Navy_CLEAN_PFAS_FOIA_request_covers.indd

NAVFAC
Naval Facilities Engineering Command

Groundwater Sample Results, Level 2 Laboratory Report, Level 4 Laboratory Report, Electronic Data Deliverable, Data Validation Report, and the Sample Location Report, SDG 18-0568

Naval Air Station Point Mugu
Point Mugu, California

July 2019

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

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

AQ, GW

Batch 18-0568

Package DP-18-0276

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

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

AQ, GW

Batch 18-0568

Package DP-18-0276

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:	Lauren Griffith	Digitally signed by Lauren Griffith DN: cn=Lauren Griffith, o=Battelle, ou, email=griffithl@battelle.org, c=US Date: 2018.10.05 17:35:13 -04'00'
QC Chemist Approval:	Ellyn M Fitch	fitche@battelle.org 2018.10.18 09:43:51 -04'00'
Project Manager Approval:		Digitally signed by Jonathan Thorn Date: 2018.10.19 14:14:26 -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 18-0568

Package DP-18-0276

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2	***Chain of Custody Records*** Sample Receipt Records	10
3	***Tables*** Analytical Data Tables, Qualifier Definitions.	31

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Signature Page

Battelle 2018 (1 of 2)
Signature Page

Name (Printed)	Signature	Initials	Date
Jonathan Thorn		JRT	4/4/2018
Robert Lizotte, Jr.		BL	4.4 2018
FRANCO PALA			4-4-2018
Carla Devine		CRD	4/4/18
Denise Schumitz		DMS	4/4/18
Candice Penn McCoy		CPM	4/4/2018
Rich Rostucci		RR	4/4/2018
Michael Mears			4/4/2018
Christie Usher		cu	4/4/18
Kevin McInerney			4/4/18
Stephanie Schultz		SAS	4/4/18
Jordan Tower		JCT	4/4/18
KRISTEN NICHOLS		KN	4/4/18
Clinton H Brown		CB	4/4/18
Matt Schumitz		MS	4-4-18
Sam Guimaraes		SG	4-4-18
Lauren Griffith		LMG	4.4.18

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Battelle 2018 (2 of 2)
Signature Page

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

Sample Summary

Client: CH2M
SDG: 18-0568
Project/Site: Naval Base Ventura County
CTO: 4164

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Receipt Date
CR847PB-FS	Procedural Blank	WATER	9/27/2018	9/27/2018
CR848LCS-FS	Laboratory Control Sample	WATER	9/27/2018	9/27/2018
J8246-FS	VC-AQ-FB01-0918	AQ	9/18/2018	9/21/2018
J8247-FS	VC-AQ-EB01-0918	AQ	9/18/2018	9/21/2018
J8259-FS	VC-PM365-DW01-0918	GW	9/19/2018	9/21/2018
J8260-FS	VC-PM365-DW02-0918	GW	9/19/2018	9/21/2018
J8261-FS	VC-PM365-DW02P-0918	GW	9/19/2018	9/21/2018
J8262-FS	VC-PM365-DW03-0918	GW	9/19/2018	9/21/2018
J8272-FS	VC-PM553-DW01-0918	GW	9/19/2018	9/21/2018
J8273-FS	VC-PM553-DW01P-0918	GW	9/19/2018	9/21/2018
J8274-FS	VC-PM553-DW02-0918	GW	9/19/2018	9/21/2018
J8275-FS	VC-PM553-DW03-0918	GW	9/19/2018	9/21/2018
J8276-FS	VC-SO-FB02-0919	AQ	9/19/2018	9/21/2018
J8277-FS	VC-SO-EB02-0918	AQ	9/19/2018	9/21/2018

Miscellaneous Documentation

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QA/QC Summary
Batch 18-0568

Project:	CTO-4164 Naval Base Ventura County, California
Parameters:	PFAS
Laboratory:	Battelle, Norwell, MA
Matrix:	AQ, GW
Data Set:	DP-18-0276
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	Water samples were spiked with surrogates in the original sample container from the field. The water was extracted using a weak ion exchange solid phase extraction (SPE) cartridge and eluted from the SPE with 0.4% NH_3 in methanol. Extracts were 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	The SPE filter for samples J8272-FS (VC-PM553-DW01-0918), J8273-FS (VC-PM553-DW01P-0918), and J8274-FS (VC-PM553-DW02-0918) clogged during extraction, the filter was popped, and extraction continued. Due to the high level of sedimentation in all field samples, except for the FB and EB samples, the samples were centrifuged and transferred to new HDPE bottles prior to extraction.
Analysis	PFAS were measured by liquid chromatography tandem mass spectrometry (LC-MS/MS) in the multiple reaction monitoring (MRM). An initial calibration consisting of representative target analytes, labelled analogs, and internal standards was analyzed prior to analysis to demonstrate the linear range of analysis. Calibration verification was performed at the beginning and end of 10 injections and at the end of each sequence. Target PFAS were quantified using the isotope dilution method. Samples are reported in ng/L concentrations.
Analysis Comments	When detected, PFHxS and PFOS contain both linear and branched isomers. In cases were native PFAS compounds were reported from dilutions (above calibration in non-diluted extracts), the extracted internal standard (surrogate) used to quantify the native compound was also reported from the dilution.

Holding Times	Extraction Date(s)	Analysis Date(s)
	9/27/2018	10/3-5/2018

QA/QC Summary
Batch 18-0568

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	MS/MSD not included with this SDG.
	No comments.

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.
	There are seven (7) instances where 13C2-PFOA and 13C4-PFOS would fail IS area criteria. These failures are due to the amount of native PFOA and PFOS found in the samples interfering with the internal standards in the non-diluted extracts. In these cases, the extracted internal standards that would use these two internal standards are reported from a dilution to mitigate the interferences from the high concentrations in the non-diluted samples. No data is reported from extracts where the IS areas would have failed criteria.

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

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

QA/QC Summary
Batch 18-0568

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

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

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Project Client: CH2M
Project Name: CTO-4164 Naval Base Ventura County, California
Project Number: 100110125-01
Preparation Batch: 18-0568
Data Set: DP-18-0276
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	NA	NA
Matrix Spike / Matrix Spike Duplicate Precision	NA	NA
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-18-0276
Project Number:	100110125-01	**Prep Batch Number:**	18-0568
Entered By:	Lauren Griffith	**Entered On:**	10/05/2018
Test Code (Matrix Type):	Master_369(L)		

Samples that were manually integrated are noted on the quant reports with the comment (TRUE).
LMG 10/5/18

In cases were native PFAS compounds were reported from dilutions (above calibration in non-diluted extracts), the extracted internal standard (surrogate) used to quantify the native compound was also reported from the dilution.
LMG 10/5/18

There are seven instances of extracted internal standards (surrogates) that would fall 50%-150% recovery criteria if reported from the non-diluted extract. This is due to the higher levels of native PFOA and PFOS found in the samples interfering with the 13C2-PFOA and 13C4-PFOS internal standards used to quantify the surrogates. In these cases, the surrogates are reported from dilutions, however, the native compounds are reported from the non-diluted extracts as the interferences are with the internal standards and not the surrogates used to quantify the native compounds.
LMG 10/5/18

Task Leader Approval:

SupervisorApproval:

PM Approval:



Digitally signed by Jonathan Thorn
Date: 2018.10.05 18:28:31 -04'00'

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Project Client: CH2M
Project Name: CTO-4164 Naval Base Ventura County, California
Project No.: 100110125-01
Preparation Batch: 18-0568
Data Set: DP-18-0276

		CR847PB-FS (Procedural Blank)	CR848LCS-FS (Laboratory Control Sample)	J8246-FS (VC-AQ-FB01-0918)	J8247-FS (VC-AQ-EB01-0918)	J8259-FS (VC-PM365-DW01-0918)	J8260-FS (VC-PM365-DW02-0918)
PFHxA	307-24-4	-	L	-	-	L	L
PFHpA	375-85-9	-	L	-	-	L	L
PFOA	335-67-1	-	L	-	-	L	L
PFNA	375-95-1	-	L	-	-	-	-
PFDA	335-76-2	-	L	-	-	-	-
PFUnA	2058-94-8	-	L	-	-	-	-
PFDoA	307-55-1	-	L	-	-	-	-
PFTrDA	72629-94-8	-	L	-	-	-	-
PFTeDA	376-06-7	-	L	-	-	-	-
NMeFOSAA	2355-31-9	-	L	-	-	-	-
NEtFOSAA	2991-50-6	-	L	-	-	-	-
PFBS	375-73-5	-	L	-	-	L	L
PFHxS	355-46-4	-	L/Br	-	-	L/Br	L/Br
PFOS	1763-23-1	-	L/Br	-	L/Br	L/Br	L/Br

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

BATTE
It can

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

	J8261-FS (VC-PM365-DW02P-0918)	J8262-FS (VC-PM365-DW03-0918)	J8272-FS (VC-PM553-DW01-0918)	J8273-FS (VC-PM553-DW01P-0918)	J8274-FS (VC-PM553-DW02-0918)	J8275-FS (VC-PM553-DW03-0918)	J8276-FS (VC-SO-FB02-0919)	J8277-FS (VC-SO-EB02-0918)
PFHxA	L	L	L	L	L	L	-	-
PFHpA	L	L	L	L	L	L	-	-
PFOA	L	L	L	L	L	L	-	-
PFNA	-	L	-	-	-	L	-	-
PFDA	-	-	-	-	-	-	-	-
PFUnA	-	-	-	-	-	-	-	-
PFDoA	-	-	-	-	-	-	-	-
PFTrDA	-	-	-	-	-	-	-	-
PFTeDA	-	-	-	-	-	-	-	-
NMeFOSAA	-	-	-	-	-	-	-	-
NEtFOSAA	-	-	-	-	-	-	-	-
PFBS	L	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/Bra
"-": 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

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ShpNo SHP-180921-01

Battelle Project No: 0110125-01

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:**

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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)			

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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:
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)			

BATTELLE
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-OOOH	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-O00H	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

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Chain-of-Custody

(4)

Client Contact Information	Project Manager: Eric Davis	Sampling Site: ~~Hangar~~ PM 3009	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: (724) 977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority RUSH Time Zone: ~~PST~~	Analysis: PFAS by Method 537 Mod	Page# 1 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
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~~ MS			~~Grab~~			~~X~~

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

Relinquished by (Print/Sign):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
Deandra Cuss Deandra Cuss	JACOBS	9/20/2018 07:30	NV	Battelle	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:

BATTELLE It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: Mugu PM3009	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: (724)977-3628 Email: Victoria.Kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 2 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	Analysis: PFAS by Method 537 Mod
VC-PM3009-DW01-0918 J8210	9/17/18	15:10	Grab	GW	2	X
VC-PM3009-DW02-0918 J8211	9/17/18	16:23	Grab	GW	2	X
VC-PM3009-DW02P-0918 J8212	9/17/18	16:27	Grab	GW	2	X
VC-PM3009-DW03-0918 J8213	9/17/18	16:38	Grab	GW	2	X
~~EDT-AQ-FB~~			Grab	AQ		X
~~PDT-AQ-FB~~			Grab	AQ		X

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

Relinquished by (Print/Sign)	Company	Date/Time	Received by (Print/Sign)	Company	Date/Time
Deandra Cass/Deandra	Jacobs	09/20/2018 0730	NV	Battelle	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:

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Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: PM 372 Mugu	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: (724) 977-3628 Email: Victoria.Kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 3 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
~~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
~~FDT-AQ-FB~~			~~Grab~~	~~AQ~~		X
~~FDT-AQ-EB~~			~~Grab~~	~~AQ~~		X

VOA

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

Relinquished by (Print/Sign):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
Deandra Cass	Jacobs	9/20/2018 07:30		Battelle	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:

BATTELLE It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: Mugu PM 372	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kibert Phone: (724) 977-3628 Email: Victoria.Kibert@jacobs.com	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Turnaround Time (TAT) Requested: Normal X Priority RUSH Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 4 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
VC-PM372-SS01-000H J8218	9/18/18	09:36	Grab	SS	1	X
VC-PM372-SB01-0102 19	9/18/18	09:37	Grab	SB	1	X
VC-PM372-SB01-0506 20	9/18/18	09:43	Grab	SB	1	X
VC-PM372-SS02-000H 21	9/18/18	08:57	Grab	SS	1	X
VC-PM372-SB02-0102 22	9/18/18	09:03	Grab	SB	1	X
VC-PM372-SB02-0506 23	9/18/18	09:06	Grab	SB	1	X
VC-PM372-SS03-000H 24	9/18/18	10:46	Grab	SS	1	X
VC-PM372-SB03-0102 25	9/18/18	10:47	Grab	SB	1	X
VC-PM372-SB03-0506 J8224	9/18/18	10:49	Grab	SB	1	X
~~VC-PM372-SD01-000H~~			Grab	SD		X
~~VC-PM372-SB01-0102~~			Grab	SD		X
J8227 VC-PM372-SS02-000H-MS	9/18/18	09:06	Grab	SS	1	X

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

Relinquished by (Print/Sign):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
Deandra Cass Deandra	Jacobs	9/20/2018 07:30	MB	Battelle	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:

BATTELLE
It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: MUGU PM 372	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: (724) 977-3628 Email: Victoria.Kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 5 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
J8228 VC-PM372-S-502-000H-SD	9/18/18	09:00	Grab	SS	1	X
~~FDT-SO-FB~~			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):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
Deandra Cross Deandra	Jacobs	9/20/2018 07:30	NS	Battelle	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:

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Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: Mugu PM 649	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: (724) 977-3628 Email: Victoria.Kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority RUSH Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 6 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
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 J8240	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):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
Deandra Cass	JACOBS	9/20/2018 07:30		Battelle	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:

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Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: PM 649	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: (724) 977-3628 Email: Victoria.Kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority RUSH Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 7 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
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)	Company	Date/Time	Received by (Print/Sign)	Company	Date/Time
Deandra Cossi/Deandra	Jacobs	9/20/2018 07:30		Battelle	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:

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Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: Mugu PM365	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal ☒ Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 8 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
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
J8257 VC-PM365-SB02-0102-MS	9/19/18	1132	Grab	SB	1	X
J8258 VC-PM365-SB02-0102-MSD	9/19/18	1132	Grab	SB	1	X
~~FDT-SO-FB~~			~~Grab~~	~~AQ~~		X

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

Relinquished by (Print/Sign):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
Deandra Cross/Deandra	Jacobs	9/20/2018 0730	MS	Battelle	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:

BATTELLE It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: MW-9A PM365	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal ☒ Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 9 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
VC-PM365-DW01-0919 J8259	9/19/18	1110	Grab	GW	2	X
VC-PM365-DW02-0919 J8260	9/19/18	1210	Grab	GW	2	X
VC-PM365-DW02P-0919 J8261	9/19/18	1214	Grab	GW	2	X
VC-PM365-DW03-0919 J8262	9/19/18	1110	Grab	GW	2	X
~~FDT-AQ-FB~~			Grab	GW		X
~~FDT-AQ-EB~~			Grab	GW		X

VK

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

Relinquished by (Print/Sign):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
Deandra Cass/Deandra	Jacobs	9/20/2018 07:30	NVS	Battelle	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:

BATTELLE It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: Munger PM553	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal ☑ Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 10 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
VC-PM553-SS01-000H J8263	9/19/18	1350	Grab	SS	1	X
VC-PM553-SB01-0102 64	9/19/18	1353	Grab	SB	1	X
VC-PM553-SB01-0506 65	9/19/18	1359	Grab	SB	1	X
VC-PM553-SS02-000H 66	9/19/18	1440	Grab	SS	1	X
VC-PM553-SB02-0102 67	9/19/18	1442	Grab	SB	1	X
VC-PM553-SB02-0506 68	9/19/18	1450	Grab	SB	1	X
VC-PM553-SS03-000H 69	9/19/18	1130	Grab	SS	1	X
VC-PM553-SB03-0102 70	9/19/18	1134	Grab	SB	1	X
VC-PM553-SB03-0506 J8271	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)	Company	Date/Time	Received by (Print/Sign)	Company	Date/Time
Deandra Cross/Deandra	Jacobs	9/20/2018 07:30	NA	Battelle	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:

BATTELLE It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: MW-4 SM 553	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal ☒ Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 11 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
~~VC-PM553-GW0001A-~~			~~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 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
~~FDT-AQ-FB-~~			Grab	AQ		X
~~FDT-AQ-EB-~~			~~Grab~~	~~AQ~~		X

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

Relinquished by (Print/Sign)	Company	Date/Time	Received by (Print/Sign)	Company	Date/Time
Deandra Cross/Deandra	Jacobs	9/20/2018 07:30	[illegible]	Battelle	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:

BATTELLE
It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: Mugu PM553	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC #: 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page#: 12 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	Analysis
~~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 02-0919 J8276	9/19/18	1435	Grab	AQ	2	X
FDT-SO-EB 02-0919 J8277	9/19/18	1430	Grab	AQ	2	X

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

Relinquished by (Print/Sign):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
Deandra Cass	Jacobs	9/20/2018 07:30		Battelle	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:

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

TO JONATHAN THORN 0.1 9:45

141 LONGWATER DR. 9-21-18 MDS
STE 202
NORWELL MA 02061 Therm-1

(781) 681-5565
INV:
PO:
REF:
DEPT:

FedEx Express

1 of 3
TRK# 0201 7828 5914 8695
MASTER

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

XE XPUA

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/SSF01904
DIMS: 26x14x14 IN

BILL THIRD PARTY

TO JONATHAN THORN 0.9 9:45

141 LONGWATER DR. 9-21-18 MDS
STE 202
NORWELL MA 02061 Therm-1

(781) 681-5565
INV:
PO:
REF:
DEPT:

FedEx Express

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

FRI - 21 SEP 10:30A
PRIORITY OVERNIGHT
0201
DSR
02061
MA-US BOS

XE XPUA

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

TO JONATHAN THORN 0.3 9:45

141 LONGWATER DR. 9-21-18 MDS
STE 202
NORWELL MA 02061 Therm-1

(781) 681-5565
INV:
PO:
REF:
DEPT:

FedEx Express

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

FRI - 21 SEP 10:30A
PRIORITY OVERNIGHT
0201
DSR
02061
MA-US BOS

XE XPUA

Data Tables

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

Client ID		VC-AQ-FB01-0918				
Battelle ID		J8246-FS				
Sample Type		SA				
Collection Date		09/18/2018				
Extraction Date		09/27/2018				
Analysis Date		10/03/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		AQ				
Sample Size		0.270				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	0.46	U	0.18	0.46	4.63
PFHpA	375-85-9	0.46	U	0.15	0.46	4.63
PFOA	335-67-1	0.74	J	0.17	0.46	4.63
PFNA	375-95-1	0.93	U	0.24	0.93	4.63
PFDA	335-76-2	0.46	U	0.15	0.46	4.63
PFUnA	2058-94-8	0.93	U	0.27	0.93	4.63
PFDoA	307-55-1	0.23	J	0.17	0.46	4.63
PFTrDA	72629-94-8	0.44	J	0.14	0.46	4.63
PFTeDA	376-06-7	0.53	J	0.23	0.93	4.63
NMeFOSAA	2355-31-9	1.85	U	0.52	1.85	4.63
NEtFOSAA	2991-50-6	0.93	U	0.45	0.93	4.63
PFBS	375-73-5	0.46	U	0.12	0.46	4.63
PFHxS	355-46-4	0.37	U	0.10	0.37	4.63
PFOS	1763-23-1	0.46	U	0.18	0.46	4.63

Surrogate Recoveries (%)

13C5-PFHxA	92
13C4-PFHpA	95
13C8-PFOA	101
13C9-PFNA	93
13C6-PFDA	97
13C7-PFUnA	110
13C2-PFDoA	97
13C2-PFTeDA	89
d3-MeFOSAA	90
d5-EtFOSAA	104
13C3-PFBS	92
13C3-PFHxS	96
13C8-PFOS	99

BATTELLE
It can be done

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

Client ID		VC-AQ-EB01-0918			
Battelle ID		J8247-FS			
Sample Type		SA			
Collection Date		09/18/2018			
Extraction Date		09/27/2018			
Analysis Date		10/03/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		AQ			
Sample Size		0.265			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	0.47 U	0.18	0.47	4.72
PFHpA	375-85-9	0.47 U	0.15	0.47	4.72
PFOA	335-67-1	0.44 J	0.17	0.47	4.72
PFNA	375-95-1	0.94 U	0.25	0.94	4.72
PFDA	335-76-2	0.47 U	0.15	0.47	4.72
PFUnA	2058-94-8	0.94 U	0.27	0.94	4.72
PFDoA	307-55-1	0.19 J	0.17	0.47	4.72
PFTrDA	72629-94-8	0.31 J	0.14	0.47	4.72
PFTeDA	376-06-7	0.38 J	0.24	0.94	4.72
NMeFOSAA	2355-31-9	1.89 U	0.53	1.89	4.72
NEtFOSAA	2991-50-6	0.94 U	0.46	0.94	4.72
PFBS	375-73-5	0.47 U	0.12	0.47	4.72
PFHxS	355-46-4	0.11 J	0.10	0.38	4.72
PFOS	1763-23-1	8.59	0.18	0.47	4.72

Surrogate Recoveries (%)

13C5-PFHxA	91
13C4-PFHpA	99
13C8-PFOA	102
13C9-PFNA	100
13C6-PFDA	105
13C7-PFUnA	101
13C2-PFDoA	98
13C2-PFTeDA	102
d3-MeFOSAA	104
d5-EtFOSAA	100
13C3-PFBS	106
13C3-PFHxS	99
13C8-PFOS	97

BATTELLE
It can be done

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

Client ID		VC-PM365-DW01-0918				
Battelle ID		J8259-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/03/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.260				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	1399.57	D	45.67	120.19	1201.92
PFHpA	375-85-9	601.72	D	7.69	24.04	240.38
PFOA	335-67-1	7715.10	D	43.27	120.19	1201.92
PFNA	375-95-1	0.96	U	0.25	0.96	4.81
PFDA	335-76-2	0.48	U	0.15	0.48	4.81
PFUnA	2058-94-8	0.96	U	0.28	0.96	4.81
PFDoA	307-55-1	0.48	U	0.17	0.48	4.81
PFTrDA	72629-94-8	0.48	U	0.14	0.48	4.81
PFTeDA	376-06-7	0.96	U	0.24	0.96	4.81
NMeFOSAA	2355-31-9	1.92	U	0.54	1.92	4.81
NEtFOSAA	2991-50-6	0.96	U	0.47	0.96	4.81
PFBS	375-73-5	244.83	D	1.25	4.81	48.08
PFHxS	355-46-4	1160.97	D	5.29	19.23	240.38
PFOS	1763-23-1	4.96		0.18	0.48	4.81
Surrogate Recoveries (%)						
13C5-PFHxA		117	D			
13C4-PFHpA		136	D			
13C8-PFOA		115	D			
13C9-PFNA		71	D			
13C6-PFDA		121				
13C7-PFUnA		124				
13C2-PFDoA		129				
13C2-PFTeDA		119				
d3-MeFOSAA		111				
d5-EtFOSAA		116				
13C3-PFBS		127	D			
13C3-PFHxS		110	D			
13C8-PFOS		106				

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

Client ID		VC-PM365-DW02-0918				
Battelle ID		J8260-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/04/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.270				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	3805.58	D	29.32	77.16	771.61
PFHpA	375-85-9	462.31	D	1.48	4.63	46.30
PFOA	335-67-1	1008.69	D	27.78	77.16	771.61
PFNA	375-95-1	2.62	J	0.24	0.93	4.63
PFDA	335-76-2	0.26	J	0.15	0.46	4.63
PFUnA	2058-94-8	0.93	U	0.27	0.93	4.63
PFDoA	307-55-1	0.46	U	0.17	0.46	4.63
PFTrDA	72629-94-8	0.46	U	0.14	0.46	4.63
PFTeDA	376-06-7	0.93	U	0.23	0.93	4.63
NMeFOSAA	2355-31-9	1.85	U	0.52	1.85	4.63
NEtFOSAA	2991-50-6	0.93	U	0.45	0.93	4.63
PFBS	375-73-5	1077.41	D	20.06	77.16	771.61
PFHxS	355-46-4	9898.70	D	84.88	308.64	3858.02
PFOS	1763-23-1	3001.26	D	29.32	77.16	771.61
Surrogate Recoveries (%)						
13C5-PFHxA		115	D			
13C4-PFHpA		133	D			
13C8-PFOA		108	D			
13C9-PFNA		63				
13C6-PFDA		107				
13C7-PFUnA		111				
13C2-PFDoA		120				
13C2-PFTeDA		120				
d3-MeFOSAA		139				
d5-EtFOSAA		149				
13C3-PFBS		125	D			
13C3-PFHxS		122	D			
13C8-PFOS		130	D			

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

Client ID		VC-PM365-DW02P-0918				
Battelle ID		J8261-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/04/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.270				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	4035.00	D	29.32	77.16	771.61
PFHpA	375-85-9	458.97	D	1.48	4.63	46.30
PFOA	335-67-1	1132.31	D	27.78	77.16	771.61
PFNA	375-95-1	2.97	J	0.24	0.93	4.63
PFDA	335-76-2	0.20	J	0.15	0.46	4.63
PFUnA	2058-94-8	0.93	U	0.27	0.93	4.63
PFDoA	307-55-1	0.46	U	0.17	0.46	4.63
PFTrDA	72629-94-8	0.46	U	0.14	0.46	4.63
PFTeDA	376-06-7	0.93	U	0.23	0.93	4.63
NMeFOSAA	2355-31-9	1.85	U	0.52	1.85	4.63
NEtFOSAA	2991-50-6	0.93	U	0.45	0.93	4.63
PFBS	375-73-5	1083.52	D	20.06	77.16	771.61
PFHxS	355-46-4	11515.55	D	84.88	308.64	3858.02
PFOS	1763-23-1	4099.63	D	29.32	77.16	771.61
Surrogate Recoveries (%)						
13C5-PFHxA		121	D			
13C4-PFHpA		128	D			
13C8-PFOA		113	D			
13C9-PFNA		61				
13C6-PFDA		94				
13C7-PFUnA		112				
13C2-PFDoA		118				
13C2-PFTeDA		110				
d3-MeFOSAA		131	D			
d5-EtFOSAA		124	D			
13C3-PFBS		149	D			
13C3-PFHxS		111	D			
13C8-PFOS		127	D			

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

Client ID		VC-PM365-DW03-0918				
Battelle ID		J8262-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/04/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.275				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	5595.98	D	57.58	151.52	1515.15
PFHpA	375-85-9	883.04	D	3.64	11.36	113.64
PFOA	335-67-1	737.85	D	4.09	11.36	113.64
PFNA	375-95-1	5.04		0.24	0.91	4.55
PFDA	335-76-2	0.31	J	0.15	0.45	4.55
PFUnA	2058-94-8	0.91	U	0.26	0.91	4.55
PFDoA	307-55-1	0.45	U	0.16	0.45	4.55
PFTrDA	72629-94-8	0.45	U	0.14	0.45	4.55
PFTeDA	376-06-7	0.91	U	0.23	0.91	4.55
NMeFOSAA	2355-31-9	1.82	U	0.51	1.82	4.55
NEtFOSAA	2991-50-6	0.91	U	0.45	0.91	4.55
PFBS	375-73-5	3796.50	D	39.39	151.52	1515.15
PFHxS	355-46-4	14935.23	D	33.33	121.21	1515.15
PFOS	1763-23-1	4338.22	D	57.58	151.52	1515.15

Surrogate Recoveries (%)

13C5-PFHxA	109	D
13C4-PFHpA	117	D
13C8-PFOA	104	D
13C9-PFNA	63	
13C6-PFDA	103	
13C7-PFUnA	109	
13C2-PFDoA	115	
13C2-PFTeDA	106	
d3-MeFOSAA	103	D
d5-EtFOSAA	114	D
13C3-PFBS	124	D
13C3-PFHxS	107	D
13C8-PFOS	127	D

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

Client ID		VC-PM553-DW01-0918				
Battelle ID		J8272-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/04/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.280				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	430.22	D	3.39	8.93	89.29
PFHpA	375-85-9	161.90	D	2.86	8.93	89.29
PFOA	335-67-1	1116.63	D	3.21	8.93	89.29
PFNA	375-95-1	1.33	J	0.23	0.89	4.46
PFDA	335-76-2	0.45	U	0.14	0.45	4.46
PFUnA	2058-94-8	0.89	U	0.26	0.89	4.46
PFDoA	307-55-1	0.45	U	0.16	0.45	4.46
PFTrDA	72629-94-8	0.45	U	0.13	0.45	4.46
PFTeDA	376-06-7	0.89	U	0.22	0.89	4.46
NMeFOSAA	2355-31-9	1.79	U	0.50	1.79	4.46
NEtFOSAA	2991-50-6	0.89	U	0.44	0.89	4.46
PFBS	375-73-5	23.12		0.12	0.45	4.46
PFHxS	355-46-4	243.30	D	1.96	7.14	89.29
PFOS	1763-23-1	61.51		0.17	0.45	4.46

Surrogate Recoveries (%)

13C5-PFHxA	126	D
13C4-PFHpA	127	D
13C8-PFOA	114	D
13C9-PFNA	56	
13C6-PFDA	97	
13C7-PFUnA	109	
13C2-PFDoA	110	
13C2-PFTeDA	98	
d3-MeFOSAA	81	
d5-EtFOSAA	115	
13C3-PFBS	72	
13C3-PFHxS	90	D
13C8-PFOS	84	

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

Client ID		VC-PM553-DW01P-0918				
Battelle ID		J8273-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/04/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.285				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	464.64	D	3.33	8.77	87.72
PFHpA	375-85-9	170.95	D	2.81	8.77	87.72
PFOA	335-67-1	1140.70	D	3.16	8.77	87.72
PFNA	375-95-1	1.09	J	0.23	0.88	4.39
PFDA	335-76-2	0.44	U	0.14	0.44	4.39
PFUnA	2058-94-8	0.88	U	0.25	0.88	4.39
PFDoA	307-55-1	0.44	U	0.16	0.44	4.39
PFTrDA	72629-94-8	0.44	U	0.13	0.44	4.39
PFTeDA	376-06-7	0.88	U	0.22	0.88	4.39
NMeFOSAA	2355-31-9	1.75	U	0.49	1.75	4.39
NEtFOSAA	2991-50-6	0.88	U	0.43	0.88	4.39
PFBS	375-73-5	19.16		0.11	0.44	4.39
PFHxS	355-46-4	216.93	D	1.93	7.02	87.72
PFOS	1763-23-1	29.47		0.17	0.44	4.39
Surrogate Recoveries (%)						
13C5-PFHxA		117	D			
13C4-PFHpA		126	D			
13C8-PFOA		110	D			
13C9-PFNA		53				
13C6-PFDA		97				
13C7-PFUnA		105				
13C2-PFDoA		111				
13C2-PFTeDA		101				
d3-MeFOSAA		101				
d5-EtFOSAA		138				
13C3-PFBS		82				
13C3-PFHxS		110	D			
13C8-PFOS		99				

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

Client ID		VC-PM553-DW02-0918			
Battelle ID		J8274-FS			
Sample Type		SA			
Collection Date		09/19/2018			
Extraction Date		09/27/2018			
Analysis Date		10/04/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		GW			
Sample Size		0.280			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	1432.20 D	18.85	49.60	496.03
PFHpA	375-85-9	4200.92 D	14.29	44.64	446.43
PFOA	335-67-1	2199.99 D	17.86	49.60	496.03
PFNA	375-95-1	2.39 J	0.23	0.89	4.46
PFDA	335-76-2	0.45 U	0.14	0.45	4.46
PFUnA	2058-94-8	0.89 U	0.26	0.89	4.46
PFDoA	307-55-1	0.45 U	0.16	0.45	4.46
PFTrDA	72629-94-8	0.45 U	0.13	0.45	4.46
PFTeDA	376-06-7	0.89 U	0.22	0.89	4.46
NMeFOSAA	2355-31-9	1.79 U	0.50	1.79	4.46
NEtFOSAA	2991-50-6	0.89 U	0.44	0.89	4.46
PFBS	375-73-5	558.01 D	11.61	44.64	446.43
PFHxS	355-46-4	5218.12 D	9.82	35.71	446.43
PFOS	1763-23-1	465.89 D	16.96	44.64	446.43
Surrogate Recoveries (%)					
13C5-PFHxA		127 D			
13C4-PFHpA		103 D			
13C8-PFOA		128 D			
13C9-PFNA		104 D			
13C6-PFDA		99			
13C7-PFUnA		99			
13C2-PFDoA		105			
13C2-PFTeDA		96			
d3-MeFOSAA		85			
d5-EtFOSAA		119			
13C3-PFBS		121 D			
13C3-PFHxS		97 D			
13C8-PFOS		108 D			

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

Client ID		VC-PM553-DW03-0918				
Battelle ID		J8275-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/04/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.275				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	5621.46	D	71.97	189.39	1893.94
PFHpA	375-85-9	9059.38	D	18.18	56.82	568.18
PFOA	335-67-1	4284.94	D	13.64	37.88	378.79
PFNA	375-95-1	8.92		0.24	0.91	4.55
PFDA	335-76-2	2.34	J	0.15	0.45	4.55
PFUnA	2058-94-8	0.91	U	0.26	0.91	4.55
PFDoA	307-55-1	0.45	U	0.16	0.45	4.55
PFTrDA	72629-94-8	0.45	U	0.14	0.45	4.55
PFTeDA	376-06-7	0.91	U	0.23	0.91	4.55
NMeFOSAA	2355-31-9	1.82	U	0.51	1.82	4.55
NEtFOSAA	2991-50-6	0.91	U	0.45	0.91	4.55
PFBS	375-73-5	684.48	D	14.77	56.82	568.18
PFHxS	355-46-4	2341.51	D	8.33	30.30	378.79
PFOS	1763-23-1	2602.77	D	21.59	56.82	568.18
Surrogate Recoveries (%)						
13C5-PFHxA		116	D			
13C4-PFHpA		101	D			
13C8-PFOA		108	D			
13C9-PFNA		110	D			
13C6-PFDA		108				
13C7-PFUnA		109				
13C2-PFDoA		110				
13C2-PFTeDA		101				
d3-MeFOSAA		134				
d5-EtFOSAA		137				
13C3-PFBS		106	D			
13C3-PFHxS		100	D			
13C8-PFOS		112	D			

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

Client ID		VC-SO-FB02-0919				
Battelle ID		J8276-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/03/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		AQ				
Sample Size		0.260				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	0.48	U	0.18	0.48	4.81
PFHpA	375-85-9	0.48	U	0.15	0.48	4.81
PFOA	335-67-1	0.68	J	0.17	0.48	4.81
PFNA	375-95-1	0.96	U	0.25	0.96	4.81
PFDA	335-76-2	0.16	J	0.15	0.48	4.81
PFUnA	2058-94-8	0.39	J	0.28	0.96	4.81
PFDoA	307-55-1	0.46	J	0.17	0.48	4.81
PFTrDA	72629-94-8	0.74	J	0.14	0.48	4.81
PFTeDA	376-06-7	0.66	J	0.24	0.96	4.81
NMeFOSAA	2355-31-9	1.92	U	0.54	1.92	4.81
NEtFOSAA	2991-50-6	0.96	U	0.47	0.96	4.81
PFBS	375-73-5	0.48	U	0.13	0.48	4.81
PFHxS	355-46-4	0.38	U	0.11	0.38	4.81
PFOS	1763-23-1	0.48	U	0.18	0.48	4.81

Surrogate Recoveries (%)

13C5-PFHxA	99
13C4-PFHpA	102
13C8-PFOA	103
13C9-PFNA	98
13C6-PFDA	104
13C7-PFUnA	99
13C2-PFDoA	94
13C2-PFTeDA	92
d3-MeFOSAA	94
d5-EtFOSAA	90
13C3-PFBS	96
13C3-PFHxS	93
13C8-PFOS	95

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

Client ID		VC-SO-EB02-0918				
Battelle ID		J8277-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/03/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		AQ				
Sample Size		0.250				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	0.50	U	0.19	0.50	5.00
PFHpA	375-85-9	0.50	U	0.16	0.50	5.00
PFOA	335-67-1	0.86	J	0.18	0.50	5.00
PFNA	375-95-1	1.00	U	0.26	1.00	5.00
PFDA	335-76-2	0.21	J	0.16	0.50	5.00
PFUnA	2058-94-8	0.37	J	0.29	1.00	5.00
PFDoA	307-55-1	0.49	J	0.18	0.50	5.00
PFTrDA	72629-94-8	0.69	J	0.15	0.50	5.00
PFTeDA	376-06-7	0.59	J	0.25	1.00	5.00
NMeFOSAA	2355-31-9	2.00	U	0.56	2.00	5.00
NEtFOSAA	2991-50-6	1.00	U	0.49	1.00	5.00
PFBS	375-73-5	0.50	U	0.13	0.50	5.00
PFHxS	355-46-4	0.52	J	0.11	0.40	5.00
PFOS	1763-23-1	2.52	J	0.19	0.50	5.00

Surrogate Recoveries (%)

13C5-PFHxA	109
13C4-PFHpA	106
13C8-PFOA	111
13C9-PFNA	103
13C6-PFDA	94
13C7-PFUnA	96
13C2-PFDoA	88
13C2-PFTeDA	100
d3-MeFOSAA	102
d5-EtFOSAA	112
13C3-PFBS	103
13C3-PFHxS	98
13C8-PFOS	101

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

Client ID		KB80 IB			
Battelle ID		KB80 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		Water			
Sample Size		0.250			
Size Unit-Basis		NA			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	0.50 U	0.19	0.50	5.00
PFHpA	375-85-9	0.50 U	0.16	0.50	5.00
PFOA	335-67-1	0.50 U	0.18	0.50	5.00
PFNA	375-95-1	1.00 U	0.26	1.00	5.00
PFDA	335-76-2	0.50 U	0.16	0.50	5.00
PFUnA	2058-94-8	1.00 U	0.29	1.00	5.00
PFDoA	307-55-1	0.50 U	0.18	0.50	5.00
PFTrDA	72629-94-8	0.50 U	0.15	0.50	5.00
PFTeDA	376-06-7	1.00 U	0.25	1.00	5.00
NMeFOSAA	2355-31-9	2.00 U	0.56	2.00	5.00
NEtFOSAA	2991-50-6	1.00 U	0.49	1.00	5.00
PFBS	375-73-5	0.50 U	0.13	0.50	5.00
PFHxS	355-46-4	0.40 U	0.11	0.40	5.00
PFOS	1763-23-1	0.50 U	0.19	0.50	5.00

Surrogate Recoveries (%)

13C5-PFHxA	93
13C4-PFHpA	93
13C8-PFOA	97
13C9-PFNA	97
13C6-PFDA	100
13C7-PFUnA	96
13C2-PFDoA	93
13C2-PFTeDA	92
d3-MeFOSAA	84
d5-EtFOSAA	99
13C3-PFBS	86
13C3-PFHxS	92
13C8-PFOS	94

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

Client ID		KB80 IB			
Battelle ID		KB80 IB_10/05/2018			
Sample Type		IB			
Collection Date		NA			
Extraction Date		NA			
Analysis Date		10/05/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		Water			
Sample Size		0.250			
Size Unit-Basis		NA			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	0.50 U	0.19	0.50	5.00
PFHpA	375-85-9	0.50 U	0.16	0.50	5.00
PFOA	335-67-1	0.50 U	0.18	0.50	5.00
PFNA	375-95-1	- -	-	-	-
PFDA	335-76-2	- -	-	-	-
PFUnA	2058-94-8	- -	-	-	-
PFDoA	307-55-1	- -	-	-	-
PFTrDA	72629-94-8	- -	-	-	-
PFTeDA	376-06-7	- -	-	-	-
NMeFOSAA	2355-31-9	- -	-	-	-
NEtFOSAA	2991-50-6	- -	-	-	-
PFBS	375-73-5	- -	-	-	-
PFHxS	355-46-4	0.40 U	0.11	0.40	5.00
PFOS	1763-23-1	- -	-	-	-

Surrogate Recoveries (%)

13C5-PFHxA	90
13C4-PFHpA	92
13C8-PFOA	93
13C9-PFNA	- -
13C6-PFDA	- -
13C7-PFUnA	- -
13C2-PFDoA	- -
13C2-PFTeDA	- -
d3-MeFOSAA	- -
d5-EtFOSAA	- -
13C3-PFBS	- -
13C3-PFHxS	99
13C8-PFOS	- -

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

Client ID		Procedural Blank			
Battelle ID		CR847PB-FS			
Sample Type		PB			
Collection Date		09/27/2018			
Extraction Date		09/27/2018			
Analysis Date		10/03/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		WATER			
Sample Size		0.250			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	0.50 U	0.19	0.50	5.00
PFHpA	375-85-9	0.50 U	0.16	0.50	5.00
PFOA	335-67-1	0.46 J	0.18	0.50	5.00
PFNA	375-95-1	1.00 U	0.26	1.00	5.00
PFDA	335-76-2	0.50 U	0.16	0.50	5.00
PFUnA	2058-94-8	1.00 U	0.29	1.00	5.00
PFDoA	307-55-1	0.50 U	0.18	0.50	5.00
PFTrDA	72629-94-8	0.50 U	0.15	0.50	5.00
PFTeDA	376-06-7	1.00 U	0.25	1.00	5.00
NMeFOSAA	2355-31-9	2.00 U	0.56	2.00	5.00
NEtFOSAA	2991-50-6	1.00 U	0.49	1.00	5.00
PFBS	375-73-5	0.50 U	0.13	0.50	5.00
PFHxS	355-46-4	0.40 U	0.11	0.40	5.00
PFOS	1763-23-1	0.50 U	0.19	0.50	5.00

Surrogate Recoveries (%)

13C5-PFHxA	94
13C4-PFHpA	100
13C8-PFOA	98
13C9-PFNA	93
13C6-PFDA	100
13C7-PFUnA	94
13C2-PFDoA	88
13C2-PFTeDA	88
d3-MeFOSAA	93
d5-EtFOSAA	96
13C3-PFBS	93
13C3-PFHxS	93
13C8-PFOS	97

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

Client ID		Laboratory Control Sample					
Battelle ID		CR848LCS-FS					
Sample Type		LCS					
Collection Date		09/27/2018					
Extraction Date		09/27/2018					
Analysis Date		10/03/2018					
Analytical Instrument		Sciex 5500 LC/MS/MS					
% Moisture		NA					
Matrix		WATER					
Sample Size		0.250					
Size Unit-Basis		L				Control Limits	
Units		ng/L	Target	Recovery	Qual	Lower	Upper
PFHxA	307-24-4	29.12	30.30	96		51	137
PFHpA	375-85-9	29.53	30.00	98		48	136
PFOA	335-67-1	32.99	30.00	110		49	141
PFNA	375-95-1	33.34	30.00	111		58	122
PFDA	335-76-2	29.84	30.00	99		59	135
PFUnA	2058-94-8	30.36	30.00	101		64	134
PFDoA	307-55-1	32.94	30.00	110		75	131
PFTrDA	72629-94-8	31.25	30.00	104		42	148
PFTeDA	376-06-7	31.25	30.00	104		42	158
NMeFOSAA	2355-31-9	37.66	30.00	126		50	146
NEtFOSAA	2991-50-6	33.12	30.00	110		51	131
PFBS	375-73-5	32.84	30.30	108		56	134
PFHxS	355-46-4	29.37	30.30	97		52	128
PFOS	1763-23-1	30.78	30.00	103		40	144
Surrogate Recoveries (%)							
13C5-PFHxA		104					
13C4-PFHpA		103					
13C8-PFOA		95					
13C9-PFNA		98					
13C6-PFDA		105					
13C7-PFUnA		106					
13C2-PFDoA		104					
13C2-PFTeDA		106					
d3-MeFOSAA		101					
d5-EtFOSAA		109					
13C3-PFBS		107					
13C3-PFHxS		114					
13C8-PFOS		105					

Glossary of Data Qualifiers

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

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

AQ, GW

Batch 18-0568

Package DP-18-0276

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

AQ, GW

Batch 18-0568

Package DP-18-0276

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:	Lauren Griffith	Digitally signed by Lauren Griffith DN: cn=Lauren Griffith, o=Battelle, ou, email=griffithl@battelle.org, c=US Date: 2018.10.05 17:35:13 -04'00'
QC Chemist Approval:	Ellyn M Fitch	fitche@battelle.org 2018.10.18 09:43:51 -04'00'
Project Manager Approval:		Digitally signed by Jonathan Thorn Date: 2018.10.19 14:14:26 -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

AQ, GW

Batch 18-0568

Package DP-18-0276

1	***Work Plan*** Laboratory Work Plan, Addendums To Work Plan, Memos From Project Manager, Special Instructions, Chain-of-Custody Reports.	1
2	***Tables*** Analytical Data Tables, Qualifier Definitions.	33
3	***Miscellaneous Documentation*** Case Narrative, Miscellaneous Documentation Form, Quality Control Summary, Example Calculations, Internal Standard Recovery Report, Retention Time Window Report.	51
4	***Sample Preparation Records*** Sample Preparation Records, Dilution Worksheets, Standard Preparation Records, Certificates Of Analysis, GPC Check Report.	202
5	***Analytical Calibrations*** Analytical Sequence, Analytical Method, Tune Report, Initial Calibration, Pesticide Degradation Report, RF Summary, Calibration Verifications, Independent Calibration Verification Check.	225
6	***Analytical Data*** Raw Data Quantification Reports.	416
7	***Chromatograms*** Sample And Standard Chromatograms.	592
8	***Unused Data***	835

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Signature Page

Name (Printed)	Signature	Initials	Date
Jonathan Thorn		JRT	4/4/2018
Robert Lizotte, Jr.		BL	4.4 2018
FRANCO PALA			4-4-2018
Carla Devine		CRD	4/4/18
Denise Schumitz		DMS	4/4/18
Candice Penn McCoy		CPM	4/4/2018
Rich Rostucci		RR	4/4/2018
Michael Mears			4/4/2018
Christie Usher		cu	4/4/18
Kevin McInerney			4/4/18
Stephanie Schultz		SAS	4/4/18
Jordan Tower		JCT	4/4/18
KRISTEN NICHOLS		KN	4/4/18
Clinton H Brown		CB	4/4/18
Matt Schumitz		MS	4-4-18
Sam Guimaraes		SG	4-4-18
Lauren Griffith		LMG	4.4.18

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Battelle 2018 (2 of 2)
Signature Page

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

Sample Summary

Client: CH2M
SDG: 18-0568
Project/Site: Naval Base Ventura County
CTO: 4164

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Receipt Date
CR847PB-FS	Procedural Blank	WATER	9/27/2018	9/27/2018
CR848LCS-FS	Laboratory Control Sample	WATER	9/27/2018	9/27/2018
J8246-FS	VC-AQ-FB01-0918	AQ	9/18/2018	9/21/2018
J8247-FS	VC-AQ-EB01-0918	AQ	9/18/2018	9/21/2018
J8259-FS	VC-PM365-DW01-0918	GW	9/19/2018	9/21/2018
J8260-FS	VC-PM365-DW02-0918	GW	9/19/2018	9/21/2018
J8261-FS	VC-PM365-DW02P-0918	GW	9/19/2018	9/21/2018
J8262-FS	VC-PM365-DW03-0918	GW	9/19/2018	9/21/2018
J8272-FS	VC-PM553-DW01-0918	GW	9/19/2018	9/21/2018
J8273-FS	VC-PM553-DW01P-0918	GW	9/19/2018	9/21/2018
J8274-FS	VC-PM553-DW02-0918	GW	9/19/2018	9/21/2018
J8275-FS	VC-PM553-DW03-0918	GW	9/19/2018	9/21/2018
J8276-FS	VC-SO-FB02-0919	AQ	9/19/2018	9/21/2018
J8277-FS	VC-SO-EB02-0918	AQ	9/19/2018	9/21/2018

Work Plan

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WORK/QUALITY ASSURANCE PROJECT PLAN

1.0 GENERAL PROJECT INFORMATION

Project Title:	CTO-4164: Analysis of Non-Potable Waters
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:	9/11/2018
Version Number:	100110125-01(L)-02
Project Manager:	Thorn, Jonathan
Laboratory Task Manager:	Thorn, Jonathan
Deliverable Due Date:	10/19/2018

2.0 SCOPE OF WORK

Overview:	Analysis of non-potable water samples for PFAS.
Matrix:	Water

2.1 TECHNICAL APPROACH

2.1.1 Sample Receipt, Storage, and Handling

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

Storage Directions:	Store refrigerated.
Sub_Sampling:	None
Procedures:	NA
Contact:	NA
Comment:	None
Archiving:	Store remaining samples for six months after submission of final reports. Notify client prior to sample disposal.
Disposal:	Dispose of any remaining samples in the appropriate waste stream.

2.1.2 Sample Preparation

Samples will be batched as they arrive, with a 28-day TAT from receipt of samples.

Samples Expected:	Samples Per Batch:	Batches Expected:
150	20	8

Batch quality control samples are defined in Table 1.

Target samples are presented in Attachment 1.

Table 1: Quality Control Samples

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

2.1.3 Extraction/Preparation

2.1.3.1 Extraction

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

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

Sample Size: 250 ml

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

Deviations:
- Do not split samples post extract, PIV adjusted to compensate for removal of split.

Comments:
- All waters will be pre-screened per draft SOP 5-370-07.

Table 2: SIS and LCS/MS Spiking Level

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

Standard Type	Standard Contents		Spike Amount (ng)	Volume (uL)	Comment
PFAS - DoD Second Source LCS/MS Solution	JZ88	LCS/MS	~ 7.5 ng	150 uL	MS/MSD only - vary spike by batch 100, 150, 200, 250, 300 µL (pre-screening data will indicate if background sample is high level and needs a higher level fortification).
PFAS - DoD Second Source LCS/MS Solution	JZ88	LCS/MS	~ 2.50 ng	50 uL	LCS sample only - vary spike for each batch 50, 100, and 150 µL.

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.

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

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

Deviations: None

Comments: None

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WORK/QUALITY ASSURANCE PROJECT PLAN

2.2. DELIVERABLES

Deliverables Due:	10/19/2018
LIMS Reports:	*No*
Histograms:	*No*
Excel Tables:	*Yes*
EICs:	*No*
Chromatograms:	*No*
EDDs:	*Yes*
Comments:	• 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	09/21/2018	09/21/2018	0	Timeline provided is an example based on samples arriving on 9/21. Schedule will shift for each delivery.
Sample Preparation	09/21/2018	09/25/2018	4	NA
Instrument Analysis	09/25/2018	10/05/2018	10	NA
Quality Control Review	10/05/2018	10/10/2018	5	NA
Quality Assurance Review	10/10/2018	10/15/2018	5	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 based on batches 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

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WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 1: Target Samples

Shipment: **SHP-180921-01**

Status: Pending

Description: NBVC Basewide SI

Range: J8210-J8277

Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility: Location:	No:	Comments:
1	J8210	VC-PM3009-DW01-0918	09/17/2018 3:10 pm	GW	R0119 (NA)		
2	J8211	VC-PM3009-DW02-0918	09/17/2018 4:23 pm	GW	R0119 (NA)		
3	J8212	VC-PM3009-DW02P-0918	09/17/2018 4:27 pm	GW	R0119 (NA)		
4	J8213	VC-PM3009-DW03-0918	09/17/2018 4:38 pm	GW	R0119 (NA)		
5	J8214	VC-PM372-DW01-0918	09/18/2018 10:07 am	GW	R0119 (NA)		
6	J8215	VC-PM372-DW02-0918	09/18/2018 9:25 am	GW	R0119 (NA)		
7	J8216	VC-PM372-DW02P-0918	09/18/2018 9:27 am	GW	R0119 (NA)		
8	J8217	VC-PM372-DW03-0918	09/18/2018 11:49 am	GW	R0119 (NA)		
9	J8241	VC-PM649-DW01-0918	09/18/2018 12:50 pm	GW	R0119 (NA)		
10	J8242	VC-PM649-DW01P-0918	09/18/2018 12:55 pm	GW	R0119 (NA)		
11	J8243	VC-PM649-DW02-0918	09/18/2018 3:35 pm	GW	R0119 (NA)		
12	J8244	VC-PM649-DW03-0918	09/18/2018 2:02 pm	GW	R0119 (NA)		
13	J8245	VC-PM649-DW04-0918	09/18/2018 2:02 pm	GW	R0119 (NA)		
14	J8246	FDT-AQ-FB01-0918	09/18/2018 1:30 pm	AQ	R0119 (NA)		
15	J8247	FDT-AQ-EB01-0918	09/18/2018 1:40 pm	AQ	R0119 (NA)		
16	J8259	VC-PM365-DW01-0919	09/19/2018 11:10 am	GW	R0119 (NA)		
17	J8260	VC-PM365-DW02-0919	09/19/2018 12:10 pm	GW	R0119 (NA)		
18	J8261	VC-PM365-DW02P-0919	09/19/2018 12:18 pm	GW	R0119 (NA)		
19	J8262	VC-PM365-DW03-0919	09/19/2018 11:10 am	GW	R0119 (NA)		
20	J8272	VC-PM553-DW01-0919	09/19/2018 2:30 pm	GW	R0119 (NA)		
21	J8273	VC-PM553-DW01P-0919	09/19/2018 2:45 pm	GW	R0119 (NA)		
22	J8274	VC-PM553-DW02-0919	09/19/2018 3:15 pm	GW	R0119 (NA)		
23	J8275	VC-PM553-DW03-0919	09/19/2018 12:06 pm	GW	R0119 (NA)		
24	J8276	FDT-SO-FB02-0919	09/19/2018 2:35 pm	AQ	R0119 (NA)		
25	J8277	FDT-SO-EB02-0919	09/19/2018 2:30 pm	AQ	R0119 (NA)		

Shipment: **SHP-180925-02**

Status: Pending

Description: NBVC Basewide SI

Range: J8285-J8337

Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility: Location:	No:	Comments:
1	J8285	VC-CS94-DW01-0918	09/21/2018 10:54 am	GW	R0119 (NA)		
2	J8286	VC-CS94-DW01P-0918	09/21/2018 10:58 am	GW	R0119 (NA)		
3	J8287	VC-CS94-DW02-0918	09/21/2018 11:50 am	GW	R0119 (NA)		
4	J8288	VC-CS94-DW03-0918	09/21/2018 11:08 am	GW	R0119 (NA)		
5	J8289	VC-CS94-DW04-0918	09/21/2018 12:14 pm	GW	R0119 (NA)		
6	J8290	VC-CS94-DW05-0918	09/21/2018 12:23 pm	GW	R0119 (NA)		
7	J8308	FDT-SO-FB04-092118	09/21/2018 2:20 pm	AQ	R0119 (NA)		

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WORK/QUALITY ASSURANCE PROJECT PLAN

Shipment: **SHP-180925-02**

Status: Pending

Description: NBVC Basewide SI

Range: J8285-J8337

Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
8	J8309	FDT-SO-EB04-092118	09/21/2018 2:20 pm	AQ	R0119 (NA)			
9	J8319	VC-PM323-324-DW01-0918	09/20/2018 2:38 pm	GW	R0119 (NA)			
10	J8320	VC-PM323-324-DW01P-0918	09/20/2018 2:45 pm	GW	R0119 (NA)			
11	J8321	VC-PM323-324-DW02-0918	09/20/2018 11:41 am	GW	R0119 (NA)			
12	J8322	VC-PM323-324-DW03-0918	09/20/2018 10:35 am	GW	R0119 (NA)			
13	J8323	FDT-AQ-FB03-092018	09/21/2018 8:00 am	AQ	R0119 (NA)			
14	J8324	FDT-AQ-EB03-092018	09/21/2018 8:00 am	AQ	R0119 (NA)			
15	J8330	VC-PM323-DW02-0918	09/20/2018 3:13 pm	GW	R0119 (NA)			
16	J8331	VC-PM323-DW02P-0918	09/20/2018 4:02 pm	GW	R0119 (NA)			
17	J8337	VC-PM324-DW02-0918	09/20/2018 2:00 pm	GW	R0119 (NA)			

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WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

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

Method Specific Reporting

Result Units:	ng/L	***Unit Conversion:***	(none)		
Weight Basis:	LIQUID	***Result Format:***	Fixed Digits		
Standard Basis:	SIS	***# of Figures/Digits:***	2		
Oil Weight Basis:	No	***Oil Weight Source:***	Oil Weight		
U-Value Substition:	U-Flag=MD	***Histograms:***	No		
ECD_Reporting:	No				

Holding Times (days)

Sample:	14
Frozen:	14
Extract:	28

Data Flags

DL_Flag:	U
RL_Flag:	J
PB_Flag:	B
DIL_Flag:	D
HT_Flag:	T

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

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Attachment 2: Test Codes

Project Test Code Name: Master_369

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

Total Analytes: 27

Subtract Peaks:

None

Sum Peaks:

None

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WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

Project Test Code Name: Master_369

ICAL Acceptance Criteria:

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

Continuing Calibration Verification Criteria:

CCV Name: 5-369

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

Independent Calibration Verification:

ICC Name: 5-369

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

Mass Discrimination Criteria:

None

Degredation Check Criteria:

None

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WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 3: Method Quality Objectives

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

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WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 3: Method Quality Objectives

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

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ShpNo SHP-180921-01

Battelle Project No: 0110125-01

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:**

BATTELLE
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)			

BATTELLE
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:
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)			

BATTELLE
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-OOOH	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-O00H	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

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Chain-of-Custody

(4)

Client Contact Information	Project Manager: Eric Davis	Sampling Site: ~~Hangar~~ PM 3009	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: (724) 977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority RUSH Time Zone: ~~PST~~	Analysis: PFAS by Method 537 Mod	Page# 1 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
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~~ MS			~~Grab~~			~~X~~

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

Relinquished by (Print/Sign):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
Deandra Cuss Deandra Cuss	JACOBS	9/20/2018 07:30	NV	Battelle	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:

BATTELLE It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: Mugu PM3009	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: (724)977-3628 Email: Victoria.Kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 2 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	Analysis
VC-PM3009-DW01-0918 J8210	9/17/18	15:10	Grab	GW	2	X
VC-PM3009-DW02-0918 J8211	9/17/18	16:23	Grab	GW	2	X
VC-PM3009-DW02P-0918 J8212	9/17/18	16:27	Grab	GW	2	X
VC-PM3009-DW03-0918 J8213	9/17/18	16:38	Grab	GW	2	X
~~EDT-AQ-FB~~			Grab	AQ		X
~~PDT-AQ-FB~~			Grab	AQ		X

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

Relinquished by (Print/Sign)	Company	Date/Time	Received by (Print/Sign)	Company	Date/Time
Deandra Cass/Deandra	Jacobs	09/20/2018 0730	NV	Battelle	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:

BATTELLE It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: PM 372 Mugu	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: (724) 977-3628 Email: Victoria.Kilbert@jacobs.com Turnaround Time (TAT) Requested:		COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST		Page# 3 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	Preservative: NA	Analysis: PFAS by Method 537 Mod
~~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
~~FDT-AQ-FB~~			~~Grab~~	~~AQ~~			X
~~FDT-AQ-EB~~			~~Grab~~	~~AQ~~			X

VTU

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

Relinquished by (Print/Sign):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
Deandra Cass /Deandra Cass	Jacobs	9/20/2018 07:30	NVB	Battelle	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:

BATTELLE It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: Mugu PM 372	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kibert Phone: (724) 977-3628 Email: Victoria.Kibert@jacobs.com	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Turnaround Time (TAT) Requested: Normal X Priority RUSH Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 4 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
VC-PM372-SS01-000H J8218	9/18/18	09:36	Grab	SS	1	X
VC-PM372-SB01-0102 19	9/18/18	09:37	Grab	SB	1	X
VC-PM372-SB01-0506 20	9/18/18	09:43	Grab	SB	1	X
VC-PM372-SS02-000H 21	9/18/18	08:57	Grab	SS	1	X
VC-PM372-SB02-0102 22	9/18/18	09:03	Grab	SB	1	X
VC-PM372-SB02-0506 23	9/18/18	09:06	Grab	SB	1	X
VC-PM372-SS03-000H 24	9/18/18	10:46	Grab	SS	1	X
VC-PM372-SB03-0102 25	9/18/18	10:47	Grab	SB	1	X
VC-PM372-SB03-0506 J8224	9/18/18	10:49	Grab	SB	1	X
~~VC-PM372-SD01-000H~~			Grab	SD		X
~~VC-PM372-SB01-0102~~			Grab	SD		X
J8227 VC-PM372-SS02-000H-MS	9/18/18	09:06	Grab	SS	1	X

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

Relinquished by (Print/Sign):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
Deandra Cass Deandra	Jacobs	9/20/2018 07:30	MB	Battelle	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:

BATTELLE
It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: MUGU PM 372	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: (724) 977-3628 Email: Victoria.Kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 5 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
J8228 VC-PM372-S-502-000H-SD	9/18/18	09:00	Grab	SS	1	X
~~FDT-SO-FB~~			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)	Company	Date/Time	Received by (Print/Sign)	Company	Date/Time
Deandra Cross Deandra	Jacobs	9/20/2018 07:30	NS	Battelle	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:

BATTELLE It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: Mugu PM 649	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: (724) 977-3628 Email: Victoria.Kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 6 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
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 J8240	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):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
Deandra Cass	JACOBS	9/20/2018 07:30		Battelle	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:

BATTELLE It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: PM 649	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: (724) 977-3628 Email: Victoria.Kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority RUSH Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 7 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
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)	Company	Date/Time	Received by (Print/Sign)	Company	Date/Time
Deandra Cossi/Deandra	Jacobs	9/20/2018 07:30		Battelle	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:

BATTELLE It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: Mygn PM365J	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal ☒ Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 8 of 12

Sample Identification		Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
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
J8257 VC-PM365-SB02-0102-MS		9/19/18	1132	Grab	SB	1	X
J8258 VC-PM365-SB02-0102-MSD		9/19/18	1132	Grab	SB	1	X
~~FDT-SO-FB~~				Grab	AQ		X

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

Relinquished by (Print/Sign):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
Deandra Cross/Deandra	Jacobs	9/20/2018 0730	MS	Battelle	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:

BATTELLE It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: MW-9 PM365	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC #: 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal ☒ Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page#: 9 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
VC-PM365-DW01-0919 J8259	9/19/18	1110	Grab	GW	2	X
VC-PM365-DW02-0919 J8260	9/19/18	1210	Grab	GW	2	X
VC-PM365-DW02P-0919 J8261	9/19/18	1214	Grab	GW	2	X
VC-PM365-DW03-0919 J8262	9/19/18	1110	Grab	GW	2	X
~~FDT-AQ-FB~~			Grab	GW		X
~~FDT-AQ-EB~~			Grab	GW		X

VK

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

Relinquished by (Print/Sign):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
Deandra Cass/Deandra	Jacobs	9/20/2018 07:30	NVS	Battelle	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:

BATTELLE It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: Munger PM553	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal ☑ Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 10 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
VC-PM553-SS01-000H J8263	9/19/18	1350	Grab	SS	1	X
VC-PM553-SB01-0102 64	9/19/18	1353	Grab	SB	1	X
VC-PM553-SB01-0506 65	9/19/18	1359	Grab	SB	1	X
VC-PM553-SS02-000H 66	9/19/18	1440	Grab	SS	1	X
VC-PM553-SB02-0102 67	9/19/18	1442	Grab	SB	1	X
VC-PM553-SB02-0506 68	9/19/18	1450	Grab	SB	1	X
VC-PM553-SS03-000H 69	9/19/18	1130	Grab	SS	1	X
VC-PM553-SB03-0102 70	9/19/18	1134	Grab	SB	1	X
VC-PM553-SB03-0506 J8271	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)	Company	Date/Time	Received by (Print/Sign)	Company	Date/Time
Deandra Cross/Deandra	Jacobs	9/20/2018 07:30	NV	Battelle	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:

BATTELLE It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: MW-4 SM 5353	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal ☒ Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 11 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
~~VC-PM553-GW0001A-~~			~~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 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
~~FDT-AQ-FB-~~			Grab	AQ		X
~~FDT-AQ-EB-~~			~~Grab~~	~~AQ~~		X

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

Relinquished by (Print/Sign):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
Deandra Cross/Deandra	Jacobs	9/20/2018 07:30	[illegible]	Battelle	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:

BATTELLE
It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: Mugu PM553	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 1
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 12 of 12

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
~~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 02-0919 J8276	9/19/18	1435	Grab	AQ	2	X
FDT-SO-EB 02-0919 J8277	9/19/18	1430	Grab	AQ	2	X

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

Relinquished by (Print/Sign)	Company	Date/Time	Received by (Print/Sign)	Company	Date/Time
Deandra Cass	Jacobs	9/20/2018 07:30	MA	Battelle	9-21-18 945

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

TO JONATHAN THORN 0.1 9:45

141 LONGWATER DR. 9-21-18 MDS
STE 202
NORWELL MA 02061 Therm-1

(781) 681-5565
INV:
PO:
REF:
DEPT:

FedEx Express

1 of 3
TRK# 0201 7828 5914 8695
MASTER

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

XE XPUA

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/SSF01904
DIMS: 26x14x14 IN

BILL THIRD PARTY

TO JONATHAN THORN 0.9 9:45

141 LONGWATER DR. 9-21-18 MDS
STE 202
NORWELL MA 02061 Therm-1

(781) 681-5565
INV:
PO:
REF:
DEPT:

FedEx Express

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

FRI - 21 SEP 10:30A
PRIORITY OVERNIGHT
0201
DSR
02061
MA-US BOS

XE XPUA

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

TO JONATHAN THORN 0.3 9:45

141 LONGWATER DR. 9-21-18 MDS
STE 202
NORWELL MA 02061 Therm-1

(781) 681-5565
INV:
PO:
REF:
DEPT:

FedEx Express

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

FRI - 21 SEP 10:30A
PRIORITY OVERNIGHT
0201
DSR
02061
MA-US BOS

XE XPUA

Data Tables

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

Client ID		VC-AQ-FB01-0918				
Battelle ID		J8246-FS				
Sample Type		SA				
Collection Date		09/18/2018				
Extraction Date		09/27/2018				
Analysis Date		10/03/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		AQ				
Sample Size		0.270				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	0.46	U	0.18	0.46	4.63
PFHpA	375-85-9	0.46	U	0.15	0.46	4.63
PFOA	335-67-1	0.74	J	0.17	0.46	4.63
PFNA	375-95-1	0.93	U	0.24	0.93	4.63
PFDA	335-76-2	0.46	U	0.15	0.46	4.63
PFUnA	2058-94-8	0.93	U	0.27	0.93	4.63
PFDoA	307-55-1	0.23	J	0.17	0.46	4.63
PFTrDA	72629-94-8	0.44	J	0.14	0.46	4.63
PFTeDA	376-06-7	0.53	J	0.23	0.93	4.63
NMeFOSAA	2355-31-9	1.85	U	0.52	1.85	4.63
NEtFOSAA	2991-50-6	0.93	U	0.45	0.93	4.63
PFBS	375-73-5	0.46	U	0.12	0.46	4.63
PFHxS	355-46-4	0.37	U	0.10	0.37	4.63
PFOS	1763-23-1	0.46	U	0.18	0.46	4.63

Surrogate Recoveries (%)

13C5-PFHxA	92
13C4-PFHpA	95
13C8-PFOA	101
13C9-PFNA	93
13C6-PFDA	97
13C7-PFUnA	110
13C2-PFDoA	97
13C2-PFTeDA	89
d3-MeFOSAA	90
d5-EtFOSAA	104
13C3-PFBS	92
13C3-PFHxS	96
13C8-PFOS	99

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

Client ID		VC-AQ-EB01-0918				
Battelle ID		J8247-FS				
Sample Type		SA				
Collection Date		09/18/2018				
Extraction Date		09/27/2018				
Analysis Date		10/03/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		AQ				
Sample Size		0.265				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	0.47	U	0.18	0.47	4.72
PFHpA	375-85-9	0.47	U	0.15	0.47	4.72
PFOA	335-67-1	0.44	J	0.17	0.47	4.72
PFNA	375-95-1	0.94	U	0.25	0.94	4.72
PFDA	335-76-2	0.47	U	0.15	0.47	4.72
PFUnA	2058-94-8	0.94	U	0.27	0.94	4.72
PFDoA	307-55-1	0.19	J	0.17	0.47	4.72
PFTrDA	72629-94-8	0.31	J	0.14	0.47	4.72
PFTeDA	376-06-7	0.38	J	0.24	0.94	4.72
NMeFOSAA	2355-31-9	1.89	U	0.53	1.89	4.72
NEtFOSAA	2991-50-6	0.94	U	0.46	0.94	4.72
PFBS	375-73-5	0.47	U	0.12	0.47	4.72
PFHxS	355-46-4	0.11	J	0.10	0.38	4.72
PFOS	1763-23-1	8.59		0.18	0.47	4.72

Surrogate Recoveries (%)

13C5-PFHxA	91
13C4-PFHpA	99
13C8-PFOA	102
13C9-PFNA	100
13C6-PFDA	105
13C7-PFUnA	101
13C2-PFDoA	98
13C2-PFTeDA	102
d3-MeFOSAA	104
d5-EtFOSAA	100
13C3-PFBS	106
13C3-PFHxS	99
13C8-PFOS	97

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

Client ID		VC-PM365-DW01-0918				
Battelle ID		J8259-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/03/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.260				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	1399.57	D	45.67	120.19	1201.92
PFHpA	375-85-9	601.72	D	7.69	24.04	240.38
PFOA	335-67-1	7715.10	D	43.27	120.19	1201.92
PFNA	375-95-1	0.96	U	0.25	0.96	4.81
PFDA	335-76-2	0.48	U	0.15	0.48	4.81
PFUnA	2058-94-8	0.96	U	0.28	0.96	4.81
PFDoA	307-55-1	0.48	U	0.17	0.48	4.81
PFTrDA	72629-94-8	0.48	U	0.14	0.48	4.81
PFTeDA	376-06-7	0.96	U	0.24	0.96	4.81
NMeFOSAA	2355-31-9	1.92	U	0.54	1.92	4.81
NEtFOSAA	2991-50-6	0.96	U	0.47	0.96	4.81
PFBS	375-73-5	244.83	D	1.25	4.81	48.08
PFHxS	355-46-4	1160.97	D	5.29	19.23	240.38
PFOS	1763-23-1	4.96		0.18	0.48	4.81
Surrogate Recoveries (%)						
13C5-PFHxA		117	D			
13C4-PFHpA		136	D			
13C8-PFOA		115	D			
13C9-PFNA		71	D			
13C6-PFDA		121				
13C7-PFUnA		124				
13C2-PFDoA		129				
13C2-PFTeDA		119				
d3-MeFOSAA		111				
d5-EtFOSAA		116				
13C3-PFBS		127	D			
13C3-PFHxS		110	D			
13C8-PFOS		106				

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

Client ID		VC-PM365-DW02-0918				
Battelle ID		J8260-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/04/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.270				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	3805.58	D	29.32	77.16	771.61
PFHpA	375-85-9	462.31	D	1.48	4.63	46.30
PFOA	335-67-1	1008.69	D	27.78	77.16	771.61
PFNA	375-95-1	2.62	J	0.24	0.93	4.63
PFDA	335-76-2	0.26	J	0.15	0.46	4.63
PFUnA	2058-94-8	0.93	U	0.27	0.93	4.63
PFDoA	307-55-1	0.46	U	0.17	0.46	4.63
PFTrDA	72629-94-8	0.46	U	0.14	0.46	4.63
PFTeDA	376-06-7	0.93	U	0.23	0.93	4.63
NMeFOSAA	2355-31-9	1.85	U	0.52	1.85	4.63
NEtFOSAA	2991-50-6	0.93	U	0.45	0.93	4.63
PFBS	375-73-5	1077.41	D	20.06	77.16	771.61
PFHxS	355-46-4	9898.70	D	84.88	308.64	3858.02
PFOS	1763-23-1	3001.26	D	29.32	77.16	771.61
Surrogate Recoveries (%)						
13C5-PFHxA		115	D			
13C4-PFHpA		133	D			
13C8-PFOA		108	D			
13C9-PFNA		63				
13C6-PFDA		107				
13C7-PFUnA		111				
13C2-PFDoA		120				
13C2-PFTeDA		120				
d3-MeFOSAA		139				
d5-EtFOSAA		149				
13C3-PFBS		125	D			
13C3-PFHxS		122	D			
13C8-PFOS		130	D			

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

Client ID		VC-PM365-DW02P-0918				
Battelle ID		J8261-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/04/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.270				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	4035.00	D	29.32	77.16	771.61
PFHpA	375-85-9	458.97	D	1.48	4.63	46.30
PFOA	335-67-1	1132.31	D	27.78	77.16	771.61
PFNA	375-95-1	2.97	J	0.24	0.93	4.63
PFDA	335-76-2	0.20	J	0.15	0.46	4.63
PFUnA	2058-94-8	0.93	U	0.27	0.93	4.63
PFDoA	307-55-1	0.46	U	0.17	0.46	4.63
PFTrDA	72629-94-8	0.46	U	0.14	0.46	4.63
PFTeDA	376-06-7	0.93	U	0.23	0.93	4.63
NMeFOSAA	2355-31-9	1.85	U	0.52	1.85	4.63
NEtFOSAA	2991-50-6	0.93	U	0.45	0.93	4.63
PFBS	375-73-5	1083.52	D	20.06	77.16	771.61
PFHxS	355-46-4	11515.55	D	84.88	308.64	3858.02
PFOS	1763-23-1	4099.63	D	29.32	77.16	771.61
Surrogate Recoveries (%)						
13C5-PFHxA		121	D			
13C4-PFHpA		128	D			
13C8-PFOA		113	D			
13C9-PFNA		61				
13C6-PFDA		94				
13C7-PFUnA		112				
13C2-PFDoA		118				
13C2-PFTeDA		110				
d3-MeFOSAA		131	D			
d5-EtFOSAA		124	D			
13C3-PFBS		149	D			
13C3-PFHxS		111	D			
13C8-PFOS		127	D			

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

Client ID		VC-PM365-DW03-0918				
Battelle ID		J8262-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/04/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.275				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	5595.98	D	57.58	151.52	1515.15
PFHpA	375-85-9	883.04	D	3.64	11.36	113.64
PFOA	335-67-1	737.85	D	4.09	11.36	113.64
PFNA	375-95-1	5.04		0.24	0.91	4.55
PFDA	335-76-2	0.31	J	0.15	0.45	4.55
PFUnA	2058-94-8	0.91	U	0.26	0.91	4.55
PFDoA	307-55-1	0.45	U	0.16	0.45	4.55
PFTrDA	72629-94-8	0.45	U	0.14	0.45	4.55
PFTeDA	376-06-7	0.91	U	0.23	0.91	4.55
NMeFOSAA	2355-31-9	1.82	U	0.51	1.82	4.55
NEtFOSAA	2991-50-6	0.91	U	0.45	0.91	4.55
PFBS	375-73-5	3796.50	D	39.39	151.52	1515.15
PFHxS	355-46-4	14935.23	D	33.33	121.21	1515.15
PFOS	1763-23-1	4338.22	D	57.58	151.52	1515.15

Surrogate Recoveries (%)

13C5-PFHxA	109	D
13C4-PFHpA	117	D
13C8-PFOA	104	D
13C9-PFNA	63	
13C6-PFDA	103	
13C7-PFUnA	109	
13C2-PFDoA	115	
13C2-PFTeDA	106	
d3-MeFOSAA	103	D
d5-EtFOSAA	114	D
13C3-PFBS	124	D
13C3-PFHxS	107	D
13C8-PFOS	127	D

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

Client ID		VC-PM553-DW01-0918				
Battelle ID		J8272-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/04/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.280				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	430.22	D	3.39	8.93	89.29
PFHpA	375-85-9	161.90	D	2.86	8.93	89.29
PFOA	335-67-1	1116.63	D	3.21	8.93	89.29
PFNA	375-95-1	1.33	J	0.23	0.89	4.46
PFDA	335-76-2	0.45	U	0.14	0.45	4.46
PFUnA	2058-94-8	0.89	U	0.26	0.89	4.46
PFDoA	307-55-1	0.45	U	0.16	0.45	4.46
PFTrDA	72629-94-8	0.45	U	0.13	0.45	4.46
PFTeDA	376-06-7	0.89	U	0.22	0.89	4.46
NMeFOSAA	2355-31-9	1.79	U	0.50	1.79	4.46
NEtFOSAA	2991-50-6	0.89	U	0.44	0.89	4.46
PFBS	375-73-5	23.12		0.12	0.45	4.46
PFHxS	355-46-4	243.30	D	1.96	7.14	89.29
PFOS	1763-23-1	61.51		0.17	0.45	4.46

Surrogate Recoveries (%)

13C5-PFHxA	126	D
13C4-PFHpA	127	D
13C8-PFOA	114	D
13C9-PFNA	56	
13C6-PFDA	97	
13C7-PFUnA	109	
13C2-PFDoA	110	
13C2-PFTeDA	98	
d3-MeFOSAA	81	
d5-EtFOSAA	115	
13C3-PFBS	72	
13C3-PFHxS	90	D
13C8-PFOS	84	

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

Client ID		VC-PM553-DW01P-0918				
Battelle ID		J8273-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/04/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.285				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	464.64	D	3.33	8.77	87.72
PFHpA	375-85-9	170.95	D	2.81	8.77	87.72
PFOA	335-67-1	1140.70	D	3.16	8.77	87.72
PFNA	375-95-1	1.09	J	0.23	0.88	4.39
PFDA	335-76-2	0.44	U	0.14	0.44	4.39
PFUnA	2058-94-8	0.88	U	0.25	0.88	4.39
PFDoA	307-55-1	0.44	U	0.16	0.44	4.39
PFTrDA	72629-94-8	0.44	U	0.13	0.44	4.39
PFTeDA	376-06-7	0.88	U	0.22	0.88	4.39
NMeFOSAA	2355-31-9	1.75	U	0.49	1.75	4.39
NEtFOSAA	2991-50-6	0.88	U	0.43	0.88	4.39
PFBS	375-73-5	19.16		0.11	0.44	4.39
PFHxS	355-46-4	216.93	D	1.93	7.02	87.72
PFOS	1763-23-1	29.47		0.17	0.44	4.39

Surrogate Recoveries (%)

13C5-PFHxA	117	D
13C4-PFHpA	126	D
13C8-PFOA	110	D
13C9-PFNA	53	
13C6-PFDA	97	
13C7-PFUnA	105	
13C2-PFDoA	111	
13C2-PFTeDA	101	
d3-MeFOSAA	101	
d5-EtFOSAA	138	
13C3-PFBS	82	
13C3-PFHxS	110	D
13C8-PFOS	99	

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

Client ID		VC-PM553-DW02-0918			
Battelle ID		J8274-FS			
Sample Type		SA			
Collection Date		09/19/2018			
Extraction Date		09/27/2018			
Analysis Date		10/04/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		GW			
Sample Size		0.280			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	1432.20 D	18.85	49.60	496.03
PFHpA	375-85-9	4200.92 D	14.29	44.64	446.43
PFOA	335-67-1	2199.99 D	17.86	49.60	496.03
PFNA	375-95-1	2.39 J	0.23	0.89	4.46
PFDA	335-76-2	0.45 U	0.14	0.45	4.46
PFUnA	2058-94-8	0.89 U	0.26	0.89	4.46
PFDoA	307-55-1	0.45 U	0.16	0.45	4.46
PFTrDA	72629-94-8	0.45 U	0.13	0.45	4.46
PFTeDA	376-06-7	0.89 U	0.22	0.89	4.46
NMeFOSAA	2355-31-9	1.79 U	0.50	1.79	4.46
NEtFOSAA	2991-50-6	0.89 U	0.44	0.89	4.46
PFBS	375-73-5	558.01 D	11.61	44.64	446.43
PFHxS	355-46-4	5218.12 D	9.82	35.71	446.43
PFOS	1763-23-1	465.89 D	16.96	44.64	446.43
Surrogate Recoveries (%)					
13C5-PFHxA		127 D			
13C4-PFHpA		103 D			
13C8-PFOA		128 D			
13C9-PFNA		104 D			
13C6-PFDA		99			
13C7-PFUnA		99			
13C2-PFDoA		105			
13C2-PFTeDA		96			
d3-MeFOSAA		85			
d5-EtFOSAA		119			
13C3-PFBS		121 D			
13C3-PFHxS		97 D			
13C8-PFOS		108 D			

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

Client ID		VC-PM553-DW03-0918				
Battelle ID		J8275-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/04/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.275				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	5621.46	D	71.97	189.39	1893.94
PFHpA	375-85-9	9059.38	D	18.18	56.82	568.18
PFOA	335-67-1	4284.94	D	13.64	37.88	378.79
PFNA	375-95-1	8.92		0.24	0.91	4.55
PFDA	335-76-2	2.34	J	0.15	0.45	4.55
PFUnA	2058-94-8	0.91	U	0.26	0.91	4.55
PFDoA	307-55-1	0.45	U	0.16	0.45	4.55
PFTrDA	72629-94-8	0.45	U	0.14	0.45	4.55
PFTeDA	376-06-7	0.91	U	0.23	0.91	4.55
NMeFOSAA	2355-31-9	1.82	U	0.51	1.82	4.55
NEtFOSAA	2991-50-6	0.91	U	0.45	0.91	4.55
PFBS	375-73-5	684.48	D	14.77	56.82	568.18
PFHxS	355-46-4	2341.51	D	8.33	30.30	378.79
PFOS	1763-23-1	2602.77	D	21.59	56.82	568.18
Surrogate Recoveries (%)						
13C5-PFHxA		116	D			
13C4-PFHpA		101	D			
13C8-PFOA		108	D			
13C9-PFNA		110	D			
13C6-PFDA		108				
13C7-PFUnA		109				
13C2-PFDoA		110				
13C2-PFTeDA		101				
d3-MeFOSAA		134				
d5-EtFOSAA		137				
13C3-PFBS		106	D			
13C3-PFHxS		100	D			
13C8-PFOS		112	D			

BATTELLE
It can be done

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

Client ID		VC-SO-FB02-0918				
Battelle ID		J8276-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/03/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		AQ				
Sample Size		0.260				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	0.48	U	0.18	0.48	4.81
PFHpA	375-85-9	0.48	U	0.15	0.48	4.81
PFOA	335-67-1	0.68	J	0.17	0.48	4.81
PFNA	375-95-1	0.96	U	0.25	0.96	4.81
PFDA	335-76-2	0.16	J	0.15	0.48	4.81
PFUnA	2058-94-8	0.39	J	0.28	0.96	4.81
PFDoA	307-55-1	0.46	J	0.17	0.48	4.81
PFTrDA	72629-94-8	0.74	J	0.14	0.48	4.81
PFTeDA	376-06-7	0.66	J	0.24	0.96	4.81
NMeFOSAA	2355-31-9	1.92	U	0.54	1.92	4.81
NEtFOSAA	2991-50-6	0.96	U	0.47	0.96	4.81
PFBS	375-73-5	0.48	U	0.13	0.48	4.81
PFHxS	355-46-4	0.38	U	0.11	0.38	4.81
PFOS	1763-23-1	0.48	U	0.18	0.48	4.81

Surrogate Recoveries (%)

13C5-PFHxA	99
13C4-PFHpA	102
13C8-PFOA	103
13C9-PFNA	98
13C6-PFDA	104
13C7-PFUnA	99
13C2-PFDoA	94
13C2-PFTeDA	92
d3-MeFOSAA	94
d5-EtFOSAA	90
13C3-PFBS	96
13C3-PFHxS	93
13C8-PFOS	95

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

Client ID		VC-SO-EB02-0918				
Battelle ID		J8277-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/03/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		AQ				
Sample Size		0.250				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	0.50	U	0.19	0.50	5.00
PFHpA	375-85-9	0.50	U	0.16	0.50	5.00
PFOA	335-67-1	0.86	J	0.18	0.50	5.00
PFNA	375-95-1	1.00	U	0.26	1.00	5.00
PFDA	335-76-2	0.21	J	0.16	0.50	5.00
PFUnA	2058-94-8	0.37	J	0.29	1.00	5.00
PFDoA	307-55-1	0.49	J	0.18	0.50	5.00
PFTrDA	72629-94-8	0.69	J	0.15	0.50	5.00
PFTeDA	376-06-7	0.59	J	0.25	1.00	5.00
NMeFOSAA	2355-31-9	2.00	U	0.56	2.00	5.00
NEtFOSAA	2991-50-6	1.00	U	0.49	1.00	5.00
PFBS	375-73-5	0.50	U	0.13	0.50	5.00
PFHxS	355-46-4	0.52	J	0.11	0.40	5.00
PFOS	1763-23-1	2.52	J	0.19	0.50	5.00

Surrogate Recoveries (%)

13C5-PFHxA	109
13C4-PFHpA	106
13C8-PFOA	111
13C9-PFNA	103
13C6-PFDA	94
13C7-PFUnA	96
13C2-PFDoA	88
13C2-PFTeDA	100
d3-MeFOSAA	102
d5-EtFOSAA	112
13C3-PFBS	103
13C3-PFHxS	98
13C8-PFOS	101

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

Client ID		KB80 IB			
Battelle ID		KB80 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		Water			
Sample Size		0.250			
Size Unit-Basis		NA			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	0.50 U	0.19	0.50	5.00
PFHpA	375-85-9	0.50 U	0.16	0.50	5.00
PFOA	335-67-1	0.50 U	0.18	0.50	5.00
PFNA	375-95-1	1.00 U	0.26	1.00	5.00
PFDA	335-76-2	0.50 U	0.16	0.50	5.00
PFUnA	2058-94-8	1.00 U	0.29	1.00	5.00
PFDoA	307-55-1	0.50 U	0.18	0.50	5.00
PFTrDA	72629-94-8	0.50 U	0.15	0.50	5.00
PFTeDA	376-06-7	1.00 U	0.25	1.00	5.00
NMeFOSAA	2355-31-9	2.00 U	0.56	2.00	5.00
NEtFOSAA	2991-50-6	1.00 U	0.49	1.00	5.00
PFBS	375-73-5	0.50 U	0.13	0.50	5.00
PFHxS	355-46-4	0.40 U	0.11	0.40	5.00
PFOS	1763-23-1	0.50 U	0.19	0.50	5.00

Surrogate Recoveries (%)

13C5-PFHxA	93
13C4-PFHpA	93
13C8-PFOA	97
13C9-PFNA	97
13C6-PFDA	100
13C7-PFUnA	96
13C2-PFDoA	93
13C2-PFTeDA	92
d3-MeFOSAA	84
d5-EtFOSAA	99
13C3-PFBS	86
13C3-PFHxS	92
13C8-PFOS	94

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

Client ID		KB80 IB			
Battelle ID		KB80 IB_10/05/2018			
Sample Type		IB			
Collection Date		NA			
Extraction Date		NA			
Analysis Date		10/05/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		Water			
Sample Size		0.250			
Size Unit-Basis		NA			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	0.50 U	0.19	0.50	5.00
PFHpA	375-85-9	0.50 U	0.16	0.50	5.00
PFOA	335-67-1	0.50 U	0.18	0.50	5.00
PFNA	375-95-1	- -	-	-	-
PFDA	335-76-2	- -	-	-	-
PFUnA	2058-94-8	- -	-	-	-
PFDoA	307-55-1	- -	-	-	-
PFTrDA	72629-94-8	- -	-	-	-
PFTeDA	376-06-7	- -	-	-	-
NMeFOSAA	2355-31-9	- -	-	-	-
NEtFOSAA	2991-50-6	- -	-	-	-
PFBS	375-73-5	- -	-	-	-
PFHxS	355-46-4	0.40 U	0.11	0.40	5.00
PFOS	1763-23-1	- -	-	-	-

Surrogate Recoveries (%)

13C5-PFHxA	90
13C4-PFHpA	92
13C8-PFOA	93
13C9-PFNA	- -
13C6-PFDA	- -
13C7-PFUnA	- -
13C2-PFDoA	- -
13C2-PFTeDA	- -
d3-MeFOSAA	- -
d5-EtFOSAA	- -
13C3-PFBS	- -
13C3-PFHxS	99
13C8-PFOS	- -

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

Client ID		Procedural Blank			
Battelle ID		CR847PB-FS			
Sample Type		PB			
Collection Date		09/27/2018			
Extraction Date		09/27/2018			
Analysis Date		10/03/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		WATER			
Sample Size		0.250			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	0.50 U	0.19	0.50	5.00
PFHpA	375-85-9	0.50 U	0.16	0.50	5.00
PFOA	335-67-1	0.46 J	0.18	0.50	5.00
PFNA	375-95-1	1.00 U	0.26	1.00	5.00
PFDA	335-76-2	0.50 U	0.16	0.50	5.00
PFUnA	2058-94-8	1.00 U	0.29	1.00	5.00
PFDoA	307-55-1	0.50 U	0.18	0.50	5.00
PFTrDA	72629-94-8	0.50 U	0.15	0.50	5.00
PFTeDA	376-06-7	1.00 U	0.25	1.00	5.00
NMeFOSAA	2355-31-9	2.00 U	0.56	2.00	5.00
NEtFOSAA	2991-50-6	1.00 U	0.49	1.00	5.00
PFBS	375-73-5	0.50 U	0.13	0.50	5.00
PFHxS	355-46-4	0.40 U	0.11	0.40	5.00
PFOS	1763-23-1	0.50 U	0.19	0.50	5.00

Surrogate Recoveries (%)

13C5-PFHxA	94
13C4-PFHpA	100
13C8-PFOA	98
13C9-PFNA	93
13C6-PFDA	100
13C7-PFUnA	94
13C2-PFDoA	88
13C2-PFTeDA	88
d3-MeFOSAA	93
d5-EtFOSAA	96
13C3-PFBS	93
13C3-PFHxS	93
13C8-PFOS	97

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

Client ID		Laboratory Control Sample					
Battelle ID		CR848LCS-FS					
Sample Type		LCS					
Collection Date		09/27/2018					
Extraction Date		09/27/2018					
Analysis Date		10/03/2018					
Analytical Instrument		Sciex 5500 LC/MS/MS					
% Moisture		NA					
Matrix		WATER					
Sample Size		0.250					
Size Unit-Basis		L				Control Limits	
Units		ng/L	Target	Recovery	Qual	Lower	Upper
PFHxA	307-24-4	29.12	30.30	96		51	137
PFHpA	375-85-9	29.53	30.00	98		48	136
PFOA	335-67-1	32.99	30.00	110		49	141
PFNA	375-95-1	33.34	30.00	111		58	122
PFDA	335-76-2	29.84	30.00	99		59	135
PFUnA	2058-94-8	30.36	30.00	101		64	134
PFDoA	307-55-1	32.94	30.00	110		75	131
PFTrDA	72629-94-8	31.25	30.00	104		42	148
PFTeDA	376-06-7	31.25	30.00	104		42	158
NMeFOSAA	2355-31-9	37.66	30.00	126		50	146
NEtFOSAA	2991-50-6	33.12	30.00	110		51	131
PFBS	375-73-5	32.84	30.30	108		56	134
PFHxS	355-46-4	29.37	30.30	97		52	128
PFOS	1763-23-1	30.78	30.00	103		40	144
Surrogate Recoveries (%)							
13C5-PFHxA		104					
13C4-PFHpA		103					
13C8-PFOA		95					
13C9-PFNA		98					
13C6-PFDA		105					
13C7-PFUnA		106					
13C2-PFDoA		104					
13C2-PFTeDA		106					
d3-MeFOSAA		101					
d5-EtFOSAA		109					
13C3-PFBS		107					
13C3-PFHxS		114					
13C8-PFOS		105					

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Glossary of Data Qualifiers

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

Miscellaneous Documentation

QA/QC Summary
Batch 18-0568

Project:	CTO-4164 Naval Base Ventura County, California
Parameters:	PFAS
Laboratory:	Battelle, Norwell, MA
Matrix:	AQ, GW
Data Set:	DP-18-0276
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	Water samples were spiked with surrogates in the original sample container from the field. The water was extracted using a weak ion exchange solid phase extraction (SPE) cartridge and eluted from the SPE with 0.4% NH_3 in methanol. Extracts were 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	The SPE filter for samples J8272-FS (VC-PM553-DW01-0918), J8273-FS (VC-PM553-DW01P-0918), and J8274-FS (VC-PM553-DW02-0918) clogged during extraction, the filter was popped, and extraction continued. Due to the high level of sedimentation in all field samples, except for the FB and EB samples, the samples were centrifuged and transferred to new HDPE bottles prior to extraction.
Analysis	PFAS were measured by liquid chromatography tandem mass spectrometry (LC-MS/MS) in the multiple reaction monitoring (MRM). An initial calibration consisting of representative target analytes, labelled analogs, and internal standards was analyzed prior to analysis to demonstrate the linear range of analysis. Calibration verification was performed at the beginning and end of 10 injections and at the end of each sequence. Target PFAS were quantified using the isotope dilution method. Samples are reported in ng/L concentrations.
Analysis Comments	When detected, PFHxS and PFOS contain both linear and branched isomers. In cases were native PFAS compounds were reported from dilutions (above calibration in non-diluted extracts), the extracted internal standard (surrogate) used to quantify the native compound was also reported from the dilution.

Holding Times	Extraction Date(s)	Analysis Date(s)
	9/27/2018	10/3-5/2018

QA/QC Summary
Batch 18-0568

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	MS/MSD not included with this SDG.
	No comments.

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.
	There are seven (7) instances where 13C2-PFOA and 13C4-PFOS would fail IS area criteria. These failures are due to the amount of native PFOA and PFOS found in the samples interfering with the internal standards in the non-diluted extracts. In these cases, the extracted internal standards that would use these two internal standards are reported from a dilution to mitigate the interferences from the high concentrations in the non-diluted samples. No data is reported from extracts where the IS areas would have failed criteria.

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

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

QA/QC Summary
Batch 18-0568

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

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

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Project Client: CH2M
Project Name: CTO-4164 Naval Base Ventura County, California
Project Number: 100110125-01
Preparation Batch: 18-0568
Data Set: DP-18-0276
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	NA	NA
Matrix Spike / Matrix Spike Duplicate Precision	NA	NA
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-18-0276
Project Number:	100110125-01	**Prep Batch Number:**	18-0568
Entered By:	Lauren Griffith	**Entered On:**	10/05/2018
Test Code (Matrix Type):	Master_369(L)		

Samples that were manually integrated are noted on the quant reports with the comment (TRUE).
LMG 10/5/18

In cases were native PFAS compounds were reported from dilutions (above calibration in non-diluted extracts), the extracted internal standard (surrogate) used to quantify the native compound was also reported from the dilution.
LMG 10/5/18

There are seven instances of extracted internal standards (surrogates) that would fall 50%-150% recovery criteria if reported from the non-diluted extract. This is due to the higher levels of native PFOA and PFOS found in the samples interfering with the 13C2-PFOA and 13C4-PFOS internal standards used to quantify the surrogates. In these cases, the surrogates are reported from dilutions, however, the native compounds are reported from the non-diluted extracts as the interferences are with the internal standards and not the surrogates used to quantify the native compounds.
LMG 10/5/18

Task Leader Approval:

SupervisorApproval:

PM Approval:



Digitally signed by Jonathan Thorn
Date: 2018.10.05 18:28:31 -04'00'

Example Calculation for PFAS

Calculation of final concentration from area:

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

Where:

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

Sample ID:	J8259-FS-D(3)
Client Sample ID:	VC-PM365-DW01-0918
Sample Size:	0.26
Units:	L
Dilution Factor:	10.000
PIV (L):	0.001
Target Analyte:	PFBS
MRM Transition:	298.9 / 80.0
Data file:	18-0568.wiff
Result table:	18-0568_BASE
Area:	3,161,322.71
IS Name:	13C3-PFBS
IS Area:	40,158.39
IS Amount (ng/L):	232.25
y-intercept:	0.09373
slope:	2.86876

$$\text{Concentration} = \frac{[(3161322.71/40158.39) - 0.09373]}{2.86876} * 232.25 * 0.001 * 10 / 0.26$$

ng/L = 244.83

*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: 18-0568
Data Set: DP-18-0276

		CR847PB-FS (Procedural Blank)	CR848LCS-FS (Laboratory Control Sample)	J8246-FS (VC-AQ-FB01-0918)	J8247-FS (VC-AQ-EB01-0918)	J8259-FS (VC-PM365-DW01-0918)	J8260-FS (VC-PM365-DW02-0918)
PFHxA	307-24-4	-	L	-	-	L	L
PFHpA	375-85-9	-	L	-	-	L	L
PFOA	335-67-1	-	L	-	-	L	L
PFNA	375-95-1	-	L	-	-	-	-
PFDA	335-76-2	-	L	-	-	-	-
PFUnA	2058-94-8	-	L	-	-	-	-
PFDoA	307-55-1	-	L	-	-	-	-
PFTrDA	72629-94-8	-	L	-	-	-	-
PFTeDA	376-06-7	-	L	-	-	-	-
NMeFOSAA	2355-31-9	-	L	-	-	-	-
NEtFOSAA	2991-50-6	-	L	-	-	-	-
PFBS	375-73-5	-	L	-	-	L	L
PFHxS	355-46-4	-	L/Br	-	-	L/Br	L/Br
PFOS	1763-23-1	-	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 Batch
Data Set: DP-18-

	J8261-FS (VC-PM365-DW02P-0918)	J8262-FS (VC-PM365-DW03-0918)	J8272-FS (VC-PM553-DW01-0918)	J8273-FS (VC-PM553-DW01P-0918)	J8274-FS (VC-PM553-DW02-0918)	J8275-FS (VC-PM553-DW03-0918)	J8276-FS (VC-SO-FB02-0919)	J8277-FS (VC-SO-EB02-0918)
PFHxA	L	L	L	L	L	L	-	-
PFHpA	L	L	L	L	L	L	-	-
PFOA	L	L	L	L	L	L	-	-
PFNA	-	L	-	-	-	L	-	-
PFDA	-	-	-	-	-	-	-	-
PFUnA	-	-	-	-	-	-	-	-
PFDoA	-	-	-	-	-	-	-	-
PFTrDA	-	-	-	-	-	-	-	-
PFTeDA	-	-	-	-	-	-	-	-
NMeFOSAA	-	-	-	-	-	-	-	-
NEtFOSAA	-	-	-	-	-	-	-	-
PFBS	L	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/Bra
"-": Not detected

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

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Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
KB77	L5	10/3/18 20:07	13C2-PFOA	104,371.80	52,185.90	156,557.70

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
KB73	L1	10/3/18 19:23	13C2-PFOA	83,195.21	52,185.90	156,557.70	
KB74	L2	10/3/18 19:34	13C2-PFOA	97,656.77	52,185.90	156,557.70	
KB75	L3	10/3/18 19:45	13C2-PFOA	95,548.87	52,185.90	156,557.70	
KB76	L4	10/3/18 19:56	13C2-PFOA	101,491.04	52,185.90	156,557.70	
KB77	L5	10/3/18 20:07	13C2-PFOA	104,371.80	52,185.90	156,557.70	
KB78	L6	10/3/18 20:18	13C2-PFOA	95,920.36	52,185.90	156,557.70	
KB79	L7	10/3/18 20:29	13C2-PFOA	96,585.69	52,185.90	156,557.70	
KB80 IB	Instrument Blank	10/3/18 20:40	13C2-PFOA	99,751.17	52,185.90	156,557.70	
KB81 ICC	ICC	10/3/18 20:50	13C2-PFOA	95,017.31	52,185.90	156,557.70	
CR847PB-FS(0)	Procedural Blank	10/3/18 22:50	13C2-PFOA	116,732.00	52,185.90	156,557.70	
CR848LCS-FS(0)	Laboratory Control Sample	10/3/18 23:01	13C2-PFOA	95,057.95	52,185.90	156,557.70	
J8246-FS(0)	VC-AQ-FB01-0918	10/3/18 23:12	13C2-PFOA	107,687.48	52,185.90	156,557.70	
J8247-FS(0)	VC-AQ-EB01-0918	10/3/18 23:23	13C2-PFOA	111,693.63	52,185.90	156,557.70	
J8276-FS(0)	VC-SO-FB02-0918	10/3/18 23:34	13C2-PFOA	78,181.44	52,185.90	156,557.70	
J8277-FS(0)	VC-SO-EB02-0918	10/3/18 23:44	13C2-PFOA	95,864.44	52,185.90	156,557.70	
J8259-FS(0)	VC-PM365-DW01-0918	10/3/18 23:55	13C2-PFOA	413,561.98	52,185.90	156,557.70	N
J8259-FS-D(3)	VC-PM365-DW01-0918	10/4/18 0:06	13C2-PFOA	148,020.64	52,185.90	156,557.70	
J8259-FS-D(7)	VC-PM365-DW01-0918	10/4/18 0:17	13C2-PFOA	109,854.70	52,185.90	156,557.70	
KB76 CCV	CCV	10/4/18 0:39	13C2-PFOA	93,169.98	52,185.90	156,557.70	
J8260-FS(0)	VC-PM365-DW02-0918	10/4/18 1:01	13C2-PFOA	83,692.79	52,185.90	156,557.70	
J8260-FS-D(3)	VC-PM365-DW02-0918	10/4/18 1:11	13C2-PFOA	94,510.79	52,185.90	156,557.70	
J8260-FS-D(9)	VC-PM365-DW02-0918	10/4/18 1:22	13C2-PFOA	104,746.99	52,185.90	156,557.70	
J8261-FS(0)	VC-PM365-DW02P-0918	10/4/18 1:33	13C2-PFOA	89,211.13	52,185.90	156,557.70	
J8261-FS-D(3)	VC-PM365-DW02P-0918	10/4/18 1:44	13C2-PFOA	83,162.34	52,185.90	156,557.70	
J8261-FS-D(9)	VC-PM365-DW02P-0918	10/4/18 1:55	13C2-PFOA	102,279.31	52,185.90	156,557.70	
J8262-FS(0)	VC-PM365-DW03-0918	10/4/18 2:06	13C2-PFOA	69,470.03	52,185.90	156,557.70	
J8262-FS-D(7)	VC-PM365-DW03-0918	10/4/18 2:17	13C2-PFOA	111,589.44	52,185.90	156,557.70	
J8262-FS-D(9)	VC-PM365-DW03-0918	10/4/18 2:28	13C2-PFOA	76,356.93	52,185.90	156,557.70	
KB77 CCV	CCV	10/4/18 2:49	13C2-PFOA	88,052.68	52,185.90	156,557.70	
J8272-FS(0)	VC-PM553-DW01-0918	10/4/18 3:11	13C2-PFOA	119,319.79	52,185.90	156,557.70	
J8272-FS-D(5)	VC-PM553-DW01-0918	10/4/18 3:22	13C2-PFOA	92,236.67	52,185.90	156,557.70	
J8273-FS(0)	VC-PM553-DW01P-0918	10/4/18 3:33	13C2-PFOA	149,381.36	52,185.90	156,557.70	
J8273-FS-D(5)	VC-PM553-DW01P-0918	10/4/18 3:44	13C2-PFOA	88,247.65	52,185.90	156,557.70	
J8274-FS(0)	VC-PM553-DW02-0918	10/4/18 3:55	13C2-PFOA	336,661.03	52,185.90	156,557.70	N
J8274-FS-D(9)	VC-PM553-DW02-0918	10/4/18 4:06	13C2-PFOA	109,925.05	52,185.90	156,557.70	
~~J8274-FS-D(11)~~	~~VC-PM553-DW02-0918~~	~~10/4/18 4:16~~	~~13C2-PFOA~~	~~20,534.70~~	~~52,185.90~~	~~156,557.70~~	N
J8275-FS(0)	VC-PM553-DW03-0918	10/4/18 4:27	13C2-PFOA	228,499.01	52,185.90	156,557.70	N
J8275-FS-D(7)	VC-PM553-DW03-0918	10/4/18 4:38	13C2-PFOA	96,160.70	52,185.90	156,557.70	
J8275-FS-D(9)	VC-PM553-DW03-0918	10/4/18 4:49	13C2-PFOA	107,582.69	52,185.90	156,557.70	
KB76 CCV	CCV	10/4/18 5:11	13C2-PFOA	94,838.84	52,185.90	156,557.70	
KB79 CCV	CCV	10/3/18 22:28	13C2-PFOA	99,140.06	52,185.90	156,557.70	
J8274-FS-D(11)	VC-PM553-DW02-0918	10/4/18 15:43	13C2-PFOA	87,195.90	52,185.90	156,557.70	
KB76 CCV	CCV	10/4/18 15:54	13C2-PFOA	97,286.10	52,185.90	156,557.70	

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

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Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
KB77	L5	10/3/18 20:07	13C2-PFDA	115,554.63	57,777.32	173,331.95

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
KB73	L1	10/3/18 19:23	13C2-PFDA	95,600.93	57,777.32	173,331.95	
KB74	L2	10/3/18 19:34	13C2-PFDA	99,405.52	57,777.32	173,331.95	
KB75	L3	10/3/18 19:45	13C2-PFDA	113,112.27	57,777.32	173,331.95	
KB76	L4	10/3/18 19:56	13C2-PFDA	110,616.59	57,777.32	173,331.95	
KB77	L5	10/3/18 20:07	13C2-PFDA	115,554.63	57,777.32	173,331.95	
KB78	L6	10/3/18 20:18	13C2-PFDA	108,848.41	57,777.32	173,331.95	
KB79	L7	10/3/18 20:29	13C2-PFDA	114,301.58	57,777.32	173,331.95	
KB80 IB	Instrument Blank	10/3/18 20:40	13C2-PFDA	109,559.77	57,777.32	173,331.95	
KB81 ICC	ICC	10/3/18 20:50	13C2-PFDA	112,520.38	57,777.32	173,331.95	
CR847PB-FS(0)	Procedural Blank	10/3/18 22:50	13C2-PFDA	129,840.05	57,777.32	173,331.95	
CR848LCS-FS(0)	Laboratory Control Sample	10/3/18 23:01	13C2-PFDA	102,610.02	57,777.32	173,331.95	
J8246-FS(0)	VC-AQ-FB01-0918	10/3/18 23:12	13C2-PFDA	120,348.37	57,777.32	173,331.95	
J8247-FS(0)	VC-AQ-EB01-0918	10/3/18 23:23	13C2-PFDA	141,052.92	57,777.32	173,331.95	
J8276-FS(0)	VC-SO-FB02-0918	10/3/18 23:34	13C2-PFDA	91,233.56	57,777.32	173,331.95	
J8277-FS(0)	VC-SO-EB02-0918	10/3/18 23:44	13C2-PFDA	121,567.71	57,777.32	173,331.95	
J8259-FS(0)	VC-PM365-DW01-0918	10/3/18 23:55	13C2-PFDA	82,877.49	57,777.32	173,331.95	
J8259-FS-D(3)	VC-PM365-DW01-0918	10/4/18 0:06	13C2-PFDA	111,733.15	57,777.32	173,331.95	
J8259-FS-D(7)	VC-PM365-DW01-0918	10/4/18 0:17	13C2-PFDA	124,145.46	57,777.32	173,331.95	
KB76 CCV	CCV	10/4/18 0:39	13C2-PFDA	106,034.98	57,777.32	173,331.95	
J8260-FS(0)	VC-PM365-DW02-0918	10/4/18 1:01	13C2-PFDA	91,935.30	57,777.32	173,331.95	
J8260-FS-D(3)	VC-PM365-DW02-0918	10/4/18 1:11	13C2-PFDA	120,689.15	57,777.32	173,331.95	
J8260-FS-D(9)	VC-PM365-DW02-0918	10/4/18 1:22	13C2-PFDA	120,261.91	57,777.32	173,331.95	
J8261-FS(0)	VC-PM365-DW02P-0918	10/4/18 1:33	13C2-PFDA	93,982.02	57,777.32	173,331.95	
J8261-FS-D(3)	VC-PM365-DW02P-0918	10/4/18 1:44	13C2-PFDA	108,639.27	57,777.32	173,331.95	
J8261-FS-D(9)	VC-PM365-DW02P-0918	10/4/18 1:55	13C2-PFDA	117,362.19	57,777.32	173,331.95	
J8262-FS(0)	VC-PM365-DW03-0918	10/4/18 2:06	13C2-PFDA	79,220.84	57,777.32	173,331.95	
J8262-FS-D(7)	VC-PM365-DW03-0918	10/4/18 2:17	13C2-PFDA	121,270.19	57,777.32	173,331.95	
J8262-FS-D(9)	VC-PM365-DW03-0918	10/4/18 2:28	13C2-PFDA	93,189.93	57,777.32	173,331.95	
KB77 CCV	CCV	10/4/18 2:49	13C2-PFDA	108,838.11	57,777.32	173,331.95	
J8272-FS(0)	VC-PM553-DW01-0918	10/4/18 3:11	13C2-PFDA	79,390.93	57,777.32	173,331.95	
J8272-FS-D(5)	VC-PM553-DW01-0918	10/4/18 3:22	13C2-PFDA	111,026.92	57,777.32	173,331.95	
J8273-FS(0)	VC-PM553-DW01P-0918	10/4/18 3:33	13C2-PFDA	100,081.13	57,777.32	173,331.95	
J8273-FS-D(5)	VC-PM553-DW01P-0918	10/4/18 3:44	13C2-PFDA	101,337.06	57,777.32	173,331.95	
J8274-FS(0)	VC-PM553-DW02-0918	10/4/18 3:55	13C2-PFDA	81,220.25	57,777.32	173,331.95	
J8274-FS-D(9)	VC-PM553-DW02-0918	10/4/18 4:06	13C2-PFDA	113,789.47	57,777.32	173,331.95	
~~J8274-FS-D(11)~~	~~VC-PM553-DW02-0918~~	~~10/4/18 4:16~~	~~13C2-PFDA~~	~~21,721.04~~	~~57,777.32~~	~~173,331.95~~	N
J8275-FS(0)	VC-PM553-DW03-0918	10/4/18 4:27	13C2-PFDA	95,141.98	57,777.32	173,331.95	
J8275-FS-D(7)	VC-PM553-DW03-0918	10/4/18 4:38	13C2-PFDA	100,840.00	57,777.32	173,331.95	
J8275-FS-D(9)	VC-PM553-DW03-0918	10/4/18 4:49	13C2-PFDA	123,675.74	57,777.32	173,331.95	
KB76 CCV	CCV	10/4/18 5:11	13C2-PFDA	103,513.22	57,777.32	173,331.95	
KB79 CCV	CCV	10/3/18 22:28	13C2-PFDA	109,532.25	57,777.32	173,331.95	
J8274-FS-D(11)	VC-PM553-DW02-0918	10/4/18 15:43	13C2-PFDA	85,293.62	57,777.32	173,331.95	
KB76 CCV	CCV	10/4/18 15:54	13C2-PFDA	114,602.59	57,777.32	173,331.95	

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

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Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
KB77	L5	10/3/18 20:07	13C4-PFOS	33,686.85	16,843.43	50,530.28

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
KB73	L1	10/3/18 19:23	13C4-PFOS	25,284.45	16,843.43	50,530.28	
KB74	L2	10/3/18 19:34	13C4-PFOS	29,610.27	16,843.43	50,530.28	
KB75	L3	10/3/18 19:45	13C4-PFOS	32,653.35	16,843.43	50,530.28	
KB76	L4	10/3/18 19:56	13C4-PFOS	32,458.54	16,843.43	50,530.28	
KB77	L5	10/3/18 20:07	13C4-PFOS	33,686.85	16,843.43	50,530.28	
KB78	L6	10/3/18 20:18	13C4-PFOS	31,404.89	16,843.43	50,530.28	
KB79	L7	10/3/18 20:29	13C4-PFOS	29,831.27	16,843.43	50,530.28	
KB80 IB	Instrument Blank	10/3/18 20:40	13C4-PFOS	32,387.71	16,843.43	50,530.28	
KB81 ICC	ICC	10/3/18 20:50	13C4-PFOS	28,012.06	16,843.43	50,530.28	
CR847PB-FS(0)	Procedural Blank	10/3/18 22:50	13C4-PFOS	35,443.48	16,843.43	50,530.28	
CR848LCS-FS(0)	Laboratory Control Sample	10/3/18 23:01	13C4-PFOS	26,753.35	16,843.43	50,530.28	
J8246-FS(0)	VC-AQ-FB01-0918	10/3/18 23:12	13C4-PFOS	33,294.95	16,843.43	50,530.28	
J8247-FS(0)	VC-AQ-EB01-0918	10/3/18 23:23	13C4-PFOS	36,492.95	16,843.43	50,530.28	
J8276-FS(0)	VC-SO-FB02-0918	10/3/18 23:34	13C4-PFOS	25,547.98	16,843.43	50,530.28	
J8277-FS(0)	VC-SO-EB02-0918	10/3/18 23:44	13C4-PFOS	32,173.74	16,843.43	50,530.28	
J8259-FS(0)	VC-PM365-DW01-0918	10/3/18 23:55	13C4-PFOS	23,220.42	16,843.43	50,530.28	
J8259-FS-D(3)	VC-PM365-DW01-0918	10/4/18 0:06	13C4-PFOS	28,130.90	16,843.43	50,530.28	
J8259-FS-D(7)	VC-PM365-DW01-0918	10/4/18 0:17	13C4-PFOS	36,942.71	16,843.43	50,530.28	
KB76 CCV	CCV	10/4/18 0:39	13C4-PFOS	30,780.46	16,843.43	50,530.28	
J8260-FS(0)	VC-PM365-DW02-0918	10/4/18 1:01	13C4-PFOS	18,012.63	16,843.43	50,530.28	
J8260-FS-D(3)	VC-PM365-DW02-0918	10/4/18 1:11	13C4-PFOS	30,559.07	16,843.43	50,530.28	
J8260-FS-D(9)	VC-PM365-DW02-0918	10/4/18 1:22	13C4-PFOS	33,376.30	16,843.43	50,530.28	
J8261-FS(0)	VC-PM365-DW02P-0918	10/4/18 1:33	13C4-PFOS	15,260.61	16,843.43	50,530.28	N
J8261-FS-D(3)	VC-PM365-DW02P-0918	10/4/18 1:44	13C4-PFOS	23,765.98	16,843.43	50,530.28	
J8261-FS-D(9)	VC-PM365-DW02P-0918	10/4/18 1:55	13C4-PFOS	30,136.29	16,843.43	50,530.28	
J8262-FS(0)	VC-PM365-DW03-0918	10/4/18 2:06	13C4-PFOS	14,036.04	16,843.43	50,530.28	N
J8262-FS-D(7)	VC-PM365-DW03-0918	10/4/18 2:17	13C4-PFOS	33,825.58	16,843.43	50,530.28	
J8262-FS-D(9)	VC-PM365-DW03-0918	10/4/18 2:28	13C4-PFOS	26,097.25	16,843.43	50,530.28	
KB77 CCV	CCV	10/4/18 2:49	13C4-PFOS	30,133.97	16,843.43	50,530.28	
J8272-FS(0)	VC-PM553-DW01-0918	10/4/18 3:11	13C4-PFOS	22,011.31	16,843.43	50,530.28	
J8272-FS-D(5)	VC-PM553-DW01-0918	10/4/18 3:22	13C4-PFOS	33,530.14	16,843.43	50,530.28	
J8273-FS(0)	VC-PM553-DW01P-0918	10/4/18 3:33	13C4-PFOS	22,580.66	16,843.43	50,530.28	
J8273-FS-D(5)	VC-PM553-DW01P-0918	10/4/18 3:44	13C4-PFOS	29,667.36	16,843.43	50,530.28	
J8274-FS(0)	VC-PM553-DW02-0918	10/4/18 3:55	13C4-PFOS	21,346.46	16,843.43	50,530.28	
J8274-FS-D(9)	VC-PM553-DW02-0918	10/4/18 4:06	13C4-PFOS	33,937.90	16,843.43	50,530.28	
~~J8274-FS-D(11)~~	~~VC-PM553-DW02-0918~~	~~10/4/18 4:16~~	~~13C4-PFOS~~	~~6,430.49~~	~~16,843.43~~	~~50,530.28~~	N
J8275-FS(0)	VC-PM553-DW03-0918	10/4/18 4:27	13C4-PFOS	21,752.77	16,843.43	50,530.28	
J8275-FS-D(7)	VC-PM553-DW03-0918	10/4/18 4:38	13C4-PFOS	30,903.44	16,843.43	50,530.28	
J8275-FS-D(9)	VC-PM553-DW03-0918	10/4/18 4:49	13C4-PFOS	37,059.85	16,843.43	50,530.28	
KB76 CCV	CCV	10/4/18 5:11	13C4-PFOS	31,207.41	16,843.43	50,530.28	
KB79 CCV	CCV	10/3/18 22:28	13C4-PFOS	28,979.06	16,843.43	50,530.28	
J8274-FS-D(11)	VC-PM553-DW02-0918	10/4/18 15:43	13C4-PFOS	30,091.36	16,843.43	50,530.28	
KB76 CCV	CCV	10/4/18 15:54	13C4-PFOS	34,016.24	16,843.43	50,530.28	

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

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Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
KB77	L5	10/5/18 11:12	13C2-PFOA	66,665.49	33,332.75	99,998.24

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
KB73	L1	10/5/18 10:28	13C2-PFOA	87,694.12	33,332.75	99,998.24	
KB74	L2	10/5/18 10:39	13C2-PFOA	92,810.43	33,332.75	99,998.24	
KB75	L3	10/5/18 10:50	13C2-PFOA	77,486.60	33,332.75	99,998.24	
KB76	L4	10/5/18 11:01	13C2-PFOA	86,595.38	33,332.75	99,998.24	
KB77	L5	10/5/18 11:12	13C2-PFOA	66,665.49	33,332.75	99,998.24	
KB78	L6	10/5/18 11:22	13C2-PFOA	81,119.78	33,332.75	99,998.24	
KB79	L7	10/5/18 11:33	13C2-PFOA	79,331.56	33,332.75	99,998.24	
KB80 IB	Instrument Blank	10/5/18 11:44	13C2-PFOA	96,909.97	33,332.75	99,998.24	
KB81 ICC	ICC	10/5/18 11:55	13C2-PFOA	90,802.43	33,332.75	99,998.24	
J8260-FS-D(11)	VC-PM365-DW02-0918	10/5/18 13:44	13C2-PFOA	73,475.09	33,332.75	99,998.24	
J8261-FS-D(11)	VC-PM365-DW02P-0918	10/5/18 13:55	13C2-PFOA	75,046.71	33,332.75	99,998.24	
J8274-FS-D(13)	VC-PM553-DW02-0918	10/5/18 14:06	13C2-PFOA	90,352.78	33,332.75	99,998.24	
J8275-FS-D(11)	VC-PM553-DW03-0918	10/5/18 14:17	13C2-PFOA	99,822.94	33,332.75	99,998.24	
KB76	L4	10/5/18 14:28	13C2-PFOA	94,796.50	33,332.75	99,998.24	
J8259-FS-D(5)	VC-PM365-DW01-0918	10/5/18 15:35	13C2-PFOA	85,068.71	33,332.75	99,998.24	
KB77	L5	10/5/18 15:46	13C2-PFOA	96,206.99	33,332.75	99,998.24	

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

BATTELLE
It can be done

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
KB77	L5	10/5/18 11:12	13C4-PFOS	25,210.85	12,605.43	37,816.28

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
KB73	L1	10/5/18 10:28	13C4-PFOS	31,921.29	12,605.43	37,816.28	
KB74	L2	10/5/18 10:39	13C4-PFOS	32,120.24	12,605.43	37,816.28	
KB75	L3	10/5/18 10:50	13C4-PFOS	25,991.21	12,605.43	37,816.28	
KB76	L4	10/5/18 11:01	13C4-PFOS	29,531.69	12,605.43	37,816.28	
KB77	L5	10/5/18 11:12	13C4-PFOS	25,210.85	12,605.43	37,816.28	
KB78	L6	10/5/18 11:22	13C4-PFOS	29,874.04	12,605.43	37,816.28	
KB79	L7	10/5/18 11:33	13C4-PFOS	26,769.43	12,605.43	37,816.28	
KB80 IB	Instrument Blank	10/5/18 11:44	13C4-PFOS	31,052.09	12,605.43	37,816.28	
KB81 ICC	ICC	10/5/18 11:55	13C4-PFOS	33,030.83	12,605.43	37,816.28	
J8260-FS-D(11)	VC-PM365-DW02-0918	10/5/18 13:44	13C4-PFOS	29,049.04	12,605.43	37,816.28	
J8261-FS-D(11)	VC-PM365-DW02P-0918	10/5/18 13:55	13C4-PFOS	26,372.90	12,605.43	37,816.28	
J8274-FS-D(13)	VC-PM553-DW02-0918	10/5/18 14:06	13C4-PFOS	31,035.76	12,605.43	37,816.28	
J8275-FS-D(11)	VC-PM553-DW03-0918	10/5/18 14:17	13C4-PFOS	35,613.73	12,605.43	37,816.28	
KB76	L4	10/5/18 14:28	13C4-PFOS	31,762.34	12,605.43	37,816.28	
J8259-FS-D(5)	VC-PM365-DW01-0918	10/5/18 15:35	13C4-PFOS	30,611.31	12,605.43	37,816.28	
KB77	L5	10/5/18 15:46	13C4-PFOS	34,374.39	12,605.43	37,816.28	

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Mass Spectral Acquisition Rate Report

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Printed: 05/10/2018 4:40:37 PM

Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 8:29:13 PM	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
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	25	>10
PFHxA_1	313.0 / 269.0	1.85	24	>10
PFHxA_2	313.0 / 119.0	1.85	24	>10
PFHpA_1	363.0 / 319.0	2.25	29	>10
PFHpA_2	363.0 / 169.0	2.25	29	>10
PFHxS_1	399.0 / 80.0	2.28	36	>10
PFHxS_2	399.0 / 99.0	2.28	36	>10
PFOA_1	413.0 / 369.0	2.66	37	>10
PFOA_2	413.0 / 169.0	2.66	40	>10
PFNA_1	463.0 / 419.0	3.06	42	>10
PFNA_2	463.0 / 219.0	3.06	39	>10
PFOS_1	499.0 / 80.0	3.06	40	>10
PFOS_2	499.0 / 99.0	3.06	36	>10
PFDA_1	513.0 / 469.0	3.42	54	>10
PFDA_2	513.0 / 219.0	3.42	52	>10
PFUnA_1	563.0 / 519.0	3.74	61	>10
PFUnA_2	563.0 / 269.0	3.74	49	>10
PFDoA_1	613.0 / 569.0	4.02	68	>10
PFDoA_2	613.0 / 319.0	4.02	53	>10
PFTrDA_1	663.0 / 619.0	4.26	70	>10
PFTrDA_2	663.0 / 169.0	4.26	41	>10
PFTeDA_1	713.0 / 669.0	4.48	89	>10
PFTeDA_2	713.0 / 169.0	4.47	62	>10
NMeFOSAA_1	570.0 / 419.0	3.57	43	>10
NMeFOSAA_2	570.0 / 512.0	3.57	21	>10
NEtFOSAA_1	584.0 / 419.0	3.73	49	>10
NEtFOSAA_2	584.0 / 483.0	3.73	23	>10

Mass Spectral Acquisition Rate Report

Created with Analyst Reporter
Printed: 05/10/2018 4:40:02 PM

Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 8:29:13 PM	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
13C2-PFDoA	615.0 / 570.0	4.01	43	>10
d3-MeFOSAA	573.0 / 419.0	3.56	30	>10
d5-EtFOSAA	589.0 / 419.0	3.72	29	>10
13C5-PFHxA	318.0 / 273.0	1.84	29	>10
13C4-PFHpA	367.0 / 322.0	2.24	39	>10
13C8-PFOA	421.0 / 376.0	2.66	39	>10
13C9-PFNA	472.0 / 427.0	3.05	40	>10
13C6-PFDA	519.0 / 474.0	3.40	41	>10
13C7-PFUnA	570.0 / 525.0	3.72	34	>10
13C2-PFTeDA	715.0 / 670.0	4.47	41	>10
13C3-PFBS	302.0 / 99.0	1.51	29	>10
13C3-PFHxS	402.0 / 99.0	2.27	28	>10
13C8-PFOS	507.0 / 99.0	3.04	19	>10

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Mass Spectral Acquisition Rate Report

Created with Analyst Reporter
Printed: 05/10/2018 4:41:43 PM

Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	10/5/2018 11:33:45 AM	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
PFHxA_1	313.0 / 269.0	1.85	23	>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	32	>10
PFHxS_1	399.0 / 80.0	2.28	40	>10
PFHxS_2	399.0 / 99.0	2.28	36	>10
PFOA_1	413.0 / 369.0	2.67	38	>10
PFOA_2	413.0 / 169.0	2.67	32	>10

Mass Spectral Acquisition Rate Report

Created with Analyst Reporter
Printed: 05/10/2018 4:41:15 PM

Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	10/5/2018 11:33:45 AM	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
13C5-PFHxA	318.0 / 273.0	1.84	41	>10
13C4-PFHpA	367.0 / 322.0	2.25	34	>10
13C8-PFOA	421.0 / 376.0	2.66	35	>10
13C3-PFHxS	402.0 / 99.0	2.27	35	>10

BATTELLE
It can be done

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

Analyte	CAS No.	Average (ng/L)	ST DEV	2 Sigma	n
PFBA	375-22-4	12.29	2.02	4.04	13
PFPeA	2706-90-3	10.73	1.51	3.02	9
PFHxA	307-24-4	9.93	1.30	2.60	39
PFHpA	375-85-9	9.42	1.57	3.14	39
PFOA	335-67-1	10.18	1.47	2.94	40
PFNA	375-95-1	9.64	1.15	2.30	39
PFDA	335-76-2	9.89	1.32	2.64	39
PFUnA	2058-94-8	9.86	1.31	2.62	39
PFDoA	307-55-1	10.75	1.29	2.58	39
PFTrDA	72629-94-8	11.18	1.54	3.08	39
PFTeDA	376-06-7	10.70	1.91	3.82	39
NMeFOSAA	2355-31-9	10.26	1.87	3.74	39
NEtFOSAA	2991-50-6	9.63	1.54	3.08	39
PFOSA	754-91-6	9.74	1.14	2.28	4
PFBS	375-73-5	10.05	1.44	2.88	40
PFPeS	BDO-2114	9.80	0.96	1.92	5
PFHxS	355-46-4	9.76	1.40	2.80	39
PFHpS	375-99-6	10.96	0.96	1.92	10
PFOS	1763-23-1	10.09	1.36	2.72	38
PFNS	98789-57-2	9.34	1.10	2.20	4
PFDS	2806-15-7	10.13	1.88	3.76	9
4:2FTS	BDO-2205	11.03	1.26	2.52	9
6:2FTS	27619-97-2	12.52	2.91	5.82	9
8:2FTS	39108-34-4	12.11	2.54	5.08	9

BATTELLE DETECTION LIMITS FOR PFAS IN NON-POTABLE WATER

Analytical SOP 5-369
Extraction SOP 5-370

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

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

Analytes on NELAP and ELAP QSM 5.1 Scope of accreditation

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ID 596 04/18

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

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

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

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

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

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Non-Potable Water Calibration to Sample Equivalents

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

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

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

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

QTRAP 5500
Preventive Maintenance Checklist

Preventive Maintenance Date:	12-June-2018

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

☑ **PASS** ☐ **FAIL**

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

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

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

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

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

Approved By :_____ **Date:** _____

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

PRE PM PPG PERFORMANCE EVALUATION:

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

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

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

☑ No degradation or Sensitivity drop

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

☑ No degradation or Sensitivity drop

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

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

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

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

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

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

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

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

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

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

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

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

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

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

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

PREVENTIVE MAINTENANCE CHECKLIST:

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

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

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

☑Pump down overnight if possible. ☐ N/A

☑Perform Maintenance on Turbo V source.

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

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

POST PM PPG PERFORMANCE TESTS:

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

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

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

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

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

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

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

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

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

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

Mass	Scan Rate	Mca	Q1 Intensity		Q1 Width Value	Width Specs
			Value	Spec		
Q1 933.636	10	10	1.35 e7	≥1.0^e7	0.7486	0.6 to 0.8
Q1 933.636	1000	50	7.52 e7	≥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	≥8.0^e6	0.7492	0.6 to 0.8
Q3 933.636	1000	50	8.33 e7	≥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	≥7.2 ^e6	0.1473	<0.35
ER 922.010	0.05	4.96 e7	≥2.8 ^e6	0.2434	<0.35
ScanRate : 10000 Da/s ; 50 Mca					
ER 118.087	0.05		≥2.4 ^e7		<0.65
ER 922.010	0.05		≥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	≥4.4 ^e7	0.1862	<0.35
ER 601.978	0.05	1.70 e8	≥5.6 ^e7	0.1809	<0.35
ScanRate : 10000 Da/s ; 50 Mca					
ER 431.982	0.05	5.72 e8	≥1.2 ^e8	0.5102	<0.65
ER 601.978	0.05	4.52 e8	≥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
☐ 236 OR ☑ 365	1000	Yes	Fragment Intensity	> 2.0 e6	≥1.6x $10^{e}6$

REVIEW:

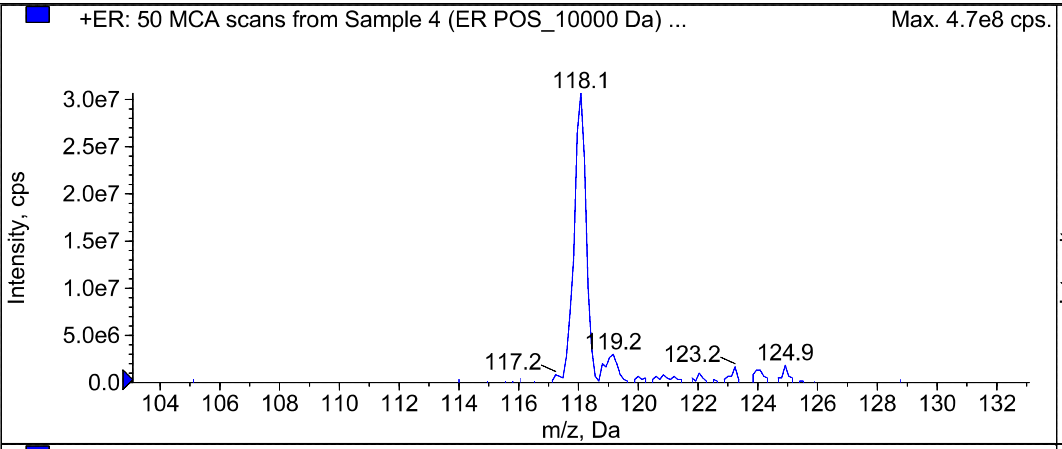
☑ Attach all spectrums printouts to this procedure.
☑ If any parameter setting access modes were changed during the PM, ensure they are returned to their normal access mode and that their offsets are adjusted to match optimized values from the post-PM acquisition files.
☐ Empty tuning cache folder, if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

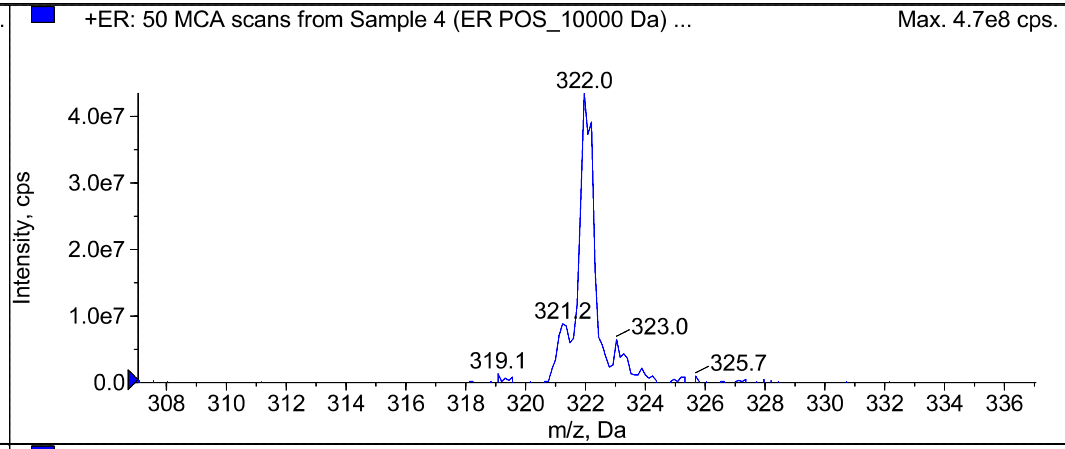
END OF PREVENTIVE MAINTENANCE CHECKLIST

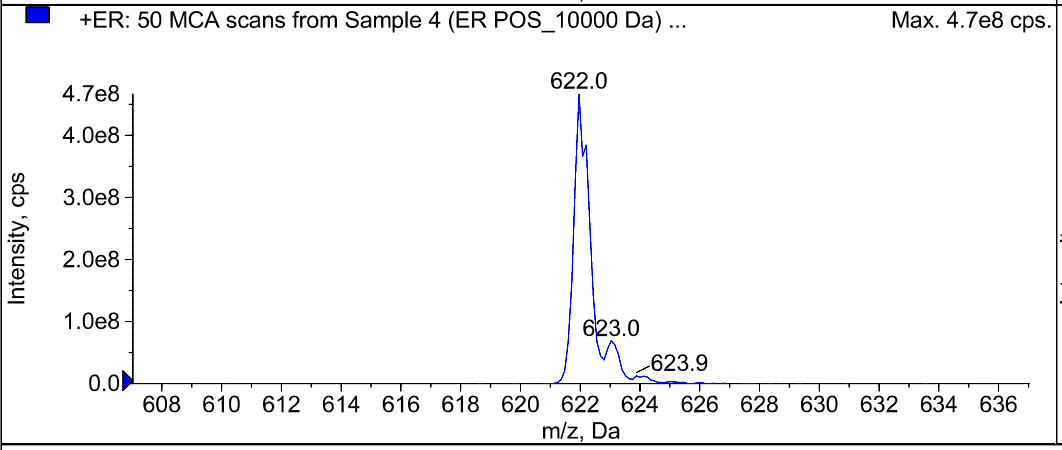
Document history:

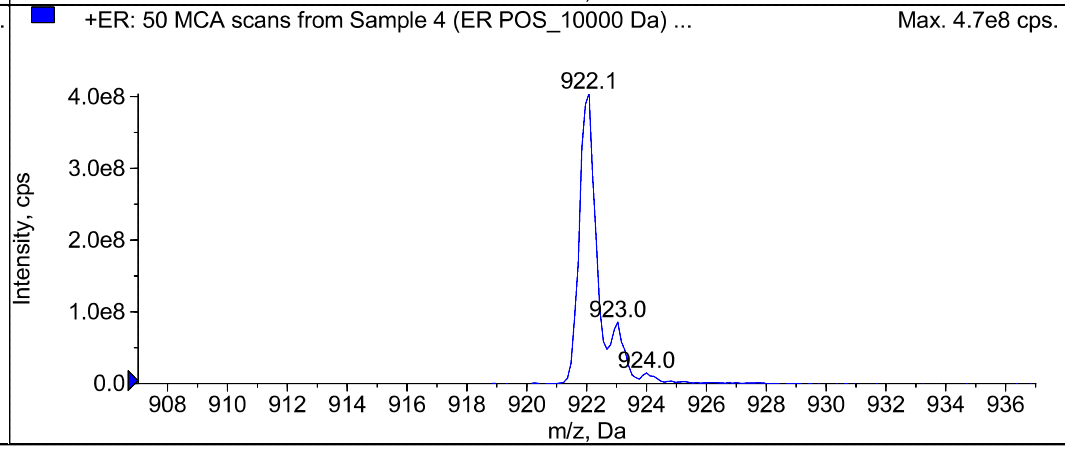
06 OCT 2016: Appendix ZEFPM003-2L: Removed requirements to fit Manufacturer's testing criteria.

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

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

Battelle Standard ID	Description	Intermediate Solutions	Battelle Reagent ID (purchased solutions)
JZ88	PFAS - DoD 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
KB73	PFAS - DoD Calibration L1	JY25	180726-04
KB73	PFAS - DoD Calibration L1	JY23	180705-02
KB73	PFAS - DoD Calibration L1	KB71	180726-05
KB74	PFAS - DoD Calibration L2	KB71	180726-05
KB74	PFAS - DoD Calibration L2	JY25	180726-04
KB74	PFAS - DoD Calibration L2	JY23	180705-02
KB75	PFAS - DoD Calibration L3	JY25	180726-04
KB75	PFAS - DoD Calibration L3	KB70	180705-02
KB75	PFAS - DoD Calibration L3	KB71	180726-05
KB76	PFAS - DoD Calibration L4	KB71	180726-05
KB76	PFAS - DoD Calibration L4	KB70	180705-02
KB76	PFAS - DoD Calibration L4	JY25	180726-04
KB77	PFAS - DoD Calibration L5	JY25	180726-04
KB77	PFAS - DoD Calibration L5	KB70	180705-02
KB77	PFAS - DoD Calibration L5	KB71	180726-05
KB78	PFAS - DoD Calibraiton L6	KB71	180726-05
KB78	PFAS - DoD Calibraiton L6	JY25	180726-04
KB78	PFAS - DoD Calibraiton L6	KB70	180705-02
KB79	PFAS - DoD Calibration L7	KB70	180705-02
KB79	PFAS - DoD Calibration L7	JY25	180726-04
KB79	PFAS - DoD Calibration L7	KB71	180726-05
KB80	PFAS - DoD Instrument Blank	KB71	180726-05
KB80	PFAS - DoD Instrument Blank	JY25	180726-04
KB81	PFAS - DoD ICC	JY25	180726-04
KB81	PFAS - DoD ICC	KB82	170724-01
KB81	PFAS - DoD ICC	KB71	180726-05
KB89	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-02
KB89	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-03
KB89	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-04
KB89	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-06
KB89	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-07

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: JX28

Description: PFAS Branched Standard Stock

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

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

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

Balance ID:

Comment:

Solvent:	Lot:
Methanol (HPLC)	179315

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

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JX28

Description: PFAS Branched Standard Stock

Stock Id: 180618-02

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

Stock Id: 180618-03

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

Stock Id: 180618-04

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

Stock Id: 180618-06

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

Stock Id: 180618-07

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

Final Concentrations:

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

Syringes/Pipettes:

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

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

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

Comment:

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

BATTELLE

It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: JY23

Description: PFAS - DoD Low ICAL Stock

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

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

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

Balance ID:

Comment: 96/4 Methanol/milli-q water

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

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY23

Description: PFAS - DoD Low ICAL Stock

Stock Id: 180705-02

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

Final Concentrations:

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

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

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

Comment: 96/4 Methanol/milli-q water

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

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY23

Description: PFAS - DoD Low ICAL Stock

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

Syringes/Pipettes:

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

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

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

Comment: 96/4 Methanol/milli-q water

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

BATTELLE

It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: JY25

Description: PFAS - DoD Internal Standard Stock Solution

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

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

Balance ID:

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

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

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY25

Description: PFAS - DoD Internal Standard Stock Solution

Stock Id: 180726-04

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

Final Concentrations:

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

Syringes/Pipettes:

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

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

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

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

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

BATTELLE

It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: JY27

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

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

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

Balance ID: _____

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

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

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY27

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

Stock Id: 180726-05

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

Final Concentrations:

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

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

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

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

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

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY27

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

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

Syringes/Pipettes:

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

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

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

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

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

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **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	~1.000000	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

BATTELLE
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-butanesulfonate	1000	1.01	1	100.000	1	20	0.05050
Perfluoro-1-hexanesulfonate	1000	1.01	1	100.000	1	20	0.05050
Perfluoro-1-octanesulfonamide	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-1-octanesulfonate	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-butanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-decanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-dodecanoic acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-heptanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-hexanoic acid	1000	1.01	1	100.000	1	20	0.05050
Perfluoro-n-octanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluorononanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-pentanoic acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-tetradecanoic acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-tridecanoic acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-undecanoic acid	1000	1.00	1	100.000	1	20	0.05000
Sodium perfluoro-1-pentanesulfonate	1000	1.00	1	100.000	1	20	0.05000

Final Concentrations:

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

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 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

BATTELLE
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

BATTELLE
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

BATTELLE
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

BATTELLE
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

BATTELLE
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

BATTELLE
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

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

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **KB70**

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 - ICAL Mix	Neat	~1.000000	06/19/23	---	---	1000 uL	1	20	~0.0500

Solution Prepared By: Schultz, Stephanie	**Date Prepared:** 10/1/2018	**Expiration Date:**	10/1/2019
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:** 10/12/2018 8:03:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KB70

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	1000	1.01	1	100.000	1	20	0.05050
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	1000	1.01	1	100.000	1	20	0.05050
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	1000	1.00	1	100.000	1	20	0.05000
(Na) Perfluoro-1-decanesulfonate	1000	1.01	1	100.000	1	20	0.05050
(NA) Perfluoro-1-heptanesulfonate	1000	1.00	1	100.000	1	20	0.05000
(Na) Perfluoro-1-nonanesulfonate	1000	1.01	1	100.000	1	20	0.05050
N-ethylperfluoro-octanesulfonamidoacetic acid	1000	1.00	1	100.000	1	20	0.05000
N-methylperfluoro-1-octanesulfonamidoacetic acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-1-butanesulfonate	1000	1.01	1	100.000	1	20	0.05050
Perfluoro-1-hexanesulfonate	1000	1.01	1	100.000	1	20	0.05050
Perfluoro-1-octanesulfonamide	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-1-octanesulfonate	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-butanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-decanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-dodecanoic acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-heptanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-hexanoic acid	1000	1.01	1	100.000	1	20	0.05050
Perfluoro-n-octanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluorononanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-pentanoic acid	1000	1.01	1	100.000	1	20	0.05050
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	.05050
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	.05000
(Na) Perfluoro-1-decanesulfonate	.05050
(NA) Perfluoro-1-heptanesulfonate	.05000
(Na) Perfluoro-1-nonanesulfonate	.05050
N-ethylperfluoro-octanesulfonamidoacetic acid	.05000
N-methylperfluoro-1-octanesulfonamidoacetic acid	.05000
Perfluoro-1-butanesulfonate	.05050

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

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:** 10/12/2018 8:03:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **KB70**

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:** 10/1/2018 **Expiration Date:** 10/1/2019

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:** 10/12/2018 8:03:00 AM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **KB71**

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

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

Solution Prepared By	Schultz, Stephanie	**Date Prepared:**	10/1/2018	**Expiration Date**	10/1/2019
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:** 10/4/2018 2:44:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KB71

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:** 10/1/2018 **Expiration Date:** 10/1/2019

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:** 10/4/2018 2:44:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KB71

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:** 10/1/2018 **Expiration Date:** 10/1/2019

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:** 10/4/2018 2:44:00 PM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **KB73**

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
KB71	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	10/01/19	---	---	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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:40:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KB73

Description: PFAS - DoD Calibration L1

Stock Id: JY23

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

Stock Id: JY25

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

Stock Id: KB71

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:** 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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:40:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **KB73**

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:** 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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:40:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **KB73**

Description: PFAS - DoD Calibration L1

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY23	Pipette	B814657482
JY25	Pipette	B814659662
KB71	Pipette	B814659662

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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:40:00 AM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **KB74**

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
KB71	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	10/01/19	---	---	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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:40:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KB74

Description: PFAS - DoD Calibration L2

Stock Id: JY23

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

Stock Id: JY25

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

Stock Id: KB71

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:** 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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:40:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **KB74**

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:** 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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:40:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **KB74**

Description: PFAS - DoD Calibration L2

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY23	Pipette	B820865811
JY25	Pipette	B814659662
KB71	Pipette	B814659662

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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:40:00 AM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **KB75**

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)
KB70	PFAS - DoD High ICAL Stock	Solution	~0	10/01/19	---	---	100 uL	1	10	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
KB71	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	10/01/19	---	---	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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:40:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KB75

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: KB70

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

Stock Id: KB71

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:** 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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:40:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **KB75**

Description: PFAS - DoD Calibration L3

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

Final Concentrations:

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

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:40:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **KB75**

Description: PFAS - DoD Calibration L3

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY25	Pipette	B814659662
KB70	Pipette	B814659662
KB71	Pipette	B814659662

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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:40:00 AM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **KB76**

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)
KB70	PFAS - DoD High ICAL Stock	Solution	~0	10/01/19	---	---	1000 uL	1	50	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	250 uL	1	50	~0.0000
KB71	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	10/01/19	---	---	250 uL	1	50	~0.0000

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

Balance ID: _____

Comment: 80/20 Methanol/milli-q water

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:40:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KB76

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	250	0.05	---	---	1	50	0.00025
13C2-PFOA	250	0.05	---	---	1	50	0.00025
13C3-PFBA	250	0.05	---	---	1	50	0.00025
13C4-PFOS	250	0.05	---	---	1	50	0.00024

Stock Id: KB70

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	50	0.00101
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	1000	0.05	---	---	1	50	0.00101
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	1000	0.05	---	---	1	50	0.00100
(Na) Perfluoro-1-decanesulfonate	1000	0.05	---	---	1	50	0.00101
(NA) Perfluoro-1-heptanesulfonate	1000	0.05	---	---	1	50	0.00100
(Na) Perfluoro-1-nonanesulfonate	1000	0.05	---	---	1	50	0.00101
N-ethylperfluoro-octanesulfonamidoacetic acid	1000	0.05	---	---	1	50	0.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	1000	0.05	---	---	1	50	0.00100
Perfluoro-1-butanesulfonate	1000	0.05	---	---	1	50	0.00101
Perfluoro-1-hexanesulfonate	1000	0.05	---	---	1	50	0.00101
Perfluoro-1-octanesulfonamide	1000	0.05	---	---	1	50	0.00100
Perfluoro-1-octanesulfonate	1000	0.05	---	---	1	50	0.00100
Perfluoro-n-butanoic Acid	1000	0.05	---	---	1	50	0.00100
Perfluoro-n-decanoic Acid	1000	0.05	---	---	1	50	0.00100
Perfluoro-n-dodecanoic acid	1000	0.05	---	---	1	50	0.00100
Perfluoro-n-heptanoic Acid	1000	0.05	---	---	1	50	0.00100
Perfluoro-n-hexanoic acid	1000	0.05	---	---	1	50	0.00101
Perfluoro-n-octanoic Acid	1000	0.05	---	---	1	50	0.00100
Perfluorononanoic Acid	1000	0.05	---	---	1	50	0.00100
Perfluoro-n-pentanoic acid	1000	0.05	---	---	1	50	0.00101
Perfluoro-n-tetradecanoic acid	1000	0.05	---	---	1	50	0.00100
Perfluoro-n-tridecanoic acid	1000	0.05	---	---	1	50	0.00100
Perfluoro-n-undecanoic acid	1000	0.05	---	---	1	50	0.00100
Sodium perfluoro-1-pentanesulfonate	1000	0.05	---	---	1	50	0.00100

Stock Id: KB71

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-4:2FTS	250	0.05	---	---	1	50	0.00023

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

Solution Volume 40 **mL X** 2 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/milli-q water

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:40:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **KB76**

Description: PFAS - DoD Calibration L4

13C2-6:2FTS	250	0.05	---	---	1	50	0.00024
13C2-8:2FTS	250	0.05	---	---	1	50	0.00024
13C2-PFDoA	250	0.05	---	---	1	50	0.00025
13C2-PFTeDA	250	0.05	---	---	1	50	0.00025
13C3-PFBS	250	0.05	---	---	1	50	0.00023
13C3-PFHxS	250	0.05	---	---	1	50	0.00024
13C4-PFBA	250	0.05	---	---	1	50	0.00025
13C4-PFHpA	250	0.05	---	---	1	50	0.00025
13C5-PFHxA	250	0.05	---	---	1	50	0.00025
13C5-PFPeA	250	0.05	---	---	1	50	0.00025
13C6-PFDA	250	0.05	---	---	1	50	0.00025
13C7-PFUnA	250	0.05	---	---	1	50	0.00025
13C8-FOSA	250	0.05	---	---	1	50	0.00025
13C8-PFOA	250	0.05	---	---	1	50	0.00025
13C8-PFOS	250	0.05	---	---	1	50	0.00024
13C9-PFNA	250	0.05	---	---	1	50	0.00025
d3-MeFOSAA	250	0.05	---	---	1	50	0.00025
d5-EtFOSAA	250	0.05	---	---	1	50	0.00025

Final Concentrations:

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

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

Solution Volume 40 **mL X** 2 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/milli-q water

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:40:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **KB76**

Description: PFAS - DoD Calibration L4

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY25	Pipette	B814657482
KB70	Pipette	B820865811
KB71	Pipette	B814657482

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

Solution Volume 40 **mL X** 2 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/milli-q water

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:40:00 AM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **KB77**

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)
KB70	PFAS - DoD High ICAL Stock	Solution	~0	10/01/19	---	---	2500 uL	1	50	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	250 uL	1	50	~0.0000
KB71	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	10/01/19	---	---	250 uL	1	50	~0.0000

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

Balance ID: _____

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KB77

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	250	0.05	---	---	1	50	0.00025
13C2-PFOA	250	0.05	---	---	1	50	0.00025
13C3-PFBA	250	0.05	---	---	1	50	0.00025
13C4-PFOS	250	0.05	---	---	1	50	0.00024

Stock Id: KB70

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	2500	0.05	---	---	1	50	0.00253
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	2500	0.05	---	---	1	50	0.00253
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	2500	0.05	---	---	1	50	0.00250
(Na) Perfluoro-1-decanesulfonate	2500	0.05	---	---	1	50	0.00253
(NA) Perfluoro-1-heptanesulfonate	2500	0.05	---	---	1	50	0.00250
(Na) Perfluoro-1-nonanesulfonate	2500	0.05	---	---	1	50	0.00253
N-ethylperfluoro-octanesulfonamidoacetic acid	2500	0.05	---	---	1	50	0.00250
N-methylperfluoro-1-octanesulfonamidoacetic acid	2500	0.05	---	---	1	50	0.00250
Perfluoro-1-butanesulfonate	2500	0.05	---	---	1	50	0.00253
Perfluoro-1-hexanesulfonate	2500	0.05	---	---	1	50	0.00253
Perfluoro-1-octanesulfonamide	2500	0.05	---	---	1	50	0.00250
Perfluoro-1-octanesulfonate	2500	0.05	---	---	1	50	0.00250
Perfluoro-n-butanoic Acid	2500	0.05	---	---	1	50	0.00250
Perfluoro-n-decanoic Acid	2500	0.05	---	---	1	50	0.00250
Perfluoro-n-dodecanoic acid	2500	0.05	---	---	1	50	0.00250
Perfluoro-n-heptanoic Acid	2500	0.05	---	---	1	50	0.00250
Perfluoro-n-hexanoic acid	2500	0.05	---	---	1	50	0.00253
Perfluoro-n-octanoic Acid	2500	0.05	---	---	1	50	0.00250
Perfluorononanoic Acid	2500	0.05	---	---	1	50	0.00250
Perfluoro-n-pentanoic acid	2500	0.05	---	---	1	50	0.00253
Perfluoro-n-tetradecanoic acid	2500	0.05	---	---	1	50	0.00250
Perfluoro-n-tridecanoic acid	2500	0.05	---	---	1	50	0.00250
Perfluoro-n-undecanoic acid	2500	0.05	---	---	1	50	0.00250
Sodium perfluoro-1-pentanesulfonate	2500	0.05	---	---	1	50	0.00250

Stock Id: KB71

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-4:2FTS	250	0.05	---	---	1	50	0.00023

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

Solution Volume 40 **mL X** 2 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KB77

Description: PFAS - DoD Calibration L5

13C2-6:2FTS	250	0.05	---	---	1	50	0.00024
13C2-8:2FTS	250	0.05	---	---	1	50	0.00024
13C2-PFDoA	250	0.05	---	---	1	50	0.00025
13C2-PFTeDA	250	0.05	---	---	1	50	0.00025
13C3-PFBS	250	0.05	---	---	1	50	0.00023
13C3-PFHxS	250	0.05	---	---	1	50	0.00024
13C4-PFBA	250	0.05	---	---	1	50	0.00025
13C4-PFHpA	250	0.05	---	---	1	50	0.00025
13C5-PFHxA	250	0.05	---	---	1	50	0.00025
13C5-PFPeA	250	0.05	---	---	1	50	0.00025
13C6-PFDA	250	0.05	---	---	1	50	0.00025
13C7-PFUnA	250	0.05	---	---	1	50	0.00025
13C8-FOSA	250	0.05	---	---	1	50	0.00025
13C8-PFOA	250	0.05	---	---	1	50	0.00025
13C8-PFOS	250	0.05	---	---	1	50	0.00024
13C9-PFNA	250	0.05	---	---	1	50	0.00025
d3-MeFOSAA	250	0.05	---	---	1	50	0.00025
d5-EtFOSAA	250	0.05	---	---	1	50	0.00025

Final Concentrations:

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

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

Solution Volume 40 **mL X** 2 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **KB77**

Description: PFAS - DoD Calibration L5

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY25	Pipette	B814657482
KB70	Pipette	OU16914
KB71	Pipette	B814657482

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

Solution Volume 40 **mL X** 2 **Vials** **Refrigerator/Freezer No:** LC Laboratory: Refrigerator - R0107

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **KB78**

Description: PFAS - DoD Calibraiton 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)
KB70	PFAS - DoD High ICAL Stock	Solution	~0	10/01/19	---	---	2000 uL	1	10	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
KB71	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	10/01/19	---	---	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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KB78

Description: PFAS - DoD Calibraiton 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	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: KB70

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	10	0.01010
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	2000	0.05	---	---	1	10	0.01010
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	2000	0.05	---	---	1	10	0.01000
(Na) Perfluoro-1-decanesulfonate	2000	0.05	---	---	1	10	0.01010
(NA) Perfluoro-1-heptanesulfonate	2000	0.05	---	---	1	10	0.01000
(Na) Perfluoro-1-nonanesulfonate	2000	0.05	---	---	1	10	0.01010
N-ethylperfluoro-octanesulfonamidoacetic acid	2000	0.05	---	---	1	10	0.01000
N-methylperfluoro-1-octanesulfonamidoacetic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-1-butanesulfonate	2000	0.05	---	---	1	10	0.01010
Perfluoro-1-hexanesulfonate	2000	0.05	---	---	1	10	0.01010
Perfluoro-1-octanesulfonamide	2000	0.05	---	---	1	10	0.01000
Perfluoro-1-octanesulfonate	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-butanoic Acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-decanoic Acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-dodecanoic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-heptanoic Acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-hexanoic acid	2000	0.05	---	---	1	10	0.01010
Perfluoro-n-octanoic Acid	2000	0.05	---	---	1	10	0.01000
Perfluorononanoic Acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-pentanoic acid	2000	0.05	---	---	1	10	0.01010
Perfluoro-n-tetradecanoic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-tridecanoic acid	2000	0.05	---	---	1	10	0.01000
Perfluoro-n-undecanoic acid	2000	0.05	---	---	1	10	0.01000
Sodium perfluoro-1-pentanesulfonate	2000	0.05	---	---	1	10	0.01000

Stock Id: KB71

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:** 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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **KB78**

Description: PFAS - DoD Calibraiton L6

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

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **KB78**

Description: PFAS - DoD Calibraiton L6

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY25	Pipette	B814659662
KB70	Pipette	OU16914
KB71	Pipette	B814659662

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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **KB79**

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)
KB70	PFAS - DoD High ICAL Stock	Solution	~0	10/01/19	---	---	4000 uL	1	10	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
KB71	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	10/01/19	---	---	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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KB79

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	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: KB70

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	4000	0.05	---	---	1	10	0.02020
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	4000	0.05	---	---	1	10	0.02020
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	4000	0.05	---	---	1	10	0.02000
(Na) Perfluoro-1-decanesulfonate	4000	0.05	---	---	1	10	0.02020
(NA) Perfluoro-1-heptanesulfonate	4000	0.05	---	---	1	10	0.02000
(Na) Perfluoro-1-nonanesulfonate	4000	0.05	---	---	1	10	0.02020
N-ethylperfluoro-octanesulfonamidoacetic acid	4000	0.05	---	---	1	10	0.02000
N-methylperfluoro-1-octanesulfonamidoacetic acid	4000	0.05	---	---	1	10	0.02000
Perfluoro-1-butanesulfonate	4000	0.05	---	---	1	10	0.02020
Perfluoro-1-hexanesulfonate	4000	0.05	---	---	1	10	0.02020
Perfluoro-1-octanesulfonamide	4000	0.05	---	---	1	10	0.02000
Perfluoro-1-octanesulfonate	4000	0.05	---	---	1	10	0.02000
Perfluoro-n-butanoic Acid	4000	0.05	---	---	1	10	0.02000
Perfluoro-n-decanoic Acid	4000	0.05	---	---	1	10	0.02000
Perfluoro-n-dodecanoic acid	4000	0.05	---	---	1	10	0.02000
Perfluoro-n-heptanoic Acid	4000	0.05	---	---	1	10	0.02000
Perfluoro-n-hexanoic acid	4000	0.05	---	---	1	10	0.02020
Perfluoro-n-octanoic Acid	4000	0.05	---	---	1	10	0.02000
Perfluorononanoic Acid	4000	0.05	---	---	1	10	0.02000
Perfluoro-n-pentanoic acid	4000	0.05	---	---	1	10	0.02020
Perfluoro-n-tetradecanoic acid	4000	0.05	---	---	1	10	0.02000
Perfluoro-n-tridecanoic acid	4000	0.05	---	---	1	10	0.02000
Perfluoro-n-undecanoic acid	4000	0.05	---	---	1	10	0.02000
Sodium perfluoro-1-pentanesulfonate	4000	0.05	---	---	1	10	0.02000

Stock Id: KB71

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:** 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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **KB79**

Description: PFAS - DoD Calibration L7

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

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **KB79**

Description: PFAS - DoD Calibration L7

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY25	Pipette	B814659662
KB70	Pipette	OU16914
KB71	Pipette	B814659662

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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **KB80**

Description: PFAS - DoD Instrument Blank

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
KB71	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	10/01/19	---	---	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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KB80

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: KB71

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

Final Concentrations:

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

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **KB80**

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
KB71	Pipette	B814659662

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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **KB81**

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)
KB82	PFAS - DoD Second Source LCS/MS Solution	Solution	~0	10/01/19	---	---	200 uL	1	10	~0.0000
KB71	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	10/01/19	---	---	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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KB81

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: KB71

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: KB82

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:** 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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **KB81**

Description: PFAS - DoD ICC

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

Final Concentrations:

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

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **KB81**

Description: PFAS - DoD ICC

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY25	Pipette	B814659662
KB71	Pipette	B814659662
KB82	Pipette	B814657482

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

Approved By: Schumitz, Denise **Date:** 10/9/2018 9:41:00 AM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **KB82**

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	~1.000000	03/22/22	---	---	1000 uL	1	20	~0.0500

Solution Prepared By: Schultz, Stephanie	**Date Prepared:** 10/1/2018	**Expiration Date:**	10/1/2019
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:** 10/12/2018 8:05:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KB82

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-butanesulfonate	1000	1.01	1	100.000	1	20	0.05050
Perfluoro-1-hexanesulfonate	1000	1.01	1	100.000	1	20	0.05050
Perfluoro-1-octanesulfonamide	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-1-octanesulfonate	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-butanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-decanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-dodecanoic acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-heptanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-hexanoic acid	1000	1.01	1	100.000	1	20	0.05050
Perfluoro-n-octanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluorononanoic Acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-pentanoic acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-tetradecanoic acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-tridecanoic acid	1000	1.00	1	100.000	1	20	0.05000
Perfluoro-n-undecanoic acid	1000	1.00	1	100.000	1	20	0.05000
Sodium perfluoro-1-pentanesulfonate	1000	1.00	1	100.000	1	20	0.05000

Final Concentrations:

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

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

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:** 10/12/2018 8:05:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KB82

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	B820865811

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

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:** 10/12/2018 8:05:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KB89

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:** 10/3/2018 **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:** 10/9/2018 9:43:00 AM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **KB89**

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:**	10/3/2018	**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:** 10/9/2018 9:43:00 AM

BATTELLE
It can be done

BDO Id: 170724-01

Reagent Receipt Report

Approved: ☐ **Authorized** ☐

Name: PFOA- 2nd Source
Vendor: ABSOLUTE STANDARDS
Catalogue No: 99207
Type: Solution
Lot No: 032217
Quantity: 5 ea mL **% Moisture:**
Description: PFOA - 2nd Source

Received: 7/24/2017
Custodian: Schumitz, Matt
Expires: 3/22/2022
Consumed:
Stored In: LC Laboratory - F0111

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

Total Analytes: 24

Notes:

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

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

CERTIFIED WEIGHT REPORT

17024-01

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

5E-05 Balance Uncertainty
0.007 Flask Uncertainty

Volume(s) shown below were combined and diluted to (mL): 50.0

Paul Barron		032217
Formulated By:	Paul Barron	DATE
Pedro Rentas		032217
Reviewed By:	Pedro L. Rentas	DATE

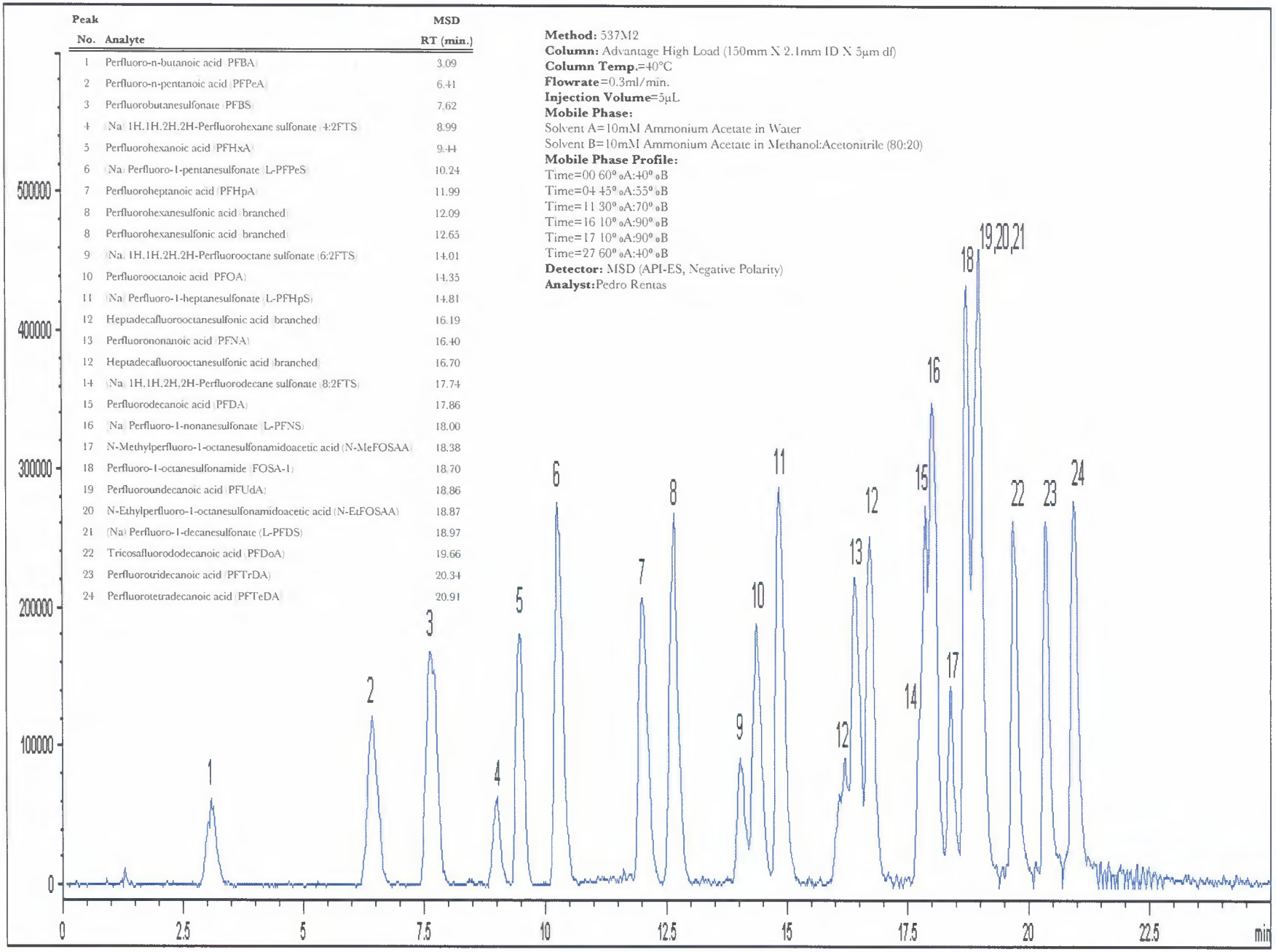
Note: All assigned values are anion concentrations.

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

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

Peak No.	Analyte	MSD RT (min.)
1	Perfluoro-n-butanoic acid (PFBA)	3.09
2	Perfluoro-n-pentanoic acid (PFPeA)	6.41
3	Perfluorobutanesulfonate (PFBS)	7.62
4	(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate (4:2FTS)	8.99
5	Perfluorohexanoic acid (PFHxA)	9.44
6	(Na) Perfluoro-1-pentanesulfonate (L-PFPeS)	10.24
7	Perfluoroheptanoic acid (PFHpA)	11.99
8	Perfluorohexanesulfonic acid (branched)	12.09
8	Perfluorohexanesulfonic acid (branched)	12.65
9	(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate (6:2FTS)	14.01
10	Perfluorooctanoic acid (PFOA)	14.35
11	(Na) Perfluoro-1-heptanesulfonate (L-PFHpS)	14.81
12	Heptadecafluorooctanesulfonic acid (branched)	16.19
13	Perfluorononanoic acid (PFNA)	16.40
12	Heptadecafluorooctanesulfonic acid (branched)	16.70
14	(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate (8:2FTS)	17.74
15	Perfluorodecanoic acid (PFDA)	17.86
16	(Na) Perfluoro-1-nonanesulfonate (L-PFNS)	18.00
17	N-Methylperfluoro-1-octanesulfonamidoacetic acid (N-MeFOSAA)	18.38
18	Perfluoro-1-octanesulfonamide (FOSA-1)	18.70
19	Perfluoroundecanoic acid (PFUdA)	18.86
20	N-Ethylperfluoro-1-octanesulfonamidoacetic acid (N-EtFOSAA)	18.87
21	(Na) Perfluoro-1-decanesulfonate (L-PFDS)	18.97
22	Tricosafluorododecanoic acid (PFDoA)	19.66
23	Perfluorotridecanoic acid (PFTrDA)	20.34
24	Perfluorotetradecanoic acid (PFTeDA)	20.91

Method: 537M2
Column: Advantage High Load (150mm X 2.1mm ID X 5µm df)
Column Temp.=40°C
Flowrate=0.3ml/min.
Injection Volume=5µL
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)
Analyst: Pedro Rentas



BATTELLE

It can be done

BDO Id: 180618-02

Reagent Receipt Report

Approved: ☐ Authorized ☐

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

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

Notes:

Approved by: _____ Approved on: _____

Authorized by: _____ Authorized on: _____

180618-02

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

br-NEtFOSAA

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

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

DESCRIPTION:

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

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HANDLING:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

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

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

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

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ACCREDITED 17034 REFERENCE MATERIAL PRODUCER

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

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

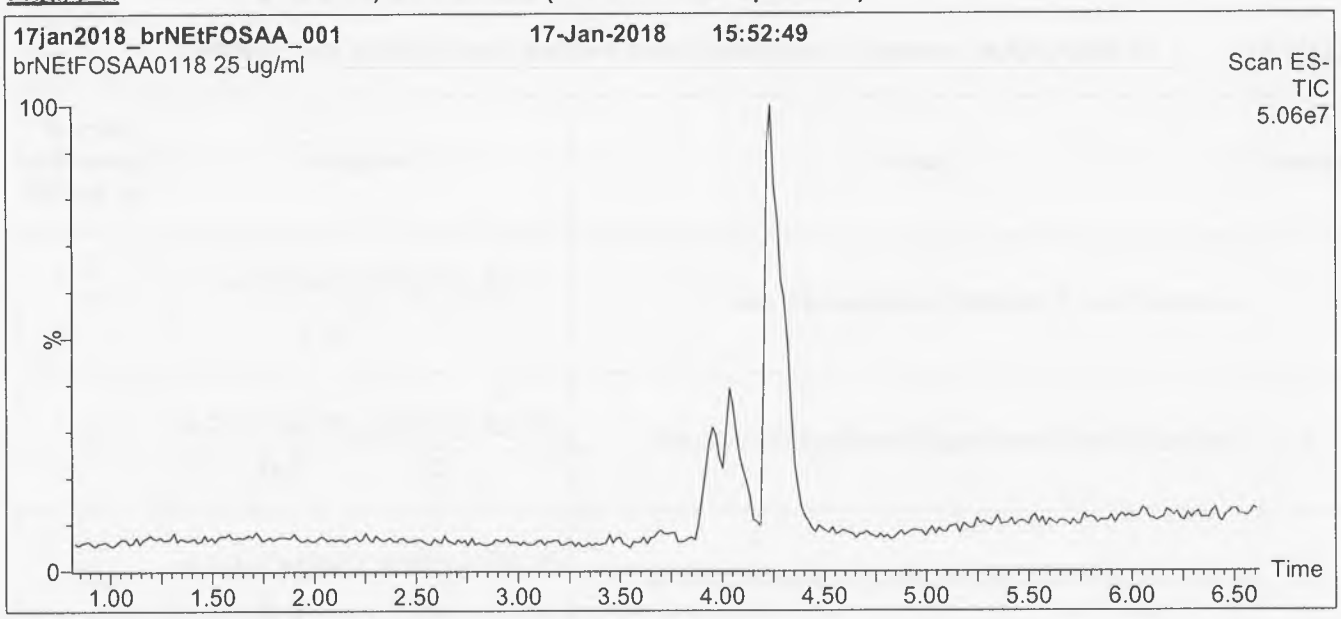
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	N-ethylperfluoro-1-octanesulfonamidoacetic acid	$CF_3(CF_2)_7SO_2N(C_2H_5)CH_2CO_2H$	77.5
2	N-ethylperfluoro-3-methylheptanesulfonamidoacetic acid	$CF_3(CF_2)_3CF(CF_3)(CF_2)_2SO_2N(C_2H_5)CH_2CO_2H$	2.3
3	N-ethylperfluoro-4-methylheptanesulfonamidoacetic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

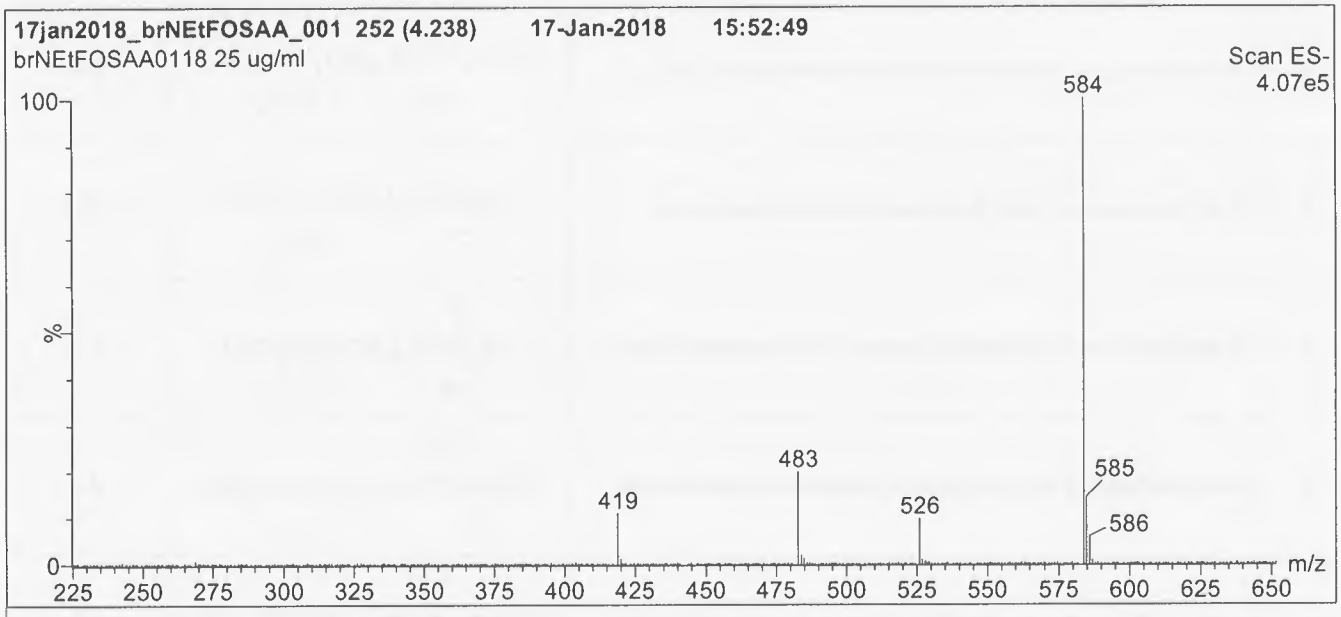
* Percent of total N-ethylperfluorooctanesulfonamidoacetic acid isomers only.

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

B.G. Chittim, General Manager

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





Conditions for Figure 1:

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

Chromatographic Conditions

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

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

Time: 10 min

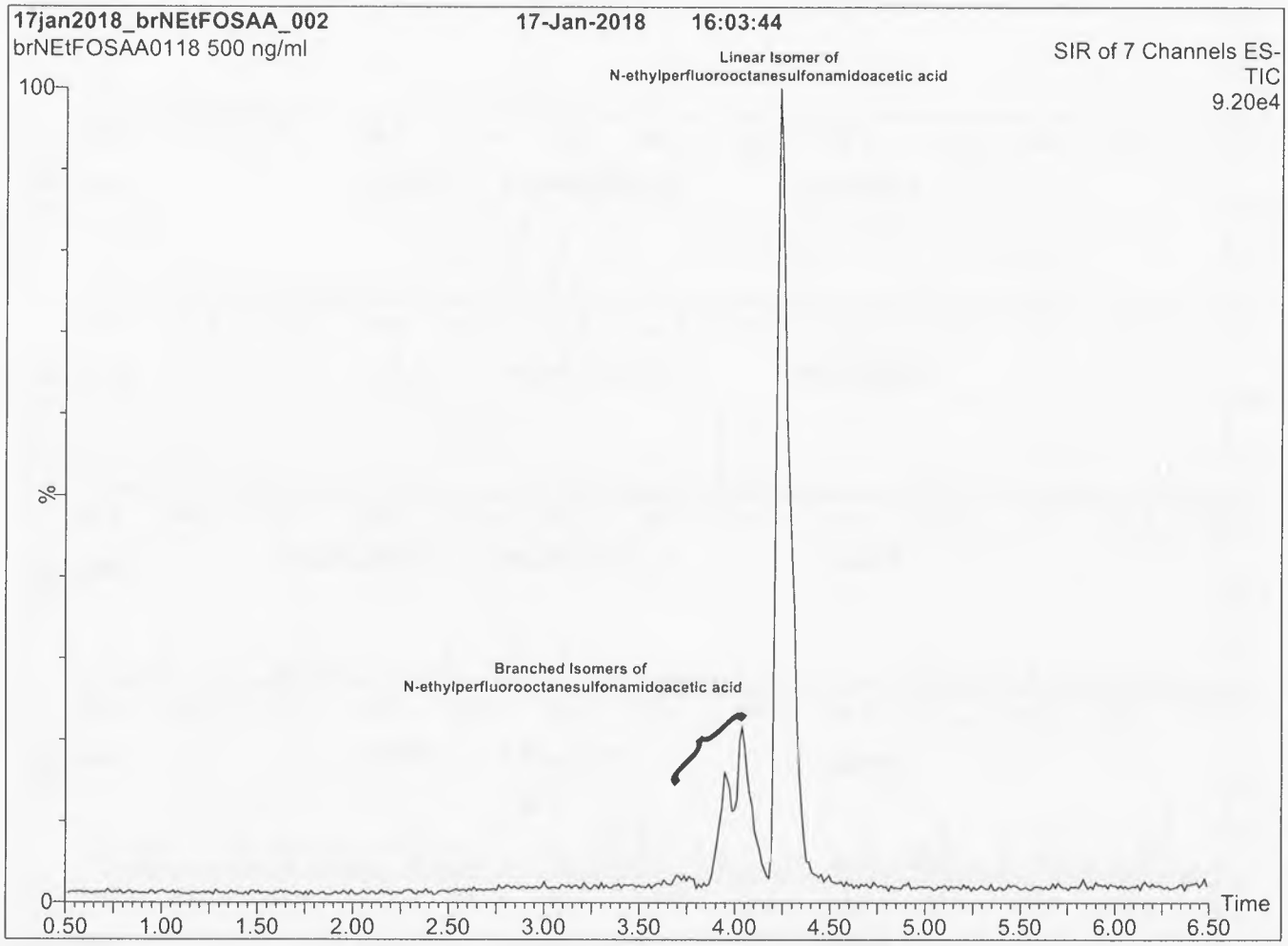
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

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

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



Conditions for Figure 2:

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

Chromatographic Conditions

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

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

Time: 10 min

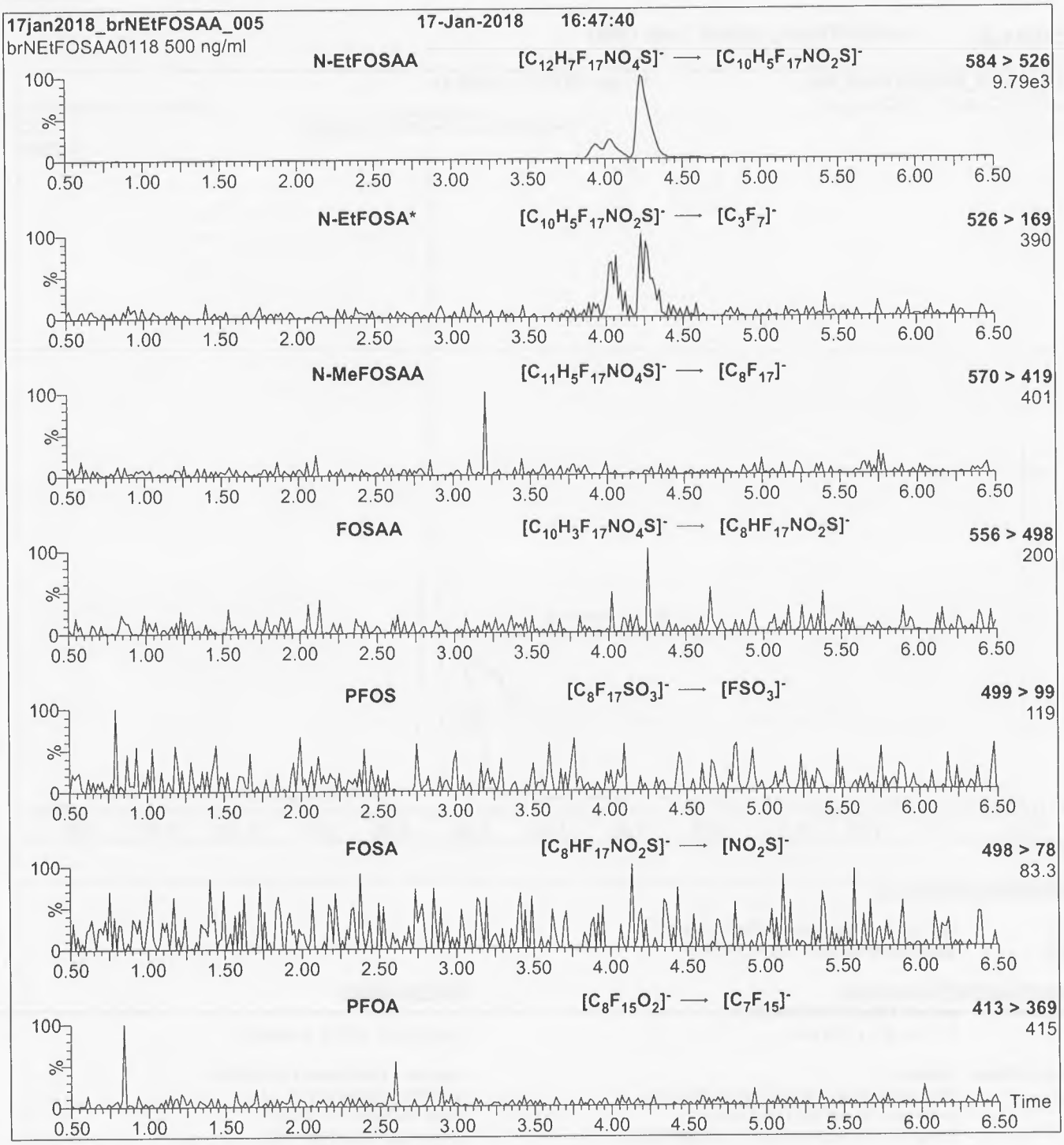
Flow: 300 µl/min

MS Parameters

Experiment: SIR (7 channels)

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

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



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

Conditions for Figure 3:

Injection: On-column

Mobile phase: Same as Figure 2

Flow: 300 µl/min

MS Parameters

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

BATTELLE

It can be done

BDO Id: 180618-03

Reagent Receipt Report

Approved: ☐ Authorized ☐

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

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

Notes:

Approved by: _____ Approved on: _____

Authorized by: _____ Authorized on: _____

180618-03

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

br-NMeFOSAA

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

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

DESCRIPTION:

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

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HANDLING:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

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

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

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

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER

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

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

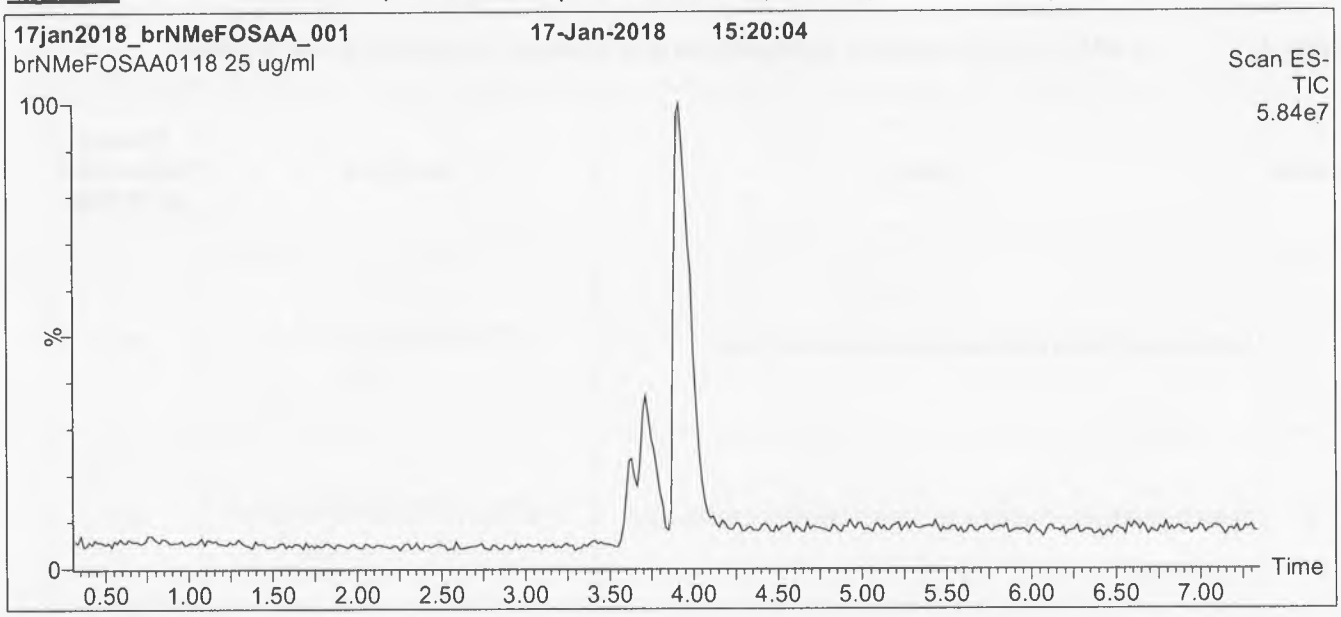
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	N-methylperfluoro-1-octanesulfonamidoacetic acid	$CF_3(CF_2)_7SO_2N(CH_3)CH_2CO_2H$	76.0
2	N-methylperfluoro-3-methylheptanesulfonamidoacetic acid	$CF_3(CF_2)_3CF(CF_3)(CF_2)_2SO_2N(CH_3)CH_2CO_2H$	0.7
3	N-methylperfluoro-4-methylheptanesulfonamidoacetic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

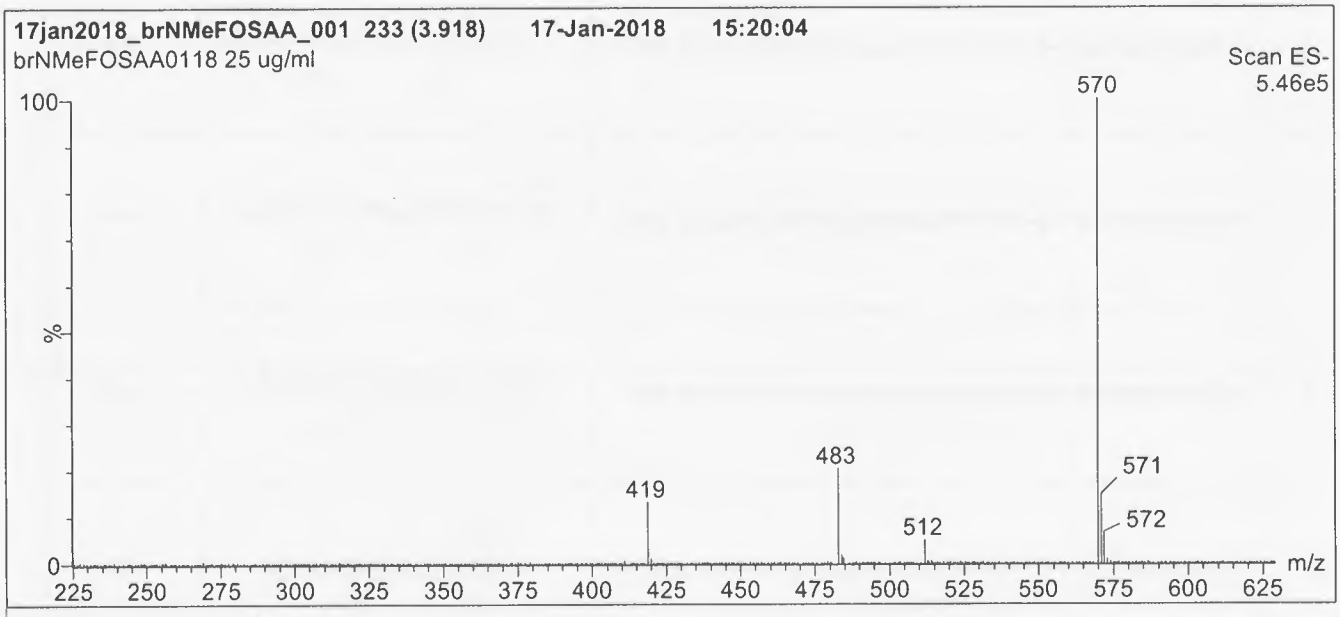
* Percent of total N-methylperfluorooctanesulfonamidoacetic acid isomers only.

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

B.G. Chittim, General Manager

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





Conditions for Figure 1:

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

Chromatographic Conditions

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

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

Time: 10 min

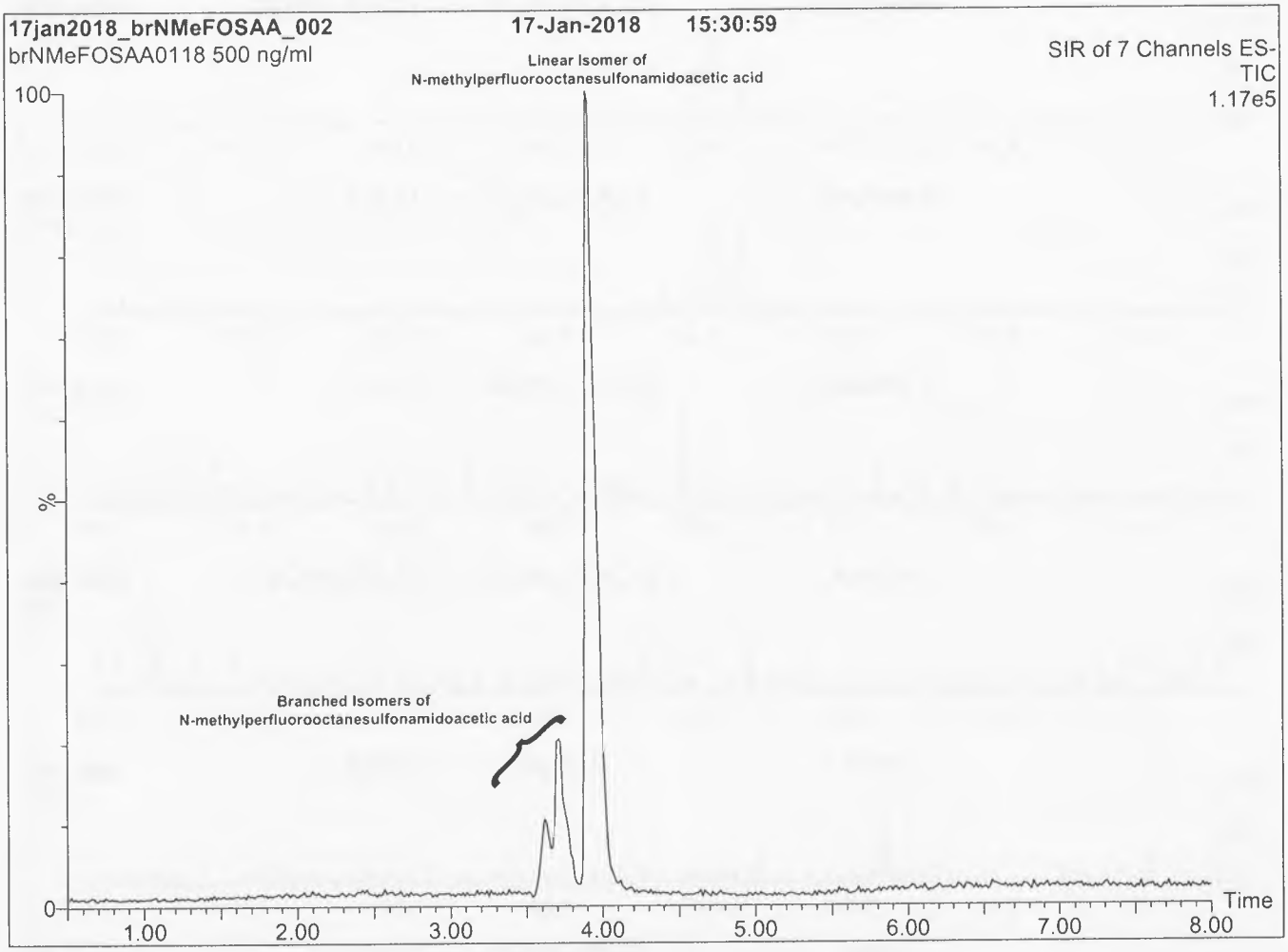
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

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

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



Conditions for Figure 2:

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

Chromatographic Conditions

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

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

Time: 10 min

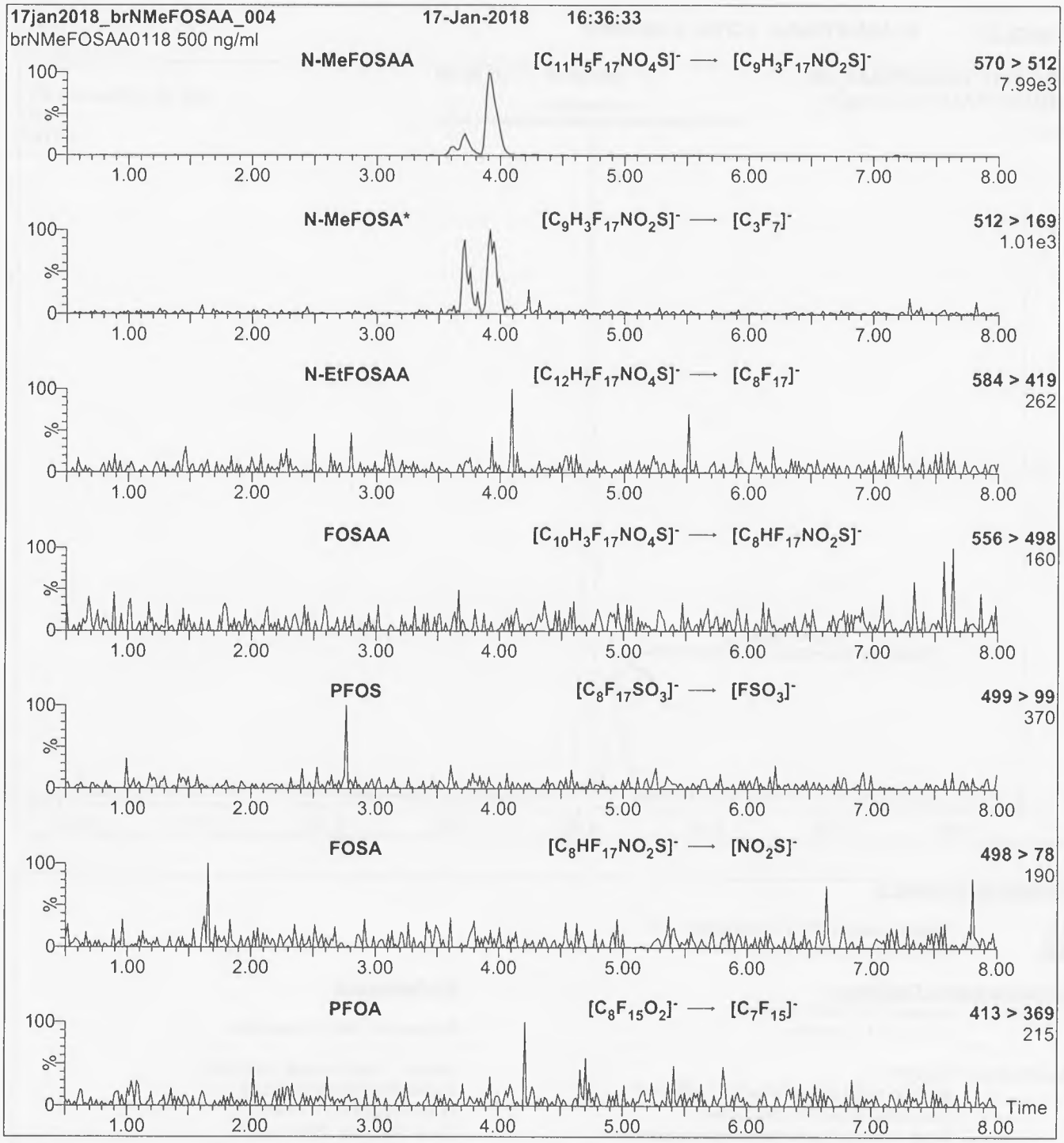
Flow: 300 µl/min

MS Parameters

Experiment: SIR (7 channels)

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

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



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

Conditions for Figure 3:

Injection: On-column

Mobile phase: Same as Figure 2

Flow: 300 µl/min

MS Parameters

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

BATTELLE

It can be done

BDO Id: 180618-04

Reagent Receipt Report

Approved: ☐ Authorized ☐

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

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

Notes:

Approved by: _____ Approved on: _____

Authorized by: _____ Authorized on: _____

180618-04

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

PRODUCT CODE:	T-PFOA	**LOT NUMBER:**	TPFOA0217
COMPOUND:	Technical Ammonium Perfluorooctanoate		
STRUCTURE:	(see Table A)	**CAS #:**	95328-99-7 (for linear ammonium perfluorooctanoate)

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

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

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

INTENDED USE:

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

HAZARDS:

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

CHARACTERIZATION / HOMOGENEITY:

This product is a technical mixture obtained from an industrial manufacturer. It has been characterized as to its content and components using a combination of the most relevant techniques, such as NMR, GC/MS, LC/MS/MS, SFC/UV/MS/MS, x-ray crystallography, and melting point. Testing of samples in solution has shown it to be homogeneous. As this product is a technical mixture, it should not be used to quantitate any of the listed components.

UNCERTAINTY:

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

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

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

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

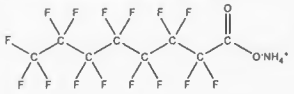
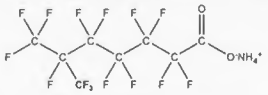
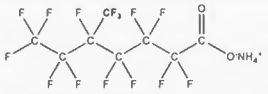
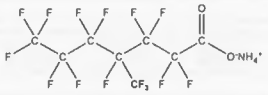
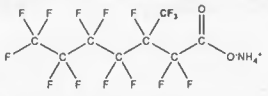
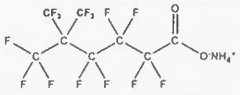
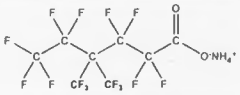
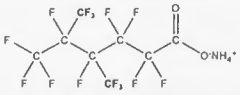
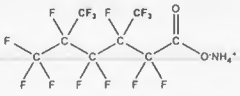
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A 1226

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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

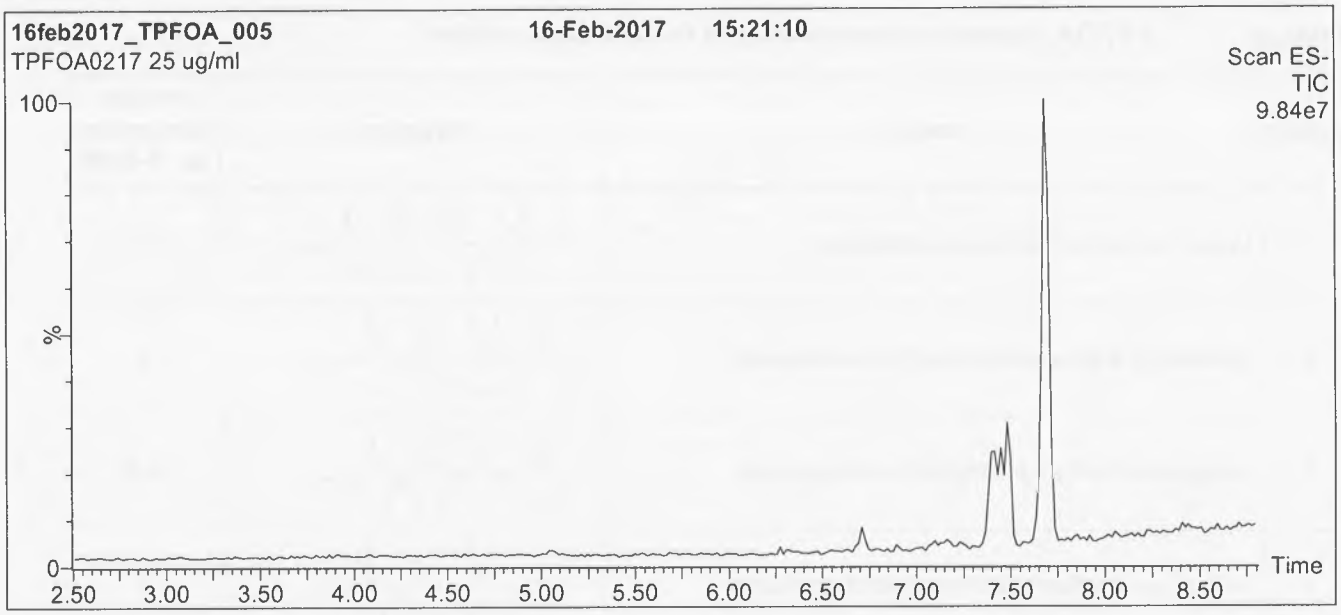
Table A: **T-PFOA; Isomeric Components and Percent Composition***

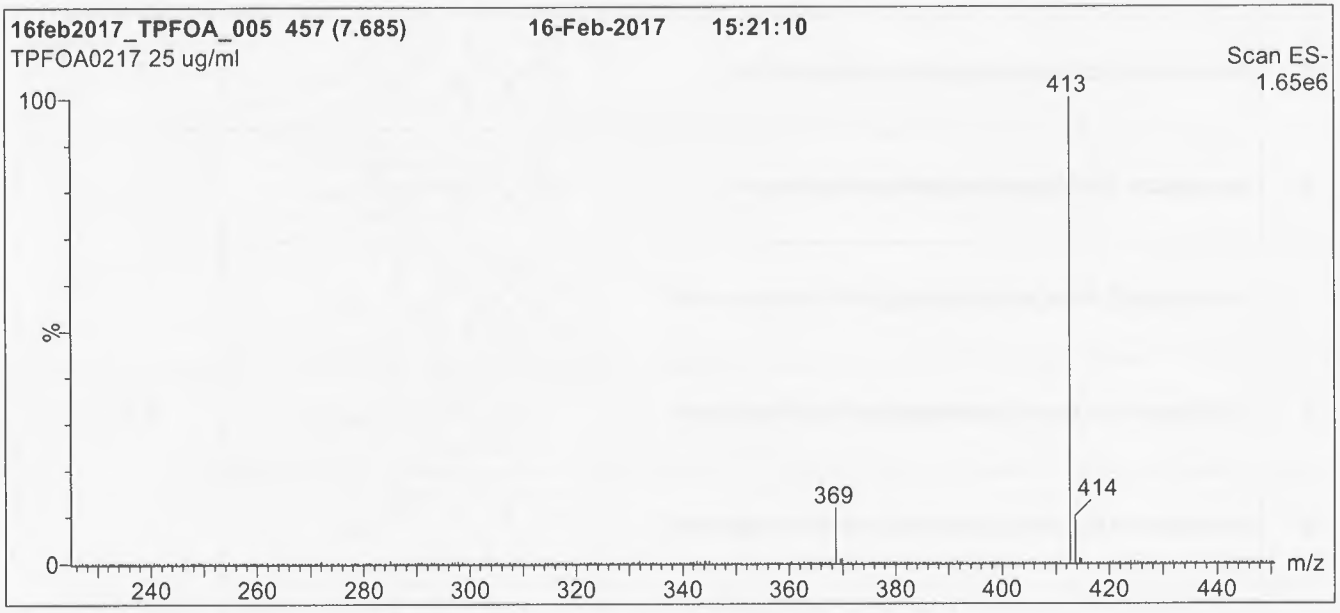
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	Linear ammonium perfluoro-n-octanoate		79
2	Ammonium 6-trifluoromethylperfluoroheptanoate		9
3	Ammonium 5-trifluoromethylperfluoroheptanoate		4.5
4	Ammonium 4-trifluoromethylperfluoroheptanoate		4
5	Ammonium 3-trifluoromethylperfluoroheptanoate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

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

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

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





Conditions for Figure 1:

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

Chromatographic Conditions:

Column: Kinetex PFP
2.6 µm, 4.6 x 100 mm

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

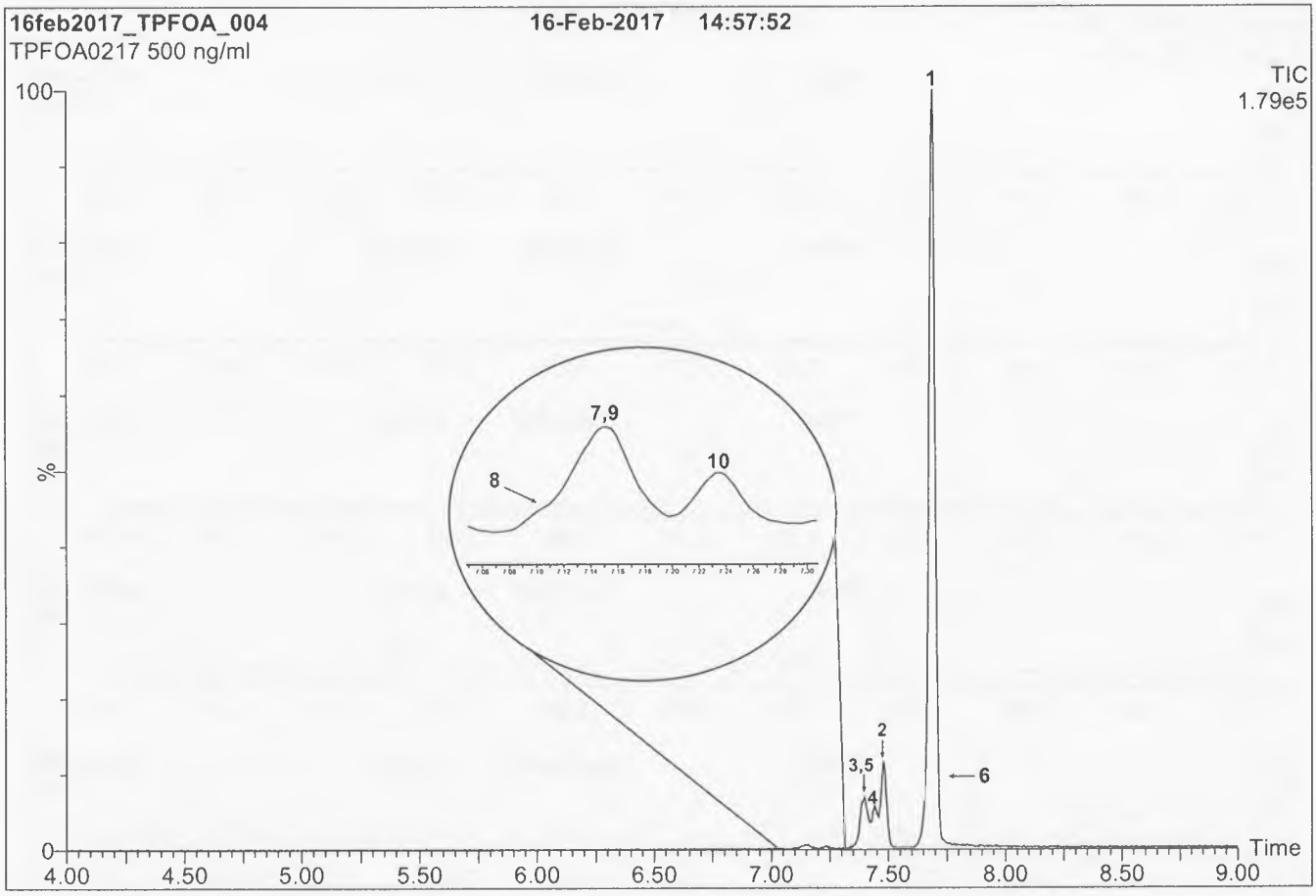
Flow: 1.0 ml/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

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

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



Conditions for Figure 2:

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

Chromatographic Conditions:

Column: Kinetex PFP
2.6 µm, 4.6 x 100 mm

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

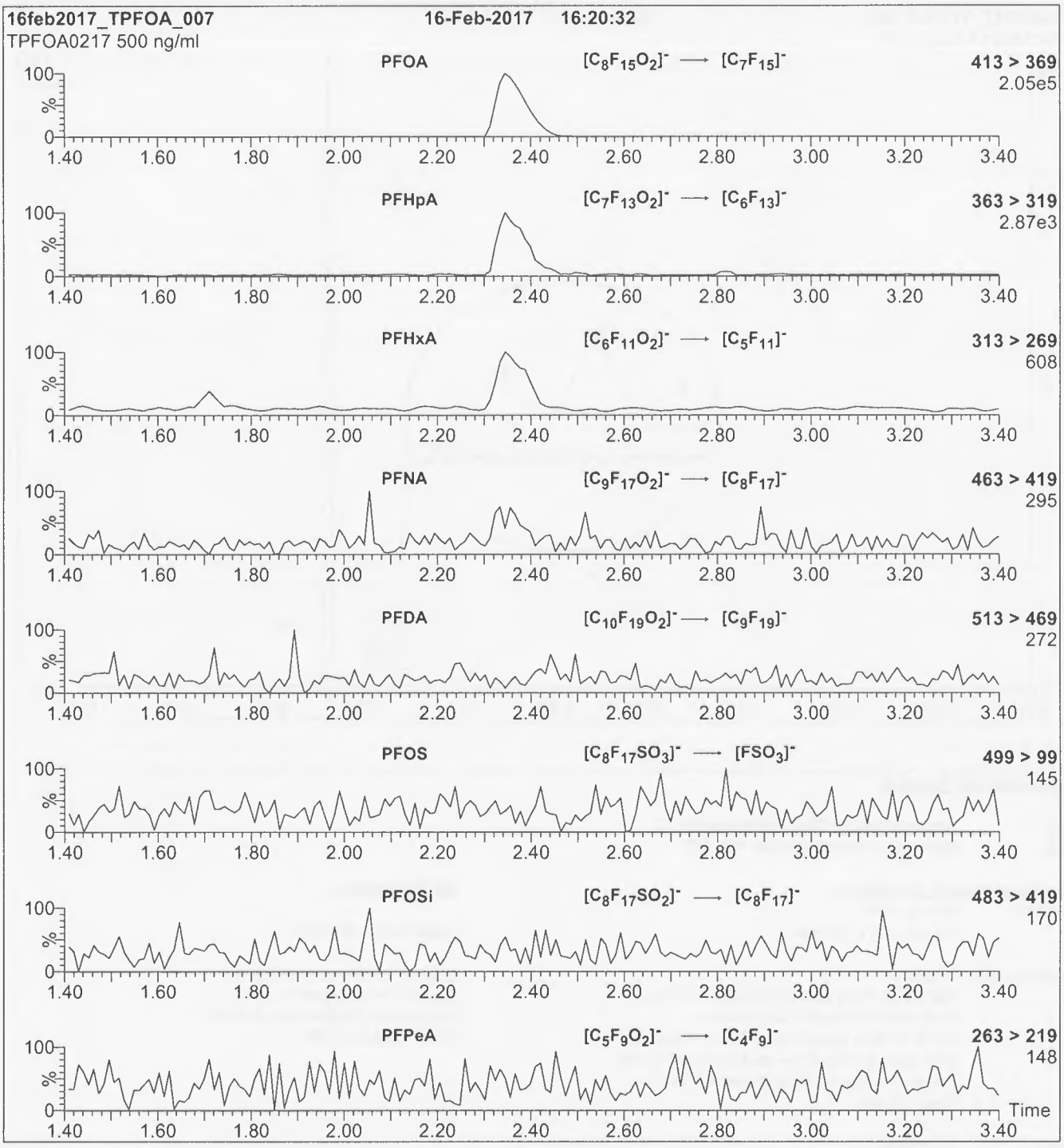
Flow: 1.0 ml/min

MS Parameters:

Experiment: SIR (ES^-)

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

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



Conditions for Figure 3:

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

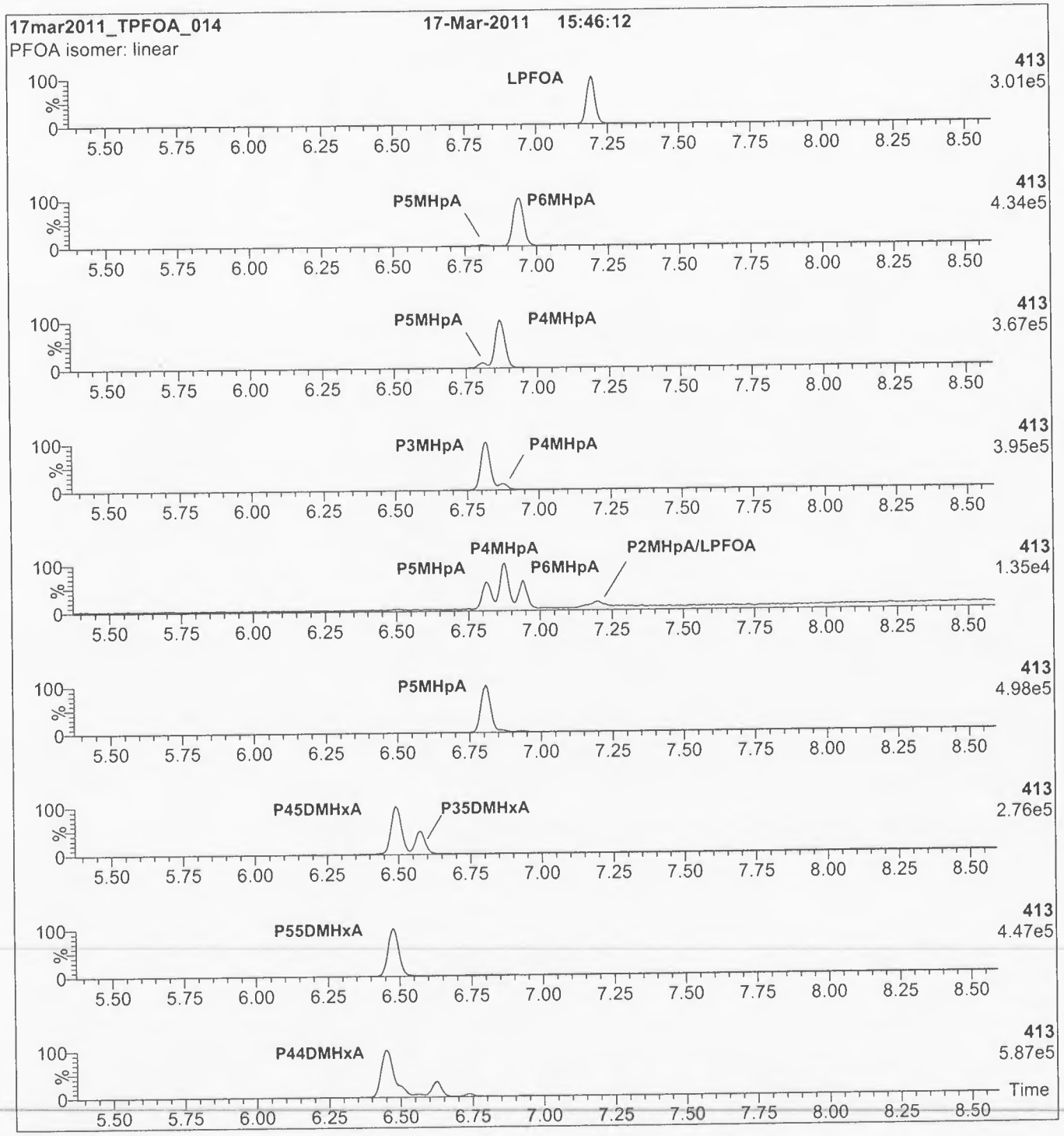
Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

Flow: 300 µl/min

MS Parameters

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

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



Conditions for Figure 4:

Same as Figure 2.

BATTELLE

It can be done

BDO Id: 180618-06

Reagent Receipt Report

Approved: ☐ Authorized ☐

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

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

Notes:

Approved by: _____ Approved on: _____

Authorized by: _____ Authorized on: _____

180618-06

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

br-PFHxSK

Potassium Perfluorohexanesulfonate Solution/Mixture of Linear and Branched Isomers

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

DESCRIPTION:

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

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HAZARDS:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

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

UNCERTAINTY:

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

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

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

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

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

CALA Testing Accreditation No. A1226

ANAB ACCREDITED ISO 17025 ISO 17034 REFERENCE MATERIAL PRODUCER

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

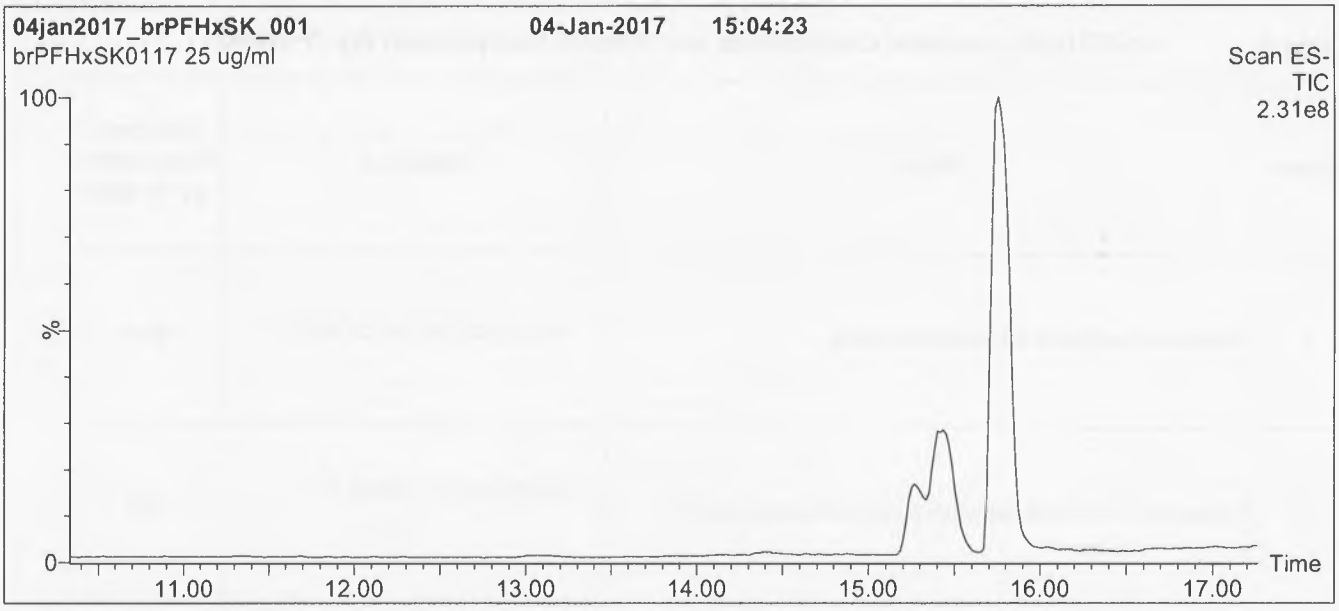
Table A: **br-PFHxSK; Isomeric Components and Percent Composition (by ^{19}F-NMR)***

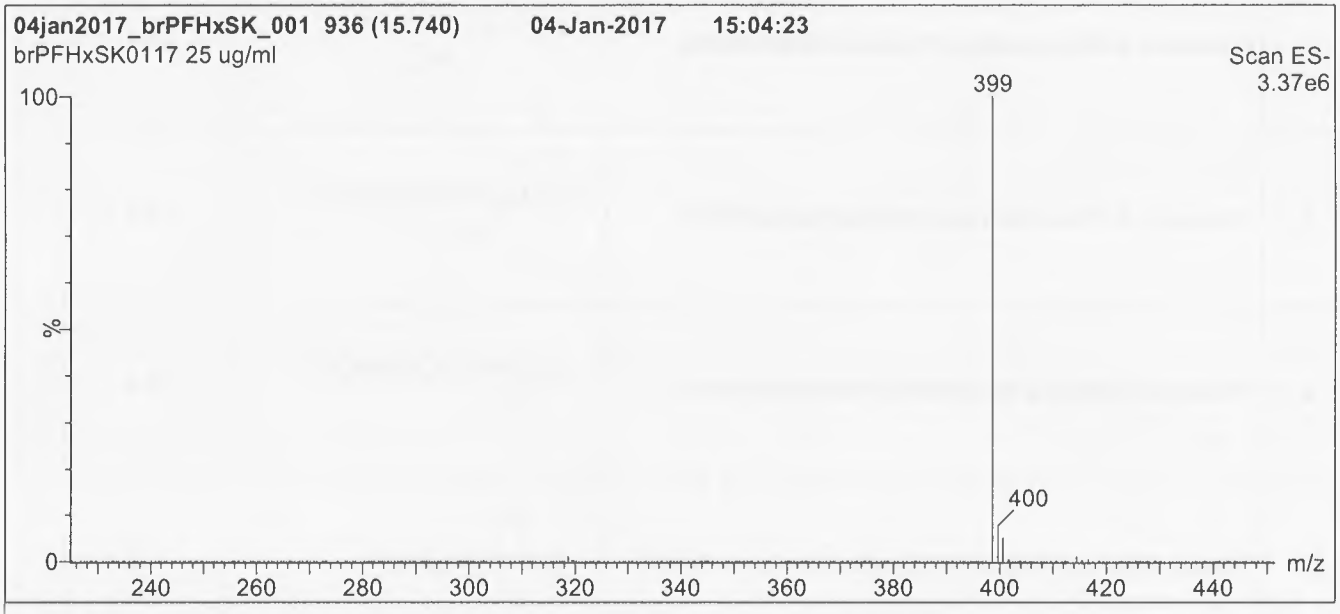
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	Potassium perfluoro-1-hexanesulfonate	$CF_3CF_2CF_2CF_2CF_2CF_2SO_3^-K^+$	81.1
2	Potassium 1-trifluoromethylperfluoropentanesulfonate**	$CF_3CF_2CF_2CF_2CF(CF_3)SO_3^-K^+$	2.9
3	Potassium 2-trifluoromethylperfluoropentanesulfonate	$CF_3CF_2CF_2CF(CF_3)CF_2SO_3^-K^+$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

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

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

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





Conditions for Figure 1:

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

Chromatographic Conditions

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

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

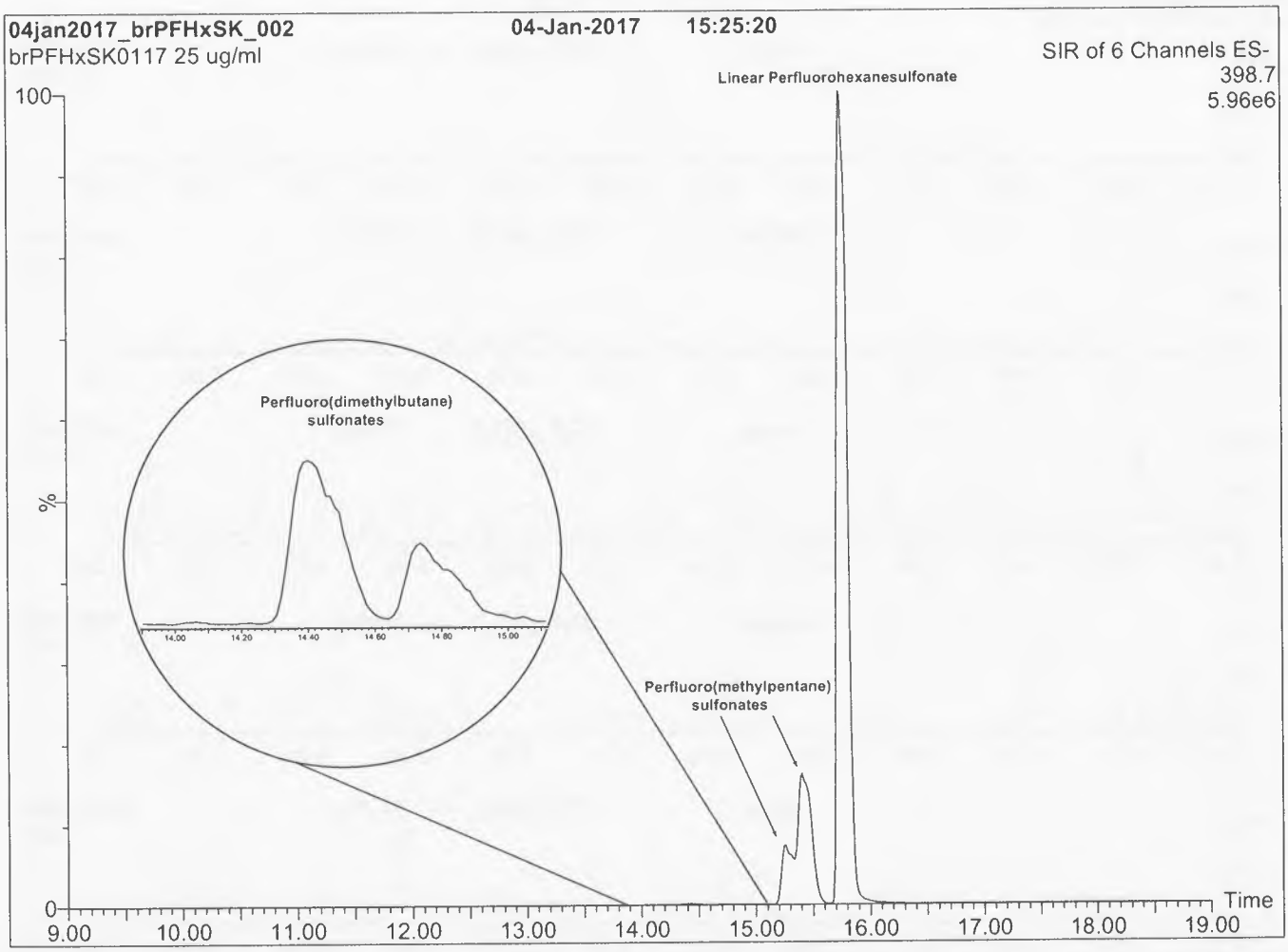
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

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

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



Conditions for Figure 2:

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

Chromatographic Conditions

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

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

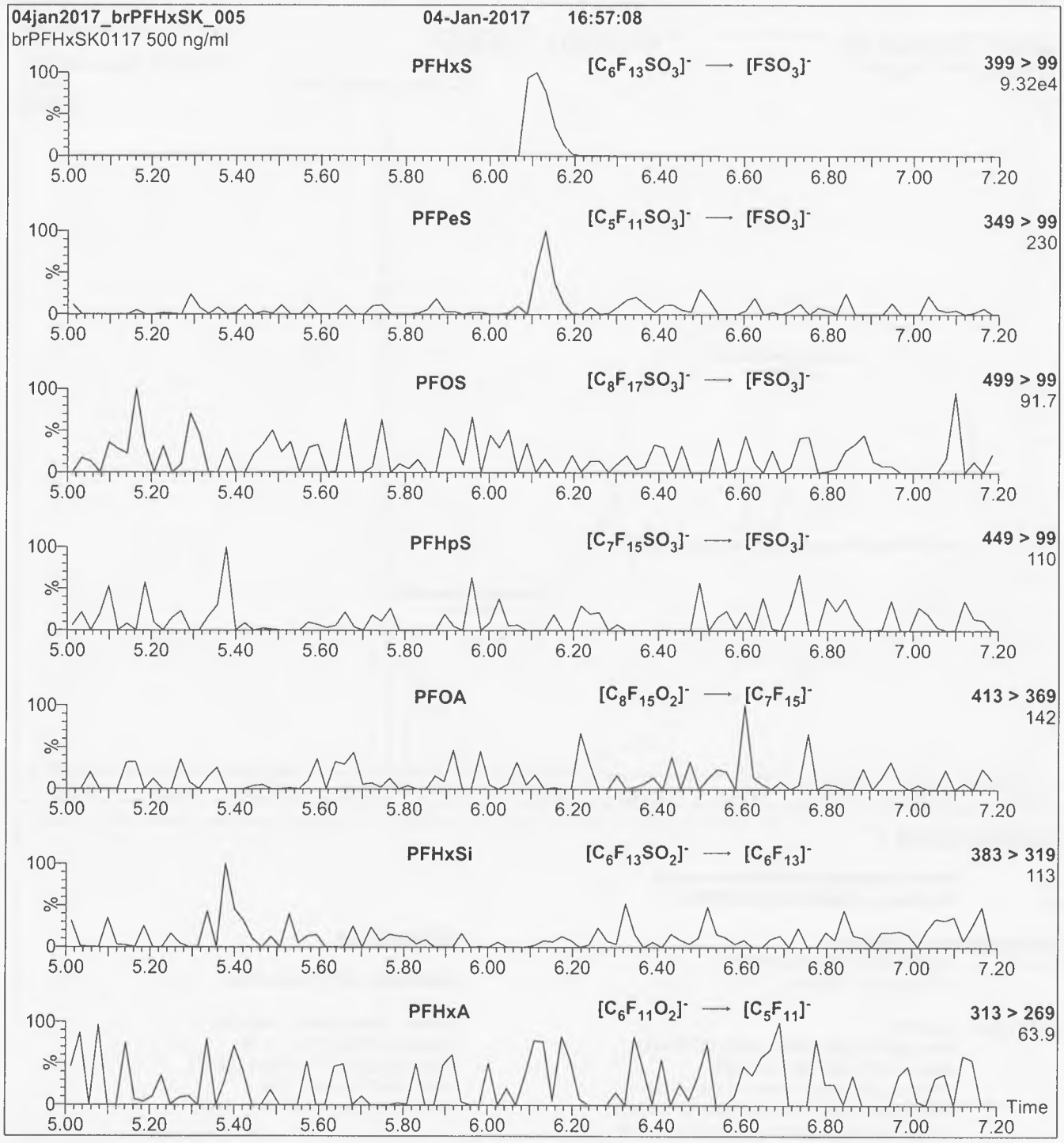
Flow: 300 µl/min

MS Parameters

Experiment: SIR (6 channels)

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

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



Conditions for Figure 3:

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

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

Flow: 300 µl/min

MS Parameters

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

BATTELLE

It can be done

BDO Id: 180618-07

Reagent Receipt Report

Approved: ☐ Authorized ☐

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

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

Notes:

Approved by: _____ Approved on: _____

Authorized by: _____ Authorized on: _____

180618-07

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

br-PFOSK

Potassium Perfluorooctanesulfonate Solution/Mixture of Linear and Branched Isomers

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

DESCRIPTION:

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

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HAZARDS:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

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

UNCERTAINTY:

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

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

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

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

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

CALA Testing Accreditation No. A1226

ANAB ACCREDITED Reference Material Producer

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

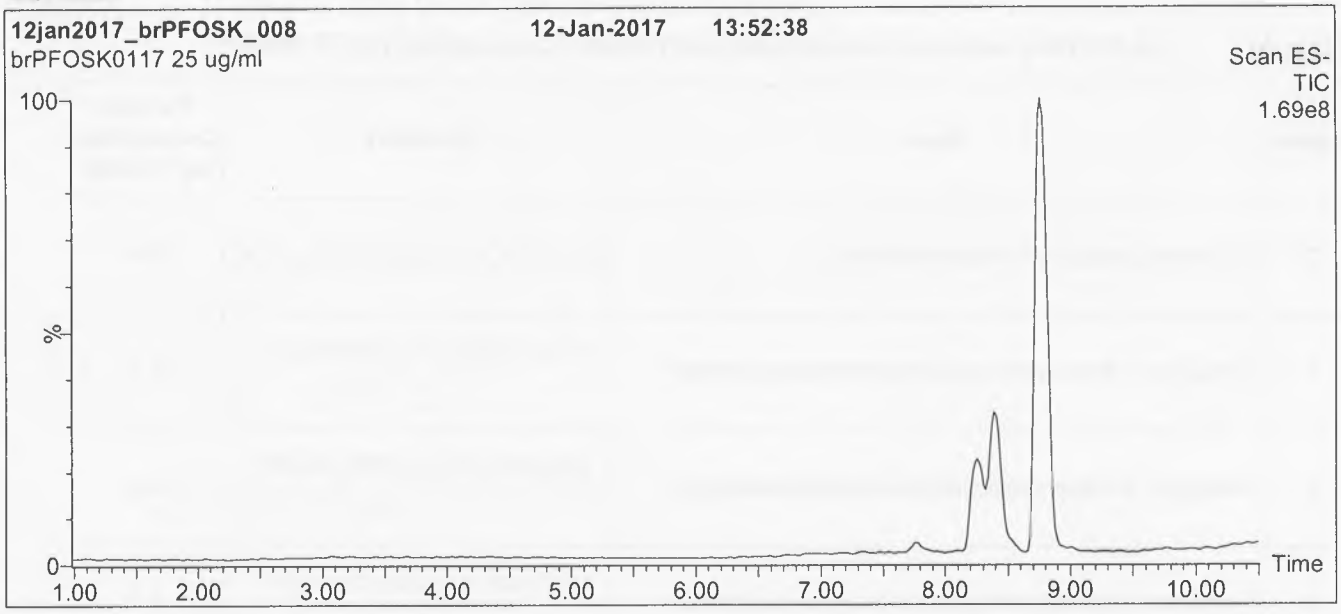
Table A: **br-PFOSK; Isomeric Components and Percent Composition (by ^{19}F-NMR)***

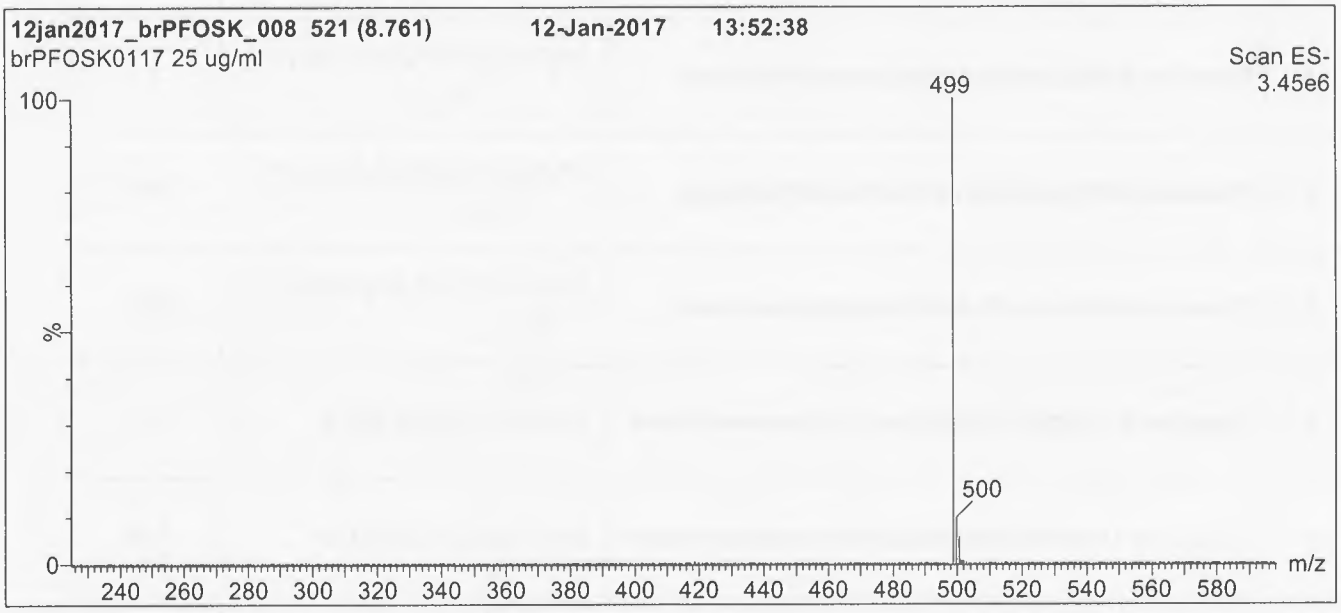
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	Potassium perfluoro-1-octanesulfonate	$CF_3CF_2CF_2CF_2CF_2CF_2CF_2CF_2SO_3^-K^+$	78.8
2	Potassium 1-trifluoromethylperfluoroheptanesulfonate**	$CF_3CF_2CF_2CF_2CF_2CF_2CF(CF_3)SO_3^-K^+$	1.2
3	Potassium 2-trifluoromethylperfluoroheptanesulfonate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

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

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

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





Conditions for Figure 1:

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

Chromatographic Conditions

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

Mobile phase: Gradient
Start: 45% (80:20 MeOH:ACN) / 55% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 12 min and hold for 2 min.
Return to initial conditions over 0.5 min.
Time: 16 min

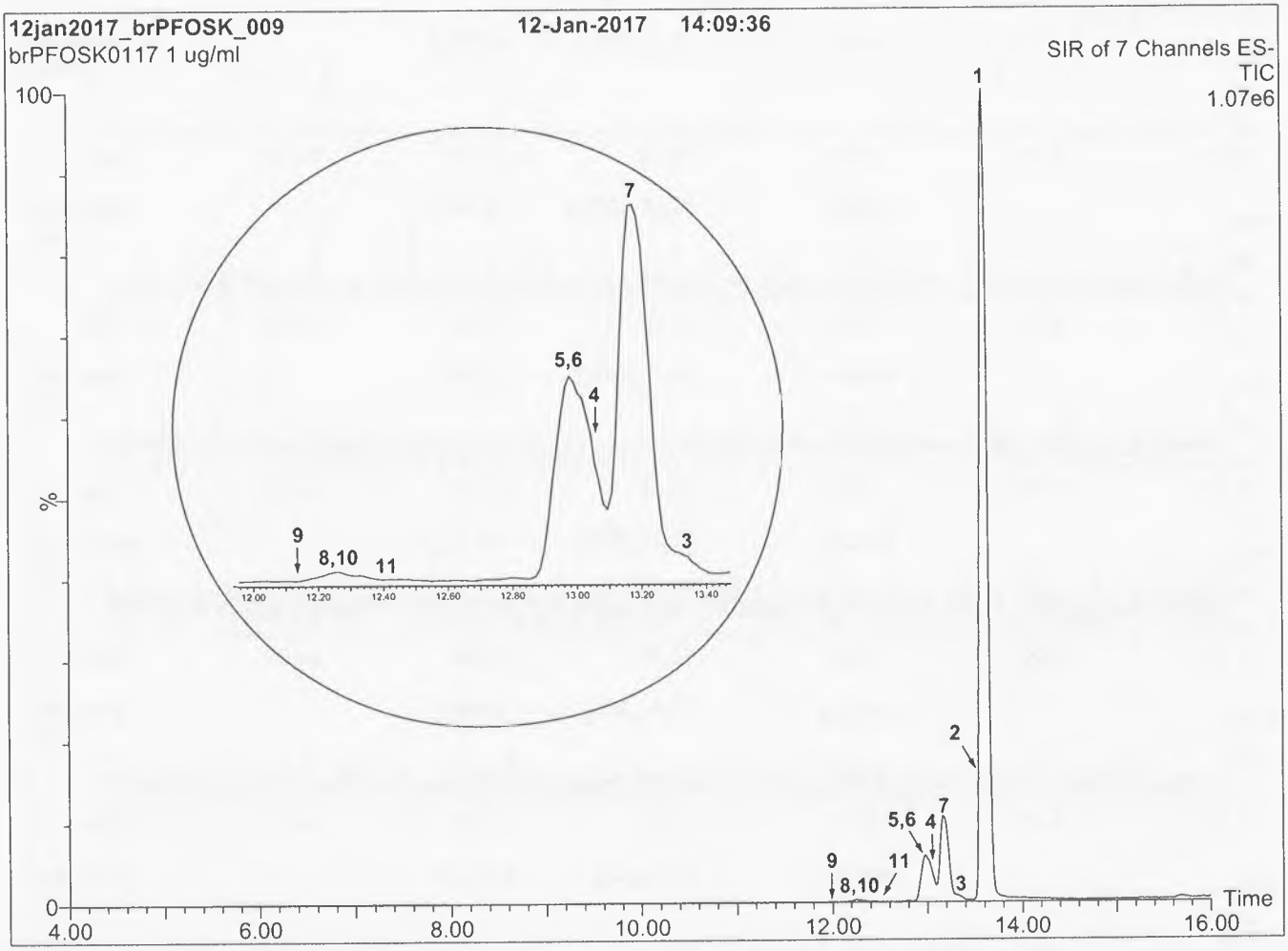
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = 60.00
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

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



Conditions for Figure 2:

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

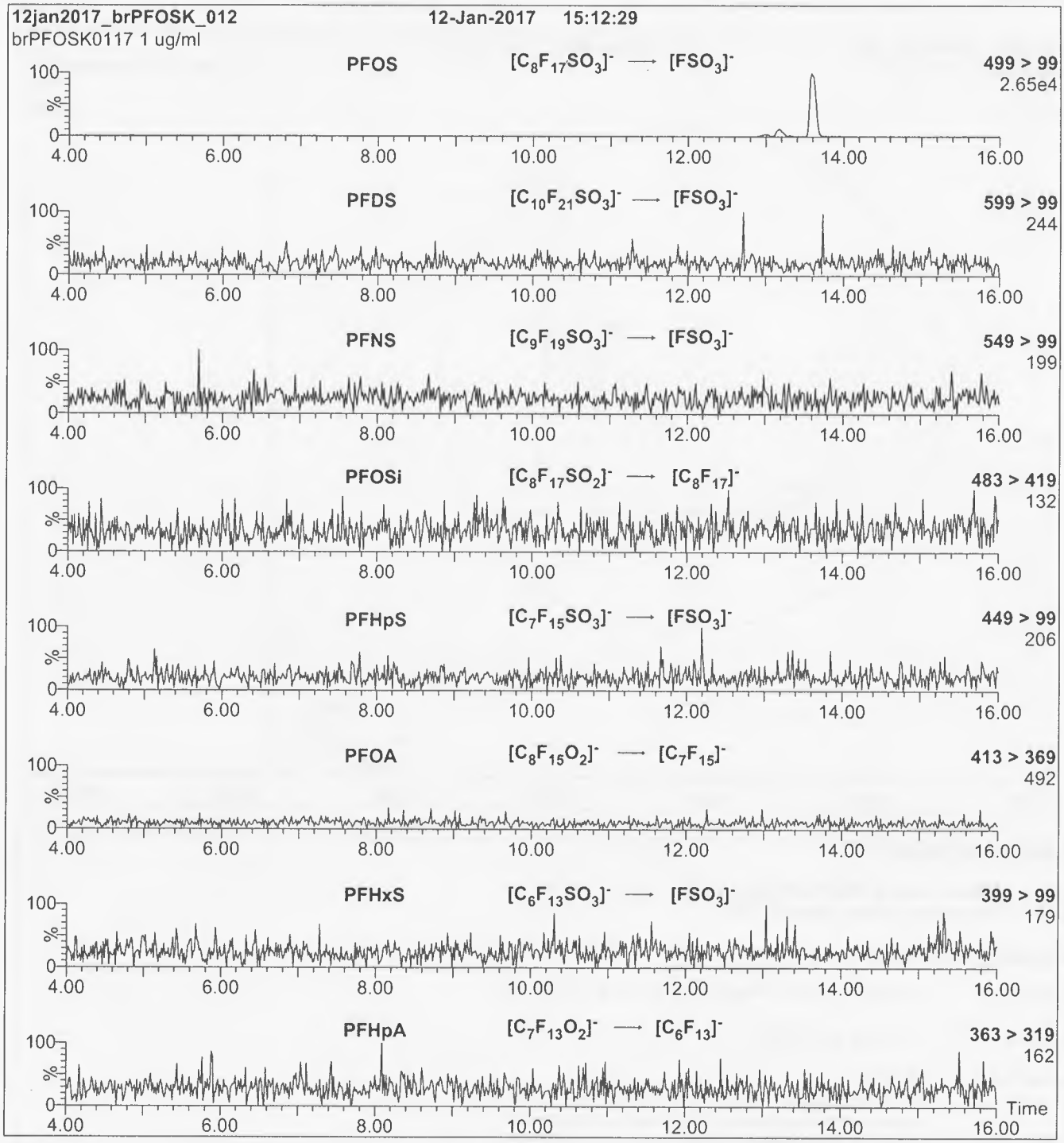
Chromatographic Conditions:

Column:	Acquity UPLC BEH Shield RP_{18} (1.7 µm, 2.1 x 100 mm)
Injection:	1.0 µg/ml of br-PFOSK
Mobile Phase:	Gradient 45% (80:20 MeOH:ACN) / 55% H_2O (both with 10 mM NH_4OAc buffer) Ramp to 90% organic over 15 min and hold for 3 min. Return to initial conditions over 1 min. Time: 20 min
Flow:	300 µl/min

MS Conditions:

SIR (ES-)
Source = 110 °C
Desolvation = 325 °C
Cone Voltage = 60V

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



Conditions for Figure 3:

Injection: On-column

Mobile phase: Same as Figure 2

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.31e-3
Collision Energy (eV) = 11-50 (variable)

CERTIFIED WEIGHT REPORT

180705-02

Part Number: 99207
Lot Number: 061918
Description: PFOA - DOD
24 components
Expiration Date: 061923
Recommended Storage: Freezer (0 °C)
Nominal Concentration (µg/mL): 1.0
NIST Test ID#: 2684186

Solvent(s):	Lot#	
Methanol (1 mM KOH)	061918	(98%)
2-Propanol	23214	(2%)

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

Formulated By:	Mario Luis	061918 DATE
Reviewed By:	Pedro L. Rentas	061918 DATE

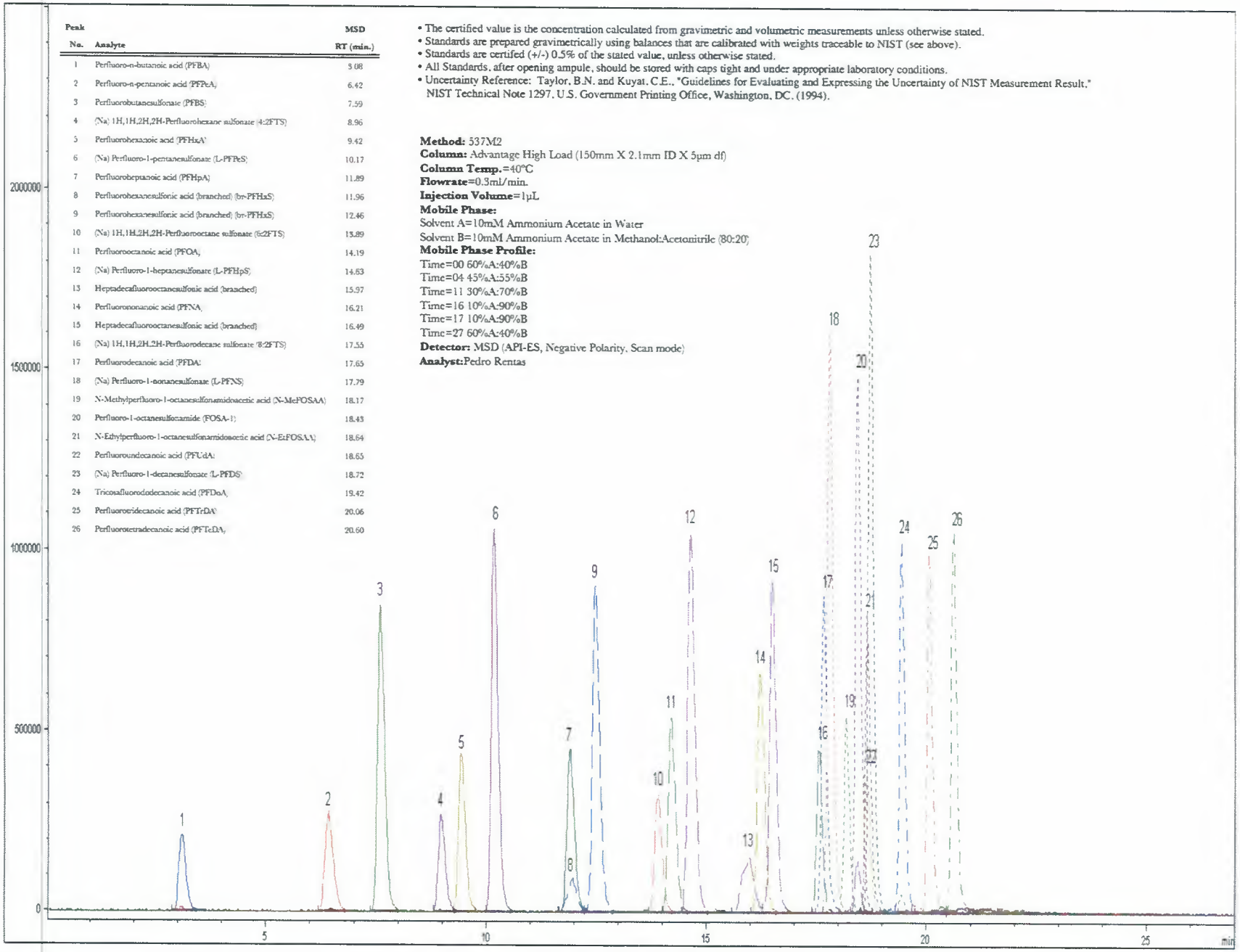
Note: All assigned values are anion concentrations.

	Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Initial Conc.(µg/mL)	Final Conc.(µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50
1.	Perfluoro-n-butanoic acid (linear)	99542	110317	0.02	1.00	0.004	50.2	1.00	0.01	375-22-4	N/A	N/A
2.	Perfluoro-n-pentanoic acid	99543	110317	0.02	1.00	0.004	50.7	1.01	0.01	2706-90-3	N/A	N/A
3.	Perfluorohexanoic acid	99199	030617	0.02	1.00	0.004	50.3	1.01	0.01	307-24-4	N/A	N/A
4.	Perfluoroheptanoic acid	99197	030517	0.02	1.00	0.004	50.1	1.00	0.01	375-85-9	N/A	N/A
5.	Perfluorooctanoic acid	99202	030617	0.02	1.00	0.004	50.2	1.00	0.01	335-67-1	N/A	ipr-rat 189mg/kg
6.	Perfluorononanoic acid	99200	030617	0.02	1.00	0.004	50.1	1.00	0.01	375-95-1	N/A	N/A
7.	Perfluorodecanoic acid	99195	030617	0.02	1.00	0.004	50.1	1.00	0.01	335-76-2	N/A	orl-rat 57mg/kg
8.	Perfluoroundecanoic acid	99205	030617	0.02	1.00	0.004	50.1	1.00	0.01	2058-94-8	N/A	N/A
9.	Tricosafluorododecanoic acid	99196	030617	0.02	1.00	0.004	50.1	1.00	0.01	307-55-1	N/A	N/A
10.	Perfluorotridecanoic acid	99204	030617	0.02	1.00	0.004	50.1	1.00	0.01	72629-94-8	N/A	N/A
11.	Perfluorotetradecanoic acid	99203	030617	0.02	1.00	0.004	50.1	1.00	0.01	376-06-7	N/A	N/A
12.	Perfluoro-1-octanesulfonamide	3677	FOSA0817I	0.02	1.00	0.004	50.0	1.00	0.01	754-91-6	N/A	N/A
13.	N-Methylperfluoro-1-octanesulfonamidoacetic acid	3667	NMeFOSAA0118	0.02	1.00	0.004	50.0	1.00	0.01	2355-31-9	N/A	N/A
14.	N-Ethylperfluoro-1-octanesulfonamidoacetic acid	3664	NEtFOSAA0118	0.02	1.00	0.004	50.0	1.00	0.01	2991-50-6	N/A	N/A
15.	Perfluorobutanesulfonic acid	99194	031017	0.02	1.00	0.004	50.7	1.01	0.01	375-73-5	N/A	N/A
16.	Perfluoro-1-pentanesulfonate	99544	111017	0.02	0.98	0.004	51.3	1.00	0.01	630402-22-1	N/A	N/A
17.	Perfluorohexanesulfonic acid (branched)	99198	030617	0.02	1.00	0.004	50.6	1.01	0.01	3871-99-6	N/A	N/A
18.	Perfluoro-1-heptanesulfonic acid	3672	LPFHpS0817	0.021	1.05	0.004	47.6	1.00	0.01	375-92-8	N/A	N/A
19.	Heptadecafluorooctanesulfonic acid (branched)	99201	030617	0.02	1.00	0.004	50.2	1.00	0.01	1763-23-1	N/A	N/A
20.	Perfluoro-1-nonanesulfonic acid	3957	LPFNS0917	0.021	1.05	0.004	48.0	1.01	0.01	98789-57-2	N/A	N/A
21.	Perfluoro-1-decanesulfonic acid	3671	LPFDS0217	0.021	1.05	0.004	48.2	1.01	0.01	2806-15-7	N/A	N/A
22.	1H,1H,2H,2H-Perfluorohexane sulfonic acid	3955	42FTS1216	0.0214	1.07	0.004	46.7	1.00	0.01	00-00-0	N/A	N/A
23.	1H,1H,2H,2H-Perfluorooctane sulfonic acid	3661	62FTS0616	0.021	1.05	0.004	47.4	1.00	0.01	27619-97-2	N/A	N/A
24.	1H,1H,2H,2H-Perfluorodecane sulfonic acid	3662	82FTS1216	0.021	1.05	0.004	47.9	1.01	0.01	39108-34-4	N/A	N/A

Peak No.	Analyte	MSD RT (min.)
1	Perfluoro-n-butanoic acid (PFBA)	5.08
2	Perfluoro-n-pentanoic acid (PFPeA)	6.42
3	Perfluorobutanesulfonate (PFBS)	7.59
4	(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate (4:2FTS)	8.96
5	Perfluorohexanoic acid (PFHxA)	9.42
6	(Na) Perfluoro-1-pentanesulfonate (L-PFPeS)	10.17
7	Perfluoroheptanoic acid (PFHpA)	11.89
8	Perfluorohexanesulfonic acid (branched) (br-PFHxS)	11.96
9	Perfluorohexanesulfonic acid (branched) (br-PFHxS)	12.46
10	(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate (6:2FTS)	13.89
11	Perfluorooctanoic acid (PFOA)	14.19
12	(Na) Perfluoro-1-heptanesulfonate (L-PFHpS)	14.63
13	Heptadecafluorooctanesulfonic acid (branched)	15.97
14	Perfluorononanoic acid (PFNA)	16.21
15	Heptadecafluorooctanesulfonic acid (branched)	16.49
16	(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate (8:2FTS)	17.55
17	Perfluorodecanoic acid (PFDA)	17.65
18	(Na) Perfluoro-1-nonanesulfonate (L-PFNS)	17.79
19	N-Methylperfluoro-1-octanesulfonamidoacetic acid (N-MeFOSAA)	18.17
20	Perfluoro-1-octanesulfonamide (FOSA-1)	18.43
21	N-Ethylperfluoro-1-octanesulfonamidoacetic acid (N-EtFOSAA)	18.64
22	Perfluoroundecanoic acid (PFUdA)	18.65
23	(Na) Perfluoro-1-decanesulfonate (L-PFDS)	18.72
24	Tricosafluorododecanoic acid (PFDoA)	19.42
25	Perfluorotridecanoic acid (PFTrDA)	20.06
26	Perfluorotetradecanoic acid (PFTeDA)	20.60

- The certified value is the concentration calculated from gravimetric and volumetric measurements unless otherwise stated.
- Standards are prepared gravimetrically using balances that are calibrated with weights traceable to NIST (see above).
- Standards are 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



BATTELLE

It can be done

BDO Id: 180726-04

Reagent Receipt Report

Approved: ☑ Authorized ☐

Name:	Mass-labelled PFAS injection standar	**Received:**	7/26/2018
Vendor:	Wellington Laboratories	**Custodian:**	Thorn, Jonathan
Catalogue No:	MPFAC-C-IS	**Expires:**	5/2/2022
Type:	Solution	**Consumed:**	
Lot No:	MPFACCIS0516	**Stored In:**	LC Laboratory - R0107
Quantity:	2 ea 1.2 mL **% Moisture:** 0		
Description:	Mass-labelled PFAS injection standards		

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:
13C2-PFDA	BDO-2110	2.0000	100.00	--	--	☐			
13C2-PFOA	BDO-2107	2.0000	100.00	--	--	☐			
13C3-PFBA	BDO-2231	2.0000	100.00	--	--	☐			
13C4-PFOS	BDO-2121	1.9140	100.00	--	--	☐			

Total Analytes: 4

Notes:

Approved by:	Lizotte Jr, Robert	**Approved on:**	7/27/2018 11:10:00 AM
Authorized by:		**Authorized on:**	

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

MPFAC-C-IS

Mass-Labelled Perfluorinated Compound Injection Standards Solution

PRODUCT CODE:	MPFAC-C-IS
LOT NUMBER:	MPFACCIS0516
SOLVENT(S):	Methanol / Water (<1%)
DATE PREPARED: (mm/dd/yyyy)	05/24/2016
LAST TESTED: (mm/dd/yyyy)	05/02/2017
EXPIRY DATE: (mm/dd/yyyy)	05/02/2022
RECOMMENDED STORAGE:	Store ampoule in a cool, dark place

DESCRIPTION:

MPFAC-C-IS is a solution/mixture of mass-labelled (^{13}C) perfluoroalkylcarboxylic acids and a mass-labelled (^{13}C) perfluoroalkylsulfonate. The components and their concentrations are given in Table A.

MPFAC-C-IS was designed for, and prepared to be used with, PFC-CVS-C.

The individual mass-labelled perfluoroalkylcarboxylic acids and mass-labelled perfluoroalkylsulfonate all have chemical purities of >98% and isotopic purities of ≥99%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: LC/MS Data (SIR)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- The mass-labelled perfluoroalkylsulfonate compound concentration is reported as the salt.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HAZARDS:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner, which further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

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

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

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

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

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

CALA Testing Accreditation No. A1226

ANAB ACCREDITED ISO 17025 REFERENCE MATERIAL PRODUCER

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

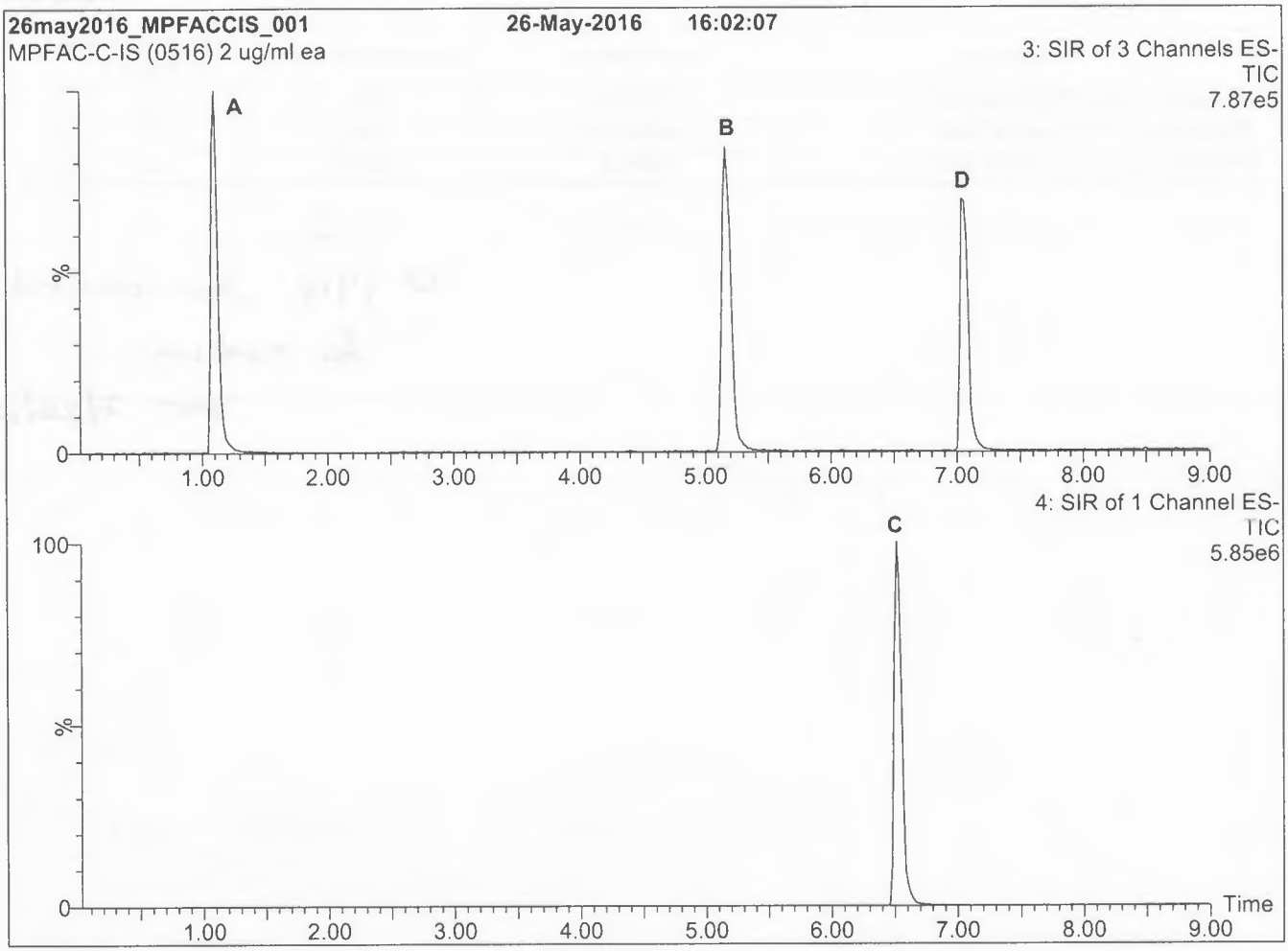
Table A: **MPFAC-C-IS; Components and Concentrations (ng/ml; ± 5% in Methanol / Water (<1%))**

Compound	Abbreviation	Concentration (ng/ml)	Peak Assignment in Figure 1
Perfluoro-n-[2,3,4-$^{13}C_3$]butanoic acid	M3PFBA	2000	A
Perfluoro-n-[1,2-$^{13}C_2$]octanoic acid	M2PFOA	2000	B
Perfluoro-n-[1,2-$^{13}C_2$]decanoic acid	MPFDA	2000	D
Sodium perfluoro-1-[1,2,3,4-$^{13}C_4$]octanesulfonate	MPFOS	2000 ①	C

① 1914 when corrected for sodium
JMS 7/26/2017

Certified By: _____ **Date:** 05/04/2017
(mm/dd/yyyy)
B.G. Chittim, General Manager

Figure 1: **MPFAC-C-IS; LC/MS Data (Total Ion Current Chromatogram; SIR)**



Conditions for Figure 1:

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

Chromatographic Conditions

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

Mobile phase: Gradient
Start: 50% (80:20 MeOH:ACN) / 50% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 90% organic over 8 min
and hold for 2 min before returning
to initial conditions in 1 min.
Time: 12 min

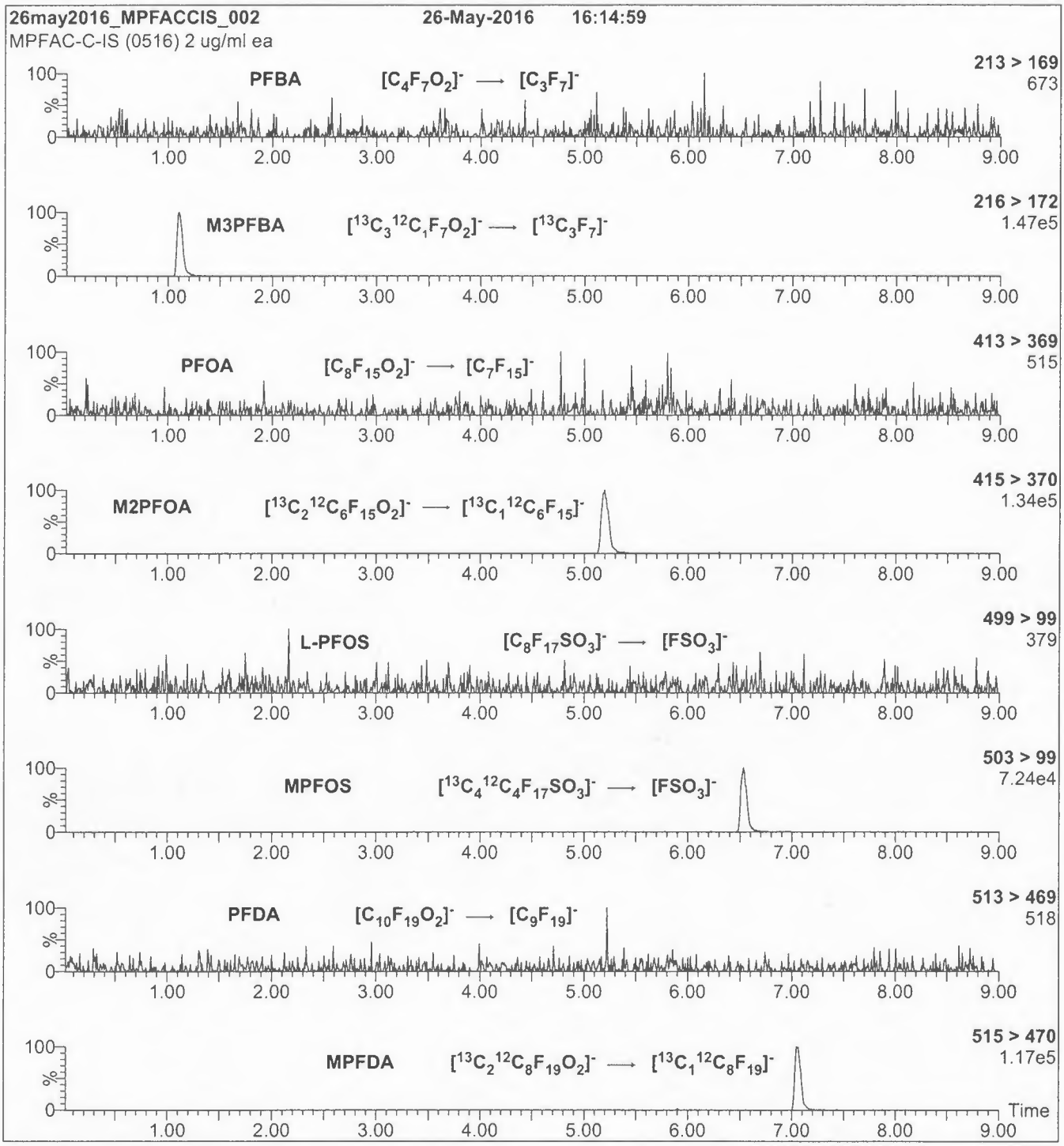
Flow: 300 µl/min

MS Parameters

Experiment: SIR

Source: Electrospray (negative)
Capillary Voltage (kV) = 2.00
Cone Voltage (V) = variable (10-80)
Cone Gas Flow (l/hr) = 50
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFAC-C-IS; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: On-column (MPFAC-C-IS)

Mobile phase: Same as Figure 1

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.50e-3

Collision Energy (eV) = 8-50 (variable)

BATTELLE

It can be done

BDO Id: 180726-05

Reagent Receipt Report

Approved: ☑ Authorized ☐

Name: Mass-labelled PFAS Extraction Stand
Vendor: Wellington Laboratories
Catalogue No: MPFAC-24ES
Type: Solution
Lot No: MPFAC24ES0218
Quantity: 2 ea 1.2 mL **% Moisture:** 0
Description: Mass-labelled PFAS Extraction Standard Solution

Received: 7/26/2018
Custodian: Thorn, Jonathan
Expires: 2/7/2023
Consumed:
Stored In: LC Laboratory - R0107

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:
13C2-4:2FTS	BDO-2229	0.9350	100.00	--	--	☐			
13C2-6:2FTS	BDO-2230	0.9490	100.00	--	--	☐			
13C2-8:2FTS	BDO-2220	0.9580	100.00	--	--	☐			
13C2-PFDoA	BDO-2112	1.0000	100.00	--	--	☐			
13C2-PFTeDA	BDO-2224	1.0000	100.00	--	--	☐			
13C3-PFBS	BDO-2226	0.9290	100.00	--	--	☐			
13C3-PFHxS	BDO-2227	0.9460	100.00	--	--	☐			
13C4-PFBA	BDO-2105	1.0000	100.00	--	--	☐			
13C4-PFHpA	BDO-2218	1.0000	100.00	--	--	☐			
13C5-PFHxA	BDO-2217	1.0000	100.00	--	--	☐			
13C5-PFPeA	BDO-2216	1.0000	100.00	--	--	☐			
13C6-PFDA	BDO-2222	1.0000	100.00	--	--	☐			
13C7-PFUnA	BDO-2223	1.0000	100.00	--	--	☐			
13C8-FOSA	BDO-2225	1.0000	100.00	--	--	☐			
13C8-PFOA	BDO-2219	1.0000	100.00	--	--	☐			
13C8-PFOS	BDO-2228	0.9570	100.00	--	--	☐			
13C9-PFNA	BDO-2221	1.0000	100.00	--	--	☐			
d3-MeFOSAA	BDO-1838	1.0000	100.00	--	--	☐			
d5-EtFOSAA	BDO-1839	1.0000	100.00	--	--	☐			

Total Analytes: 19

Notes:

Approved by: Lizotte Jr, Robert **Approved on:** 7/27/2018 11:10:00 AM
Authorized by: **Authorized on:**

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

MPFAC-24ES

Mass-Labelled Per- and Poly-fluoroalkyl Substance Extraction Standard Solution

PRODUCT CODE:	MPFAC-24ES
LOT NUMBER:	MPFAC24ES0218
SOLVENT(S):	Methanol / Isopropanol (2%) / Water (<1%)
DATE PREPARED: (mm/dd/yyyy)	02/07/2018
LAST TESTED: (mm/dd/yyyy)	02/07/2018
EXPIRY DATE: (mm/dd/yyyy)	02/07/2023
RECOMMENDED STORAGE:	Refrigerate ampoule

DESCRIPTION:

MPFAC-24ES is a solution/mixture of ten mass-labelled (^{13}C) perfluoroalkylcarboxylic acids (C_4-C_{12} and C_{14}), three mass-labelled (^{13}C) perfluoroalkylsulfonates (C_4, C_6, and C_8), three mass-labelled (^{13}C) telomer sulfonates (4:2, 6:2, and 8:2), two mass-labelled (^{2}H) perfluorooctanesulfonamidoacetic acids, and perfluoro-1-[$^{13}C_8$]octanesulfonamide. The components and their concentrations are given in Table A.

The individual mass-labelled perfluoroalkylcarboxylic acids, mass-labelled perfluoroalkylsulfonates, mass-labelled telomer sulfonates, and perfluoro-1-[$^{13}C_8$]octanesulfonamide all have chemical purities of >98% and isotopic purities of ≥99%. The individual mass-labelled perfluorooctanesulfonamidoacetic acids all have chemical purities of >98% and isotopic purities of ≥98%.

DOCUMENTATION/ DATA ATTACHED:

Table A: Components and Concentrations of the Solution/Mixture
Figure 1: LC/MS Data (SIR)
Figure 2: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

- See page 2 for further details.
- Contains 4 mole eq. of NaOH to prevent conversion of the carboxylic acids to their respective methyl esters.

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HANDLING:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

Prior to solution preparation, crystalline material is tested for homogeneity using a variety of techniques (as stated above) and its solubility in a given diluent is taken into consideration. Duplicate solutions of a new product are prepared from the same crystalline lot and, after the addition of an appropriate internal standard, they are compared by GC/MS, LC/MS/MS, and/or SFC/UV/MS/MS. The relative response factors of the analyte of interest in each solution are required to be <5% RSD. New solution lots of existing products, as well as mixtures and calibration solutions, are compared to older lots in a similar manner. This further confirms the homogeneity of the crystalline material as well as the stability and homogeneity of the solutions in the storage containers. In order to maintain the integrity of the assigned value(s), and associated uncertainty, the dilution or injection of a subsample of this product should be performed using calibrated measuring equipment.

UNCERTAINTY:

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

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

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

where x is expressed as a relative standard uncertainty of the individual parameter.

The individual uncertainties taken into account include those associated with weights (calibration of the balance) and volumes (calibration of the volumetric glassware). An expanded maximum combined percent relative uncertainty of ±5% (calculated with a coverage factor of 2 and a level of confidence of 95%) is stated on the Certificate of Analysis for all of our products.

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO 17034 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A1226

ANAB ACCREDITED 9017034 REFERENCE MATERIAL PRODUCER

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

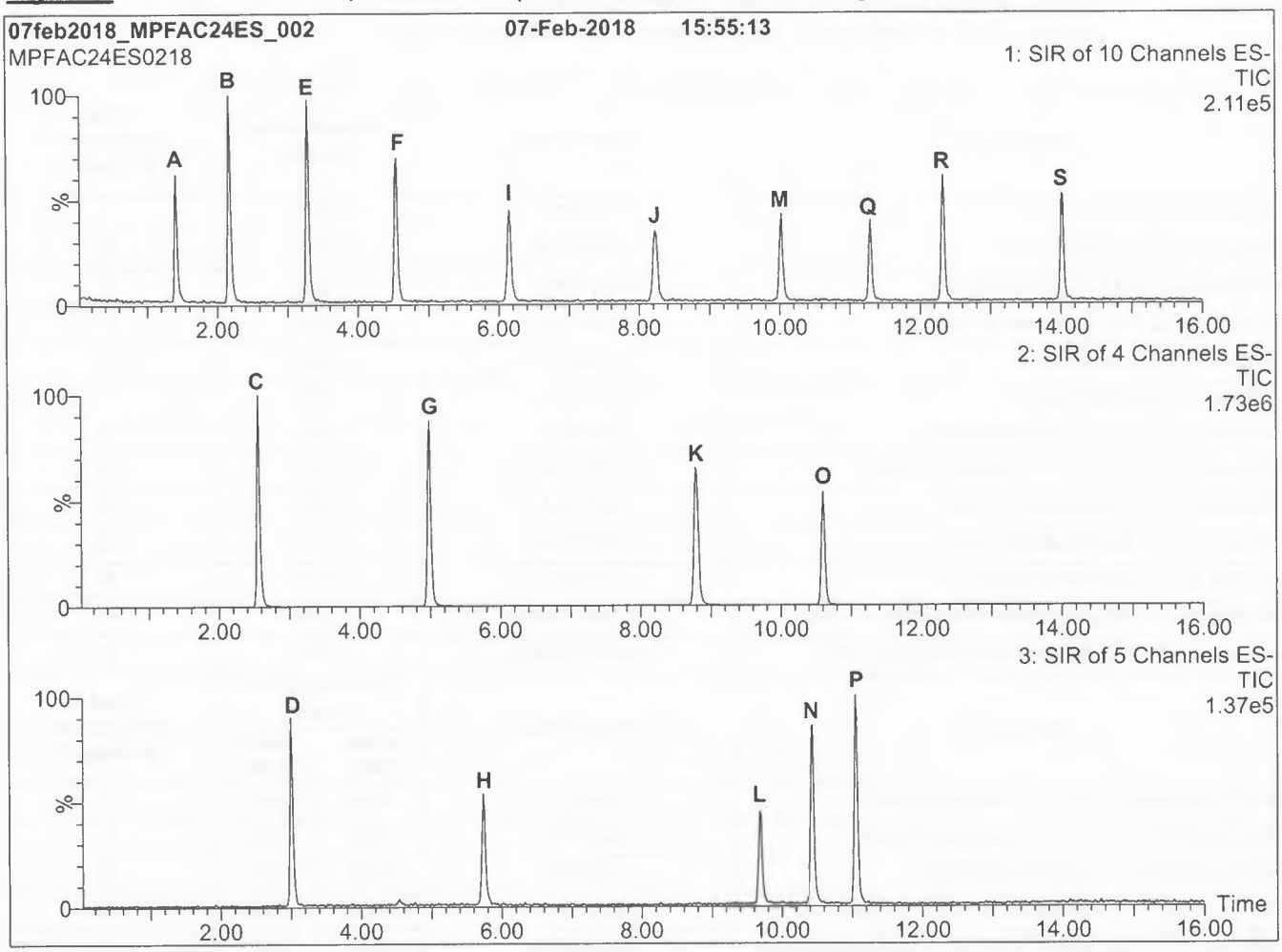
Table A: **MPFAC-24ES; Components and Concentrations (ng/ml, ± 5% in Methanol / Isopropanol (2%) / Water (<1%))**

Compound	Abbreviation	Concentration (ng/ml)		Peak Assignment in Figure 1
Perfluoro-n-[$^{13}C_4$]butanoic acid	MPFBA	1000		A
Perfluoro-n-[$^{13}C_5$]pentanoic acid	M5PFPeA	1000		B
Perfluoro-n-[1,2,3,4,6-$^{13}C_5$]hexanoic acid	M5PFHxA	1000		E
Perfluoro-n-[1,2,3,4-$^{13}C_4$]heptanoic acid	M4PFHpA	1000		F
Perfluoro-n-[$^{13}C_8$]octanoic acid	M8PFOA	1000		I
Perfluoro-n-[$^{13}C_9$]nonanoic acid	M9PFNA	1000		J
Perfluoro-n-[1,2,3,4,5,6-$^{13}C_6$]decanoic acid	M6PFDA	1000		M
Perfluoro-n-[1,2,3,4,5,6,7-$^{13}C_7$]undecanoic acid	M7PFUdA	1000		Q
Perfluoro-n-[1,2-$^{13}C_2$]dodecanoic acid	MPFDoA	1000		R
Perfluoro-n-[1,2-$^{13}C_2$]tetradecanoic acid	M2PFTeDA	1000		S
Perfluoro-1-[$^{13}C_8$]octanesulfonamide	M8FOSA	1000		O
N-methyl-d_3-perfluoro-1-octanesulfonamidoacetic acid	d3-N-MeFOSAA	1000		N
N-ethyl-d_5-perfluoro-1-octanesulfonamidoacetic acid	d5-N-EtFOSAA	1000		P
Compound	**Abbreviation**	**Concentration (ng/ml)**		**Peak Assignment in Figure 1**
		as the salt	**as the anion**	
Sodium perfluoro-1-[2,3,4-$^{13}C_3$]butanesulfonate	M3PFBS	1000	929	C
Sodium perfluoro-1-[1,2,3-$^{13}C_3$]hexanesulfonate	M3PFHxS	1000	946	G
Sodium perfluoro-1-[$^{13}C_8$]octanesulfonate	M8PFOS	1000	957	K
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-$^{13}C_2$]hexanesulfonate	M2-4:2FTS	1000	935	D
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-$^{13}C_2$]octanesulfonate	M2-6:2FTS	1000	949	H
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-$^{13}C_2$]decanesulfonate	M2-8:2FTS	1000	958	L

Certified By: _____ **Date:** 02/09/2018 (mm/dd/yyyy)

B.G. Chittim, General Manager

Figure 1: **MPFAC-24ES; LC/MS Data (Total Ion Current Chromatogram; SIR)**



Conditions for Figure 1:

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

Chromatographic Conditions

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

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 55% organic over 3.5 min.
Ramp to 70% organic over 6.5 min.
Ramp to 85% organic over 5 min and hold for
1 min before returning to initial conditions in 0.5 min.
Time: 17 min

Flow: 300 µl/min

MS Parameters

Experiment: SIR

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = variable (10-60)
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

Figure 2: **MPFAC-24ES; LC/MS/MS Data (Selected MRM Transitions)**

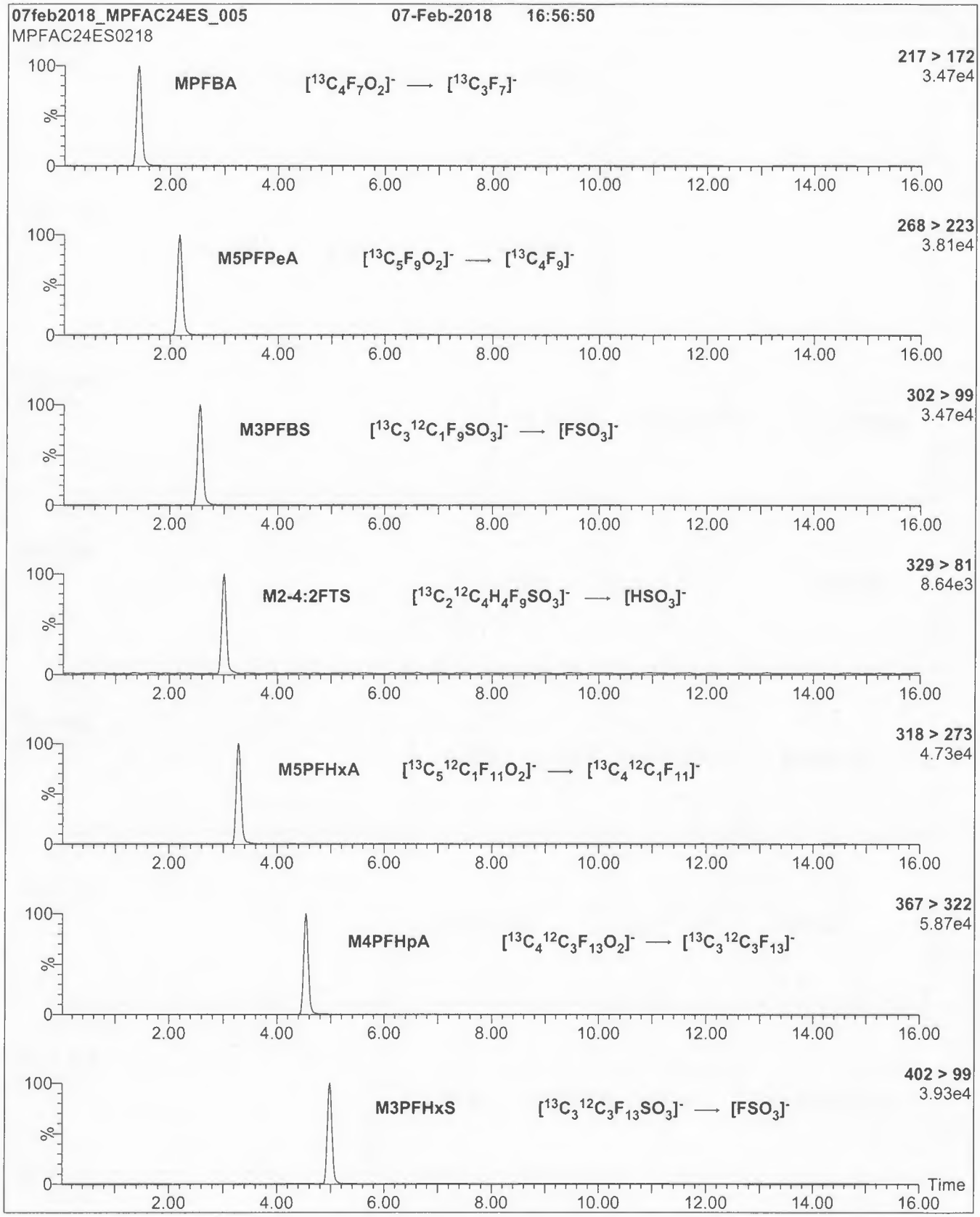


Figure 2: **MPFAC-24ES; LC/MS/MS Data (Selected MRM Transitions)**

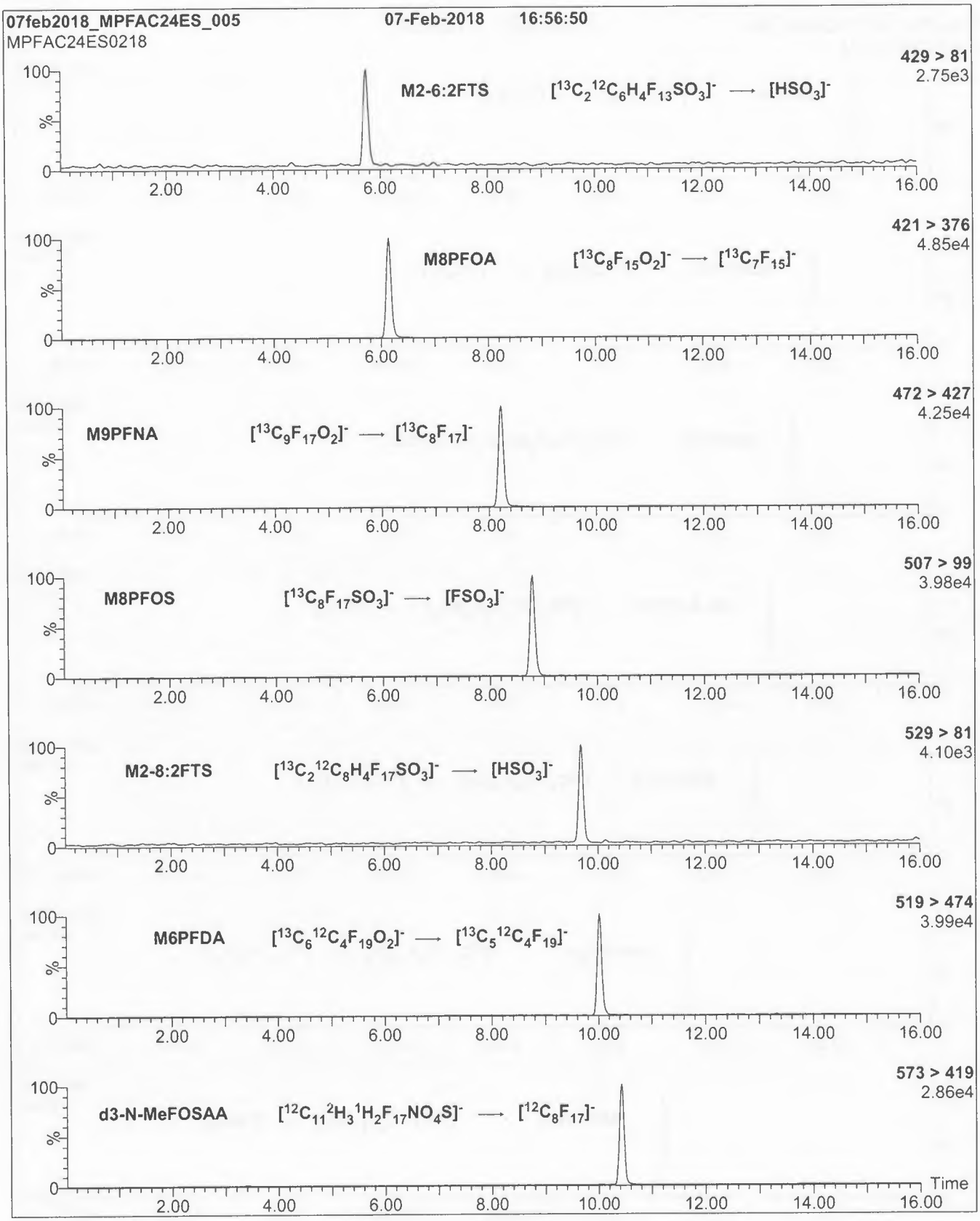
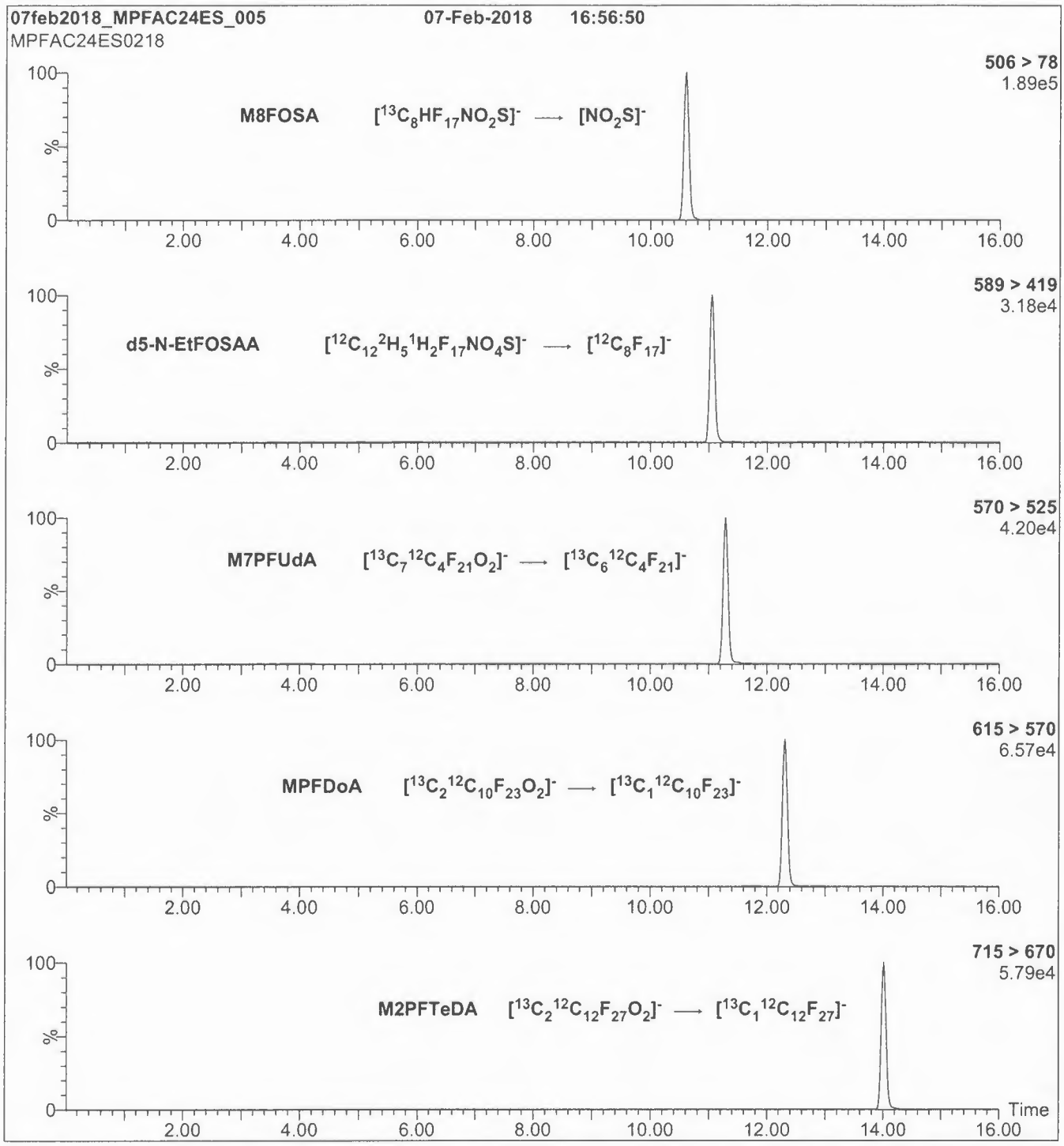


Figure 2: **MPFAC-24ES; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: On-column (MPFAC-24ES)

Mobile phase: Same as Figure 1

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.28e-3

Collision Energy (eV) = 8-40 (variable)

Sample Preparation

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
SAMPLE PREPARATION RECORDS

Project Title(s)	**Project No.(s)**
CTO-4164 Naval Base Ventura County, California	100110125-01

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

SOP Numbers (see workplan for modifications)

ExtractionSOP No. 5-370

This Batch Contains The Following Samples:		
CR847PB-FS	J8261-FS	J8276-FS
CR848LCS-FS	J8262-FS	J8277-FS
J8246-FS	J8272-FS	
J8247-FS	J8273-FS	
J8259-FS	J8274-FS	
J8260-FS	J8275-FS	

Laboratory Preparation Records
COMPLETE AND VALIDATED

Prep Task Leader: Stephanie Schultz

Approved By:	Date	Initials
Denise Schumitz	10/17/2018	DMS

BATTELLE
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

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Sample ID	Description
CR847PB-FS	Procedural Blank
CR848LCS-FS	Laboratory Control Sample
J8246-FS	VC-AQ-FB01-0918
J8247-FS	VC-AQ-EB01-0918
J8259-FS	VC-PM365-DW01-0918
J8260-FS	VC-PM365-DW02-0918
J8261-FS	VC-PM365-DW02P-0918
J8262-FS	VC-PM365-DW03-0918
J8272-FS	VC-PM553-DW01-0918
J8273-FS	VC-PM553-DW01P-0918
J8274-FS	VC-PM553-DW02-0918
J8275-FS	VC-PM553-DW03-0918
J8276-FS	VC-SO-FB02-0918
J8277-FS	VC-SO-EB02-0918

Samples Assigned By: Jonathan Thorn Date : September 21, 2018

Comments:

BATTELLE
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BATTELLE - NORWELL OPERATIONS
SAMPLE CUSTODY LOG

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Requested On/By:	09/27/2018 SAS	**Purpose:**	Sample Preparation
Relinquished On/By:	09/27/2018 MDS	**Last Activity:**	Transfer

Accepted On/By:	09/27/2018 SAS	**Returned On/To:**	
Stored In Facility:	Sample Preparation	**Returned To Facility:**	
Stored Until	09/27/2018		
Stored Comment:	NA	**Returned Comment:**	NA

No.	BDO-ID:	Ctrs	*	Condition:	Custody Comment:
1	J8246	2	C	Consumed	NA
2	J8247	2	C	Consumed	NA
3	J8259	2	C	Consumed	NA
4	J8260	2	C	Consumed	NA
5	J8261	1	C	Consumed	NA
6	J8262	1	C	Consumed	NA
7	J8272	2	C	Consumed	NA
8	J8273	2	C	Consumed	NA
9	J8274	2	C	Consumed	NA
10	J8275	1	C	Consumed	NA
11	J8276	2	C	Consumed	NA
12	J8277	2	C	Consumed	NA

Total Samples 12 * "C" = Consumed Container

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
LIQUID SAMPLE ID FORM

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Sample ID	Description	Volume (mL)	Bottles	*	Date Initials
CR847PB-FS	Procedural Blank	250.0	NA	--	09/27/18 SAS
CR848LCS-FS	Laboratory Control Sample	250.0	NA	--	09/27/18 SAS
J8246-FS	VC-AQ-FB01-0918	270.0	2	C	09/27/18 LMG
J8247-FS	VC-AQ-EB01-0918	265.0	2	C	09/27/18 LMG
J8259-FS	VC-PM365-DW01-0918	260.0	2	C	09/27/18 LMG
J8260-FS	VC-PM365-DW02-0918	270.0	2	C	09/27/18 LMG
J8261-FS	VC-PM365-DW02P-0918	270.0	1	C	09/27/18 LMG
J8262-FS	VC-PM365-DW03-0918	275.0	1	C	09/27/18 LMG
J8272-FS	VC-PM553-DW01-0918	280.0	2	C	09/27/18 LMG
J8273-FS	VC-PM553-DW01P-0918	285.0	2	C	09/27/18 LMG
J8274-FS	VC-PM553-DW02-0918	280.0	2	C	09/27/18 LMG
J8275-FS	VC-PM553-DW03-0918	275.0	1	C	09/27/18 LMG
J8276-FS	VC-SO-FB02-0918	260.0	2	C	09/27/18 LMG
J8277-FS	VC-SO-EB02-0918	250.0	2	C	09/27/18 LMG

Comments:

Samples Assigned By Jonathan Thorn Date : September 21, 2018

* - "C" = Sample is Consumed

BATTELLE
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

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Sample ID	Standard ID	Type	Vial No.	Vol Added (uL)	Date Spiked/ Spiked By	Witn'd By	Comment
CR847PB-FS	KB33	SIS	1	50	09/27/18 SAS	LMG	NA
CR848LCS-FS	JZ88	LCS/MS	1	150	09/27/18 SAS	LMG	NA
CR848LCS-FS	KB33	SIS	1	50	09/27/18 SAS	LMG	NA
J8246-FS	KB33	SIS	1	50	09/27/18 SAS	LMG	NA
J8247-FS	KB33	SIS	1	50	09/27/18 SAS	LMG	NA
J8259-FS	KB33	SIS	1	50	09/27/18 SAS	LMG	NA
J8260-FS	KB33	SIS	1	50	09/27/18 SAS	LMG	NA
J8261-FS	KB33	SIS	1	50	09/27/18 SAS	LMG	NA
J8262-FS	KB33	SIS	1	50	09/27/18 SAS	LMG	NA
J8272-FS	KB33	SIS	1	50	09/27/18 SAS	LMG	NA
J8273-FS	KB33	SIS	1	50	09/27/18 SAS	LMG	NA
J8274-FS	KB33	SIS	1	50	09/27/18 SAS	LMG	NA
J8275-FS	KB33	SIS	1	50	09/27/18 SAS	LMG	NA
J8276-FS	KB33	SIS	1	50	09/27/18 SAS	LMG	NA
J8277-FS	KB33	SIS	1	50	09/27/18 SAS	LMG	NA

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
JZ88	Pipette	B814657482
KB33	Pipette	B814659662

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BATTELLE - NORWELL OPERATIONS
SAMPLE EXTRACTION FORM

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Sample ID	1st Extraction	2nd Extraction	3rd Extraction	Conc. ID	Turbo °C	Turbo PSI	KD °C	Comment
CR847PB-FS	09/27/18 LMG	NA	NA	NA	NA	NA	NA	NA
CR848LCS-FS	09/27/18 LMG	NA	NA	NA	NA	NA	NA	NA
J8246-FS	09/27/18 LMG	NA	NA	NA	NA	NA	NA	NA
J8247-FS	09/27/18 LMG	NA	NA	NA	NA	NA	NA	NA
J8259-FS	09/27/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8260-FS	09/27/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8261-FS	09/27/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8262-FS	09/27/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8272-FS	09/27/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8273-FS	09/27/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8274-FS	09/27/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8275-FS	09/27/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8276-FS	09/27/18 LMG	NA	NA	NA	NA	NA	NA	NA
J8277-FS	09/27/18 LMG	NA	NA	NA	NA	NA	NA	NA

Solvents/Reagent Preparations:

Name	ID	Expires	Lot No	Procedure	Comments
0.4% NH3 in Methanol	RP-180927-11	09/27/18	182674	Per 100 mL, 3.5 mL ammonia solution brought to 100 mL with methanol	
0.4% NH3 in Methanol	RP-180927-11	09/27/18	SHBJ0412	Per 100 mL, 3.5 mL ammonia solution brought to 100 mL with methanol	
Pre-packed SPE Column	RP-180927-12	09/27/18	003537250A/ 0035	Pre-packed SPE Column	

Solvents/Reagents:

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BATTELLE - NORWELL OPERATIONS
INTERNAL STANDARD SPIKING FORM

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

(N/A Fraction)

Extract Id	Extr. Vol. (uL)	Added (uL)	Std. Id	Accm. (uL)	Vial No.	Pre Inj. Vol. (uL)^	Final Dilution *	Date Spiked/ Spiked By	Witn'd By
CR847PB-FS(0)	950	50	KB34	50	1	1000	1.000	10/04/18 SAS	LMG
CR848LCS-FS(0)	950	50	KB34	50	1	1000	1.000	10/02/18 SAS	LMG
J8246-FS(0)	950	50	KB34	50	1	1000	1.000	10/02/18 SAS	LMG
J8247-FS(0)	950	50	KB34	50	1	1000	1.000	10/02/18 SAS	LMG
J8259-FS(0)	950	50	KB34	50	1	1000	1.000	10/02/18 SAS	LMG
J8259-FS-D(3)	955	45	KB34	50	1	1000	10.000	10/02/18 SAS	LMG
J8259-FS-D(5)	951	49	KB34	50	1	1000	50.000	10/02/18 SAS	LMG
J8259-FS-D(7)	960	40	KB34	50	1	1000	250.000	10/02/18 SAS	LMG
J8260-FS(0)	950	50	KB34	50	1	1000	1.000	10/02/18 SAS	LMG
J8260-FS-D(3)	955	45	KB34	50	1	1000	10.000	10/02/18 SAS	LMG
J8260-FS-D(5)	952	48	KB34	50	1	1000	25.000	10/02/18 SAS	LMG
J8260-FS-D(7)	975	25	KB34	50	1	1000	50.000	10/02/18 SAS	LMG
J8260-FS-D(9)	965	35	KB34	50	1	1000	166.667	10/02/18 SAS	LMG
J8260-FS-D(11)	960	40	KB34	50	1	1000	833.333	10/05/18 LMG	SG
J8261-FS(0)	950	50	KB34	50	1	1000	1.000	10/02/18 SAS	LMG
J8261-FS-D(3)	955	45	KB34	50	1	1000	10.000	10/02/18 SAS	LMG
J8261-FS-D(5)	952	48	KB34	50	1	1000	25.000	10/02/18 SAS	LMG
J8261-FS-D(7)	975	25	KB34	50	1	1000	50.000	10/02/18 SAS	LMG
J8261-FS-D(9)	965	35	KB34	50	1	1000	166.667	10/02/18 SAS	LMG

* - Final Dilution is any HPLC, dilutions, or other manipulation

^ - Pre Injection Volume (PIV) includes any RIS spikes.

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BATTELLE - NORWELL OPERATIONS
INTERNAL STANDARD SPIKING FORM

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

(N/A Fraction)

Extract Id	Extr. Vol. (uL)	Added (uL)	Std. Id	Accm. (uL)	Vial No.	Pre Inj. Vol. (uL)^	Final Dilution *	Date Spiked/ Spiked By	Witn'd By
J8261-FS-D(11)	960	40	KB34	50	1	1000	833.333	10/05/18 LMG	SG
J8262-FS(0)	950	50	KB34	50	1	1000	1.000	10/02/18 SAS	LMG
J8262-FS-D(3)	955	45	KB34	50	1	1000	10.000	10/02/18 SAS	LMG
J8262-FS-D(5)	955	45	KB34	50	1	1000	100.000	10/02/18 SAS	LMG
J8262-FS-D(7)	965	35	KB34	50	1	1000	333.333	10/02/18 SAS	LMG
J8262-FS-D(9)	952	48	KB34	50	1	1000	25.000	10/02/18 SAS	LMG
J8272-FS(0)	950	50	KB34	50	1	1000	1.000	10/02/18 SAS	LMG
J8272-FS-D(3)	955	45	KB34	50	1	1000	10.000	10/02/18 SAS	LMG
J8272-FS-D(5)	975	25	KB34	50	1	1000	20.000	10/02/18 SAS	LMG
J8273-FS(0)	950	50	KB34	50	1	1000	1.000	10/02/18 SAS	LMG
J8273-FS-D(3)	955	45	KB34	50	1	1000	10.000	10/02/18 SAS	LMG
J8273-FS-D(5)	975	25	KB34	50	1	1000	20.000	10/02/18 SAS	LMG
J8274-FS(0)	950	50	KB34	50	1	1000	1.000	10/02/18 SAS	LMG
J8274-FS-D(3)	960	40	KB34	50	1	1000	5.000	10/02/18 SAS	LMG
J8274-FS-D(5)	960	40	KB34	52.5	1	1000	20.000	10/02/18 SAS	LMG
J8274-FS-D(7)	975	25	KB34	51.25	1	1000	40.000	10/02/18 SAS	LMG
J8274-FS-D(9)	970	30	KB34	50.5	1	1000	100.000	10/02/18 SAS	LMG
J8274-FS-D(11)	965	35	KB34	46.25	1	1000	22.222	10/02/18 SAS	LMG
J8274-FS-D(13)	960	40	KB34	49.25	1	1000	111.111	10/05/18 LMG	SG

* - Final Dilution is any HPLC, dilutions, or other manipulation

^ - Pre Injection Volume (PIV) includes any RIS spikes.

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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

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

(N/A Fraction)

Extract Id	Extr. Vol. (uL)	Added (uL)	Std. Id	Accm. (uL)	Vial No.	Pre Inj. Vol. (uL)^	Final Dilution *	Date Spiked/ Spiked By	Witn'd By
J8275-FS(0)	950	50	KB34	50	1	1000	1.000	10/02/18 SAS	LMG
J8275-FS-D(3)	960	40	KB34	50	1	1000	5.000	10/02/18 SAS	LMG
J8275-FS-D(5)	960	40	KB34	50	1	1000	25.000	10/02/18 SAS	LMG
J8275-FS-D(7)	960	40	KB34	50	1	1000	125.000	10/02/18 SAS	LMG
J8275-FS-D(9)	965	35	KB34	50	1	1000	83.333	10/02/18 SAS	LMG
J8275-FS-D(11)	960	40	KB34	50	1	1000	416.667	10/05/18 LMG	SG
J8276-FS(0)	950	50	KB34	50	1	1000	1.000	10/02/18 SAS	LMG
J8277-FS(0)	950	50	KB34	50	1	1000	1.000	10/02/18 SAS	LMG

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.

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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

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Extract Id	DF	Std. ID	Type	Vial No.	Vol. Added (uL)	Conc (ug/mL)	Added (ng)	Date Spiked/ Spiked By	Witn'd By
J8259-FS-D(3)	10	KB33	SIS	1	45	0	0	10/02/18 SAS	LMG
J8259-FS-D(5)	50	KB33	SIS	1	49	0	0	10/02/18 SAS	LMG
J8259-FS-D(7)	250	KB33	SIS	1	40	0	0	10/02/18 SAS	LMG
J8260-FS-D(3)	10	KB33	SIS	1	45	0	0	10/02/18 SAS	LMG
J8260-FS-D(5)	25	KB33	SIS	1	48	0	0	10/02/18 SAS	LMG
J8260-FS-D(7)	50	KB33	SIS	1	25	0	0	10/02/18 SAS	LMG
J8260-FS-D(9)	166.667	KB33	SIS	1	35	0	0	10/02/18 SAS	LMG
J8260-FS-D(11)	833.333	KB33	SIS	1	40	0	0	10/05/18 LMG	SG
J8261-FS-D(3)	10	KB33	SIS	1	45	0	0	10/02/18 SAS	LMG
J8261-FS-D(5)	25	KB33	SIS	1	48	0	0	10/02/18 SAS	LMG
J8261-FS-D(7)	50	KB33	SIS	1	25	0	0	10/02/18 SAS	LMG
J8261-FS-D(9)	166.667	KB33	SIS	1	35	0	0	10/02/18 SAS	LMG
J8261-FS-D(11)	833.333	KB33	SIS	1	40	0	0	10/05/18 LMG	SG
J8262-FS-D(3)	10	KB33	SIS	1	45	0	0	10/02/18 SAS	LMG
J8262-FS-D(5)	100	KB33	SIS	1	45	0	0	10/02/18 SAS	LMG
J8262-FS-D(7)	333.333	KB33	SIS	1	35	0	0	10/02/18 SAS	LMG
J8262-FS-D(9)	25	KB33	SIS	1	48	0	0	10/02/18 SAS	LMG
J8272-FS-D(3)	10	KB33	SIS	1	45	0	0	10/02/18 SAS	LMG
J8272-FS-D(5)	20	KB33	SIS	1	25	0	0	10/02/18 SAS	LMG
J8273-FS-D(3)	10	KB33	SIS	1	45	0	0	10/02/18 SAS	LMG
J8273-FS-D(5)	20	KB33	SIS	1	25	0	0	10/02/18 SAS	LMG
J8274-FS-D(3)	5	KB33	SIS	1	40	0	0	10/02/18 SAS	LMG
J8274-FS-D(5)	20	KB33	SIS	1	40	0	0	10/02/18 SAS	LMG
J8274-FS-D(7)	40	KB33	SIS	1	25	0	0	10/02/18 SAS	LMG
J8274-FS-D(9)	100	KB33	SIS	1	30	0	0	10/02/18 SAS	LMG

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BATTELLE - NORWELL OPERATIONS
EXTRACT SPIKE FORM

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Extract Id	DF	Std. ID	Type	Vial No.	Vol. Added (uL)	Conc (ug/mL)	Added (ng)	Date Spiked/ Spiked By	Witn'd By
J8274-FS-D(11)	22.222	KB33	SIS	1	35	0	0	10/02/18 SAS	LMG
J8274-FS-D(13)	111.111	KB33	SIS	1	40	0	0	10/05/18 LMG	SG
J8275-FS-D(3)	5	KB33	SIS	1	40	0	0	10/02/18 SAS	LMG
J8275-FS-D(5)	25	KB33	SIS	1	40	0	0	10/02/18 SAS	LMG
J8275-FS-D(7)	125	KB33	SIS	1	40	0	0	10/02/18 SAS	LMG
J8275-FS-D(9)	83.333	KB33	SIS	1	35	0	0	10/02/18 SAS	LMG
J8275-FS-D(11)	416.667	KB33	SIS	1	40	0	0	10/05/18 LMG	SG

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
KB33	Pipette	B814659662
KB34	Pipette	B814659662

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BATTELLE - NORWELL OPERATIONS
PREPARATION EXTRACT SPLIT FORM

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
CR847PB-FS	0	--	9/27/2018 2:34:00 PM	NA		NA	NA	1.000	1.000	09/27/18 LMG
CR848LCS-FS	0	--	9/27/2018 2:34:00 PM	NA		NA	NA	1.000	1.000	09/27/18 LMG
J8246-FS	0	C	9/27/2018 2:34:00 PM	NA		NA	NA	1.000	1.000	09/27/18 LMG
J8247-FS	0	C	9/27/2018 2:34:00 PM	NA		NA	NA	1.000	1.000	09/27/18 LMG
J8259-FS	0	C	9/27/2018 2:34:00 PM	NA		NA	NA	1.000	1.000	09/27/18 SAS
J8259-FS	2	C	10/2/2018 10:40:00 AM	J8259-FS	0	1000	900	1.111	1.111	10/02/18 SAS
J8259-FS-D	3	--	10/2/2018 10:40:00 AM	J8259-FS	0	1000	100	10.000	10.000	10/02/18 SAS
J8259-FS	4	--	10/2/2018 10:47:00 AM	J8259-FS	2	900	880	1.023	1.136	10/02/18 SAS
J8259-FS-D	5	C	10/2/2018 10:47:00 AM	J8259-FS	2	900	20	45.000	50.000	10/02/18 SAS
J8259-FS-D	6	--	10/2/2018 10:47:00 AM	J8259-FS-D	5	1000	800	1.250	62.500	10/02/18 SAS
J8259-FS-D	7	--	10/2/2018 10:47:00 AM	J8259-FS-D	5	1000	200	5.000	250.000	10/02/18 SAS
J8260-FS	0	C	9/27/2018 2:34:00 PM	NA		NA	NA	1.000	1.000	09/27/18 SAS
J8260-FS	2	C	10/2/2018 10:40:00 AM	J8260-FS	0	1000	900	1.111	1.111	10/02/18 SAS
J8260-FS-D	3	--	10/2/2018 10:40:00 AM	J8260-FS	0	1000	100	10.000	10.000	10/02/18 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]
Dilution Factor = [Sample Volume (uL) / Aliqot Volume (uL))] * Prior Dilution Factor
* - "C" = Extract is Consumed

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
PREPARATION EXTRACT SPLIT FORM

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J8260-FS	4	--	10/2/2018 10:48:00 AM	J8260-FS	2	900	860	1.047	1.163	10/02/18 SAS
J8260-FS-D	5	C	10/2/2018 10:48:00 AM	J8260-FS	2	900	40	22.500	25.000	10/02/18 SAS
J8260-FS-D	6	--	10/2/2018 10:48:00 AM	J8260-FS-D	5	1000	500	2.000	50.000	10/02/18 SAS
J8260-FS-D	7	C	10/2/2018 10:48:00 AM	J8260-FS-D	5	1000	500	2.000	50.000	10/02/18 SAS
J8260-FS-D	8	--	10/2/2018 10:48:00 AM	J8260-FS-D	7	1000	700	1.429	71.429	10/02/18 SAS
J8260-FS-D	9	C	10/2/2018 10:48:00 AM	J8260-FS-D	7	1000	300	3.333	166.667	10/02/18 SAS
J8260-FS-D	10	--	10/5/2018 10:21:00 AM	J8260-FS-D	9	1000	800	1.250	208.333	10/05/18 LMG
J8260-FS-D	11	--	10/5/2018 10:21:00 AM	J8260-FS-D	9	1000	200	5.000	833.333	10/05/18 LMG
J8261-FS	0	C	9/27/2018 2:34:00 PM	NA		NA	NA	1.000	1.000	09/27/18 SAS
J8261-FS	2	C	10/2/2018 10:40:00 AM	J8261-FS	0	1000	900	1.111	1.111	10/02/18 SAS
J8261-FS-D	3	--	10/2/2018 10:40:00 AM	J8261-FS	0	1000	100	10.000	10.000	10/02/18 SAS
J8261-FS	4	--	10/2/2018 10:50:00 AM	J8261-FS	2	900	860	1.047	1.163	10/02/18 SAS
J8261-FS-D	5	C	10/2/2018 10:50:00 AM	J8261-FS	2	900	40	22.500	25.000	10/02/18 SAS
J8261-FS-D	6	--	10/2/2018 10:50:00 AM	J8261-FS-D	5	1000	500	2.000	50.000	10/02/18 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]
Dilution Factor = [Sample Volume (uL) / Aliqot Volume (uL))] * Prior Dilution Factor
* - "C" = Extract is Consumed

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
PREPARATION EXTRACT SPLIT FORM

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J8261-FS-D	7	C	10/2/2018 10:50:00 AM	J8261-FS-D	5	1000	500	2.000	50.000	10/02/18 SAS
J8261-FS-D	8	--	10/2/2018 10:51:00 AM	J8261-FS-D	7	1000	700	1.429	71.429	10/02/18 SAS
J8261-FS-D	9	C	10/2/2018 10:51:00 AM	J8261-FS-D	7	1000	300	3.333	166.667	10/02/18 SAS
J8261-FS-D	10	--	10/5/2018 10:21:00 AM	J8261-FS-D	9	1000	800	1.250	208.333	10/05/18 LMG
J8261-FS-D	11	--	10/5/2018 10:21:00 AM	J8261-FS-D	9	1000	200	5.000	833.333	10/05/18 LMG
J8262-FS	0	C	9/27/2018 2:34:00 PM	NA		NA	NA	1.000	1.000	09/27/18 SAS
J8262-FS	2	C	10/2/2018 10:46:00 AM	J8262-FS	0	1000	900	1.111	1.111	10/02/18 SAS
J8262-FS-D	3	C	10/2/2018 10:46:00 AM	J8262-FS	0	1000	100	10.000	10.000	10/02/18 SAS
J8262-FS-D	4	--	10/2/2018 10:47:00 AM	J8262-FS-D	3	1000	900	1.111	11.111	10/02/18 SAS
J8262-FS-D	5	C	10/2/2018 10:47:00 AM	J8262-FS-D	3	1000	100	10.000	100.000	10/02/18 SAS
J8262-FS-D	6	--	10/2/2018 10:47:00 AM	J8262-FS-D	5	1000	700	1.429	142.857	10/02/18 SAS
J8262-FS-D	7	--	10/2/2018 10:47:00 AM	J8262-FS-D	5	1000	300	3.333	333.333	10/02/18 SAS
J8262-FS	8	--	10/2/2018 1:30:00 PM	J8262-FS	2	900	860	1.047	1.163	10/02/18 SAS
J8262-FS-D	9	--	10/2/2018 1:30:00 PM	J8262-FS	2	900	40	22.500	25.000	10/02/18 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]
Dilution Factor = [Sample Volume (uL) / Aliqot Volume (uL))] * Prior Dilution Factor
* - "C" = Extract is Consumed

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
PREPARATION EXTRACT SPLIT FORM

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J8272-FS	0	C	9/27/2018 2:34:00 PM	NA		NA	NA	1.000	1.000	09/27/18 SAS
J8272-FS	2	--	10/2/2018 10:40:00 AM	J8272-FS	0	1000	900	1.111	1.111	10/02/18 SAS
J8272-FS-D	3	C	10/2/2018 10:40:00 AM	J8272-FS	0	1000	100	10.000	10.000	10/02/18 SAS
J8272-FS-D	4	--	10/2/2018 10:51:00 AM	J8272-FS-D	3	1000	500	2.000	20.000	10/02/18 SAS
J8272-FS-D	5	--	10/2/2018 10:51:00 AM	J8272-FS-D	3	1000	500	2.000	20.000	10/02/18 SAS
J8273-FS	0	C	9/27/2018 2:34:00 PM	NA		NA	NA	1.000	1.000	09/27/18 SAS
J8273-FS	2	--	10/2/2018 10:40:00 AM	J8273-FS	0	1000	900	1.111	1.111	10/02/18 SAS
J8273-FS-D	3	--	10/2/2018 10:40:00 AM	J8273-FS	0	1000	100	10.000	10.000	10/02/18 SAS
J8273-FS-D	4	--	10/2/2018 10:51:00 AM	J8273-FS-D	3	1000	500	2.000	20.000	10/02/18 SAS
J8273-FS-D	5	--	10/2/2018 10:51:00 AM	J8273-FS-D	3	1000	500	2.000	20.000	10/02/18 SAS
J8274-FS	0	C	9/27/2018 2:34:00 PM	NA		NA	NA	1.000	1.000	09/27/18 SAS
J8274-FS	2	--	10/2/2018 10:52:00 AM	J8274-FS	0	1000	800	1.250	1.250	10/02/18 SAS
J8274-FS-D	3	C	10/2/2018 10:52:00 AM	J8274-FS	0	1000	200	5.000	5.000	10/02/18 SAS
J8274-FS-D	4	C	10/2/2018 10:52:00 AM	J8274-FS-D	3	800	600	1.333	6.667	10/02/18 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]
Dilution Factor = [Sample Volume (uL) / Aliqot Volume (uL))] * Prior Dilution Factor
* - "C" = Extract is Consumed

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
PREPARATION EXTRACT SPLIT FORM

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J8274-FS-D	5	C	10/2/2018 10:52:00 AM	J8274-FS-D	3	800	200	4.000	20.000	10/02/18 SAS
J8274-FS-D	6	--	10/2/2018 10:54:00 AM	J8274-FS-D	5	1000	500	2.000	40.000	10/02/18 SAS
J8274-FS-D	7	C	10/2/2018 10:54:00 AM	J8274-FS-D	5	1000	500	2.000	40.000	10/02/18 SAS
J8274-FS-D	8	--	10/2/2018 10:54:00 AM	J8274-FS-D	7	1000	600	1.667	66.667	10/02/18 SAS
J8274-FS-D	9	--	10/2/2018 10:54:00 AM	J8274-FS-D	7	1000	400	2.500	100.000	10/02/18 SAS
J8274-FS-D	10	--	10/2/2018 10:55:00 AM	J8274-FS-D	4	1000	700	1.429	9.524	10/02/18 SAS
J8274-FS-D	11	C	10/2/2018 10:55:00 AM	J8274-FS-D	4	1000	300	3.333	22.222	10/02/18 SAS
J8274-FS-D	12	--	10/5/2018 10:21:00 AM	J8274-FS-D	11	1000	800	1.250	27.778	10/05/18 LMG
J8274-FS-D	13	--	10/5/2018 10:21:00 AM	J8274-FS-D	11	1000	200	5.000	111.111	10/05/18 LMG
J8275-FS	0	C	9/27/2018 2:34:00 PM	NA		NA	NA	1.000	1.000	09/27/18 SAS
J8275-FS	2	--	10/2/2018 10:52:00 AM	J8275-FS	0	1000	800	1.250	1.250	10/02/18 SAS
J8275-FS-D	3	C	10/2/2018 10:52:00 AM	J8275-FS	0	1000	200	5.000	5.000	10/02/18 SAS
J8275-FS-D	4	--	10/2/2018 10:52:00 AM	J8275-FS-D	3	1000	800	1.250	6.250	10/02/18 SAS
J8275-FS-D	5	C	10/2/2018 10:52:00 AM	J8275-FS-D	3	1000	200	5.000	25.000	10/02/18 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]
Dilution Factor = [Sample Volume (uL) / Aliqot Volume (uL))] * Prior Dilution Factor
* - "C" = Extract is Consumed

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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

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J8275-FS-D	6	C	10/2/2018 10:53:00 AM	J8275-FS-D	5	1000	800	1.250	31.250	10/02/18 SAS
J8275-FS-D	7	--	10/2/2018 10:53:00 AM	J8275-FS-D	5	1000	200	5.000	125.000	10/02/18 SAS
J8275-FS-D	8	--	10/2/2018 10:53:00 AM	J8275-FS-D	6	800	500	1.600	50.000	10/02/18 SAS
J8275-FS-D	9	C	10/2/2018 10:53:00 AM	J8275-FS-D	6	800	300	2.667	83.333	10/02/18 SAS
J8275-FS-D	10	--	10/5/2018 10:21:00 AM	J8275-FS-D	9	1000	800	1.250	104.167	10/05/18 LMG
J8275-FS-D	11	--	10/5/2018 10:21:00 AM	J8275-FS-D	9	1000	200	5.000	416.667	10/05/18 LMG
J8276-FS	0	C	9/27/2018 2:34:00 PM	NA		NA	NA	1.000	1.000	09/27/18 LMG
J8277-FS	0	C	9/27/2018 2:34:00 PM	NA		NA	NA	1.000	1.000	09/27/18 LMG

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]
Dilution Factor = [Sample Volume (uL) / Aliqot Volume (uL))] * Prior Dilution Factor
* - "C" = Extract is Consumed

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BATTELLE - NORWELL OPERATIONS
EXTRACT - INSTRUMENT FACILITY CUSTODY PAGE

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Purpose:	LC-MS/MS TRANSFER	**Last Activity:**	Prep->Inst
Relinquished On/By:	Oct 3 2018 8:40AM LMG	**Received On/By:**	Oct 3 2018 8:40AM 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	CR847PB-FS(0)	1000	1	Intact	NA
2	CR848LCS-FS(0)	1000	1	Intact	NA
3	J8246-FS(0)	1000	1	Intact	NA
4	J8247-FS(0)	1000	1	Intact	NA
5	J8259-FS(0)	1000	1	Intact	NA
6	J8259-FS-D(3)	1000	10	Intact	NA
7	J8259-FS-D(5)	1000	50	Intact	NA
8	J8259-FS-D(7)	1000	250	Intact	NA
9	J8260-FS(0)	1000	1	Intact	NA
10	J8260-FS-D(3)	1000	10	Intact	NA
11	J8260-FS-D(5)	1000	25	Intact	NA
12	J8260-FS-D(7)	1000	50	Intact	NA
13	J8260-FS-D(9)	1000	166.667	Intact	NA
14	J8261-FS(0)	1000	1	Intact	NA
15	J8261-FS-D(3)	1000	10	Intact	NA
16	J8261-FS-D(5)	1000	25	Intact	NA
17	J8261-FS-D(7)	1000	50	Intact	NA
18	J8261-FS-D(9)	1000	166.667	Intact	NA
19	J8262-FS(0)	1000	1	Intact	NA
20	J8262-FS-D(3)	1000	10	Intact	NA
21	J8262-FS-D(5)	1000	100	Intact	NA
22	J8262-FS-D(7)	1000	333.333	Intact	NA
23	J8262-FS-D(9)	1000	25	Intact	NA
24	J8272-FS(0)	1000	1	Intact	NA
25	J8272-FS-D(3)	1000	10	Intact	NA
26	J8272-FS-D(5)	1000	20	Intact	NA
27	J8273-FS(0)	1000	1	Intact	NA
28	J8273-FS-D(3)	1000	10	Intact	NA

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BATTELLE - NORWELL OPERATIONS
EXTRACT - INSTRUMENT FACILITY CUSTODY PAGE

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

29	J8273-FS-D(5)	1000	20	Intact	NA
30	J8274-FS(0)	1000	1	Intact	NA
31	J8274-FS-D(3)	1000	5	Intact	NA
32	J8274-FS-D(5)	1000	20	Intact	NA
33	J8274-FS-D(7)	1000	40	Intact	NA
34	J8274-FS-D(9)	1000	100	Intact	NA
35	J8274-FS-D(11)	1000	22.222	Intact	NA
36	J8275-FS(0)	1000	1	Intact	NA
37	J8275-FS-D(3)	1000	5	Intact	NA
38	J8275-FS-D(5)	1000	25	Intact	NA
39	J8275-FS-D(7)	1000	125	Intact	NA
40	J8275-FS-D(9)	1000	83.333	Intact	NA
41	J8276-FS(0)	1000	1	Intact	NA
42	J8277-FS(0)	1000	1	Intact	NA

Total Extracts: 42

Purpose: LC-MS/MS TRANSFER

Last Activity: Prep->Inst

Relinquished On/By: Oct 5 2018 1:06PM LMG

Relinquished From: Sample Preparation: NA

Relinquish Comment: NA

Received On/By: Oct 5 2018 1:06PM LMG

Received Location: LC Laboratory: NA

Received Comment: NA

No.	BDO-ID:	PIV:	DF:	Condition:	Custody Comment:
1	J8260-FS-D(11)	1000	833.333	Intact	NA
2	J8261-FS-D(11)	1000	833.333	Intact	NA
3	J8274-FS-D(13)	1000	111.111	Intact	NA
4	J8275-FS-D(11)	1000	416.667	Intact	NA

Total Extracts: 4

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SAMPLE SPECIFIC COMMENTS

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Sample ID:	Comment:	Date/Initials:
CR847PB-FS	Extraction started 2:34pm, extraction block 3, ended at 3:49pm	09/27/18 LMG
CR848LCS-FS	Extraction started 2:34pm, extraction block 3, ended at 3:41pm	09/27/18 LMG
J8246-FS	Extraction started 2:34pm, extraction block 3, ended at 3:42pm	09/27/18 LMG
J8247-FS	Extraction started 2:34pm, extraction block 3, ended at 3:50pm	09/27/18 LMG
J8259-FS	Extraction started 2:34pm, extraction block 2, ended at 4:20pm	09/27/18 SAS
J8260-FS	Extraction started 2:34pm, extraction block 2, ended at 4:33pm	09/27/18 SAS
J8261-FS	Extraction started 2:34pm, extraction block 2, ended at 4:24pm	09/27/18 SAS
J8262-FS	Extraction started 2:34pm, extraction block 2, ended at 4:50pm	09/27/18 SAS
J8272-FS	Extraction started 2:34pm, extraction block 1, ended at 5:31pm. Filter was popped on column due to it being clogged.	09/27/18 SAS
J8273-FS	Extraction started 2:34pm, extraction block 1, ended at 5:04pm. Filter was popped on column due to it being clogged.	09/27/18 SAS
J8274-FS	Extraction started 2:34pm, extraction block 1, ended at 4:26pm. Filter was popped on column due to it being clogged.	09/27/18 SAS
J8275-FS	Extraction started 2:34pm, extraction block 1, ended at 4:01pm	09/27/18 SAS
J8276-FS	Extraction started 2:34pm, extraction block 3, ended at 3:38pm	09/27/18 LMG
J8277-FS	Extraction started 2:34pm, extraction block 3, ended at 3:32pm	09/27/18 LMG

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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

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Entered By:	Lauren Griffith	**On:**	09/27/2018

due to high levels of sedimentation in the sample bottles, all samples were centrifuged and transferred to new bottles. The sediment remaining in the original bottle was stored with the remaining bottle of water.

Task Leader Approval:	Lauren Griffith	**On:**	10/15/2018
SupervisorApproval:	Denise Schumitz	**On:**	10/16/2018
PM Approval:	Jonathan Thorn	**On:**	10/16/2018

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It can be done

BATTELLE - NORWELL OPERATIONS
MISCELLANEOUS DOCUMENTATION FORM

Project Title(s)	**Project No.(s)**
CTO-4164 Naval Base Ventura County, California	100110125-01

18-0568

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Task Leader Approval:	Lauren Griffith	**On:**	10/15/2018
SupervisorApproval:	Denise Schumitz	**On:**	10/16/2018
PM Approval:	Jonathan Thorn	**On:**	10/16/2018

Analytical Calibrations

BATTELLE

Sequence Report

Created with Analyst Reporter
Printed: 15/10/2018 2:45:07 PM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
2	KB73	L1	10/3/2018 7:23:54 PM	5-0369.dam	18-0568.wiff
3	KB74	L2	10/3/2018 7:34:48 PM	5-0369.dam	18-0568.wiff
4	KB75	L3	10/3/2018 7:45:42 PM	5-0369.dam	18-0568.wiff
5	KB76	L4	10/3/2018 7:56:35 PM	5-0369.dam	18-0568.wiff
6	KB77	L5	10/3/2018 8:07:29 PM	5-0369.dam	18-0568.wiff
7	KB78	L6	10/3/2018 8:18:21 PM	5-0369.dam	18-0568.wiff
8	KB79	L7	10/3/2018 8:29:13 PM	5-0369.dam	18-0568.wiff
9	KB80 IB	Instrument Blank	10/3/2018 8:40:04 PM	5-0369.dam	18-0568.wiff
10	KB81 ICC	ICC	10/3/2018 8:50:56 PM	5-0369.dam	18-0568.wiff
11	KB89 Branch	Branch Standard	10/3/2018 9:01:50 PM	5-0369.dam	18-0568.wiff
8	KB79 CCV	CCV	10/3/2018 10:28:49 PM	5-0369.dam	18-0568.wiff
1	MeOH		10/3/2018 10:39:41 PM	5-0369.dam	18-0568.wiff
19	CR847PB-FS(0)	Procedural Blank	10/3/2018 10:50:35 PM	5-0369.dam	18-0568.wiff
20	CR848LCS-FS(0)	Laboratory Control Sample	10/3/2018 11:01:28 PM	5-0369.dam	18-0568.wiff
21	J8246-FS(0)	VC-AQ-FB01-0918	10/3/2018 11:12:20 PM	5-0369.dam	18-0568.wiff
22	J8247-FS(0)	VC-AQ-EB01-0918	10/3/2018 11:23:13 PM	5-0369.dam	18-0568.wiff
23	J8276-FS(0)	VC-SO-FB02-0918	10/3/2018 11:34:06 PM	5-0369.dam	18-0568.wiff
24	J8277-FS(0)	VC-SO-EB02-0918	10/3/2018 11:44:58 PM	5-0369.dam	18-0568.wiff
25	J8259-FS(0)	VC-PM365-DW01-0918	10/3/2018 11:55:49 PM	5-0369.dam	18-0568.wiff
26	J8259-FS-D(3)	VC-PM365-DW01-0918	10/4/2018 12:06:43 AM	5-0369.dam	18-0568.wiff
27	J8259-FS-D(7)	VC-PM365-DW01-0918	10/4/2018 12:17:35 AM	5-0369.dam	18-0568.wiff
28	MeOH		10/4/2018 12:28:27 AM	5-0369.dam	18-0568.wiff
29	KB76 CCV	CCV	10/4/2018 12:39:21 AM	5-0369.dam	18-0568.wiff
28	MeOH		10/4/2018 12:50:14 AM	5-0369.dam	18-0568.wiff
30	J8260-FS(0)	VC-PM365-DW02-0918	10/4/2018 1:01:07 AM	5-0369.dam	18-0568.wiff
31	J8260-FS-D(3)	VC-PM365-DW02-0918	10/4/2018 1:11:59 AM	5-0369.dam	18-0568.wiff
32	J8260-FS-D(9)	VC-PM365-DW02-	10/4/2018 1:22:52	5-0369.dam	18-0568.wiff

BATTELLE

Sequence Report

Created with Analyst Reporter
Printed: 15/10/2018 2:45:07 PM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File	
		0918	AM			
33	J8261-FS(0)	VC-PM365-DW02P-0918	10/4/2018 1:33:45 AM	5-0369.dam	18-0568.wiff	
34	J8261-FS-D(3)	VC-PM365-DW02P-0918	10/4/2018 1:44:38 AM	5-0369.dam	18-0568.wiff	
35	J8261-FS-D(9)	VC-PM365-DW02P-0918	10/4/2018 1:55:30 AM	5-0369.dam	18-0568.wiff	
36	J8262-FS(0)	VC-PM365-DW03-0918	10/4/2018 2:06:22 AM	5-0369.dam	18-0568.wiff	
37	J8262-FS-D(7)	VC-PM365-DW03-0918	10/4/2018 2:17:15 AM	5-0369.dam	18-0568.wiff	
38	J8262-FS-D(9)	VC-PM365-DW03-0918	10/4/2018 2:28:08 AM	5-0369.dam	18-0568.wiff	
39	MeOH		10/4/2018 2:39:01 AM	5-0369.dam	18-0568.wiff	
40	KB77 CCV	CCV	10/4/2018 2:49:54 AM	5-0369.dam	18-0568.wiff	
39	MeOH		10/4/2018 3:00:47 AM	5-0369.dam	18-0568.wiff	
41	J8272-FS(0)	VC-PM553-DW01-0918	10/4/2018 3:11:39 AM	5-0369.dam	18-0568.wiff	
42	J8272-FS-D(5)	VC-PM553-DW01-0918	10/4/2018 3:22:32 AM	5-0369.dam	18-0568.wiff	
43	J8273-FS(0)	VC-PM553-DW01P-0918	10/4/2018 3:33:25 AM	5-0369.dam	18-0568.wiff	
44	J8273-FS-D(5)	VC-PM553-DW01P-0918	10/4/2018 3:44:17 AM	5-0369.dam	18-0568.wiff	
45	J8274-FS(0)	VC-PM553-DW02-0918	10/4/2018 3:55:09 AM	5-0369.dam	18-0568.wiff	
46	J8274-FS-D(9)	VC-PM553-DW02-0918	10/4/2018 4:06:02 AM	5-0369.dam	18-0568.wiff	
47	~~J8274-FS-D(11)~~	VC-PM553-DW02-0918	10/4/2018 4:16:54 AM	~~5-0369.dam~~	~~18-0568.wiff~~	(1)
48	J8275-FS(0)	VC-PM553-DW03-0918	10/4/2018 4:27:47 AM	5-0369.dam	18-0568.wiff	
49	J8275-FS-D(7)	VC-PM553-DW03-0918	10/4/2018 4:38:40 AM	5-0369.dam	18-0568.wiff	
50	J8275-FS-D(9)	VC-PM553-DW03-0918	10/4/2018 4:49:33 AM	5-0369.dam	18-0568.wiff	
51	MeOH		10/4/2018 5:00:25 AM	5-0369.dam	18-0568.wiff	
52	KB76 CCV	CCV	10/4/2018 5:11:17 AM	5-0369.dam	18-0568.wiff	
53	J8274-FS-D(11)	VC-PM553-DW02-0918	10/4/2018 3:43:57 PM	5-0369.dam	18-0568.wiff	
52	KB76 CCV	CCV	10/4/2018 3:54:52 PM	5-0369.dam	18-0568.wiff	

(1) Sample was re-aliquoted and reanalyzed due to low internal standard areas. The reanalysis is reported. LMG 10/15/18

BATTELLE

Sequence Report

Created with Analyst Reporter
Printed: 15/10/2018 2:50:27 PM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
2	KB73	L1	10/5/2018 10:28:31 AM	5-0369.dam	18-0568B.wiff
3	KB74	L2	10/5/2018 10:39:24 AM	5-0369.dam	18-0568B.wiff
4	KB75	L3	10/5/2018 10:50:18 AM	5-0369.dam	18-0568B.wiff
5	KB76	L4	10/5/2018 11:01:11 AM	5-0369.dam	18-0568B.wiff
6	KB77	L5	10/5/2018 11:12:02 AM	5-0369.dam	18-0568B.wiff
7	KB78	L6	10/5/2018 11:22:53 AM	5-0369.dam	18-0568B.wiff
8	KB79	L7	10/5/2018 11:33:45 AM	5-0369.dam	18-0568B.wiff
9	KB80 IB	Instrument Blank	10/5/2018 11:44:37 AM	5-0369.dam	18-0568B.wiff
10	KB81 ICC	ICC	10/5/2018 11:55:29 AM	5-0369.dam	18-0568B.wiff
11	KB89 BRANCH	Branch Standard	10/5/2018 12:06:21 PM	5-0369.dam	18-0568B.wiff
12	MEOH		10/5/2018 12:17:12 PM	5-0369.dam	18-0568B.wiff
13	J8260-FS-D(11)	VC-PM365-DW02-0918	10/5/2018 1:44:17 PM	5-0369.dam	18-0568B.wiff
14	J8261-FS-D(11)	VC-PM365-DW02P-0918	10/5/2018 1:55:43 PM	5-0369.dam	18-0568B.wiff
15	J8274-FS-D(13)	VC-PM553-DW02-0918	10/5/2018 2:06:36 PM	5-0369.dam	18-0568B.wiff
16	J8275-FS-D(11)	VC-PM553-DW03-0918	10/5/2018 2:17:29 PM	5-0369.dam	18-0568B.wiff
17	KB76	CCV	10/5/2018 2:28:21 PM	5-0369.dam	18-0568B.wiff
18	MEOH		10/5/2018 2:39:13 PM	5-0369.dam	18-0568B.wiff
19	J8259-FS-D(5)	VC-PM365-DW01-0918	10/5/2018 3:35:51 PM	5-0369.dam	18-0568B.wiff
6	KB77	CCV	10/5/2018 3:46:45 PM	5-0369.dam	18-0568B.wiff

BATTELLE

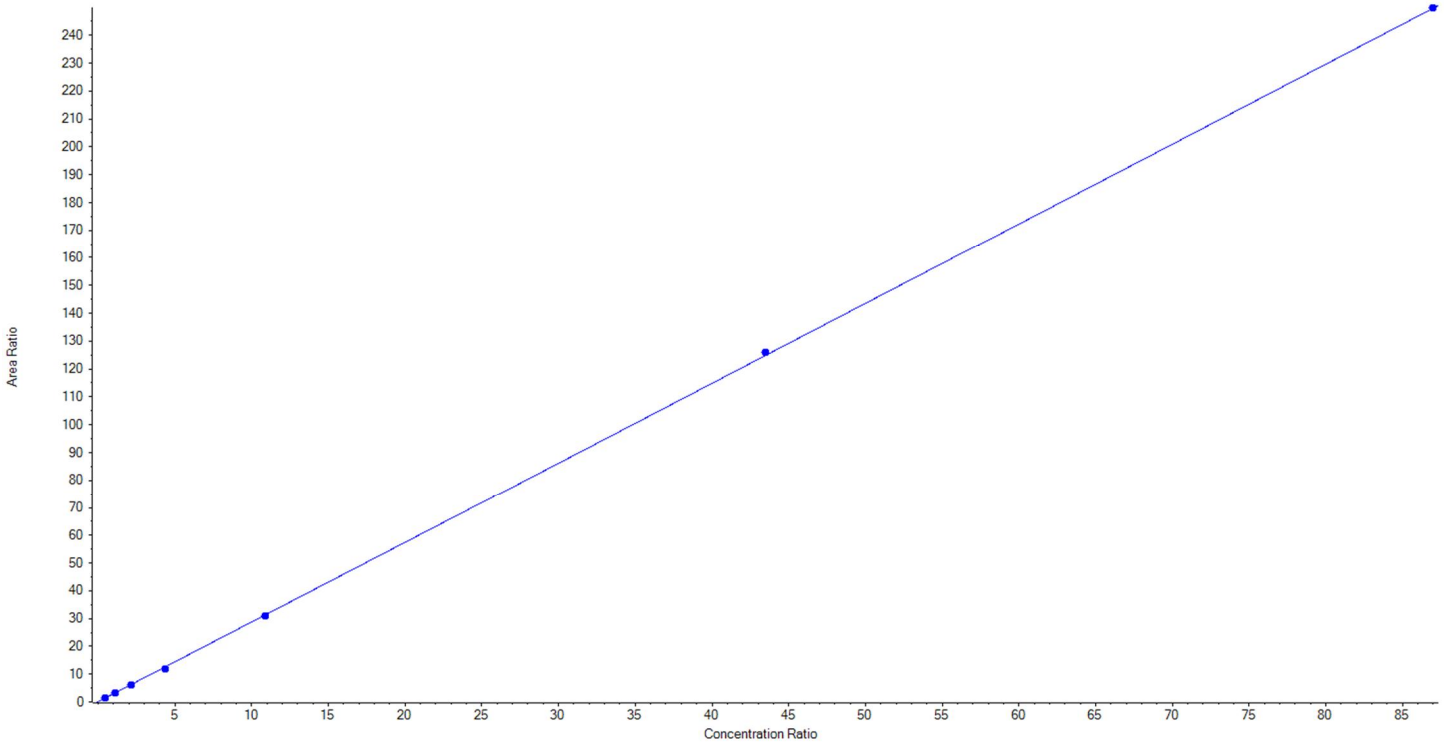
Calibration Summary Report

Created with Analyst Reporter
Printed: 05/10/2018 4:46:04 PM

Analyte Name	PFBS_1	**Data File**	18-0568.wiff
MRM Transition	298.9 / 80.0	**Result Table**	18-0568_BASE
Internal Standard	13C3-PFBS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 2.86876 x + 0.09373 (r = 0.99991) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	101.00	107.185187	106.1
3	KB74	L2	True	252.50	256.453566	101.6
4	KB75	L3	True	505.00	501.747793	99.4
5	KB76	L4	True	1010.00	945.114053	93.6
6	KB77	L5	True	2525.00	2487.264910	98.5
7	KB78	L6	True	10100.00	10180.630834	100.8
8	KB79	L7	True	20200.00	20215.103657	100.1



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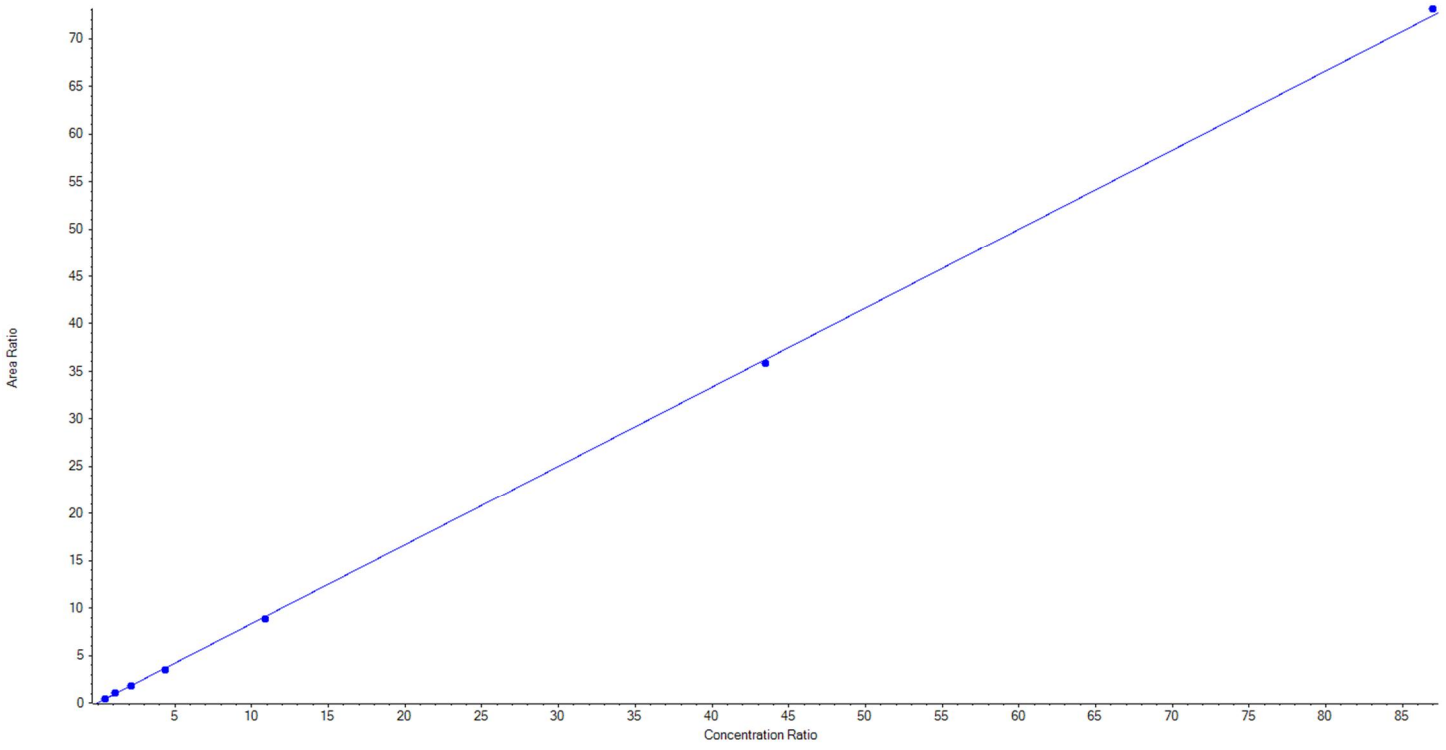
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Analyte Name	PFBS_2	**Data File**	18-0568.wiff
MRM Transition	298.9 / 99.0	**Result Table**	18-0568_BASE
Internal Standard	13C3-PFBS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.83251 x + 0.03349 (r = 0.99986) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	101.00	103.990749	103.0
3	KB74	L2	True	252.50	274.123640	108.6
4	KB75	L3	True	505.00	479.514815	95.0
5	KB76	L4	True	1010.00	966.281410	95.7
6	KB77	L5	True	2525.00	2470.569912	97.8
7	KB78	L6	True	10100.00	10002.159455	99.0
8	KB79	L7	True	20200.00	20396.860018	101.0



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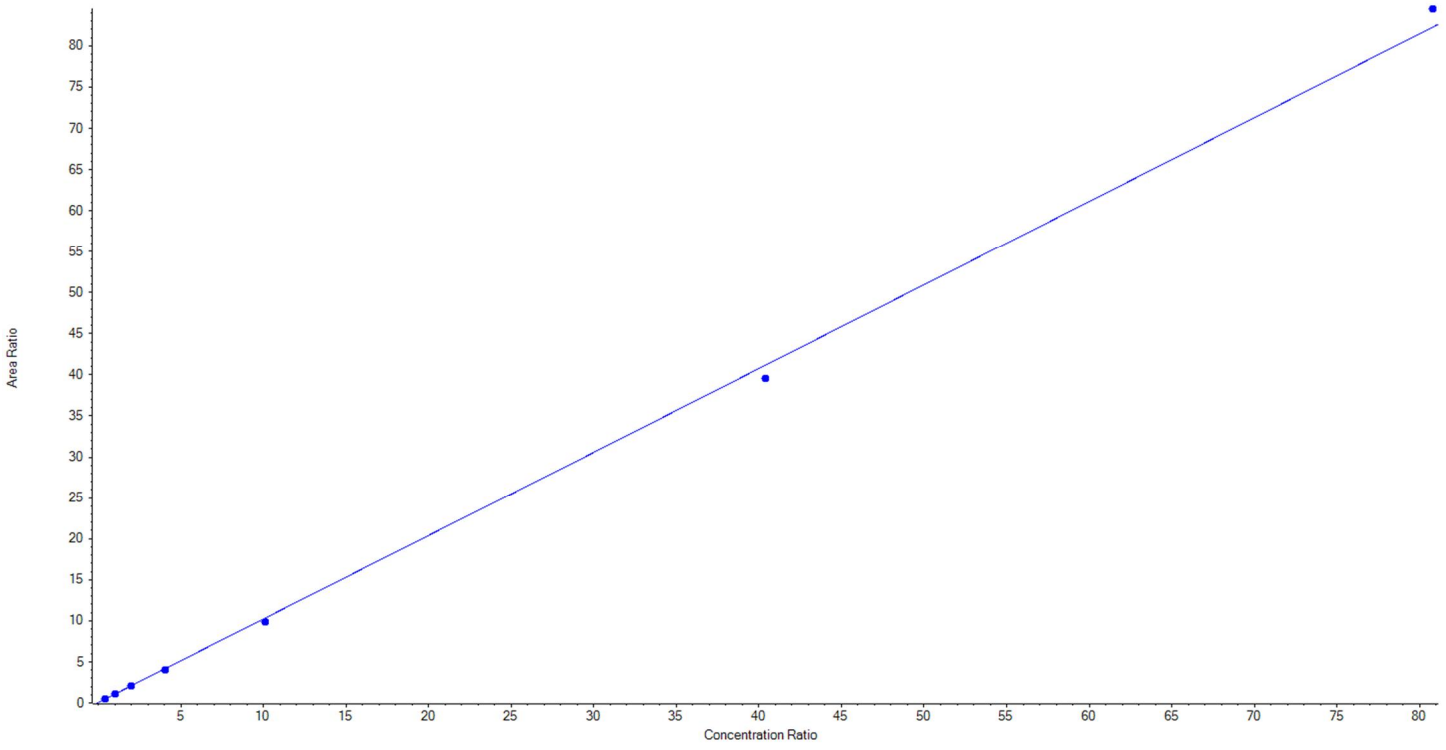
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Analyte Name	PFHxA_1	**Data File**	18-0568.wiff
MRM Transition	313.0 / 269.0	**Result Table**	18-0568_BASE
Internal Standard	13C5-PFHxA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.01783 x + 0.04283 (r = 0.99939) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	101.00	106.358810	105.3
3	KB74	L2	True	252.50	270.096054	107.0
4	KB75	L3	True	505.00	484.269965	95.9
5	KB76	L4	True	1010.00	988.363810	97.9
6	KB77	L5	True	2525.00	2405.394912	95.3
7	KB78	L6	True	10100.00	9700.303090	96.0
8	KB79	L7	True	20200.00	20738.713359	102.7



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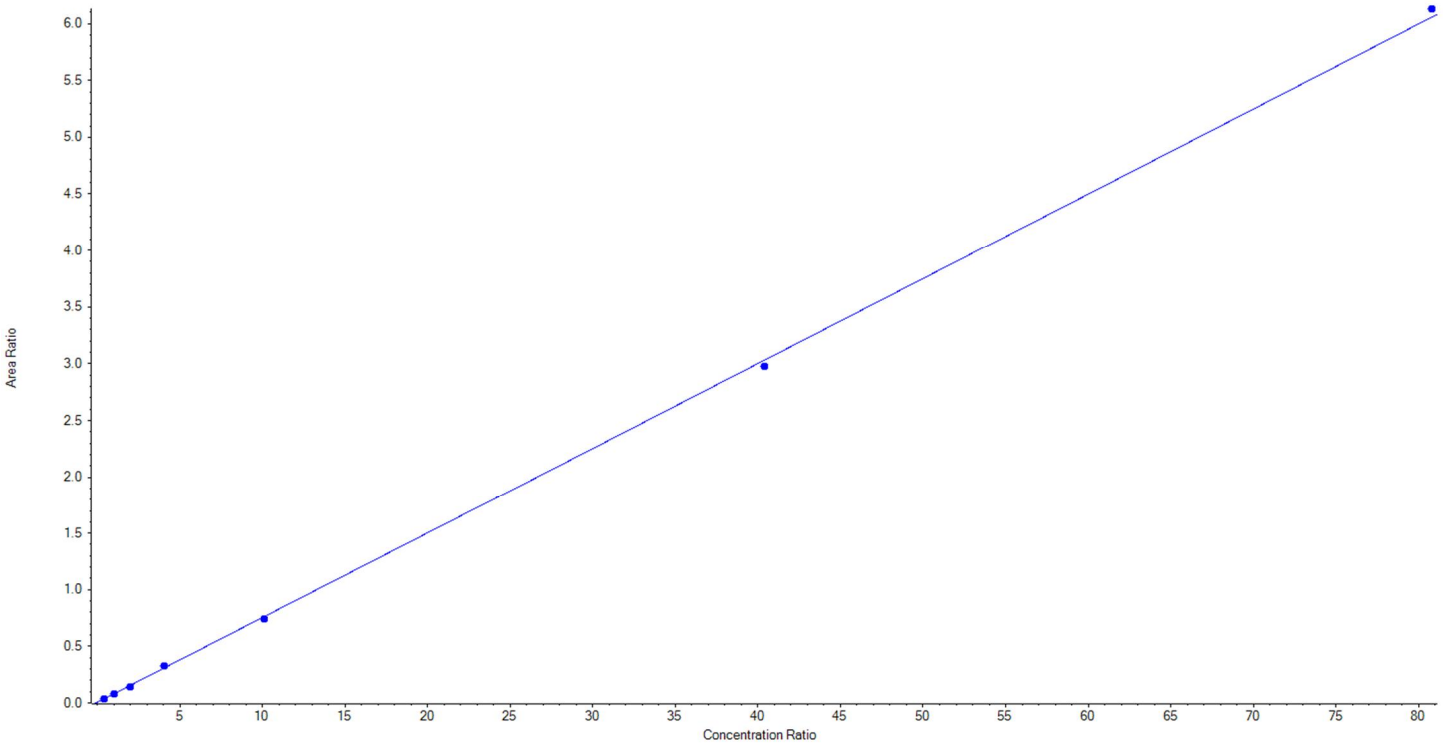
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Analyte Name	PFHxA_2	**Data File**	18-0568.wiff
MRM Transition	313.0 / 119.0	**Result Table**	18-0568_BASE
Internal Standard	13C5-PFHxA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.07490 x + 0.00487 (r = 0.99968) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	101.00	108.381403	107.3
3	KB74	L2	True	252.50	253.021527	100.2
4	KB75	L3	True	505.00	450.264398	89.2
5	KB76	L4	True	1010.00	1081.698888	107.1
6	KB77	L5	True	2525.00	2446.267317	96.9
7	KB78	L6	True	10100.00	9913.438478	98.2
8	KB79	L7	True	20200.00	20440.427988	101.2



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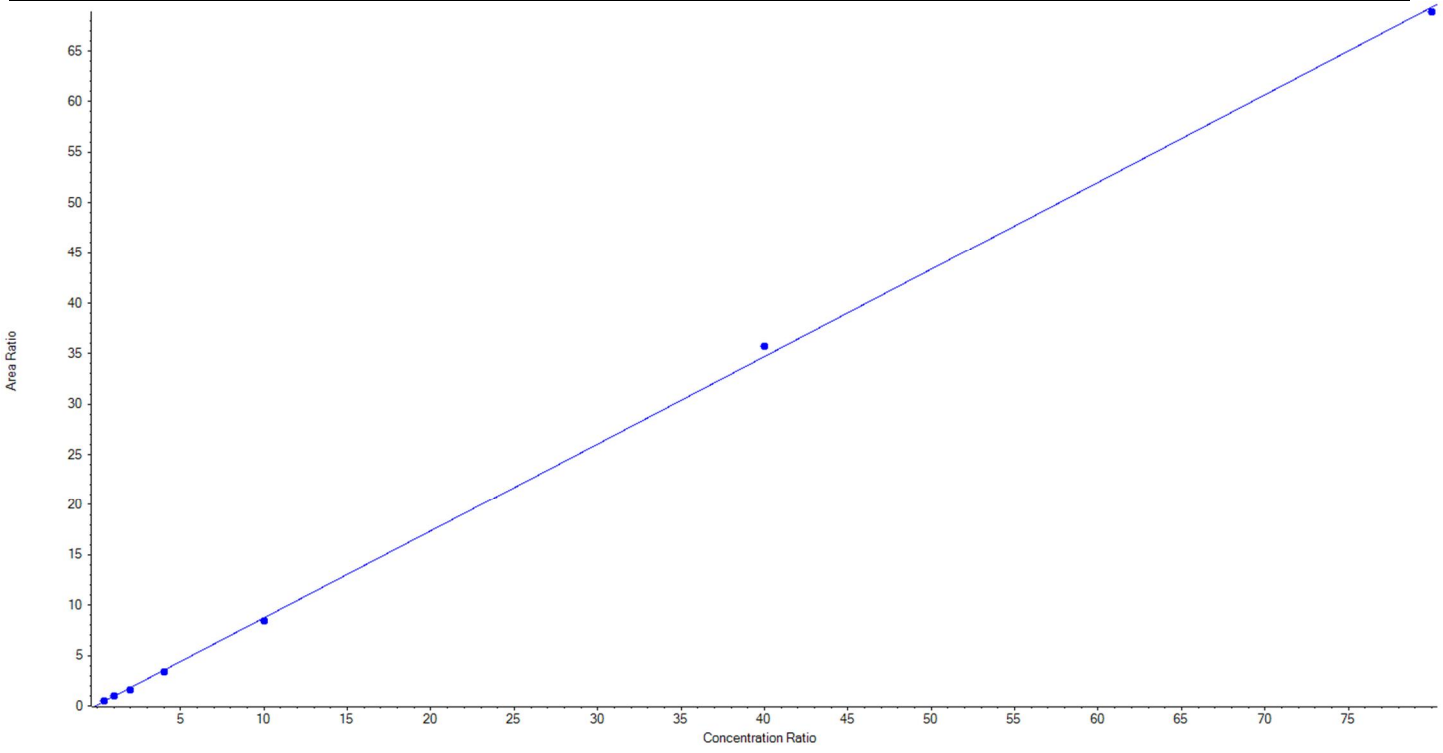
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Analyte Name	PFHpA_1	**Data File**	18-0568.wiff
MRM Transition	363.0 / 319.0	**Result Table**	18-0568_BASE
Internal Standard	13C4-PFHpA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.86571 x + 0.08224 (r = 0.99961) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	108.009386	108.0
3	KB74	L2	True	250.00	274.771603	109.9
4	KB75	L3	True	500.00	436.260886	87.3
5	KB76	L4	True	1000.00	958.179117	95.8
6	KB77	L5	True	2500.00	2420.399563	96.8
7	KB78	L6	True	10000.00	10286.800754	102.9
8	KB79	L7	True	20000.00	19865.578690	99.3



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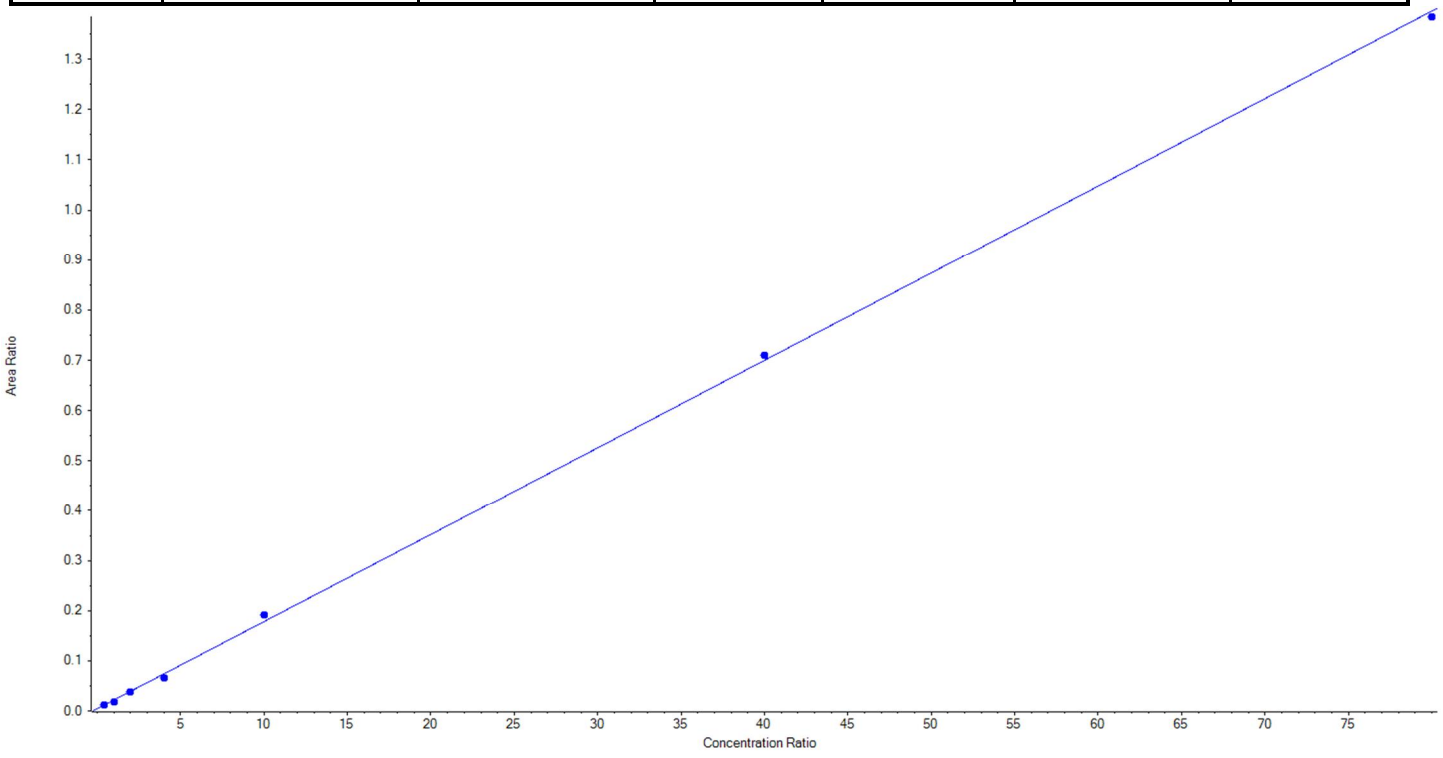
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Analyte Name	PFHpA_2	**Data File**	18-0568.wiff
MRM Transition	363.0 / 169.0	**Result Table**	18-0568_BASE
Internal Standard	13C4-PFHpA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.01739 x + 0.00429 (r = 0.99931) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	123.401925	123.4
3	KB74	L2	True	250.00	210.313812	84.1
4	KB75	L3	True	500.00	483.245848	96.7
5	KB76	L4	True	1000.00	879.401217	87.9
6	KB77	L5	True	2500.00	2683.726322	107.4
7	KB78	L6	True	10000.00	10136.930324	101.4
8	KB79	L7	True	20000.00	19832.980552	99.2



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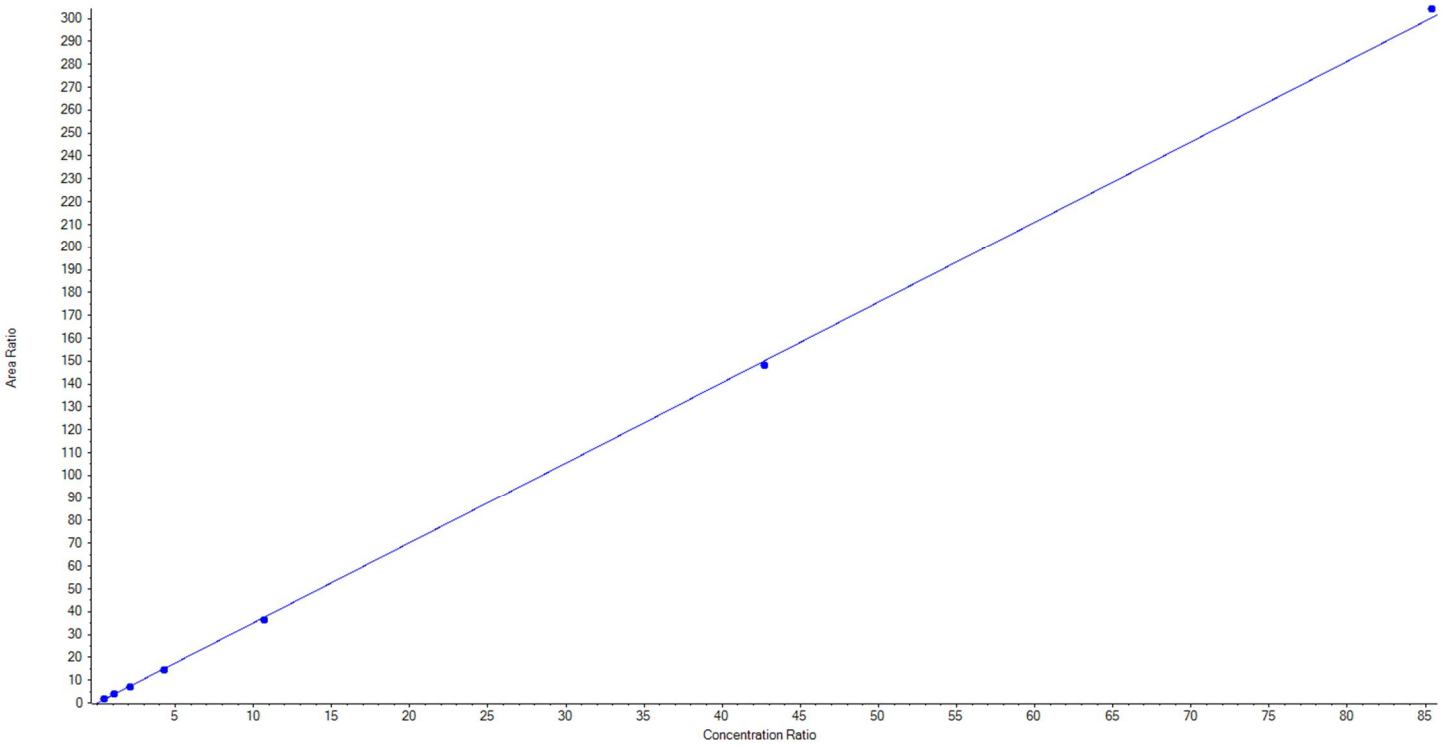
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Analyte Name	PFHxS_1	**Data File**	18-0568.wiff
MRM Transition	399.0 / 80.0	**Result Table**	18-0568_BASE
Internal Standard	13C3-PFHxS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 3.51706 x + -0.06371 (r = 0.99977) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	101.00	110.129011	109.0
3	KB74	L2	True	252.50	269.248214	106.6
4	KB75	L3	True	505.00	462.383044	91.6
5	KB76	L4	True	1010.00	965.005837	95.6
6	KB77	L5	True	2525.00	2454.175508	97.2
7	KB78	L6	True	10100.00	9972.939784	98.7
8	KB79	L7	True	20200.00	20459.618602	101.3



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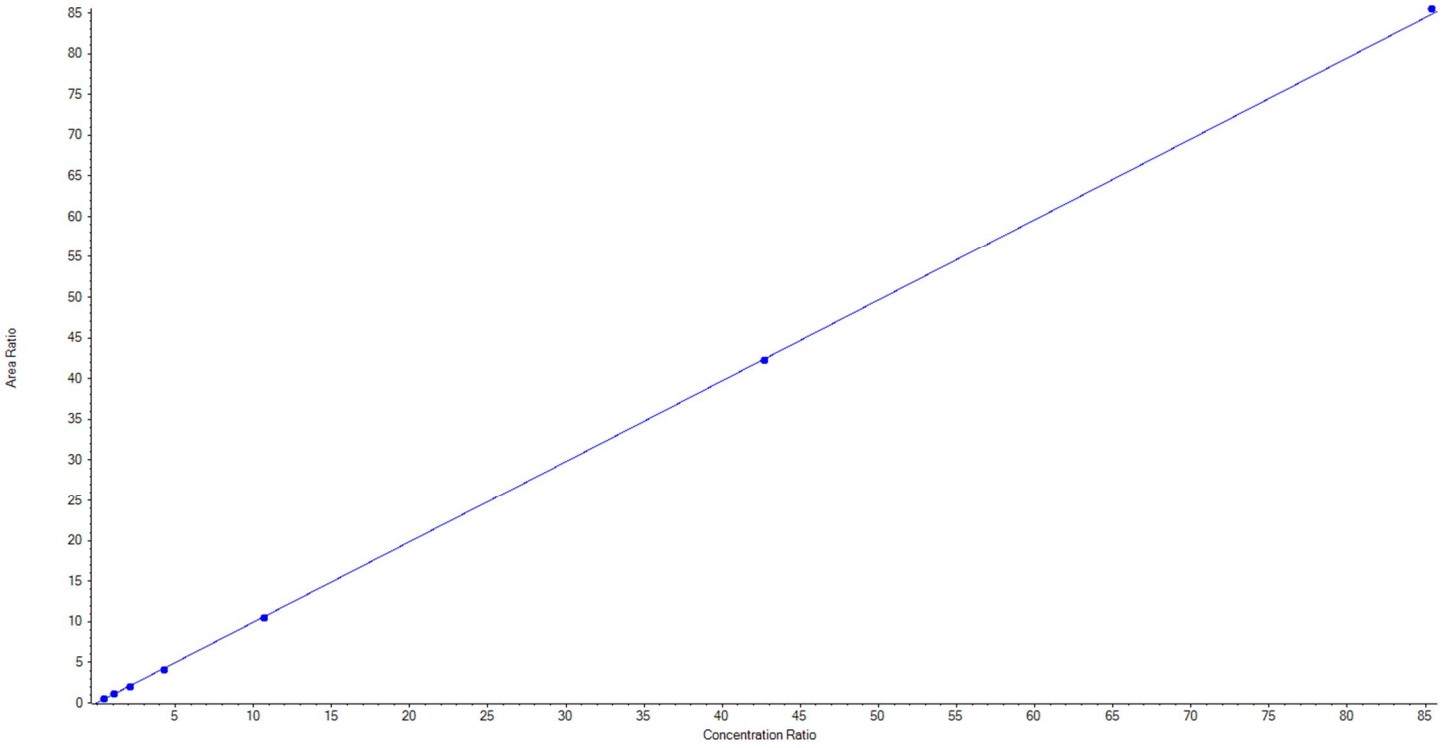
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Analyte Name	PFHxS_2	**Data File**	18-0568.wiff
MRM Transition	399.0 / 99.0	**Result Table**	18-0568_BASE
Internal Standard	13C3-PFHxS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.99305 x + 0.01404 (r = 0.99987) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	101.00	106.772063	105.7
3	KB74	L2	True	252.50	270.754123	107.2
4	KB75	L3	True	505.00	470.641483	93.2
5	KB76	L4	True	1010.00	964.740500	95.5
6	KB77	L5	True	2525.00	2476.462901	98.1
7	KB78	L6	True	10100.00	10048.956168	99.5
8	KB79	L7	True	20200.00	20355.172762	100.8



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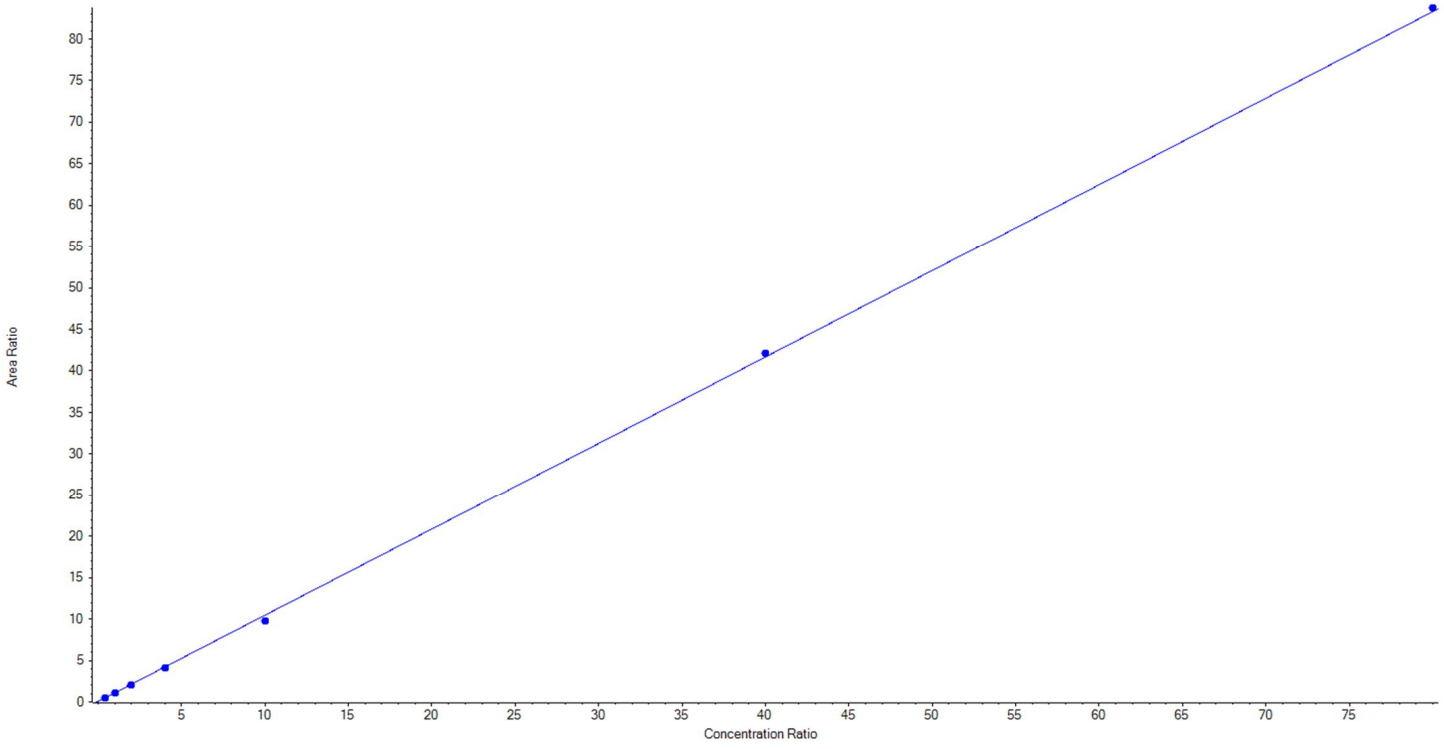
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Analyte Name	PFOA_1	**Data File**	18-0568.wiff
MRM Transition	413.0 / 369.0	**Result Table**	18-0568_BASE
Internal Standard	13C8-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.04036 x + 0.06459 (r = 0.99970) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	112.771782	112.8
3	KB74	L2	True	250.00	256.880152	102.8
4	KB75	L3	True	500.00	467.890925	93.6
5	KB76	L4	True	1000.00	960.811481	96.1
6	KB77	L5	True	2500.00	2327.910032	93.1
7	KB78	L6	True	10000.00	10116.348977	101.2
8	KB79	L7	True	20000.00	20107.386651	100.5



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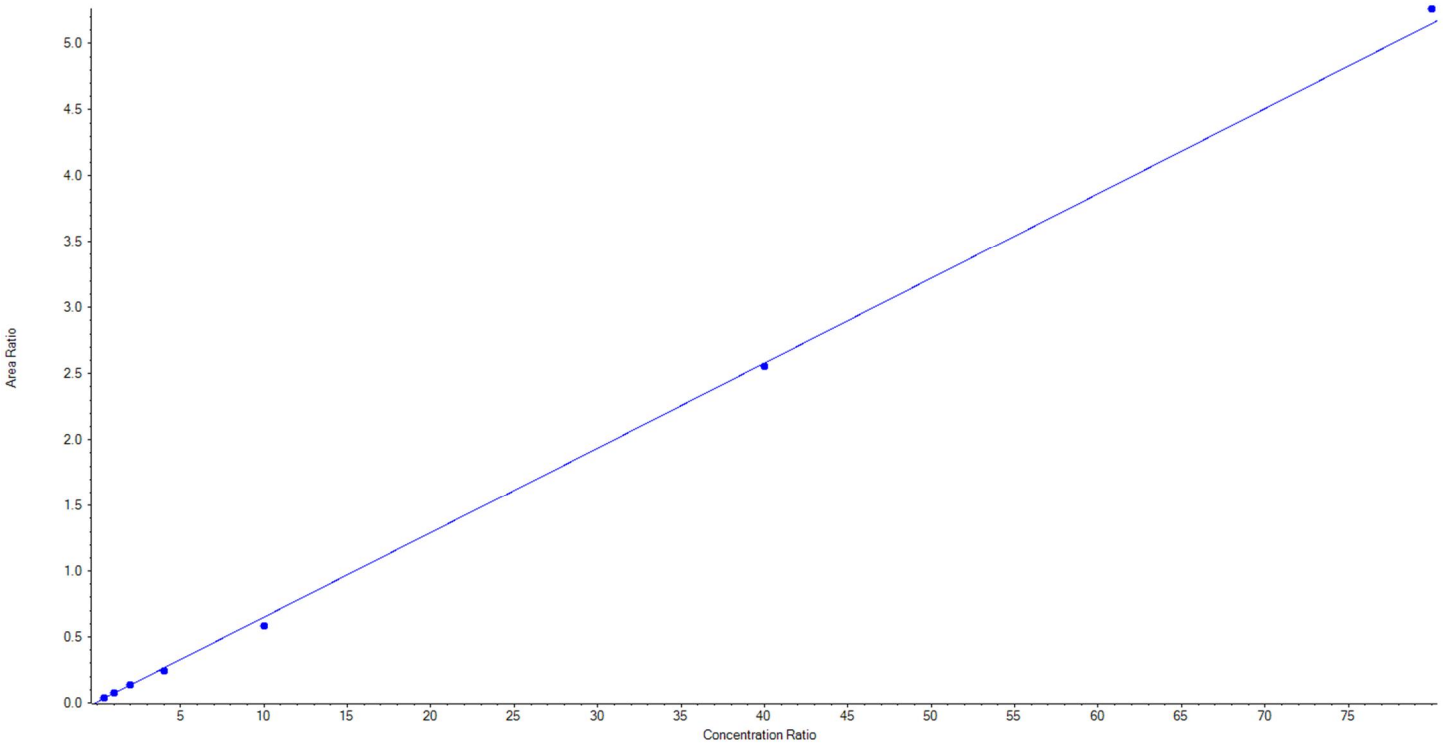
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Analyte Name	PFOA_2	**Data File**	18-0568.wiff
MRM Transition	413.0 / 169.0	**Result Table**	18-0568_BASE
Internal Standard	13C8-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.06429 x + 0.00742 (r = 0.99925) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	116.073890	116.1
3	KB74	L2	True	250.00	255.935887	102.4
4	KB75	L3	True	500.00	494.585149	98.9
5	KB76	L4	True	1000.00	920.725235	92.1
6	KB77	L5	True	2500.00	2235.852750	89.4
7	KB78	L6	True	10000.00	9898.791253	99.0
8	KB79	L7	True	20000.00	20428.035836	102.1



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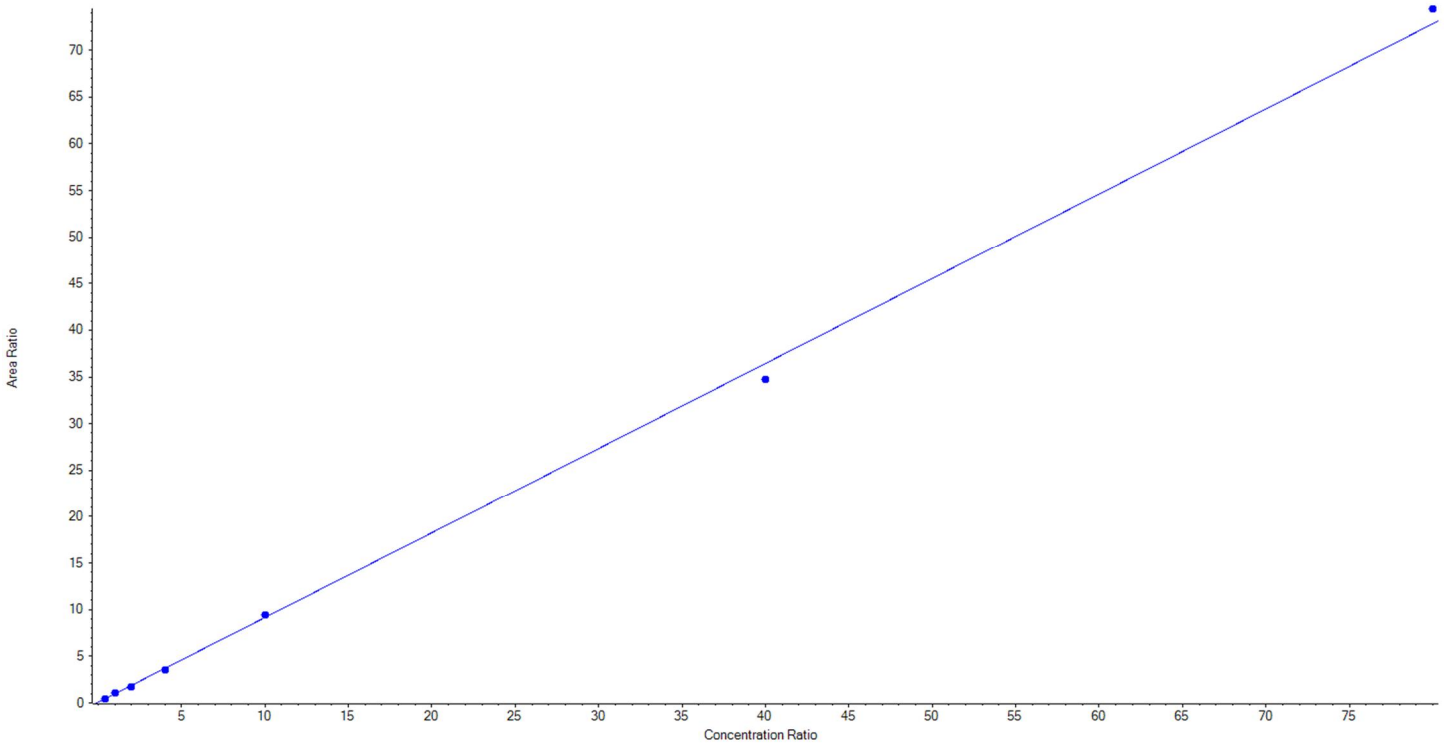
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Analyte Name	PFNA_1	**Data File**	18-0568.wiff
MRM Transition	463.0 / 419.0	**Result Table**	18-0568_BASE
Internal Standard	13C9-PFNA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.90930 x + 0.06836 (r = 0.99934) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	101.509411	101.5
3	KB74	L2	True	250.00	275.171680	110.1
4	KB75	L3	True	500.00	458.096812	91.6
5	KB76	L4	True	1000.00	958.283433	95.8
6	KB77	L5	True	2500.00	2586.151199	103.5
7	KB78	L6	True	10000.00	9534.845171	95.4
8	KB79	L7	True	20000.00	20435.942294	102.2



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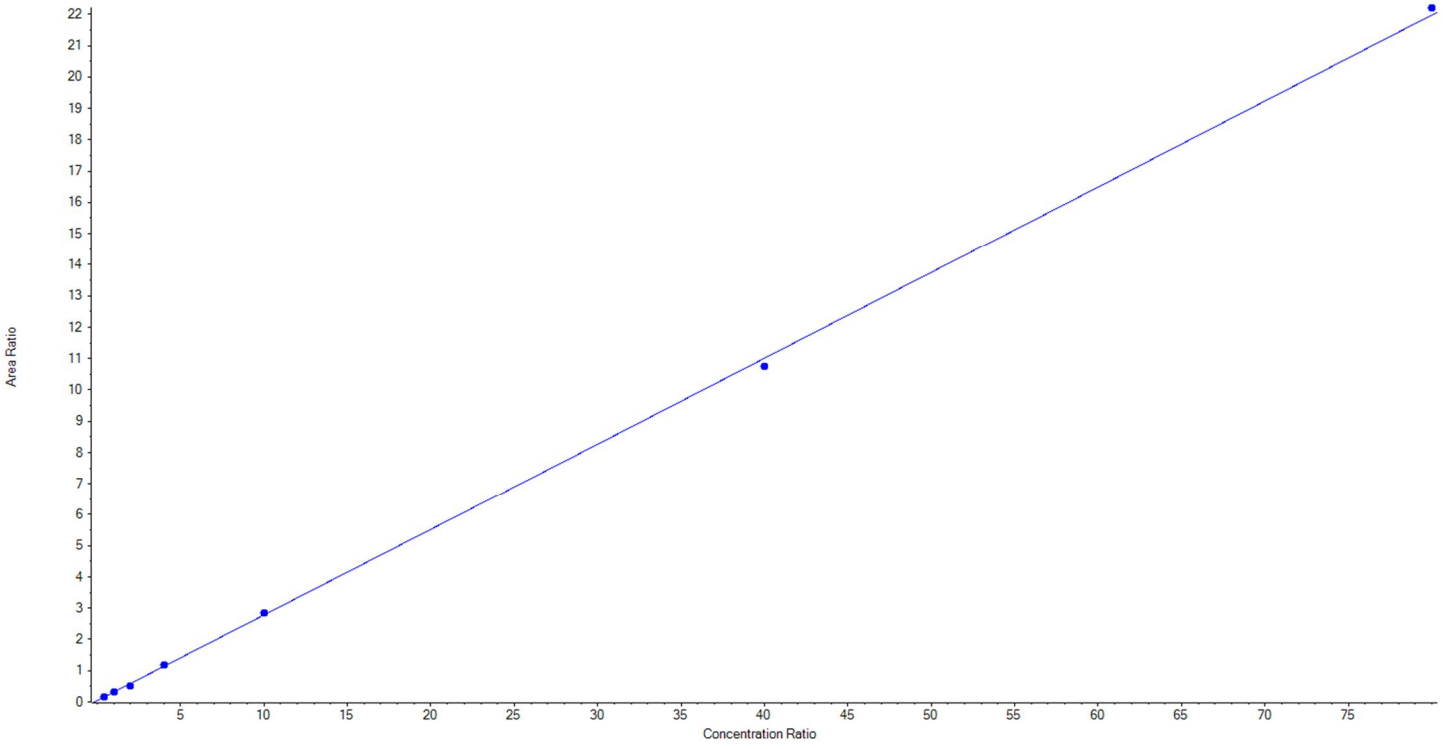
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Analyte Name	PFNA_2	**Data File**	18-0568.wiff
MRM Transition	463.0 / 219.0	**Result Table**	18-0568_BASE
Internal Standard	13C9-PFNA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.27419 x + 0.04110 (r = 0.99971) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	104.690293	104.7
3	KB74	L2	True	250.00	258.444592	103.4
4	KB75	L3	True	500.00	439.242975	87.9
5	KB76	L4	True	1000.00	1034.787134	103.5
6	KB77	L5	True	2500.00	2550.156239	102.0
7	KB78	L6	True	10000.00	9756.983753	97.6
8	KB79	L7	True	20000.00	20205.695014	101.0



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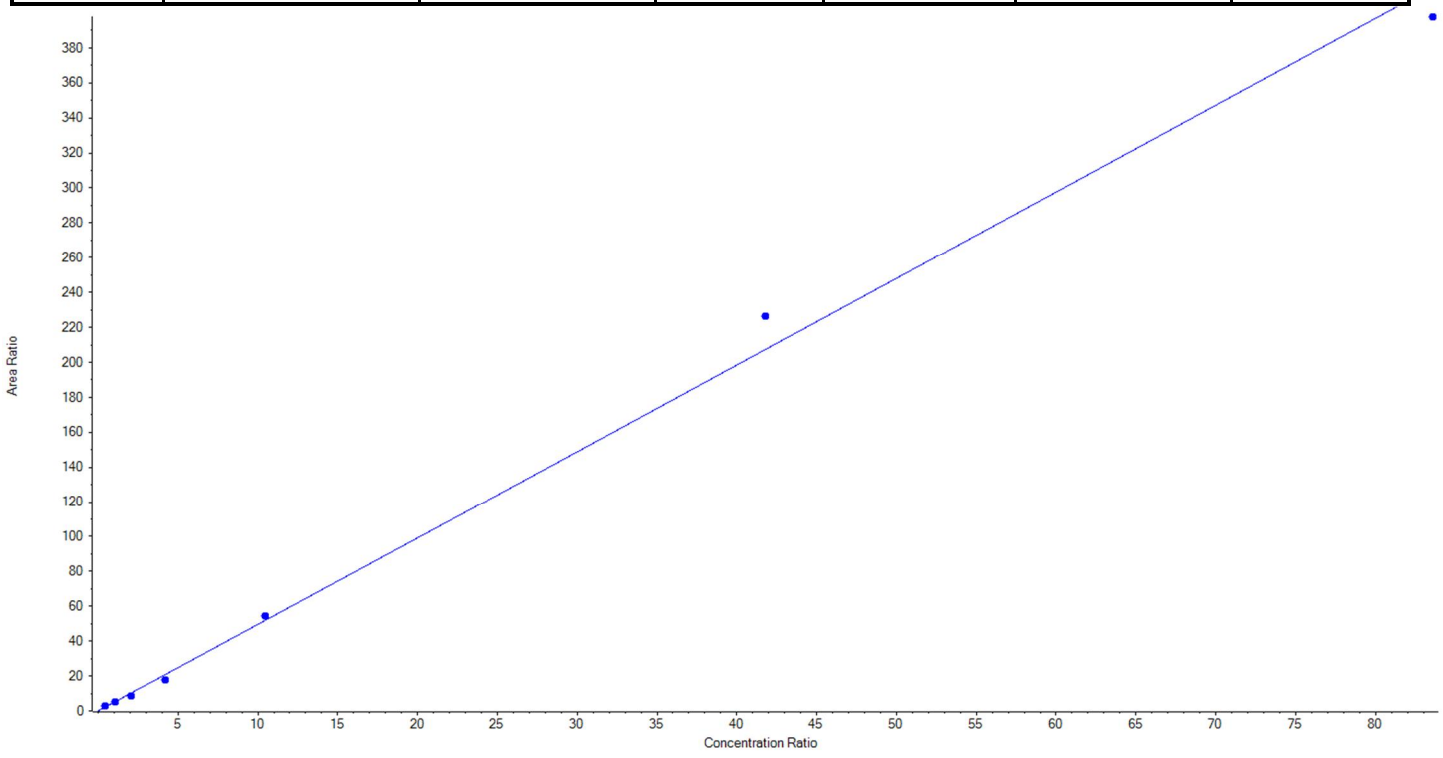
Calibration Summary Report

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Analyte Name	PFOS_1	**Data File**	18-0568.wiff
MRM Transition	499.0 / 80.0	**Result Table**	18-0568_BASE
Internal Standard	13C8-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 4.96108 x + -0.00555 (r = 0.99745) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	126.185542	126.2
3	KB74	L2	True	250.00	235.905036	94.4
4	KB75	L3	True	500.00	416.739485	83.4
5	KB76	L4	True	1000.00	865.212758	86.5
6	KB77	L5	True	2500.00	2614.099426	104.6
7	KB78	L6	True	10000.00	10912.001070	109.1
8	KB79	L7	True	20000.00	19179.856685	95.9



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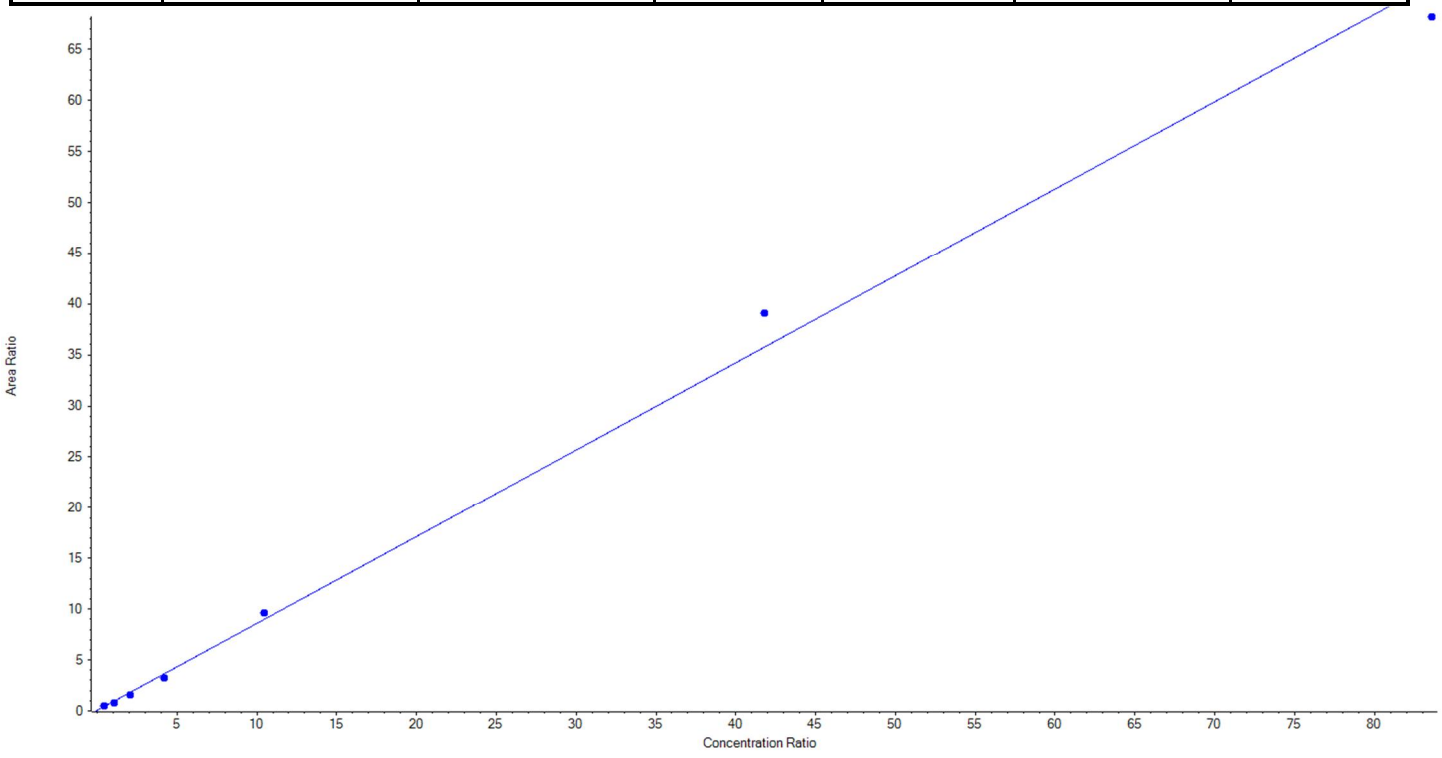
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Analyte Name	PFOS_2	**Data File**	18-0568.wiff
MRM Transition	499.0 / 99.0	**Result Table**	18-0568_BASE
Internal Standard	13C8-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.85436 x + 0.05248 (r = 0.99724) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	124.979245	125.0
3	KB74	L2	True	250.00	218.745785	87.5
4	KB75	L3	True	500.00	437.157438	87.4
5	KB76	L4	True	1000.00	884.032705	88.4
6	KB77	L5	True	2500.00	2673.203851	106.9
7	KB78	L6	True	10000.00	10940.024881	109.4
8	KB79	L7	True	20000.00	19071.856096	95.4



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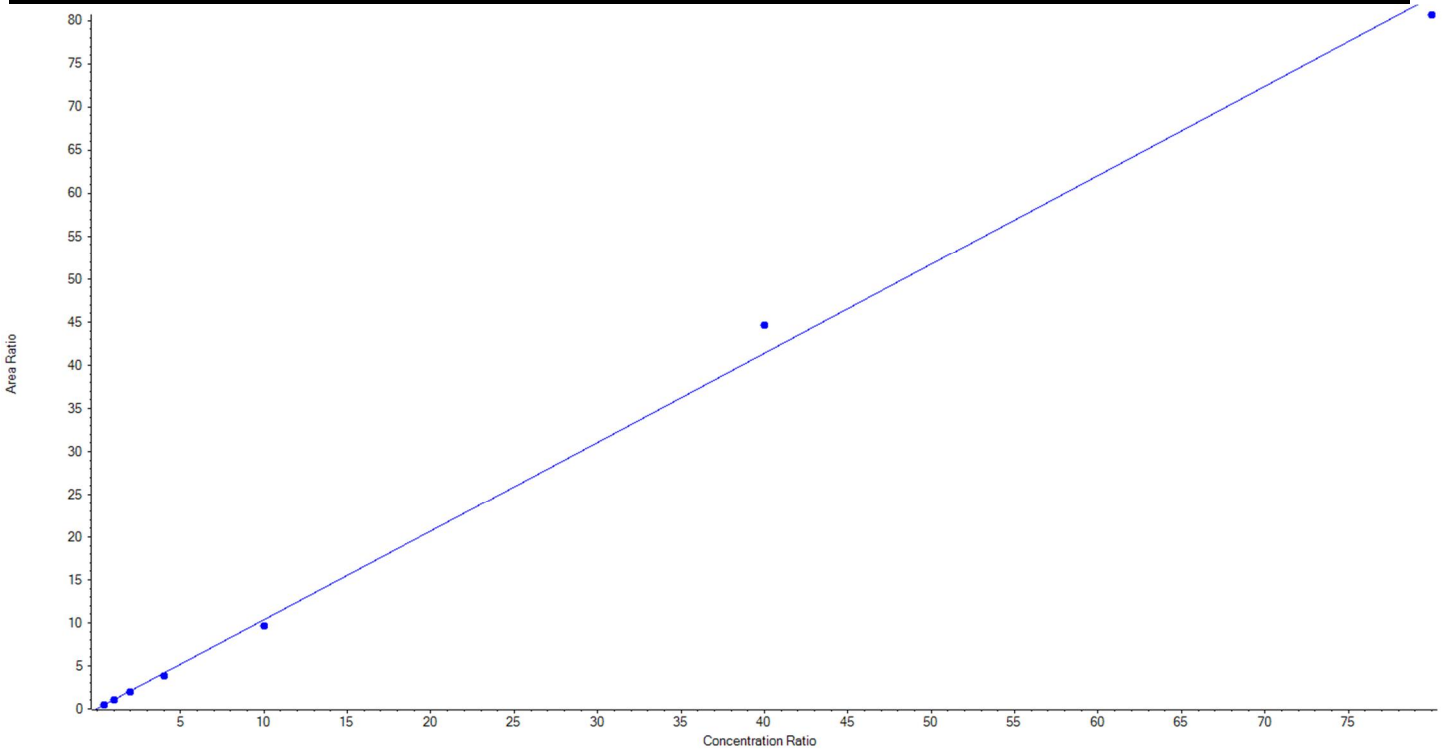
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Analyte Name	PFDA_1	**Data File**	18-0568.wiff
MRM Transition	513.0 / 469.0	**Result Table**	18-0568_BASE
Internal Standard	13C6-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.03414 x + 0.02878 (r = 0.99849) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	111.372806	111.4
3	KB74	L2	True	250.00	259.148315	103.7
4	KB75	L3	True	500.00	475.258996	95.1
5	KB76	L4	True	1000.00	921.872693	92.2
6	KB77	L5	True	2500.00	2312.948548	92.5
7	KB78	L6	True	10000.00	10772.772925	107.7
8	KB79	L7	True	20000.00	19496.625718	97.5



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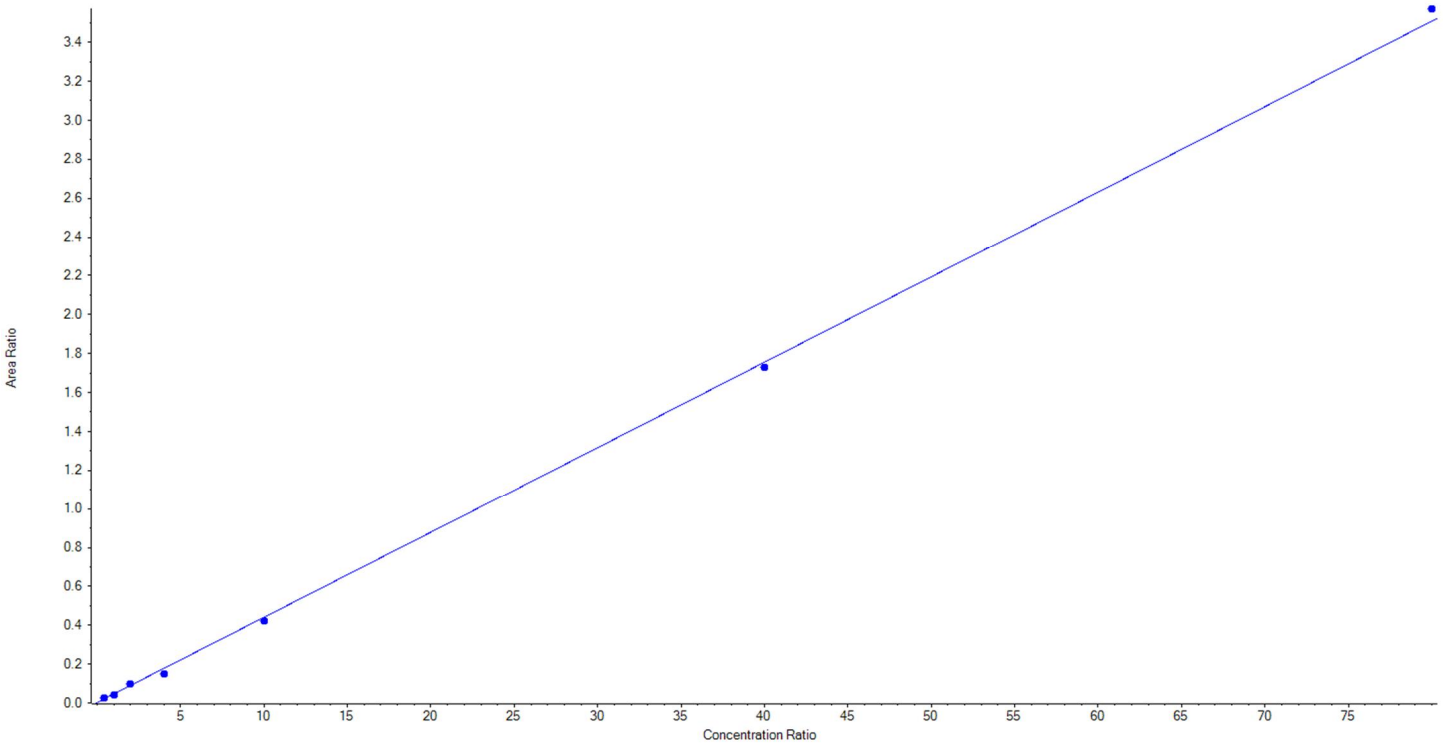
Calibration Summary Report

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Analyte Name	PFDA_2	**Data File**	18-0568.wiff
MRM Transition	513.0 / 219.0	**Result Table**	18-0568_BASE
Internal Standard	13C6-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.04382 x + 0.00242 (r = 0.99923) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	122.063219	122.1
3	KB74	L2	True	250.00	217.509099	87.0
4	KB75	L3	True	500.00	548.209451	109.6
5	KB76	L4	True	1000.00	850.548167	85.1
6	KB77	L5	True	2500.00	2396.957040	95.9
7	KB78	L6	True	10000.00	9856.917615	98.6
8	KB79	L7	True	20000.00	20357.795409	101.8



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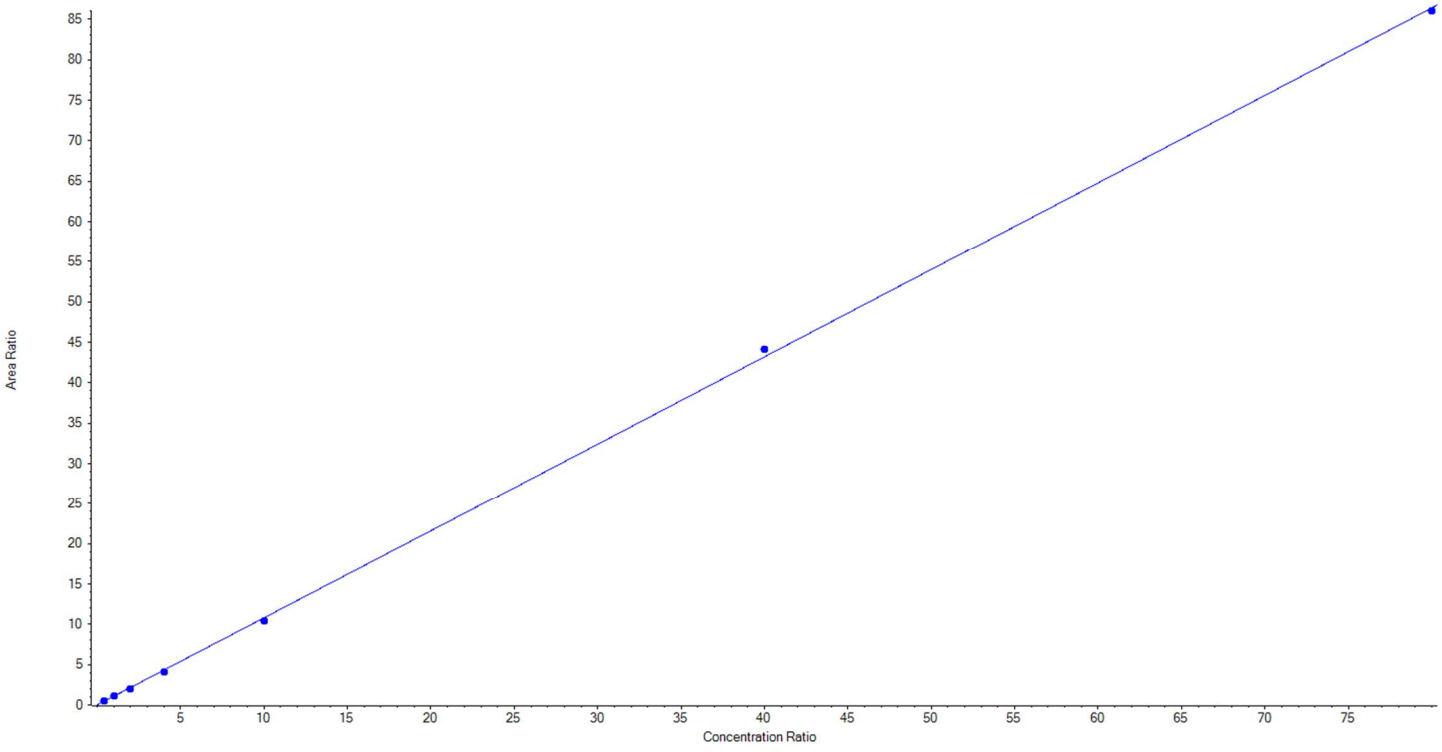
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Analyte Name	PFUnA_1	**Data File**	18-0568.wiff
MRM Transition	563.0 / 519.0	**Result Table**	18-0568_BASE
Internal Standard	13C7-PFUnA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.08004 x + 3.77797e-4 (r = 0.99977) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	108.624464	108.6
3	KB74	L2	True	250.00	261.791382	104.7
4	KB75	L3	True	500.00	463.269773	92.7
5	KB76	L4	True	1000.00	952.898017	95.3
6	KB77	L5	True	2500.00	2421.740228	96.9
7	KB78	L6	True	10000.00	10227.447430	102.3
8	KB79	L7	True	20000.00	19914.228706	99.6



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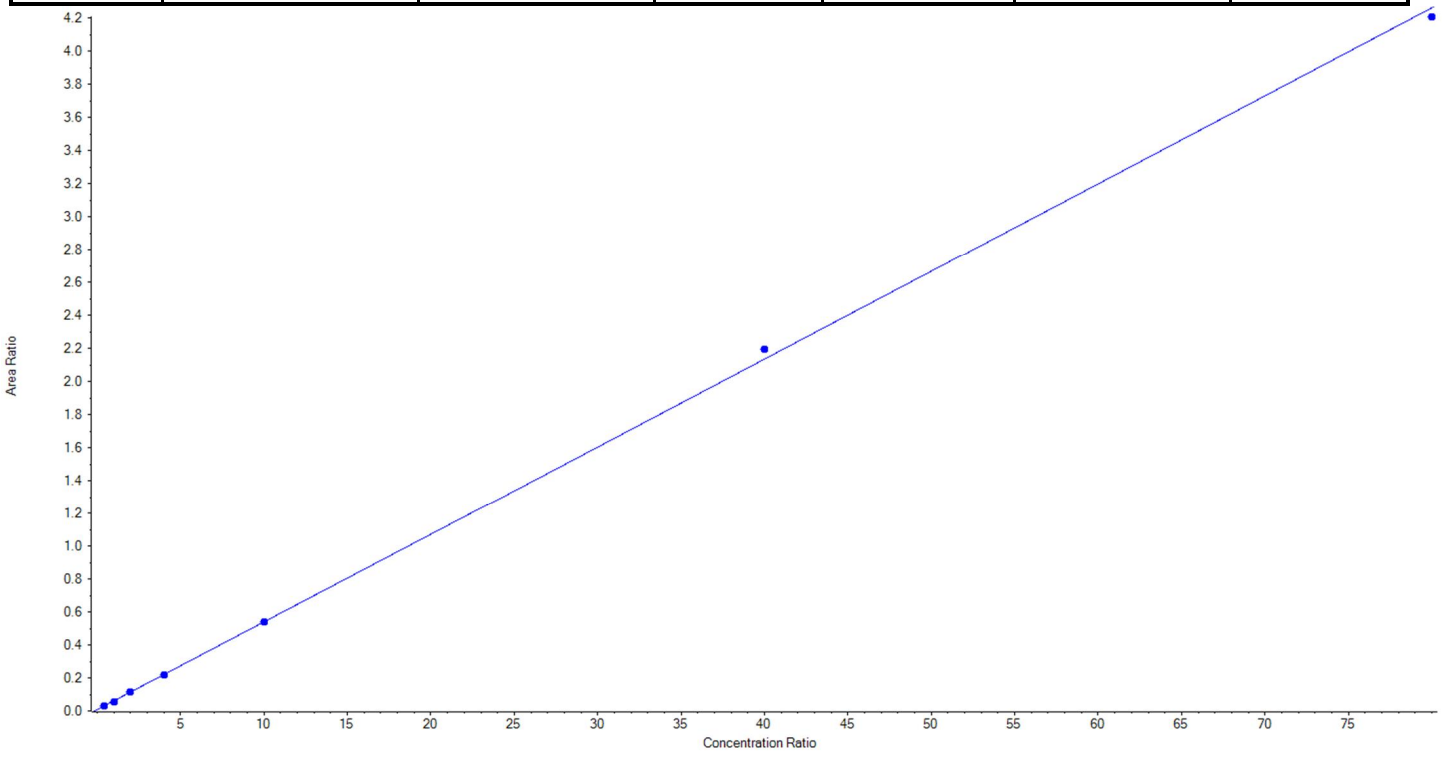
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Analyte Name	PFUnA_2	**Data File**	18-0568.wiff
MRM Transition	563.0 / 269.0	**Result Table**	18-0568_BASE
Internal Standard	13C7-PFUnA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.05319 x + 0.00820 (r = 0.99977) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	108.920714	108.9
3	KB74	L2	True	250.00	230.088303	92.0
4	KB75	L3	True	500.00	496.082844	99.2
5	KB76	L4	True	1000.00	982.432584	98.2
6	KB77	L5	True	2500.00	2498.888766	100.0
7	KB78	L6	True	10000.00	10292.130524	102.9
8	KB79	L7	True	20000.00	19741.456264	98.7



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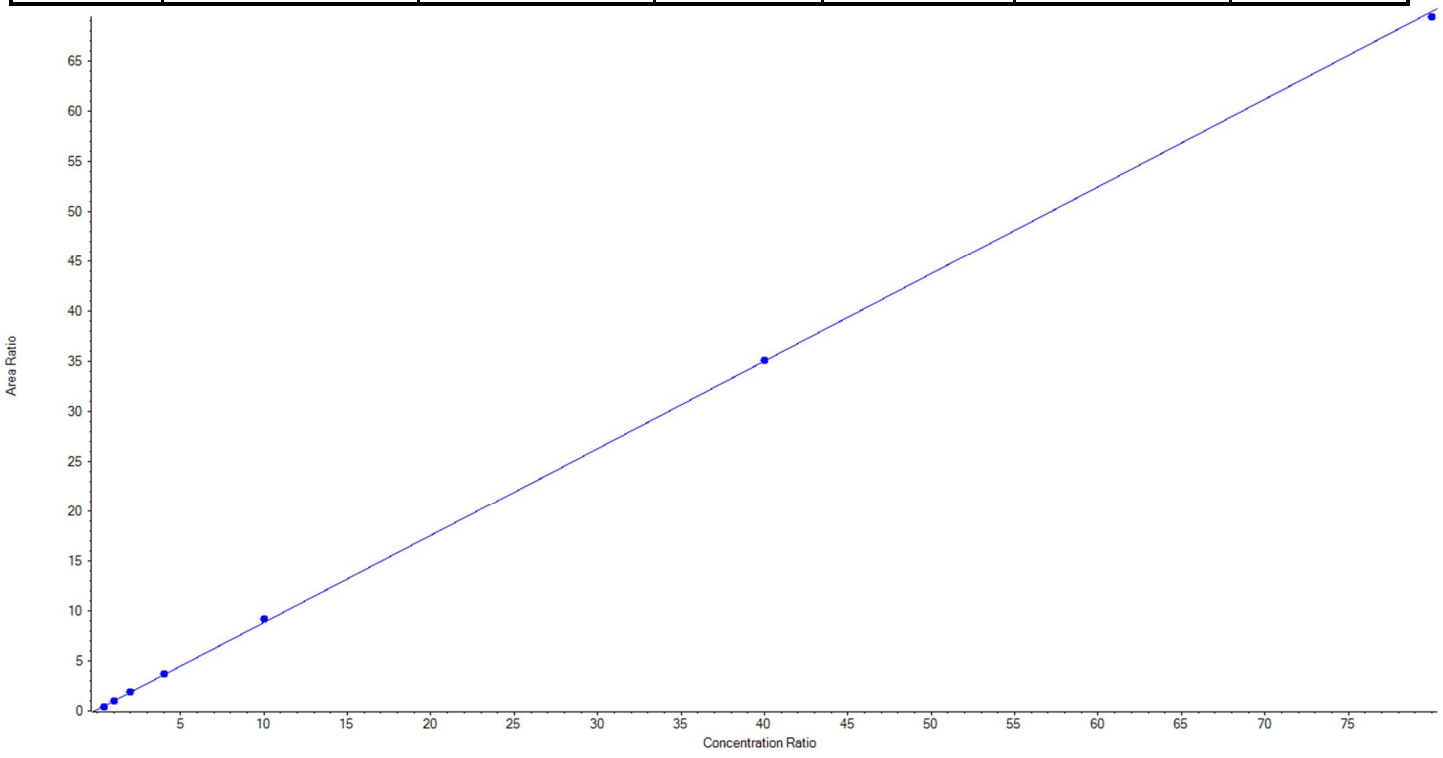
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Analyte Name	PFDoA_1	**Data File**	18-0568.wiff
MRM Transition	613.0 / 569.0	**Result Table**	18-0568_BASE
Internal Standard	13C2-PFDoA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.87289 x + 0.11794 (r = 0.99989) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	90.649559	90.7
3	KB74	L2	True	250.00	258.738908	103.5
4	KB75	L3	True	500.00	502.828604	100.6
5	KB76	L4	True	1000.00	1015.595853	101.6
6	KB77	L5	True	2500.00	2604.748205	104.2
7	KB78	L6	True	10000.00	10030.489734	100.3
8	KB79	L7	True	20000.00	19846.949136	99.2



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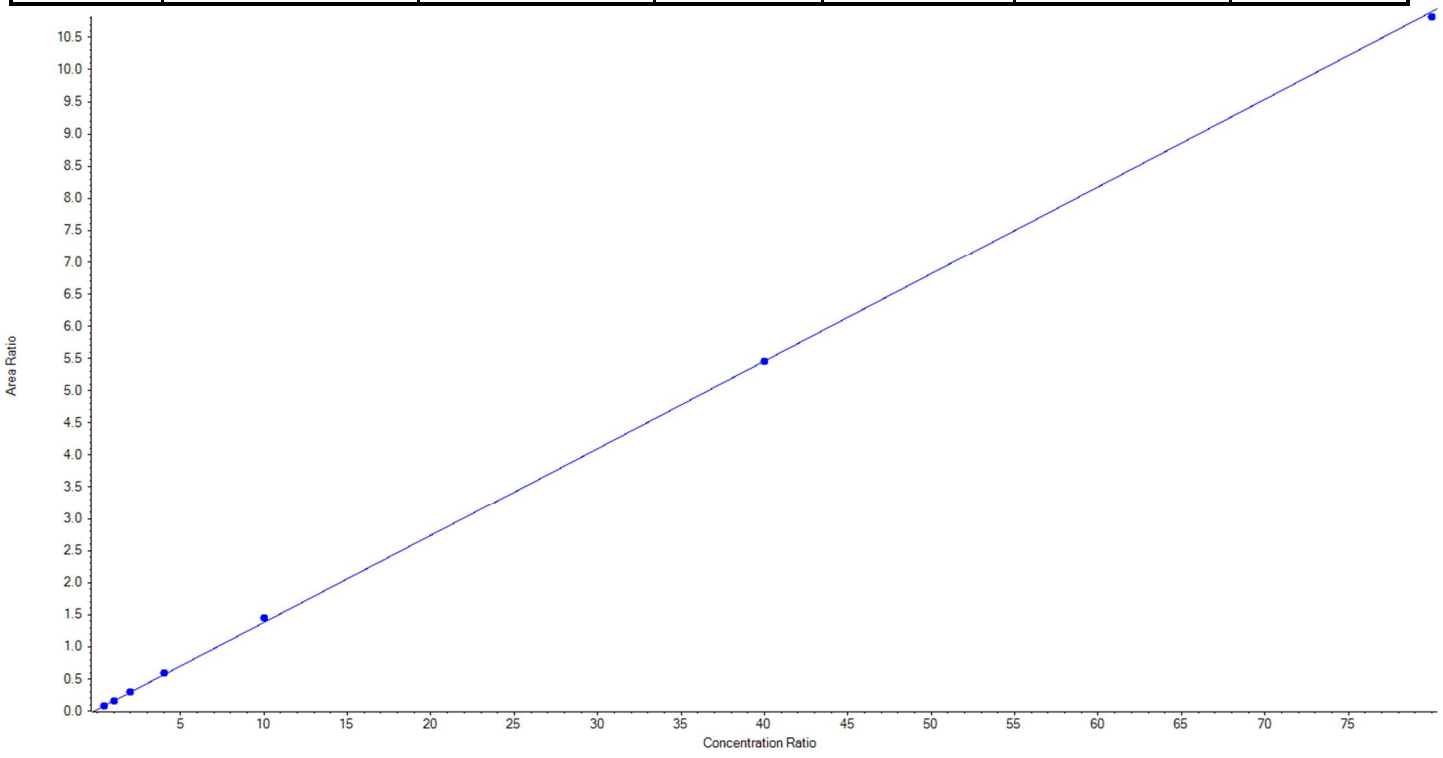
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Analyte Name	PFDoA_2	**Data File**	18-0568.wiff
MRM Transition	613.0 / 319.0	**Result Table**	18-0568_BASE
Internal Standard	13C2-PFDoA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.13599 x + 0.02014 (r = 0.99983) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	93.160201	93.2
3	KB74	L2	True	250.00	242.744499	97.1
4	KB75	L3	True	500.00	505.129580	101.0
5	KB76	L4	True	1000.00	1044.394656	104.4
6	KB77	L5	True	2500.00	2629.555885	105.2
7	KB78	L6	True	10000.00	9983.861332	99.8
8	KB79	L7	True	20000.00	19851.153847	99.3



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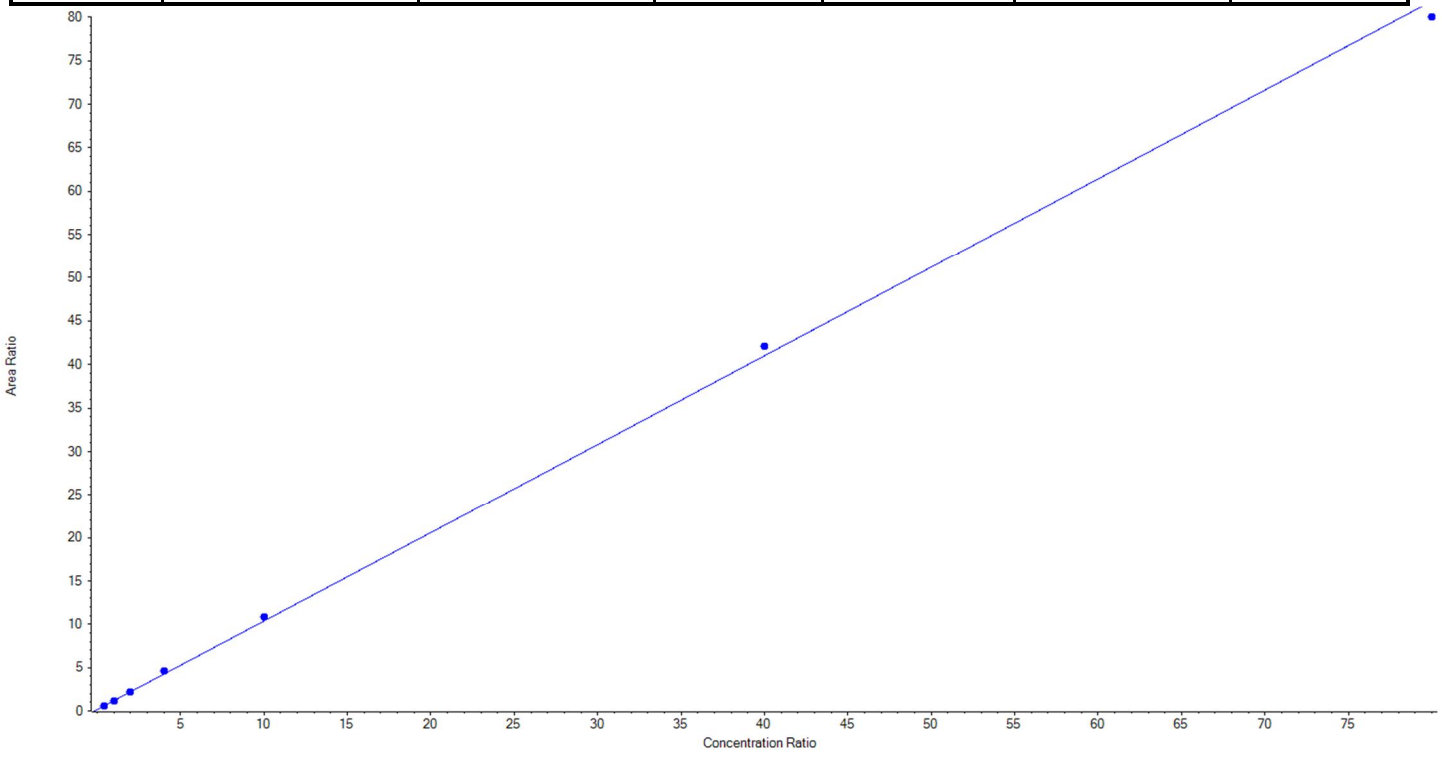
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Analyte Name	PFTrDA_1	**Data File**	18-0568.wiff
MRM Transition	663.0 / 619.0	**Result Table**	18-0568_BASE
Internal Standard	13C2-PFTeDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.02119 x + 0.16063 (r = 0.99949) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	88.277124	88.3
3	KB74	L2	True	250.00	245.151049	98.1
4	KB75	L3	True	500.00	495.489263	99.1
5	KB76	L4	True	1000.00	1097.355339	109.7
6	KB77	L5	True	2500.00	2612.536447	104.5
7	KB78	L6	True	10000.00	10254.331665	102.5
8	KB79	L7	True	20000.00	19556.859113	97.8



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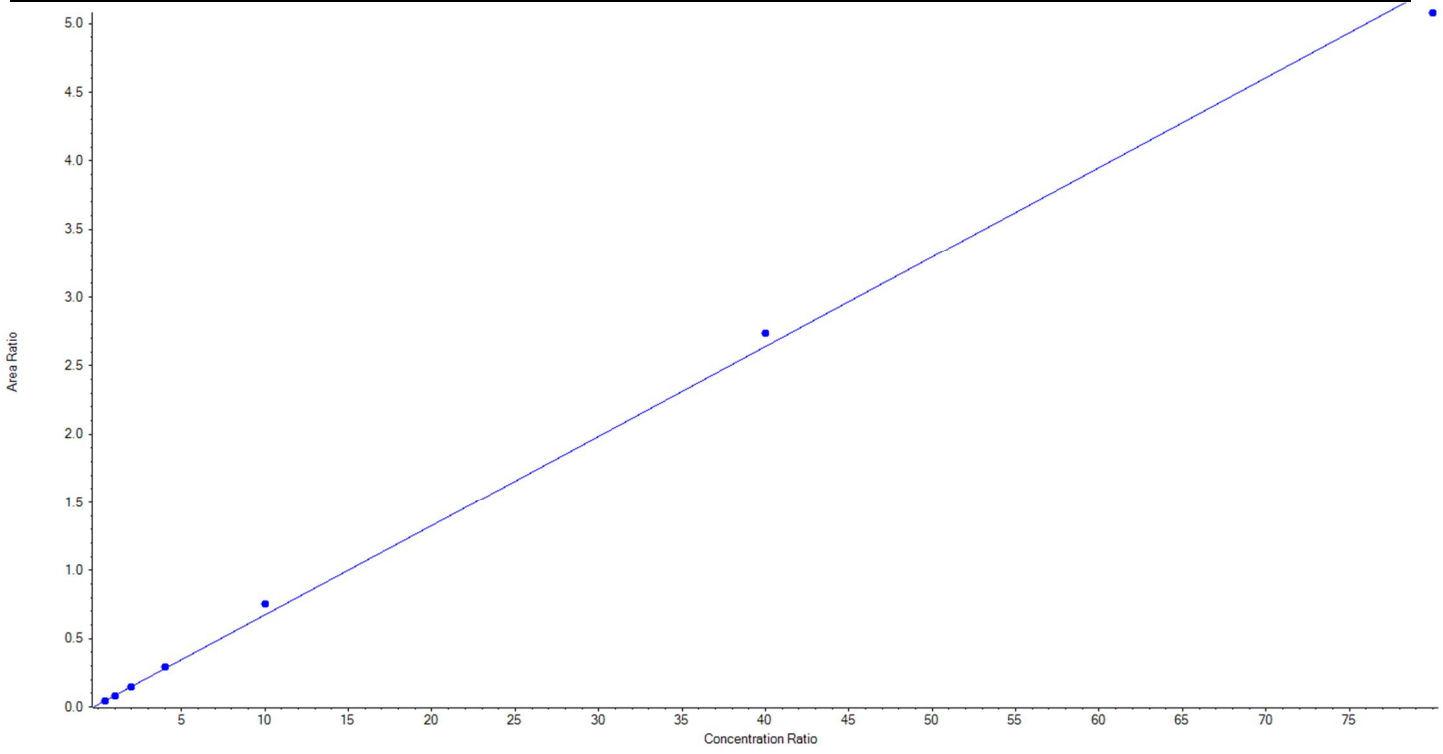
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Analyte Name	PFTrDA_2	**Data File**	18-0568.wiff
MRM Transition	663.0 / 169.0	**Result Table**	18-0568_BASE
Internal Standard	13C2-PFTeDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.06555 x + 0.01822 (r = 0.99870) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	89.016507	89.0
3	KB74	L2	True	250.00	239.586679	95.8
4	KB75	L3	True	500.00	485.093333	97.0
5	KB76	L4	True	1000.00	1054.043404	105.4
6	KB77	L5	True	2500.00	2813.870237	112.6
7	KB78	L6	True	10000.00	10365.811177	103.7
8	KB79	L7	True	20000.00	19302.578663	96.5



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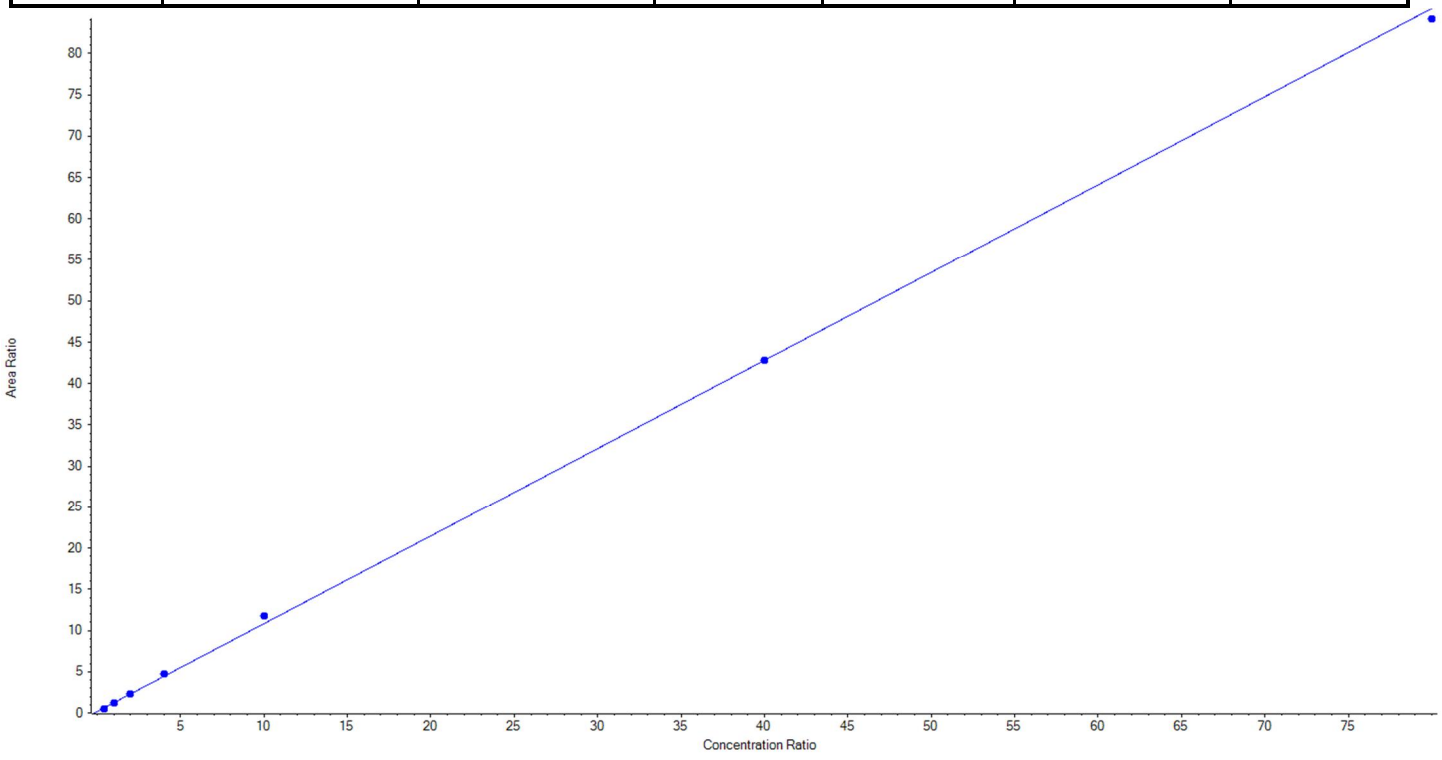
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Analyte Name	PFTeDA_1	**Data File**	18-0568.wiff
MRM Transition	713.0 / 669.0	**Result Table**	18-0568_BASE
Internal Standard	13C2-PFTeDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.06574 x + 0.16988 (r = 0.99946) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	80.512556	80.5
3	KB74	L2	True	250.00	255.815368	102.3
4	KB75	L3	True	500.00	511.901320	102.4
5	KB76	L4	True	1000.00	1072.623294	107.3
6	KB77	L5	True	2500.00	2724.629761	109.0
7	KB78	L6	True	10000.00	10002.184988	100.0
8	KB79	L7	True	20000.00	19702.332714	98.5



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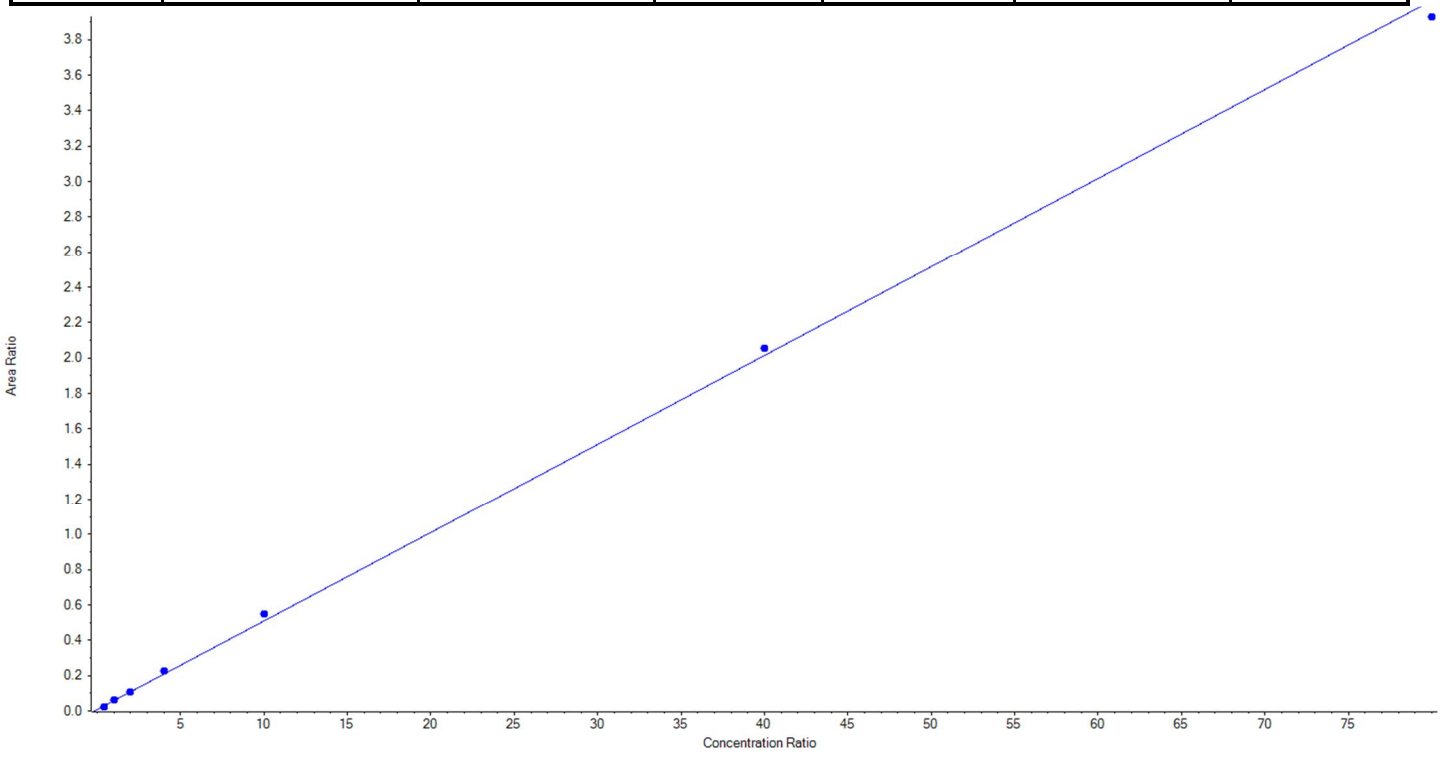
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Analyte Name	PFTeDA_2	**Data File**	18-0568.wiff
MRM Transition	713.0 / 169.0	**Result Table**	18-0568_BASE
Internal Standard	13C2-PFTeDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.05017 x + 0.00766 (r = 0.99938) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	81.761617	81.8
3	KB74	L2	True	250.00	259.328010	103.7
4	KB75	L3	True	500.00	495.242531	99.1
5	KB76	L4	True	1000.00	1082.652188	108.3
6	KB77	L5	True	2500.00	2686.150282	107.5
7	KB78	L6	True	10000.00	10204.623109	102.1
8	KB79	L7	True	20000.00	19540.242263	97.7



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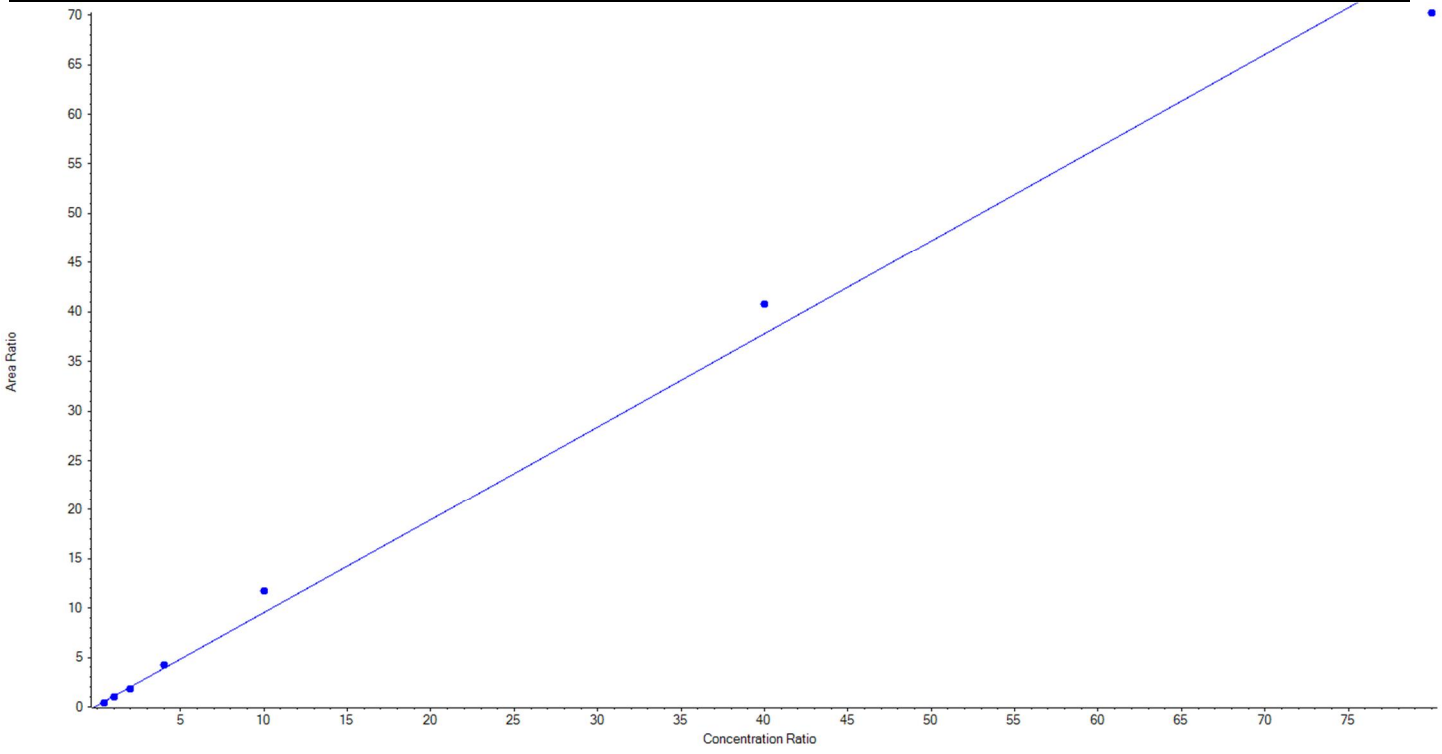
Calibration Summary Report

Created with Analyst Reporter
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Analyte Name	NMeFOSAA_1	**Data File**	18-0568.wiff
MRM Transition	570.0 / 419.0	**Result Table**	18-0568_BASE
Internal Standard	d3-MeFOSAA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.94146 x + 0.13752 (r = 0.99514) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	79.208694	79.2
3	KB74	L2	True	250.00	239.761289	95.9
4	KB75	L3	True	500.00	455.455702	91.1
5	KB76	L4	True	1000.00	1099.137764	109.9
6	KB77	L5	True	2500.00	3072.377694	122.9
7	KB78	L6	True	10000.00	10793.294331	107.9
8	KB79	L7	True	20000.00	18610.764527	93.1



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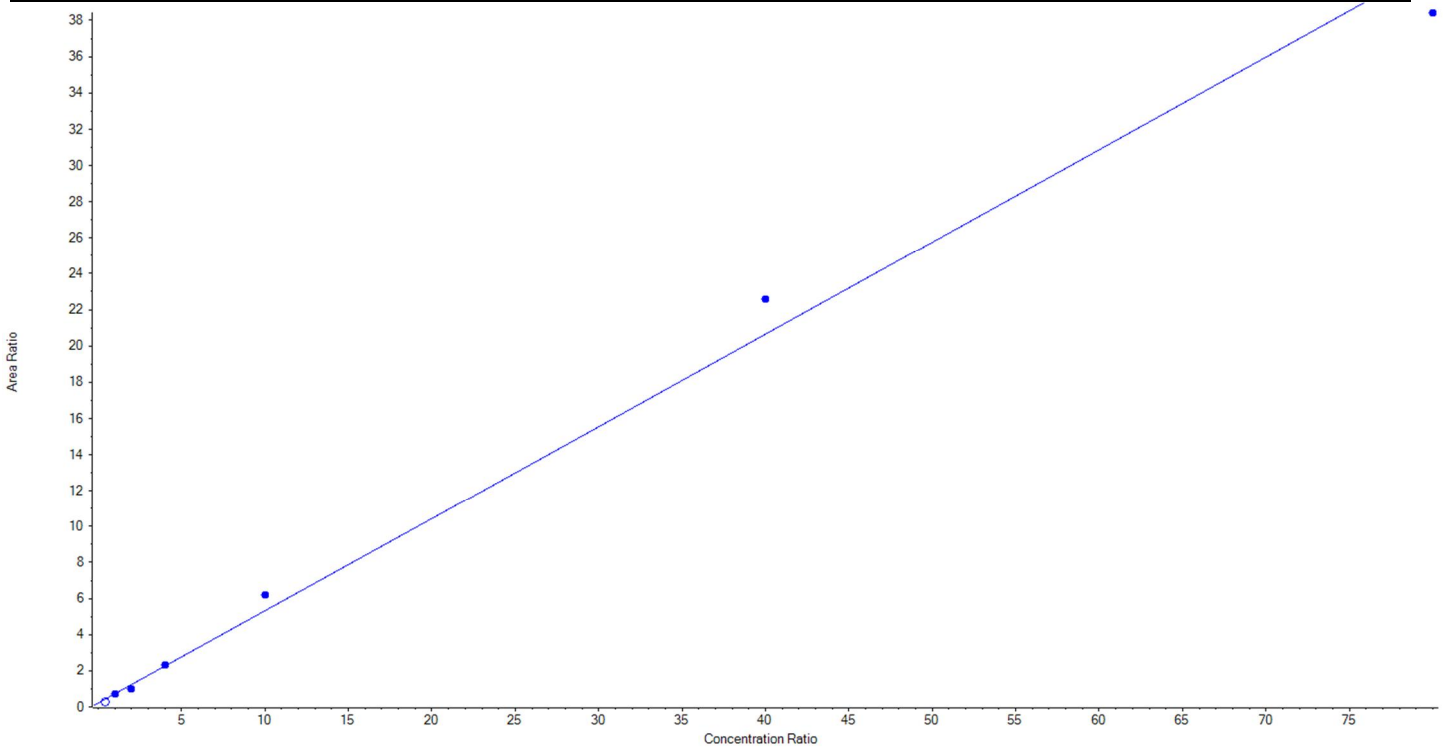
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Analyte Name	NMeFOSAA_2	**Data File**	18-0568.wiff
MRM Transition	570.0 / 512.0	**Result Table**	18-0568_BASE
Internal Standard	d3-MeFOSAA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.51082 x + 0.21734 (r = 0.99529) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	False	100.00	17.946229	18.0
3	KB74	L2	True	250.00	248.838672	99.5
4	KB75	L3	True	500.00	383.636478	76.7
5	KB76	L4	True	1000.00	1034.449547	103.4
6	KB77	L5	True	2500.00	2931.022341	117.2
7	KB78	L6	True	10000.00	10958.224531	109.6
8	KB79	L7	True	20000.00	18693.828431	93.5



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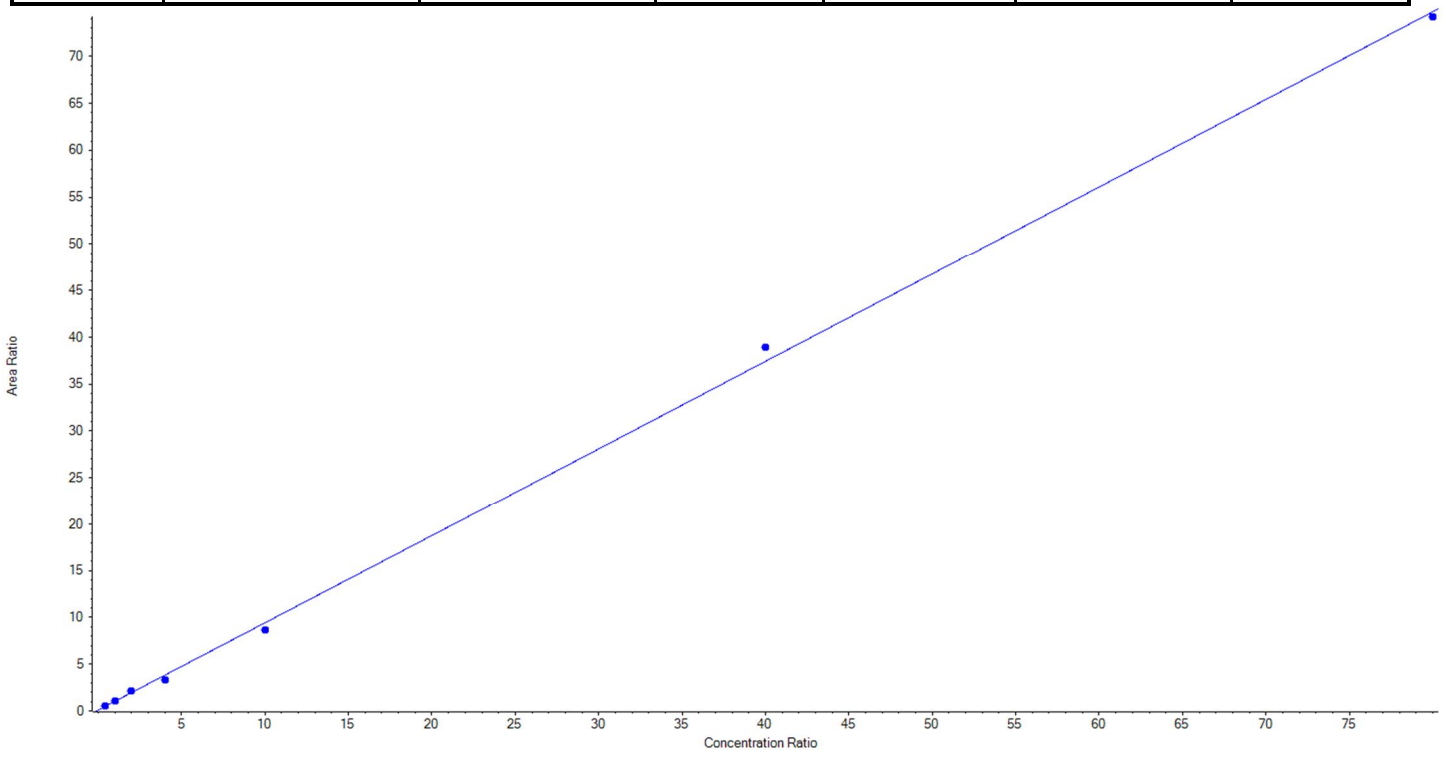
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Analyte Name	NEtFOSAA_1	**Data File**	18-0568.wiff
MRM Transition	584.0 / 419.0	**Result Table**	18-0568_BASE
Internal Standard	d5-EtFOSAA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.93319 x + 0.09500 (r = 0.99916) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	106.523211	106.5
3	KB74	L2	True	250.00	254.232760	101.7
4	KB75	L3	True	500.00	543.540008	108.7
5	KB76	L4	True	1000.00	874.090352	87.4
6	KB77	L5	True	2500.00	2307.360809	92.3
7	KB78	L6	True	10000.00	10410.190312	104.1
8	KB79	L7	True	20000.00	19854.062549	99.3



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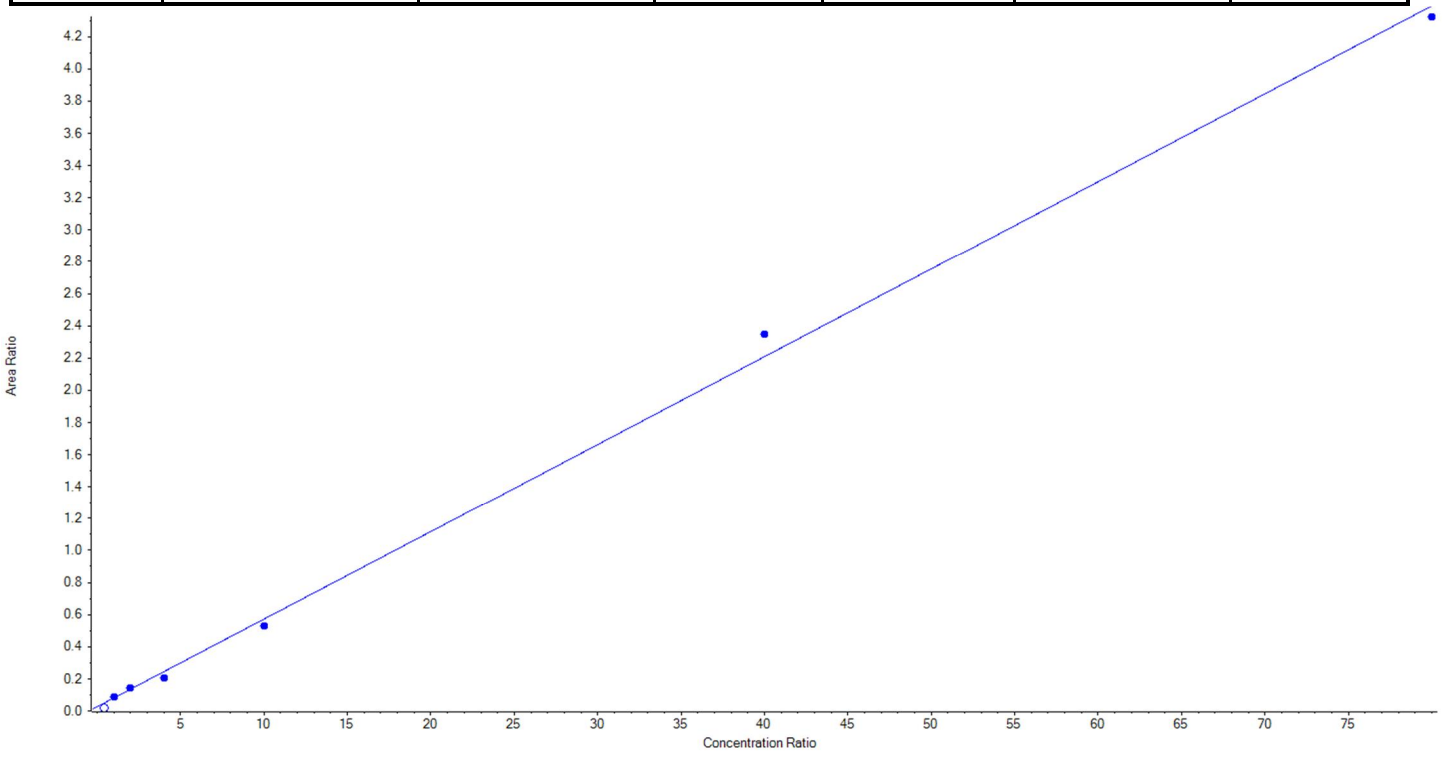
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Analyte Name	NEtFOSAA_2	**Data File**	18-0568.wiff
MRM Transition	584.0 / 483.0	**Result Table**	18-0568_BASE
Internal Standard	d5-EtFOSAA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.05455 x + 0.02653 (r = 0.99821) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	False	100.00	< 0	N/A
3	KB74	L2	True	250.00	291.786269	116.7
4	KB75	L3	True	500.00	528.277193	105.7
5	KB76	L4	True	1000.00	806.825087	80.7
6	KB77	L5	True	2500.00	2304.888201	92.2
7	KB78	L6	True	10000.00	10632.180153	106.3
8	KB79	L7	True	20000.00	19686.043096	98.4



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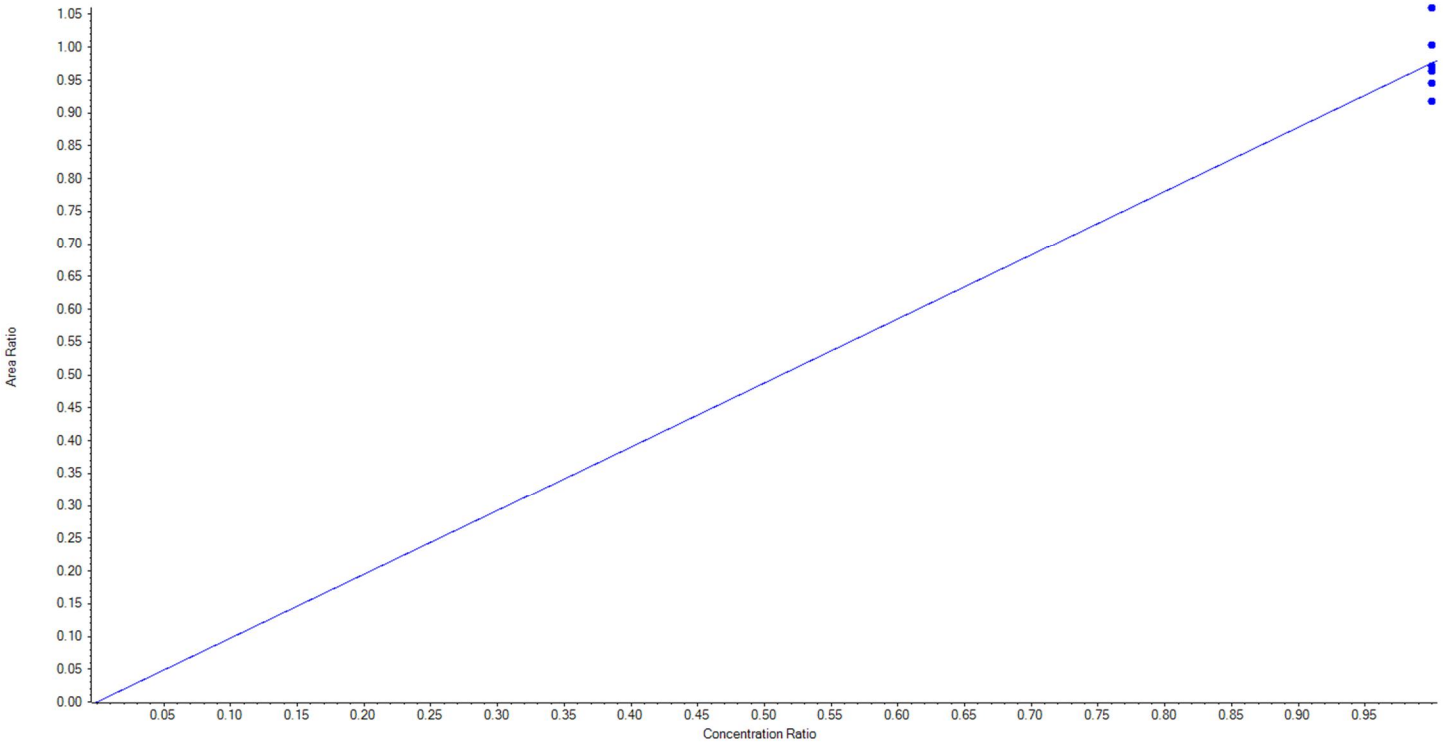
Calibration Summary Report

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Analyte Name	13C2-PFDoA	**Data File**	18-0568.wiff
MRM Transition	615.0 / 570.0	**Result Table**	18-0568_SIS
Internal Standard	13C2-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.97586 x (std. dev. = 0.04544) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	250.00	248.693897	99.5
3	KB74	L2	True	250.00	248.884664	99.6
4	KB75	L3	True	250.00	235.026619	94.0
5	KB76	L4	True	250.00	246.681415	98.7
6	KB77	L5	True	250.00	242.122653	96.9
7	KB78	L6	True	250.00	271.508720	108.6
8	KB79	L7	True	250.00	257.082031	102.8



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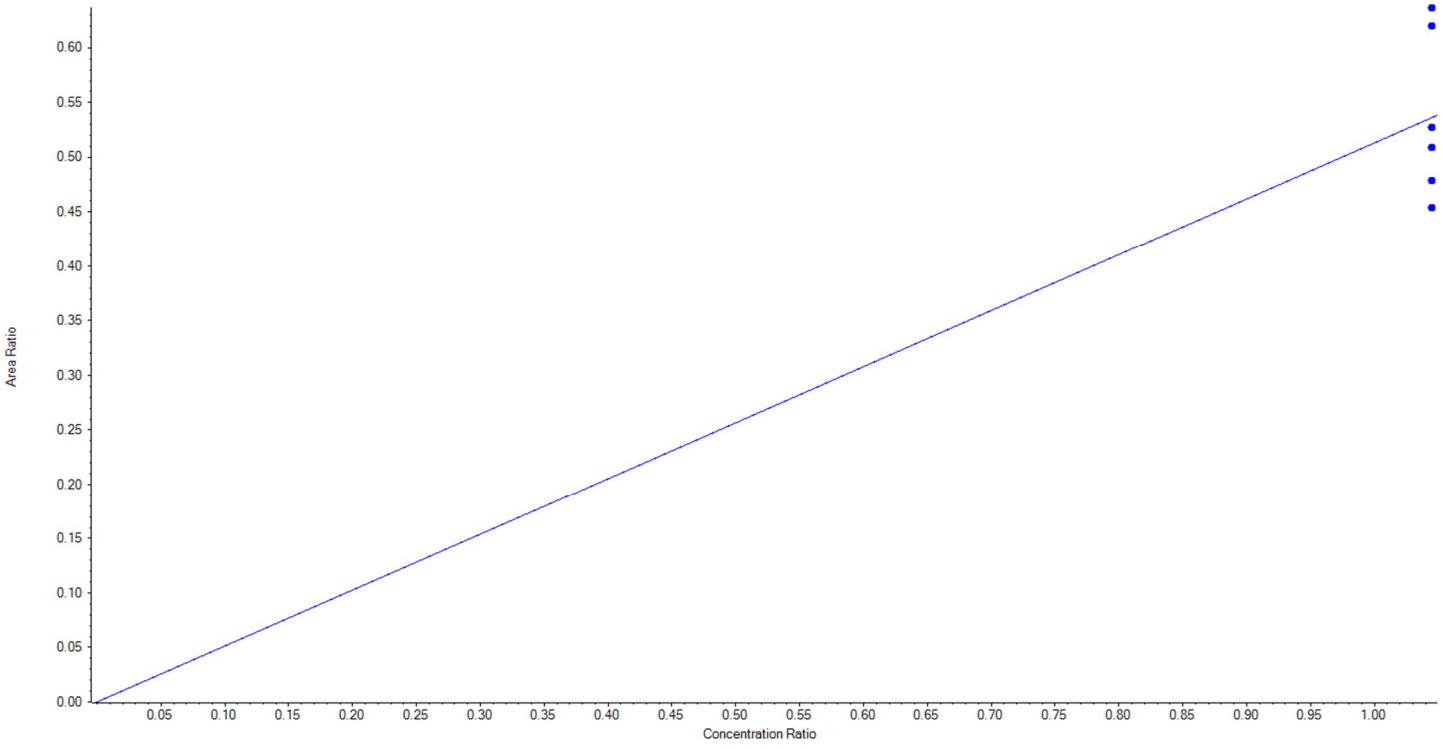
Calibration Summary Report

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Analyte Name	d3-MeFOSAA	**Data File**	18-0568.wiff
MRM Transition	573.0 / 419.0	**Result Table**	18-0568_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.51317 x (std. dev. = 0.06534) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	250.00	289.112520	115.7
3	KB74	L2	True	250.00	223.271020	89.3
4	KB75	L3	True	250.00	245.672141	98.3
5	KB76	L4	True	250.00	237.387057	95.0
6	KB77	L5	True	250.00	211.861972	84.7
7	KB78	L6	True	250.00	245.938580	98.4
8	KB79	L7	True	250.00	296.756710	118.7



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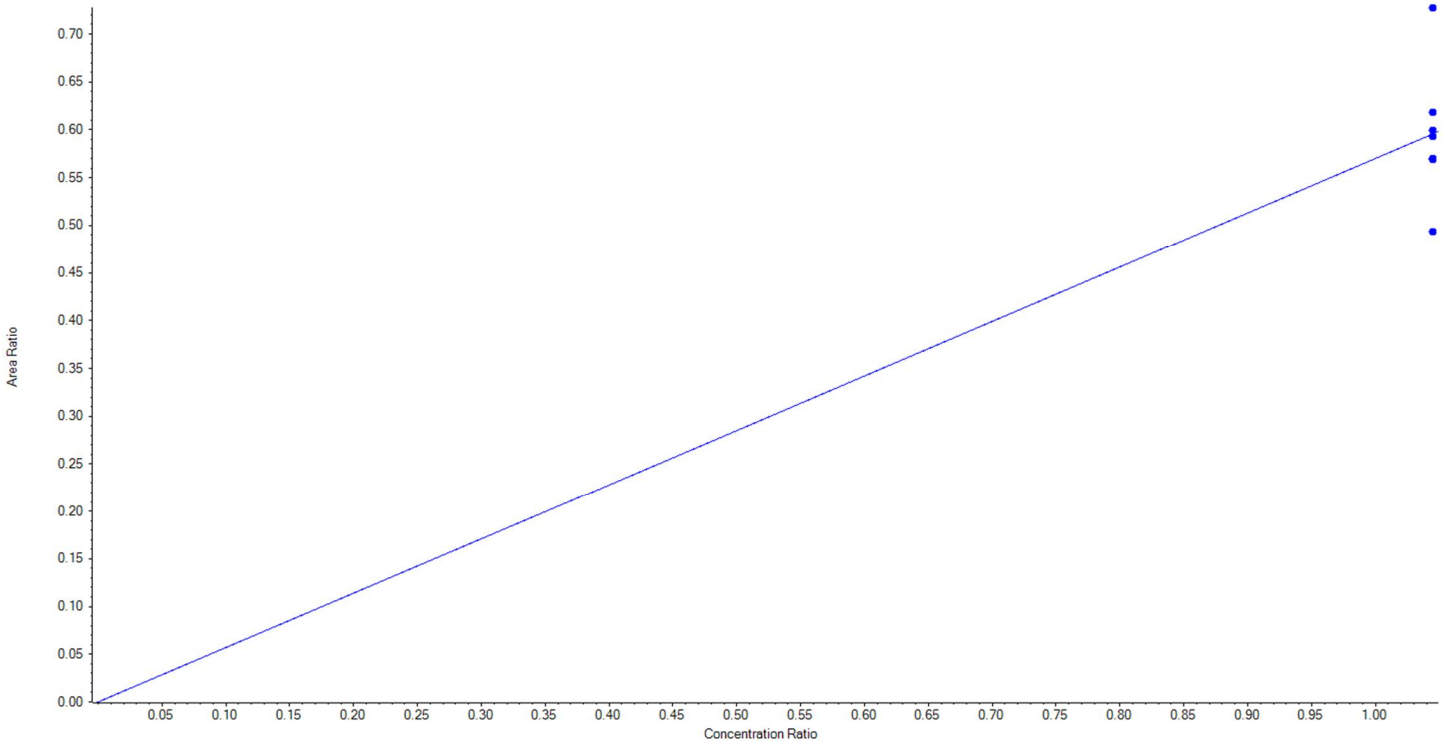
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Analyte Name	d5-EtFOSAA	**Data File**	18-0568.wiff
MRM Transition	589.0 / 419.0	**Result Table**	18-0568_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.57004 x (std. dev. = 0.06736) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	250.00	305.213878	122.1
3	KB74	L2	True	250.00	239.080225	95.6
4	KB75	L3	True	250.00	206.989127	82.8
5	KB76	L4	True	250.00	259.449505	103.8
6	KB77	L5	True	250.00	238.732216	95.5
7	KB78	L6	True	250.00	251.401210	100.6
8	KB79	L7	True	250.00	249.133839	99.7



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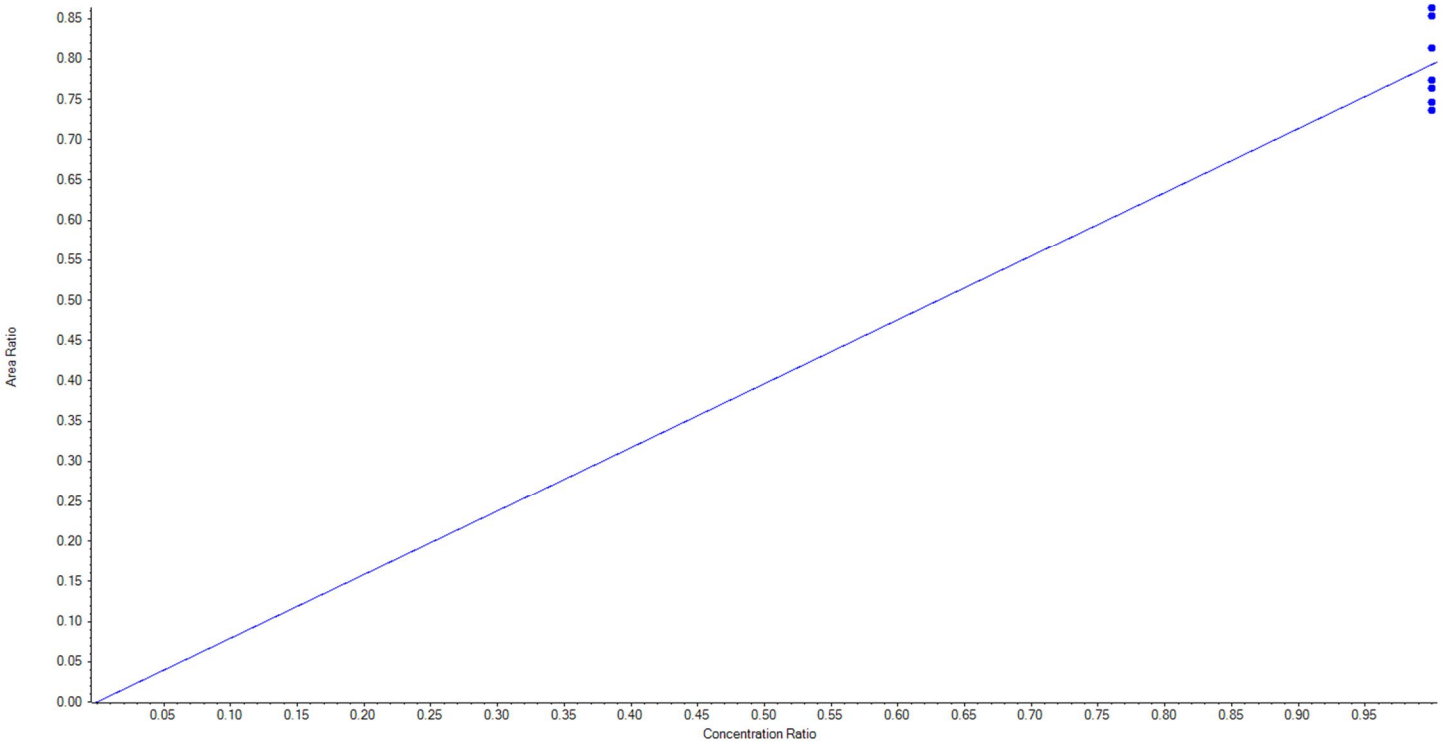
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Analyte Name	13C5-PFHxA	**Data File**	18-0568.wiff
MRM Transition	318.0 / 273.0	**Result Table**	18-0568_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.79298 x (std. dev. = 0.05100) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	250.00	269.150973	107.7
3	KB74	L2	True	250.00	235.455610	94.2
4	KB75	L3	True	250.00	243.730897	97.5
5	KB76	L4	True	250.00	232.154227	92.9
6	KB77	L5	True	250.00	240.893065	96.4
7	KB78	L6	True	250.00	272.133878	108.9
8	KB79	L7	True	250.00	256.481350	102.6



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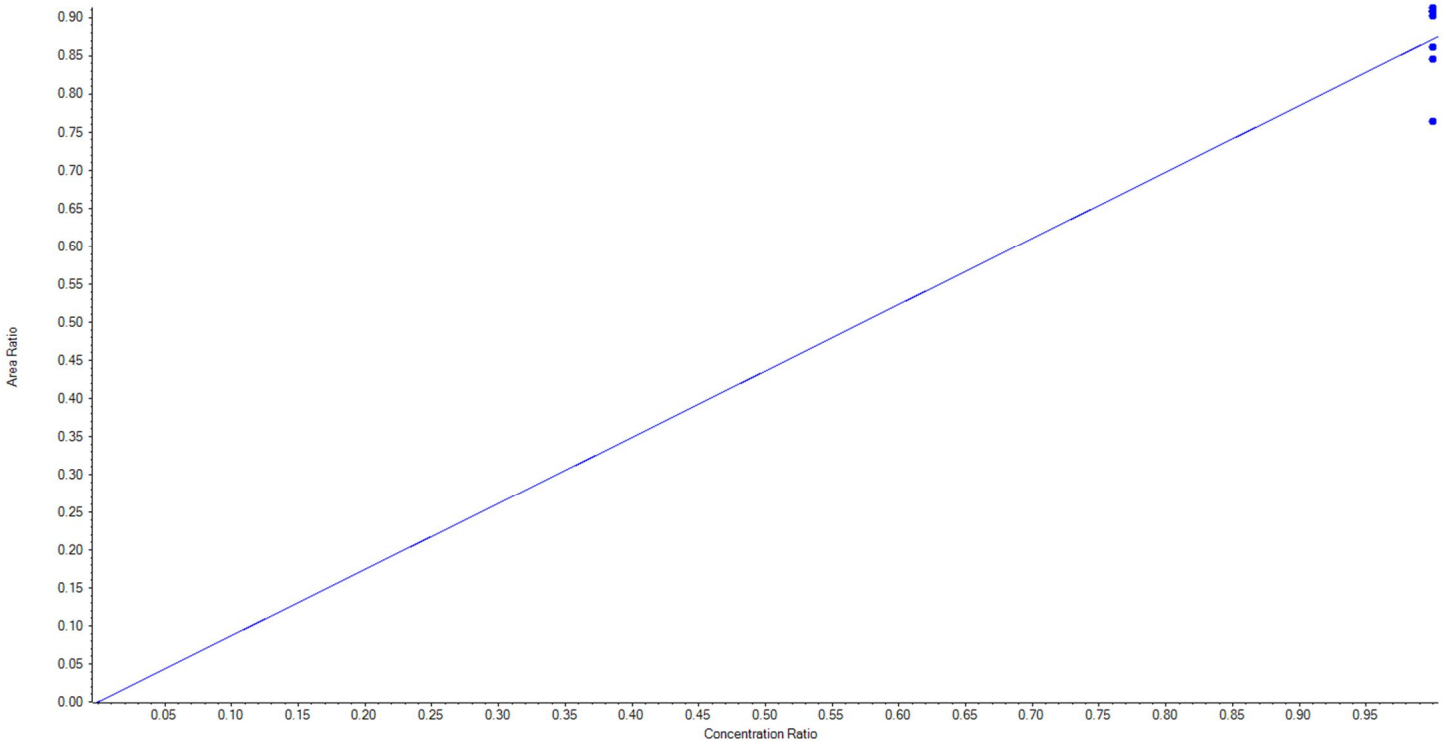
Calibration Summary Report

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Analyte Name	13C4-PFHpA	**Data File**	18-0568.wiff
MRM Transition	367.0 / 322.0	**Result Table**	18-0568_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.87214 x (std. dev. = 0.05401) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	250.00	261.702496	104.7
3	KB74	L2	True	250.00	219.268506	87.7
4	KB75	L3	True	250.00	260.177699	104.1
5	KB76	L4	True	250.00	246.984853	98.8
6	KB77	L5	True	250.00	242.561847	97.0
7	KB78	L6	True	250.00	258.569751	103.4
8	KB79	L7	True	250.00	260.734848	104.3



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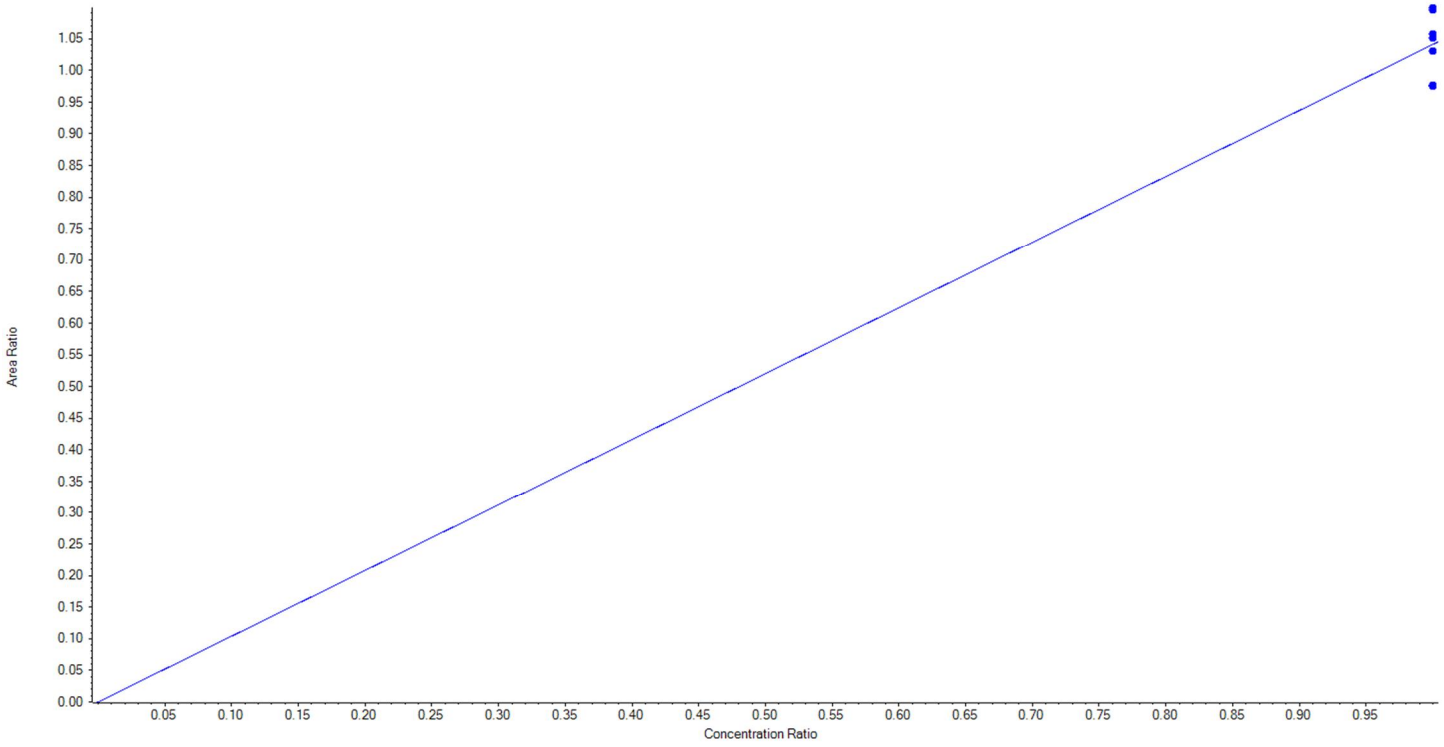
Calibration Summary Report

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Analyte Name	13C8-PFOA	**Data File**	18-0568.wiff
MRM Transition	421.0 / 376.0	**Result Table**	18-0568_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.04101 x (std. dev. = 0.05058) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	250.00	263.847727	105.5
3	KB74	L2	True	250.00	234.222879	93.7
4	KB75	L3	True	250.00	263.238726	105.3
5	KB76	L4	True	250.00	252.517718	101.0
6	KB77	L5	True	250.00	254.095411	101.6
7	KB78	L6	True	250.00	247.576155	99.0
8	KB79	L7	True	250.00	234.501383	93.8



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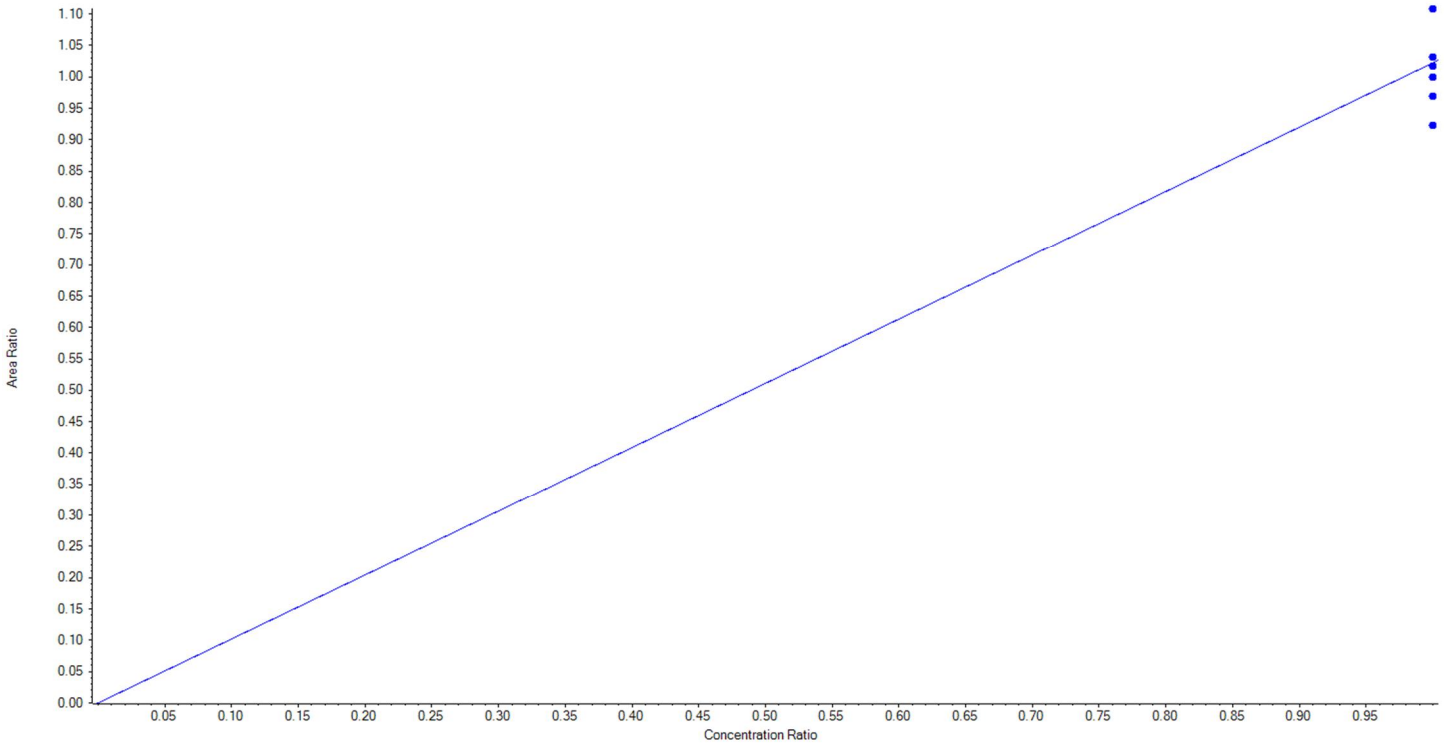
Calibration Summary Report

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Analyte Name	13C9-PFNA	**Data File**	18-0568.wiff
MRM Transition	472.0 / 427.0	**Result Table**	18-0568_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.02220 x (std. dev. = 0.06837) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	250.00	252.156514	100.9
3	KB74	L2	True	250.00	225.616535	90.3
4	KB75	L3	True	250.00	271.001659	108.4
5	KB76	L4	True	250.00	244.420161	97.8
6	KB77	L5	True	250.00	236.999906	94.8
7	KB78	L6	True	250.00	270.883952	108.4
8	KB79	L7	True	250.00	248.921273	99.6



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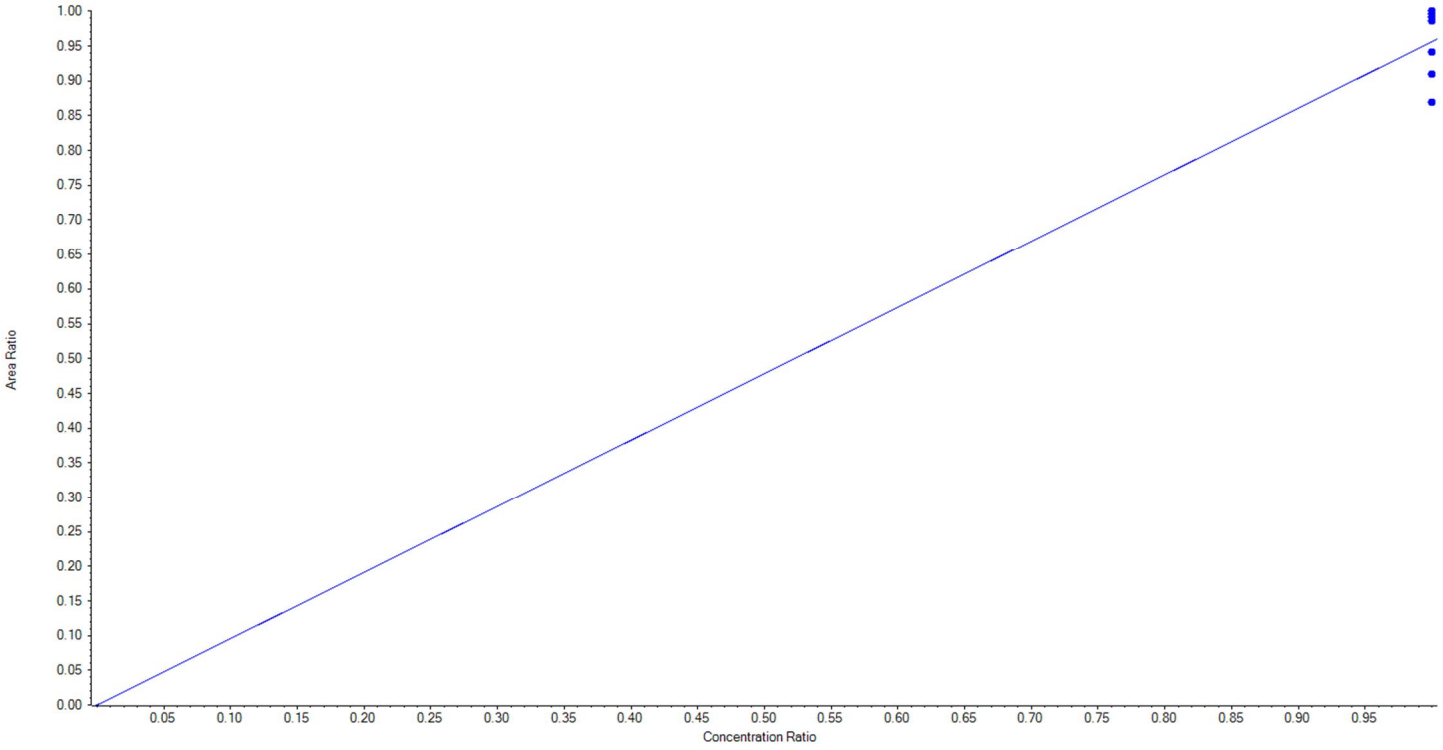
Calibration Summary Report

Created with Analyst Reporter
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Analyte Name	13C6-PFDA	**Data File**	18-0568.wiff
MRM Transition	519.0 / 474.0	**Result Table**	18-0568_SIS
Internal Standard	13C2-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.95644 x (std. dev. = 0.05121) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	250.00	257.652724	103.1
3	KB74	L2	True	250.00	260.585869	104.2
4	KB75	L3	True	250.00	246.169094	98.5
5	KB76	L4	True	250.00	259.172875	103.7
6	KB77	L5	True	250.00	261.549414	104.6
7	KB78	L6	True	250.00	237.691666	95.1
8	KB79	L7	True	250.00	227.178358	90.9



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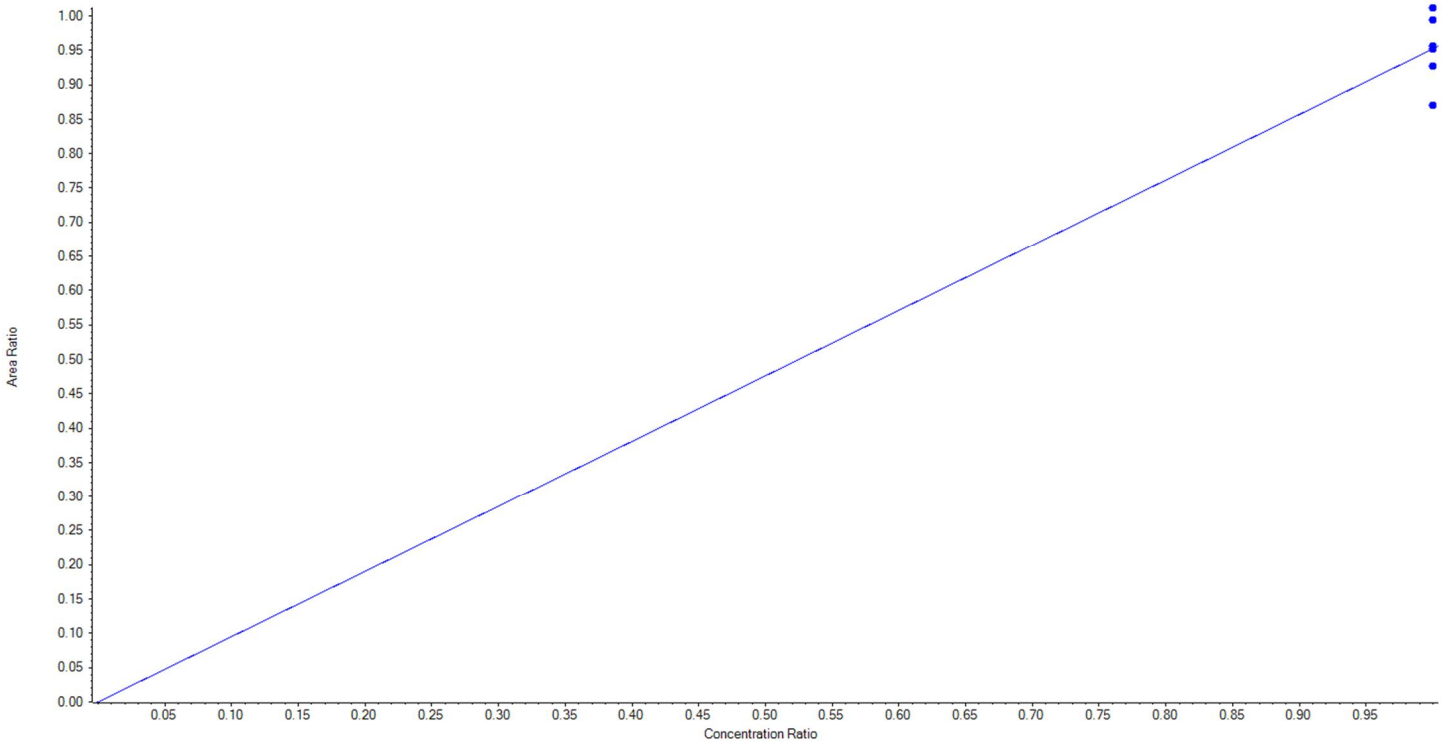
Calibration Summary Report

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Analyte Name	13C7-PFUnA	**Data File**	18-0568.wiff
MRM Transition	570.0 / 525.0	**Result Table**	18-0568_SIS
Internal Standard	13C2-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.95211 x (std. dev. = 0.04568) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	250.00	265.628887	106.3
3	KB74	L2	True	250.00	260.943861	104.4
4	KB75	L3	True	250.00	250.114047	100.1
5	KB76	L4	True	250.00	251.124061	100.5
6	KB77	L5	True	250.00	250.066360	100.0
7	KB78	L6	True	250.00	243.459467	97.4
8	KB79	L7	True	250.00	228.663316	91.5



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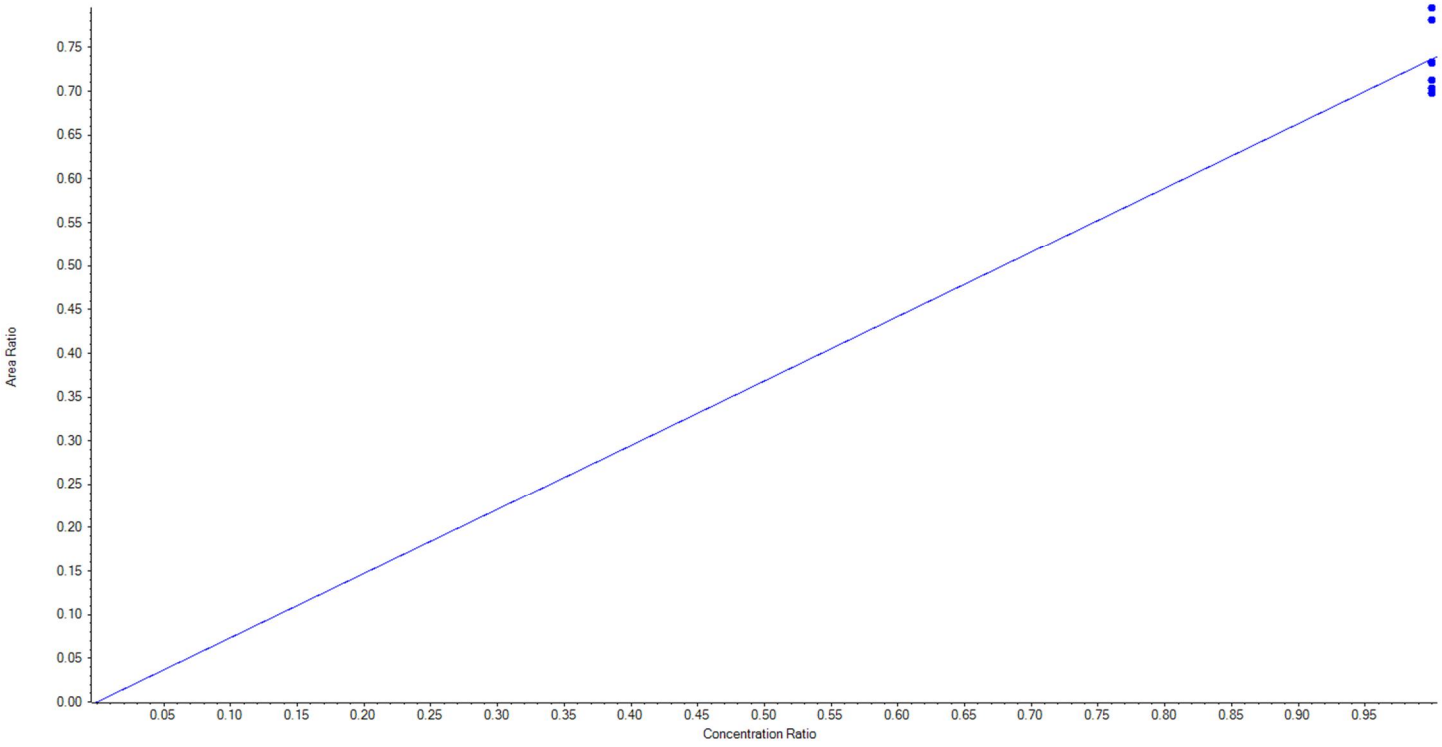
Calibration Summary Report

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Analyte Name	13C2-PFTeDA	**Data File**	18-0568.wiff
MRM Transition	715.0 / 670.0	**Result Table**	18-0568_SIS
Internal Standard	13C2-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.73677 x (std. dev. = 0.03790) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	250.00	248.775228	99.5
3	KB74	L2	True	250.00	248.606755	99.4
4	KB75	L3	True	250.00	236.823646	94.7
5	KB76	L4	True	250.00	241.996398	96.8
6	KB77	L5	True	250.00	238.747718	95.5
7	KB78	L6	True	250.00	269.822330	107.9
8	KB79	L7	True	250.00	265.227924	106.1



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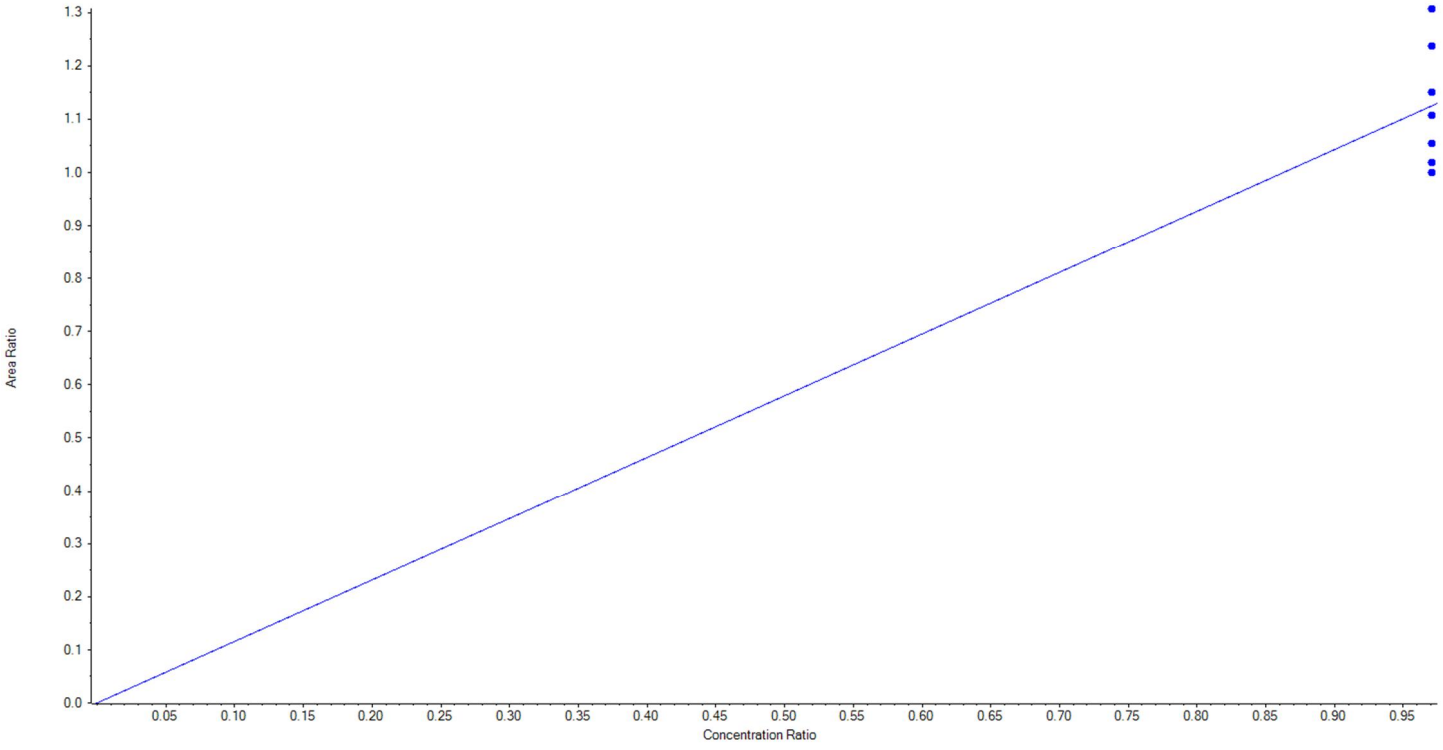
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Analyte Name	13C3-PFBS	**Data File**	18-0568.wiff
MRM Transition	302.0 / 99.0	**Result Table**	18-0568_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.15888 x (std. dev. = 0.11754) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	232.25	237.405175	102.2
3	KB74	L2	True	232.25	206.473633	88.9
4	KB75	L3	True	232.25	210.485247	90.6
5	KB76	L4	True	232.25	228.741517	98.5
6	KB77	L5	True	232.25	217.606564	93.7
7	KB78	L6	True	232.25	255.253476	109.9
8	KB79	L7	True	232.25	269.784388	116.2



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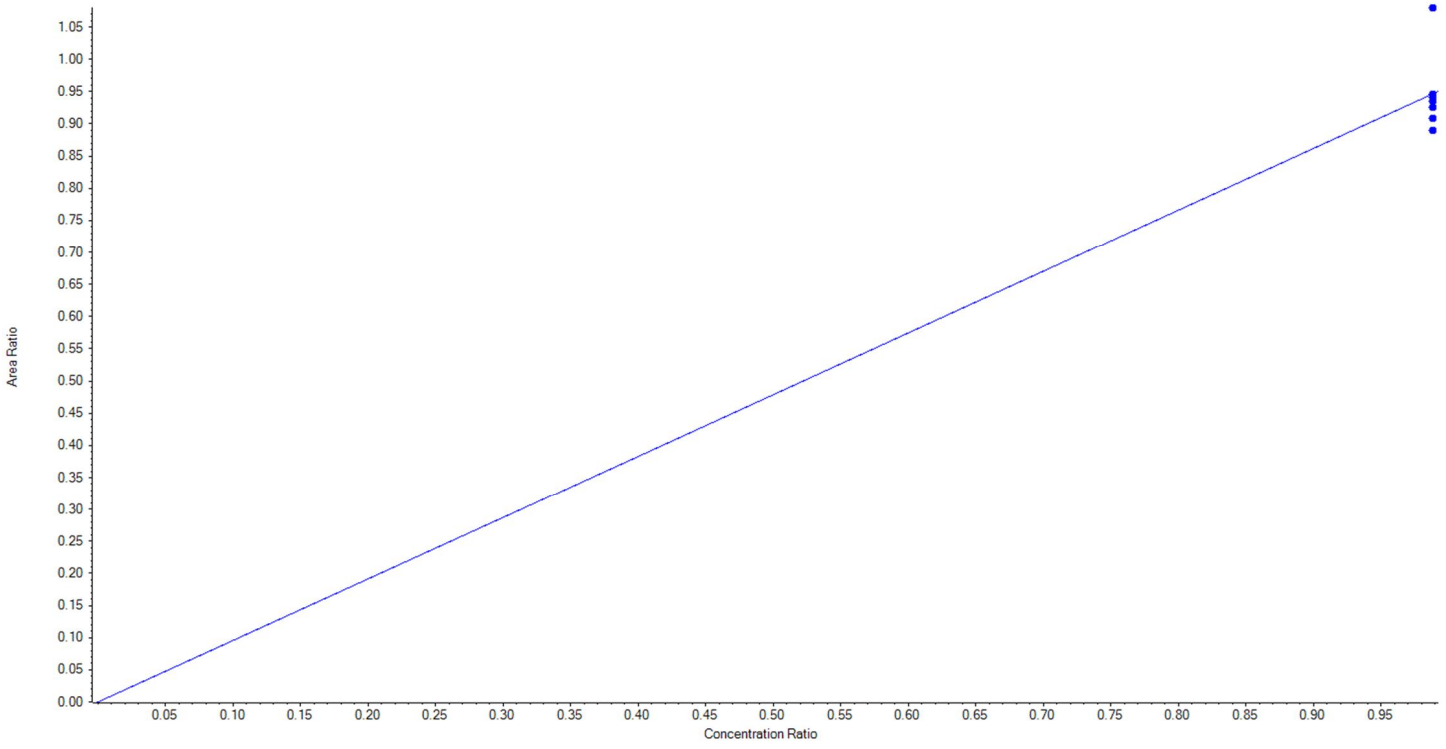
Calibration Summary Report

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Analyte Name	13C3-PFHxS	**Data File**	18-0568.wiff
MRM Transition	402.0 / 99.0	**Result Table**	18-0568_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.95741 x (std. dev. = 0.06259) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	236.50	269.763002	114.1
3	KB74	L2	True	236.50	222.341947	94.0
4	KB75	L3	True	236.50	233.714630	98.8
5	KB76	L4	True	236.50	231.415753	97.9
6	KB77	L5	True	236.50	226.918022	96.0
7	KB78	L6	True	236.50	235.126998	99.4
8	KB79	L7	True	236.50	236.219649	99.9



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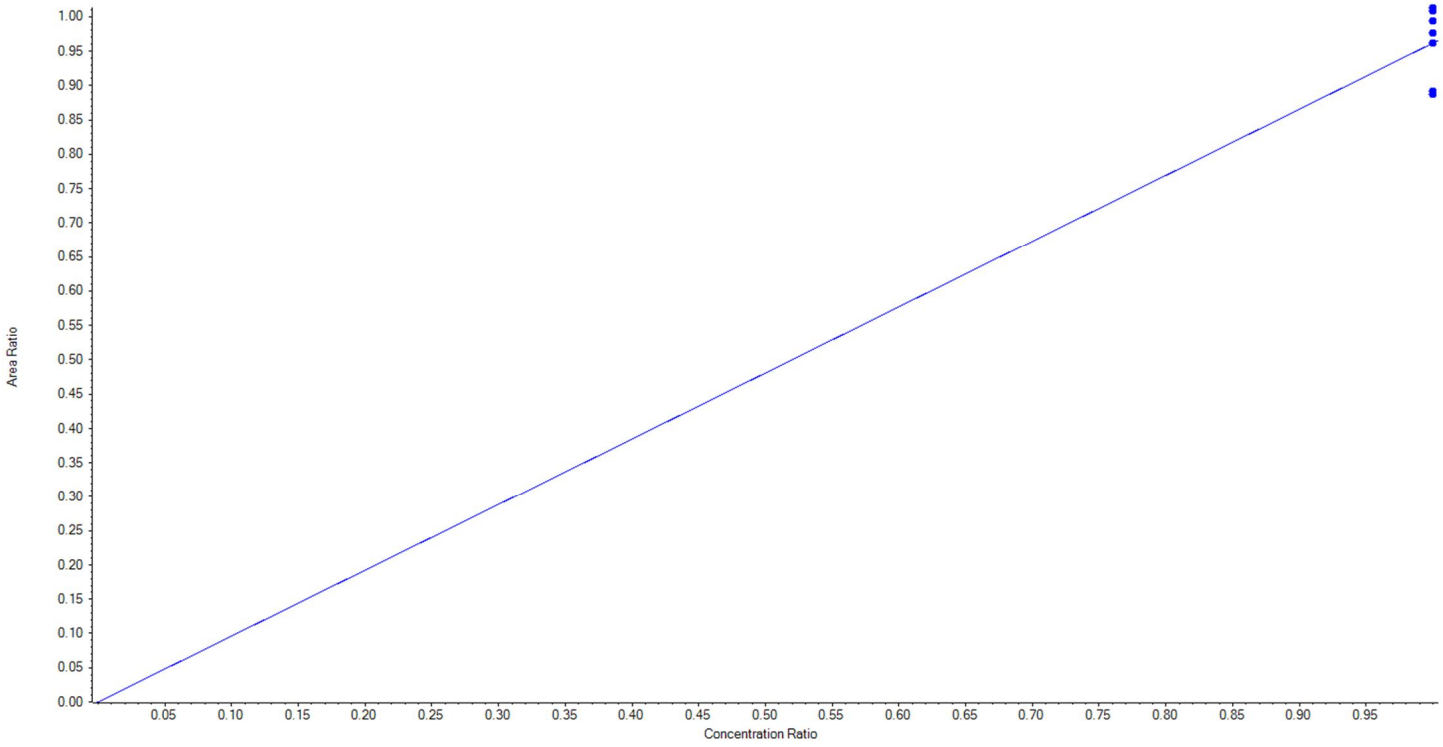
Calibration Summary Report

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Analyte Name	13C8-PFOS	**Data File**	18-0568.wiff
MRM Transition	507.0 / 99.0	**Result Table**	18-0568_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/3/2018 7:23:54 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.96162 x (std. dev. = 0.05246) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	239.25	247.383980	103.4
3	KB74	L2	True	239.25	250.885376	104.9
4	KB75	L3	True	239.25	239.110739	99.9
5	KB76	L4	True	239.25	251.977456	105.3
6	KB77	L5	True	239.25	220.677582	92.2
7	KB78	L6	True	239.25	221.899031	92.8
8	KB79	L7	True	239.25	242.815836	101.5



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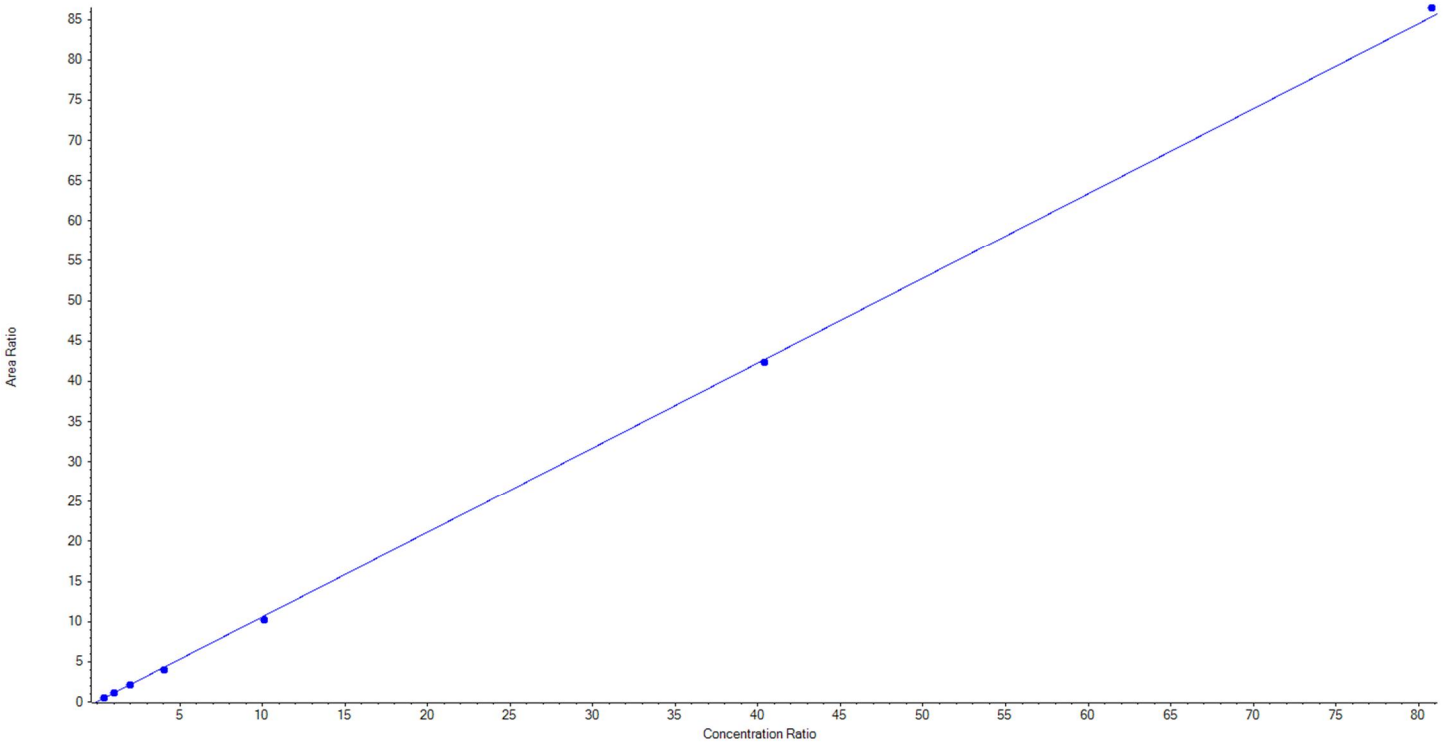
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Analyte Name	PFHxA_1	**Data File**	18-0568B.wiff
MRM Transition	313.0 / 269.0	**Result Table**	18-0568B_BASE
Internal Standard	13C5-PFHxA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/5/2018 10:28:31 AM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.05567 x + 0.03773 (r = 0.99976) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	101.00	113.463123	112.3
3	KB74	L2	True	252.50	258.220575	102.3
4	KB75	L3	True	505.00	482.572019	95.6
5	KB76	L4	True	1010.00	945.287318	93.6
6	KB77	L5	True	2525.00	2419.069151	95.8
7	KB78	L6	True	10100.00	10013.661360	99.2
8	KB79	L7	True	20200.00	20461.226455	101.3



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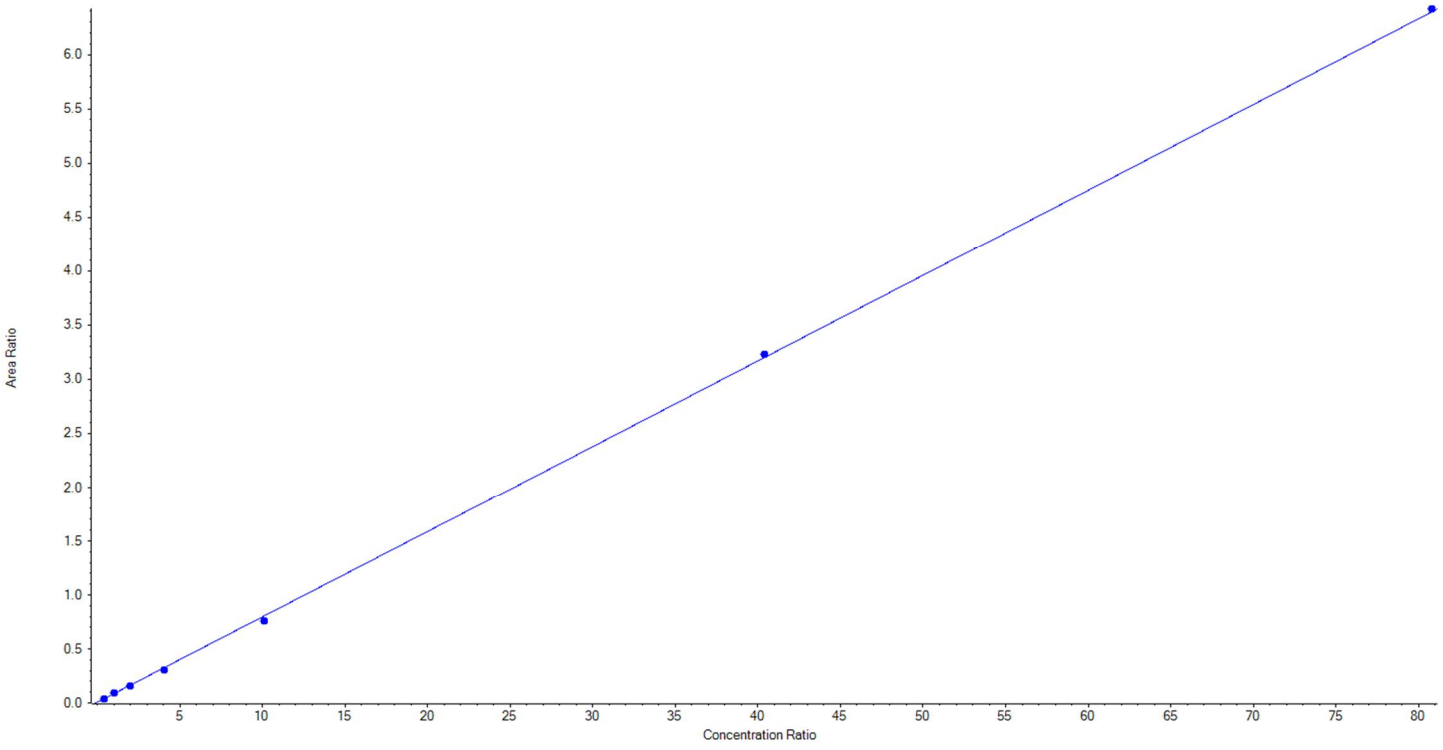
Calibration Summary Report

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Analyte Name	PFHxA_2	**Data File**	18-0568B.wiff
MRM Transition	313.0 / 119.0	**Result Table**	18-0568B_BASE
Internal Standard	13C5-PFHxA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/5/2018 10:28:31 AM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.07908 x + 0.00563 (r = 0.99979) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	101.00	108.442717	107.4
3	KB74	L2	True	252.50	267.909760	106.1
4	KB75	L3	True	505.00	484.438769	95.9
5	KB76	L4	True	1010.00	952.719147	94.3
6	KB77	L5	True	2525.00	2395.486932	94.9
7	KB78	L6	True	10100.00	10198.343892	101.0
8	KB79	L7	True	20200.00	20286.158782	100.4



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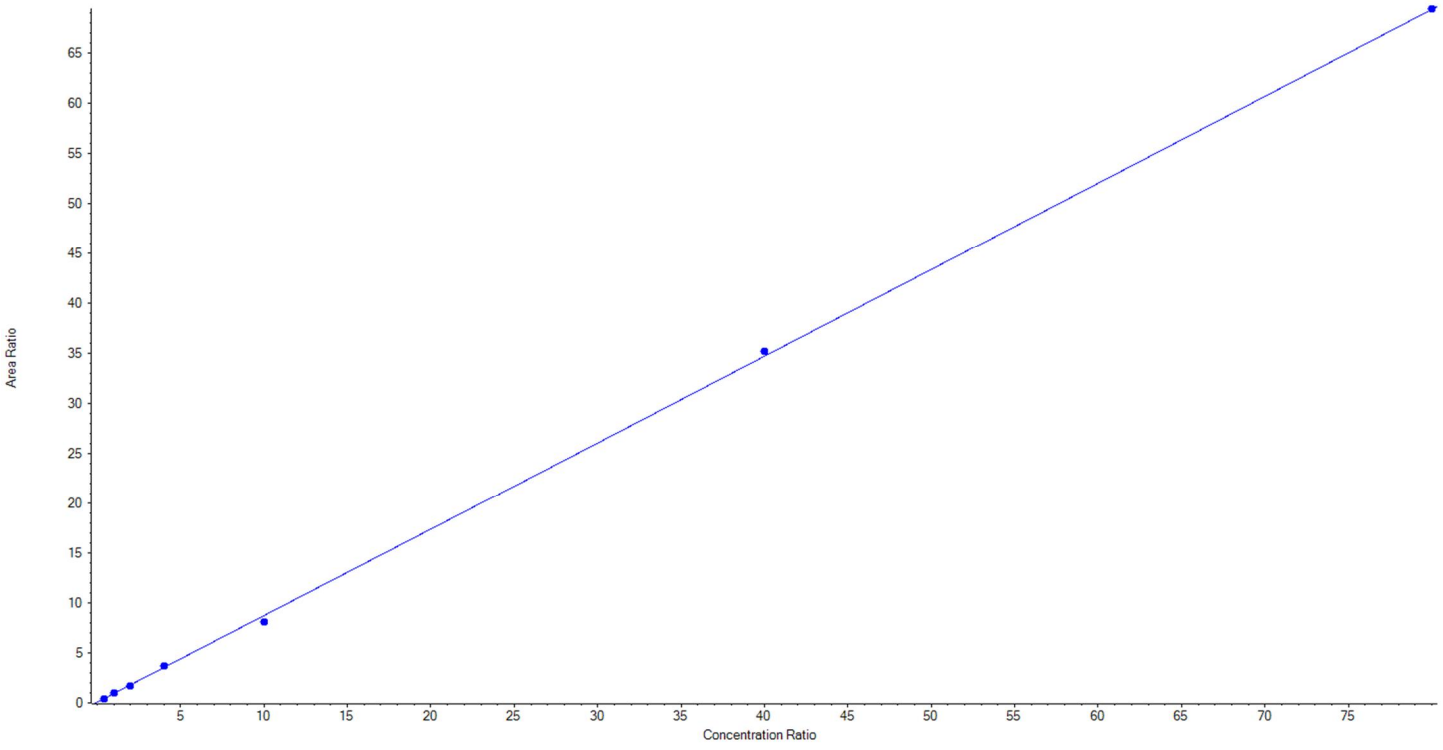
Calibration Summary Report

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Analyte Name	PFHpA_1	**Data File**	18-0568B.wiff
MRM Transition	363.0 / 319.0	**Result Table**	18-0568B_BASE
Internal Standard	13C4-PFHpA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/5/2018 10:28:31 AM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.86648 x + 0.07783 (r = 0.99967) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	101.506515	101.5
3	KB74	L2	True	250.00	267.303609	106.9
4	KB75	L3	True	500.00	464.409874	92.9
5	KB76	L4	True	1000.00	1044.768290	104.5
6	KB77	L5	True	2500.00	2318.952299	92.8
7	KB78	L6	True	10000.00	10137.969780	101.4
8	KB79	L7	True	20000.00	20015.089633	100.1



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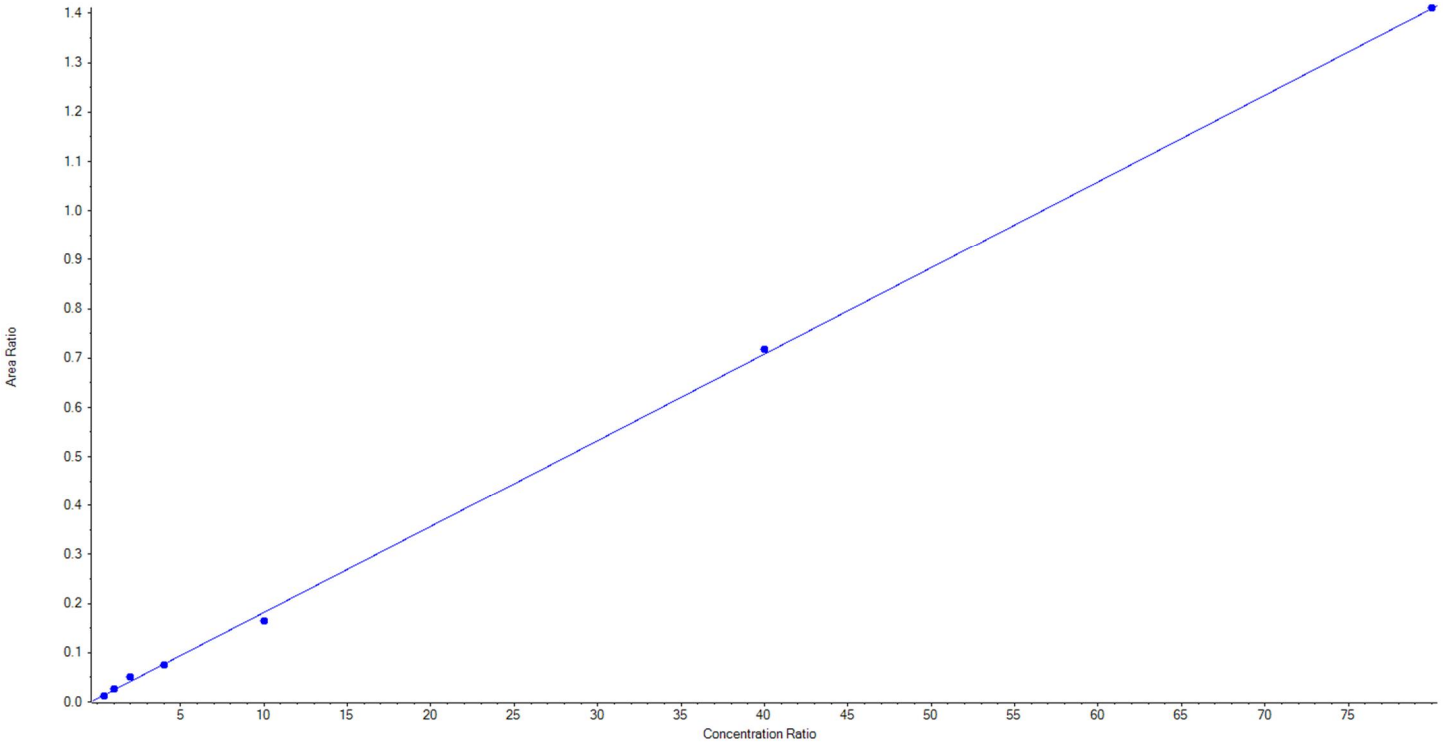
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Analyte Name	PFHpA_2	**Data File**	18-0568B.wiff
MRM Transition	363.0 / 169.0	**Result Table**	18-0568B_BASE
Internal Standard	13C4-PFHpA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/5/2018 10:28:31 AM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.01754 x + 0.00657 (r = 0.99887) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	77.666828	77.7
3	KB74	L2	True	250.00	268.737630	107.5
4	KB75	L3	True	500.00	634.179378	126.8
5	KB76	L4	True	1000.00	967.461735	96.8
6	KB77	L5	True	2500.00	2244.844631	89.8
7	KB78	L6	True	10000.00	10135.347293	101.4
8	KB79	L7	True	20000.00	20021.762504	100.1



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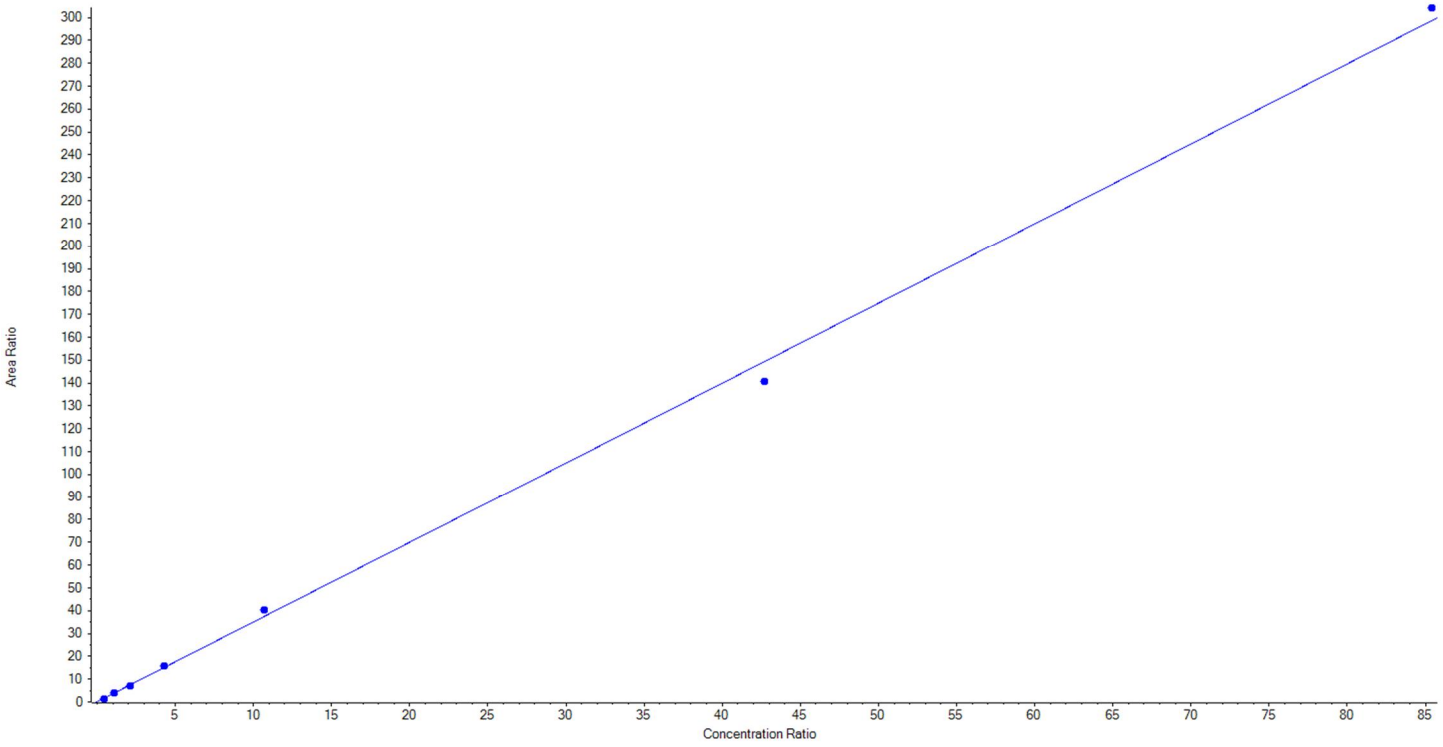
Calibration Summary Report

Created with Analyst Reporter
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Analyte Name	PFHxS_1	**Data File**	18-0568B.wiff
MRM Transition	399.0 / 80.0	**Result Table**	18-0568B_BASE
Internal Standard	13C3-PFHxS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/5/2018 10:28:31 AM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 3.49564 x + 0.10448 (r = 0.99901) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	101.00	96.189067	95.2
3	KB74	L2	True	252.50	261.547957	103.6
4	KB75	L3	True	505.00	466.566995	92.4
5	KB76	L4	True	1010.00	1058.906196	104.8
6	KB77	L5	True	2525.00	2725.211879	107.9
7	KB78	L6	True	10100.00	9510.773371	94.2
8	KB79	L7	True	20200.00	20574.304535	101.9



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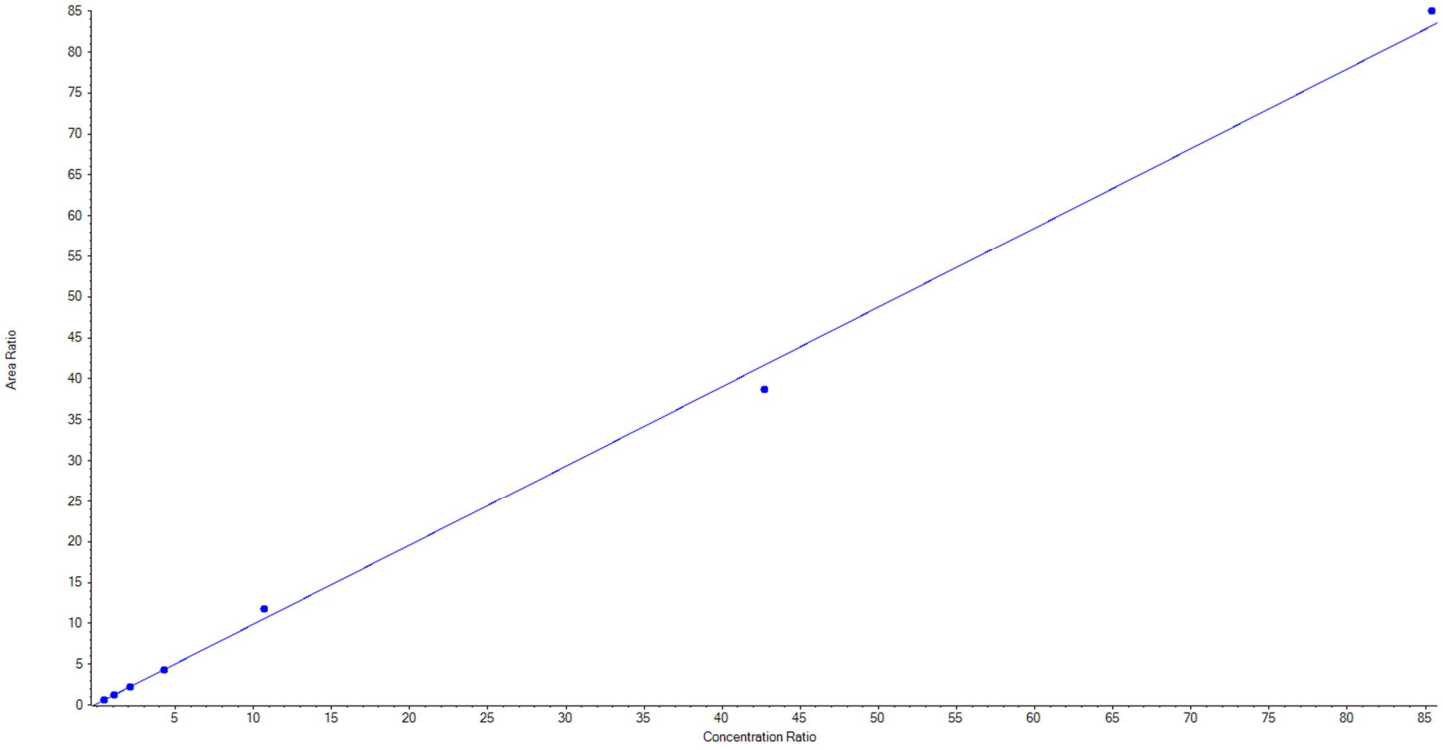
Calibration Summary Report

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Analyte Name	PFHxS_2	**Data File**	18-0568B.wiff
MRM Transition	399.0 / 99.0	**Result Table**	18-0568B_BASE
Internal Standard	13C3-PFHxS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/5/2018 10:28:31 AM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.97210 x + 0.16391 (r = 0.99851) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	101.00	95.061118	94.1
3	KB74	L2	True	252.50	248.171296	98.3
4	KB75	L3	True	505.00	508.104811	100.6
5	KB76	L4	True	1010.00	1016.816934	100.7
6	KB77	L5	True	2525.00	2811.160039	111.3
7	KB78	L6	True	10100.00	9370.075513	92.8
8	KB79	L7	True	20200.00	20644.110289	102.2



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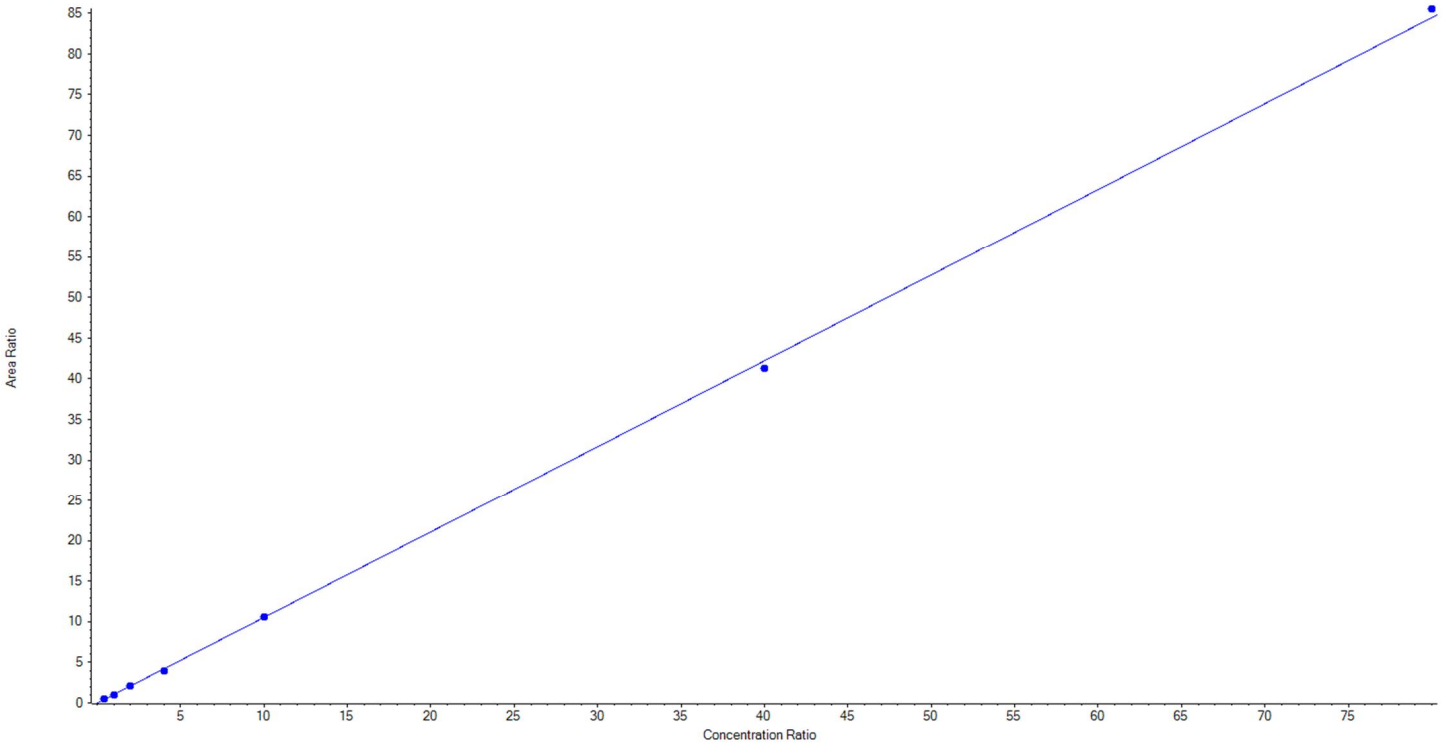
Calibration Summary Report

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Analyte Name	PFOA_1	**Data File**	18-0568B.wiff
MRM Transition	413.0 / 369.0	**Result Table**	18-0568B_BASE
Internal Standard	13C8-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/5/2018 10:28:31 AM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.05614 x + -0.02325 (r = 0.99979) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	111.759164	111.8
3	KB74	L2	True	250.00	235.445902	94.2
4	KB75	L3	True	500.00	495.870315	99.2
5	KB76	L4	True	1000.00	949.074725	94.9
6	KB77	L5	True	2500.00	2522.264999	100.9
7	KB78	L6	True	10000.00	9782.483021	97.8
8	KB79	L7	True	20000.00	20253.101875	101.3



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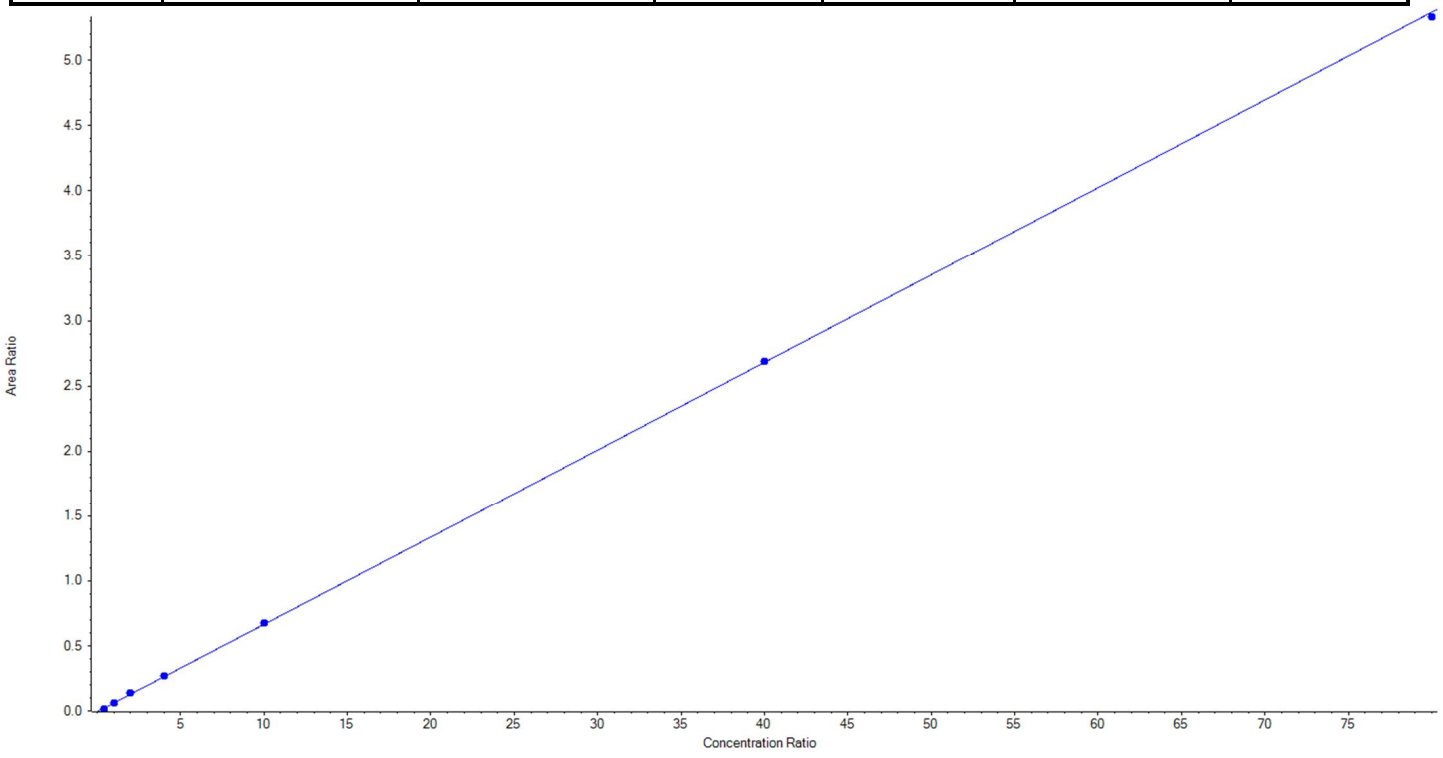
Calibration Summary Report

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Analyte Name	PFOA_2	**Data File**	18-0568B.wiff
MRM Transition	413.0 / 169.0	**Result Table**	18-0568B_BASE
Internal Standard	13C8-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/5/2018 10:28:31 AM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.06720 x + -0.00683 (r = 0.99985) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	100.00	82.127204	82.1
3	KB74	L2	True	250.00	266.393231	106.6
4	KB75	L3	True	500.00	539.896756	108.0
5	KB76	L4	True	1000.00	1022.757278	102.3
6	KB77	L5	True	2500.00	2533.071951	101.3
7	KB78	L6	True	10000.00	10041.755775	100.4
8	KB79	L7	True	20000.00	19863.997806	99.3



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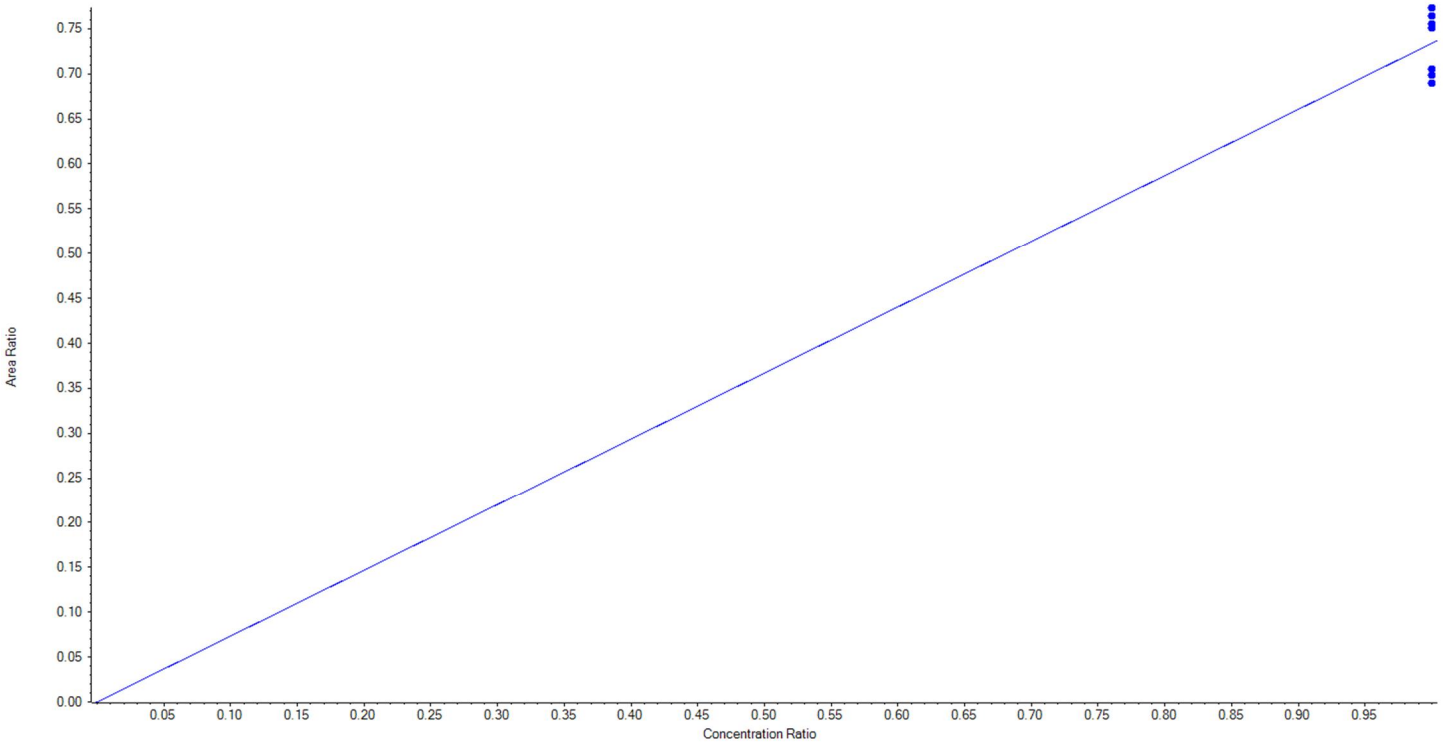
Calibration Summary Report

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Printed: 05/10/2018 4:46:31 PM

Analyte Name	13C5-PFHxA	**Data File**	18-0568B.wiff
MRM Transition	318.0 / 273.0	**Result Table**	18-0568B_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/5/2018 10:28:31 AM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.73394 x (std. dev. = 0.03460) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	250.00	240.339110	96.1
3	KB74	L2	True	250.00	257.108193	102.8
4	KB75	L3	True	250.00	235.009964	94.0
5	KB76	L4	True	250.00	260.345239	104.1
6	KB77	L5	True	250.00	263.363899	105.4
7	KB78	L6	True	250.00	255.869016	102.4
8	KB79	L7	True	250.00	237.964579	95.2



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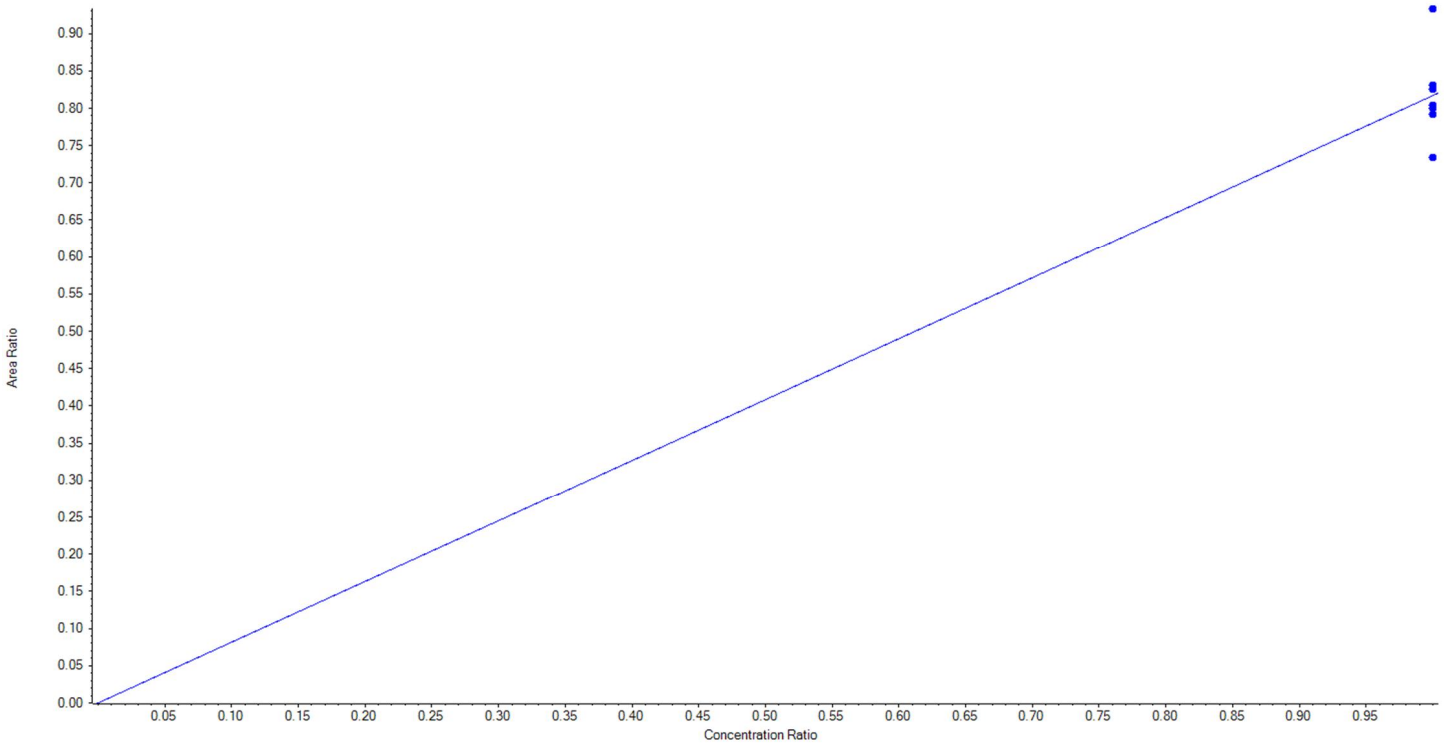
Calibration Summary Report

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Printed: 05/10/2018 4:46:31 PM

Analyte Name	13C4-PFHpA	**Data File**	18-0568B.wiff
MRM Transition	367.0 / 322.0	**Result Table**	18-0568B_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/5/2018 10:28:31 AM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.81692 x (std. dev. = 0.06020) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	250.00	244.968087	98.0
3	KB74	L2	True	250.00	224.484788	89.8
4	KB75	L3	True	250.00	252.659703	101.1
5	KB76	L4	True	250.00	245.971202	98.4
6	KB77	L5	True	250.00	285.511098	114.2
7	KB78	L6	True	250.00	254.082474	101.6
8	KB79	L7	True	250.00	242.322648	96.9



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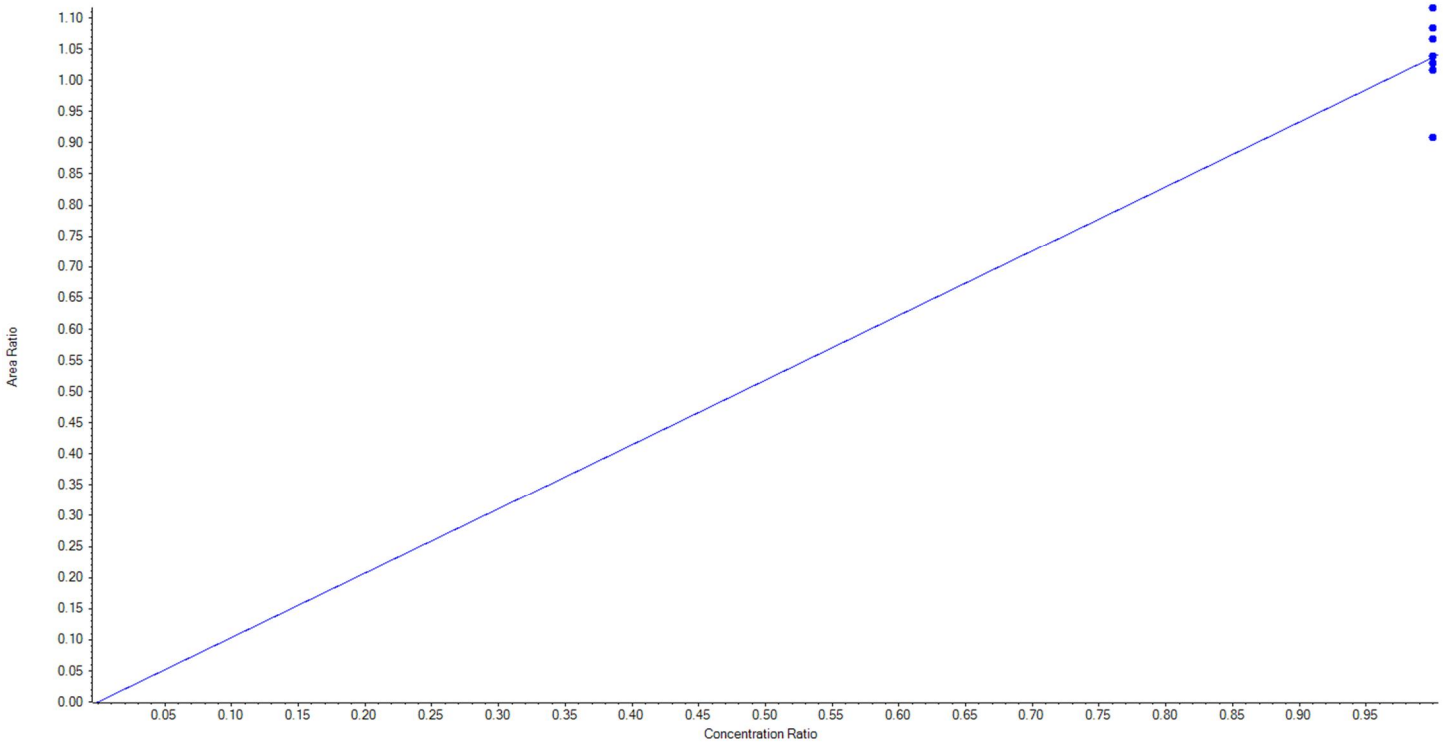
Calibration Summary Report

Created with Analyst Reporter
Printed: 05/10/2018 4:46:31 PM

Analyte Name	13C8-PFOA	**Data File**	18-0568B.wiff
MRM Transition	421.0 / 376.0	**Result Table**	18-0568B_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/5/2018 10:28:31 AM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.03691 x (std. dev. = 0.06630) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	250.00	250.481742	100.2
3	KB74	L2	True	250.00	257.232271	102.9
4	KB75	L3	True	250.00	245.044603	98.0
5	KB76	L4	True	250.00	269.097434	107.6
6	KB77	L5	True	250.00	261.353204	104.5
7	KB78	L6	True	250.00	247.734550	99.1
8	KB79	L7	True	250.00	219.056196	87.6



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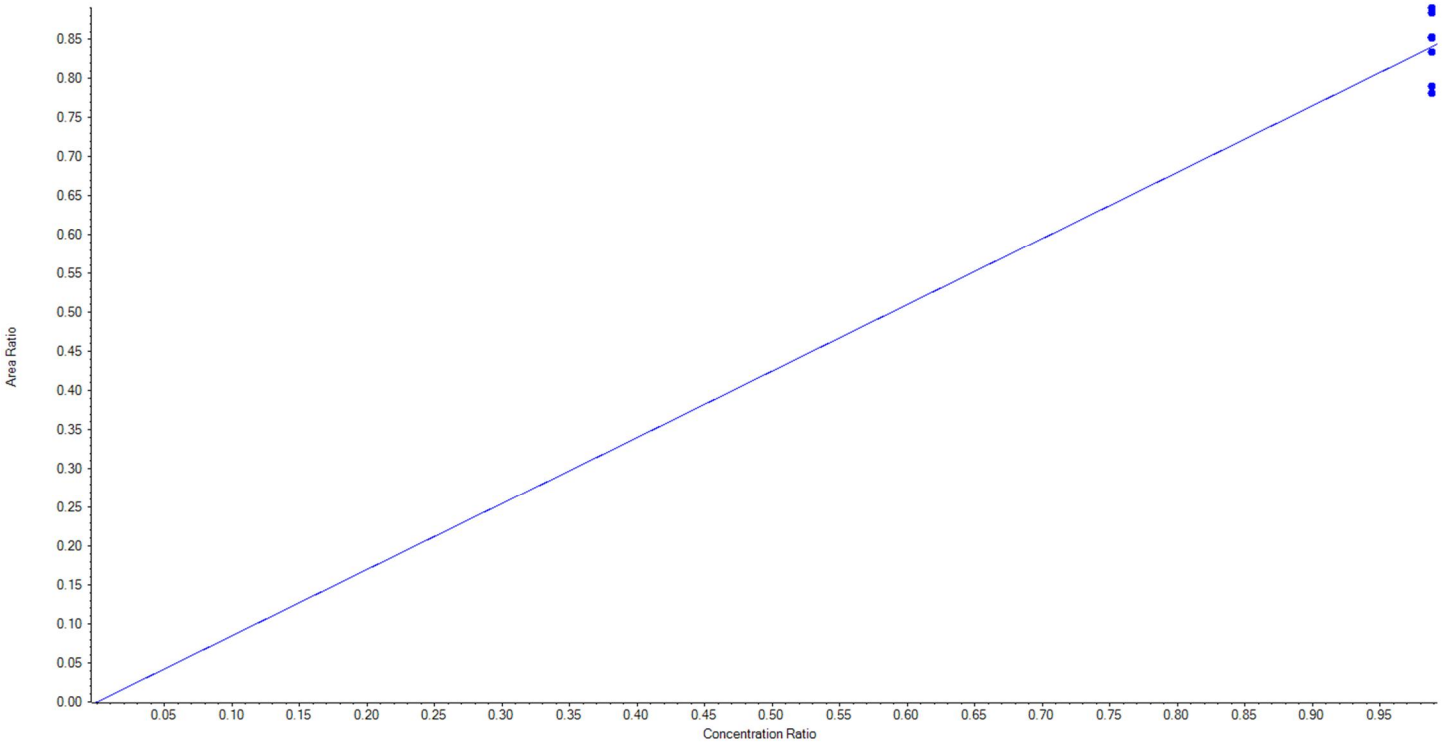
Calibration Summary Report

Created with Analyst Reporter
Printed: 05/10/2018 4:46:31 PM

Analyte Name	13C3-PFHxS	**Data File**	18-0568B.wiff
MRM Transition	402.0 / 99.0	**Result Table**	18-0568B_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/5/2018 10:28:31 AM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.85011 x (std. dev. = 0.04263) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	KB73	L1	True	236.50	248.636899	105.1
3	KB74	L2	True	236.50	234.557667	99.2
4	KB75	L3	True	236.50	239.525159	101.3
5	KB76	L4	True	236.50	250.535307	105.9
6	KB77	L5	True	236.50	219.859548	93.0
7	KB78	L6	True	236.50	239.950225	101.5
8	KB79	L7	True	236.50	222.435195	94.1



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	Isotope Dilution Calibration Curve Concentrations (ng/L)						
	KB73	KB74	KB75	KB76	KB77	KB78	KB79
PFBA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFPeA	101.00	252.50	505.00	1,010.00	2,525.00	10,100.00	20,200.00
PFHxA	101.00	252.50	505.00	1,010.00	2,525.00	10,100.00	20,200.00
PFHpA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFOA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFNA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFDA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFUnA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFDoA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFTrDA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFTeDA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
NMeFOSAA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
NEtFOSAA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFOSA	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFBS	101.00	252.50	505.00	1,010.00	2,525.00	10,100.00	20,200.00
PFPeS	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFHxS (Branched)	101.00	252.50	505.00	1,010.00	2,525.00	10,100.00	20,200.00
PFHpS	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFOS (Branched)	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
PFDS	101.00	252.50	505.00	1,010.00	2,525.00	10,100.00	20,200.00
PFNS	101.00	252.50	505.00	1,010.00	2,525.00	10,100.00	20,200.00
4:2FTS	101.00	252.50	505.00	1,010.00	2,525.00	10,100.00	20,200.00
6:2FTS	100.00	250.00	500.00	1,000.00	2,500.00	10,000.00	20,000.00
8:2FTS	101.00	252.50	505.00	1,010.00	2,525.00	10,100.00	20,200.00
	Surrogates / Extracted Internal Standards						
13C4-PFBA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C5-PFPeA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C5-PFHxA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C4-PFHpA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C8-PFOA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C9-PFNA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C6-PFDA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C7-PFUnA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C2-PFDoA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C2-PFTeDA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
d3-MeFOSAA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
d5-EtFOSAA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C8-FOSA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C3-PFBS	232.25	232.25	232.25	232.25	232.25	232.25	232.25
13C3-PFHxS	236.50	236.50	236.50	236.50	236.50	236.50	236.50
13C8-PFOS	239.25	239.25	239.25	239.25	239.25	239.25	239.25
13C2-4:2FTS	233.75	233.75	233.75	233.75	233.75	233.75	233.75
13C2-6:2FTS	237.25	237.25	237.25	237.25	237.25	237.25	237.25
13C2-8:2FTS	239.50	239.50	239.50	239.50	239.50	239.50	239.50
	Internal Standards						
13C3-PFBA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C2-PFOA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C2-PFDA	250.00	250.00	250.00	250.00	250.00	250.00	250.00
13C4-PFOS	239.25	239.25	239.25	239.25	239.25	239.25	239.25

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Summary Quant Report

Sample Name	KB73	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:23:54	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	41220.01	107.185187	64.4	true
PFBS_2	298.9 / 99.0	1.53	11811.86	103.990749	68.1	true
PFHxA_1	313.0 / 269.0	1.85	33797.47	106.358810	6.1	false
PFHxA_2	313.0 / 119.0	1.84	2652.16	108.381403	5.6	false
PFHpA_1	363.0 / 319.0	2.26	34655.30	108.009386	21.7	false
PFHpA_2	363.0 / 169.0	2.25	977.84	123.401925	24.7	false
PFHxS_1	399.0 / 80.0	2.28	40728.92	110.129011	61.7	false
PFHxS_2	399.0 / 99.0	2.28	11963.82	106.772063	76.6	false
PFOA_1	413.0 / 369.0	2.67	48799.39	112.771782	73.9	false
PFOA_2	413.0 / 169.0	2.67	3407.01	116.073890	52.0	false
PFNA_1	463.0 / 419.0	3.06	37533.16	101.509411	71.6	false
PFNA_2	463.0 / 219.0	3.06	13374.50	104.690293	78.5	false
PFOS_1	499.0 / 80.0	3.06	67443.19	126.185542	55.0	false
PFOS_2	499.0 / 99.0	3.06	12883.47	124.979245	100.2	false
PFDA_1	513.0 / 469.0	3.41	46126.19	111.372806	114.6	false
PFDA_2	513.0 / 219.0	3.42	2243.91	122.063219	40.1	false
PFUnA_1	563.0 / 519.0	3.73	45421.59	108.624464	105.6	false
PFUnA_2	563.0 / 269.0	3.72	3034.14	108.920714	51.9	false
PFDoA_1	613.0 / 569.0	4.02	40319.66	90.649559	154.8	false
PFDoA_2	613.0 / 319.0	4.02	6572.32	93.160201	113.8	false
PFTrDA_1	663.0 / 619.0	4.26	36532.79	88.277124	238.2	false
PFTrDA_2	663.0 / 169.0	4.26	2913.20	89.016507	86.7	false
PFTeDA_1	713.0 / 669.0	4.48	35963.79	80.512556	439.4	false
PFTeDA_2	713.0 / 169.0	4.48	1687.25	81.761617	128.9	false
NMeFOSAA_1	570.0 / 419.0	3.57	6866.45	79.208694	126.6	false
NMeFOSAA_2	570.0 / 512.0	3.57	4002.03	17.946229	95.7	false
NEtFOSAA_1	584.0 / 419.0	3.73	9042.36	106.523211	178.4	false
NEtFOSAA_2	584.0 / 483.0	3.73	373.91	< 0	20.3	false

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Summary Quant Report

Sample Name	KB74	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:34:48	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	96583.58	256.453566	145.4	false
PFBS_2	298.9 / 99.0	1.54	30090.28	274.123640	136.2	false
PFHxA_1	313.0 / 269.0	1.86	83326.03	270.096054	14.3	false
PFHxA_2	313.0 / 119.0	1.85	5884.10	253.021527	11.3	false
PFHpA_1	363.0 / 319.0	2.26	77220.95	274.771603	44.6	false
PFHpA_2	363.0 / 169.0	2.26	1413.40	210.313812	26.4	false
PFHxS_1	399.0 / 80.0	2.29	102490.64	269.248214	93.0	false
PFHxS_2	399.0 / 99.0	2.28	29935.89	270.754123	147.1	false
PFOA_1	413.0 / 369.0	2.67	107969.64	256.880152	147.5	false
PFOA_2	413.0 / 169.0	2.67	6975.98	255.935887	88.9	false
PFNA_1	463.0 / 419.0	3.07	96324.63	275.171680	148.2	false
PFNA_2	463.0 / 219.0	3.07	29239.00	258.444592	132.8	false
PFOS_1	499.0 / 80.0	3.06	149867.63	235.905036	78.4	false
PFOS_2	499.0 / 99.0	3.06	25568.59	218.745785	183.9	false
PFDA_1	513.0 / 469.0	3.42	109086.30	259.148315	218.0	false
PFDA_2	513.0 / 219.0	3.41	4017.59	217.509099	73.4	false
PFUnA_1	563.0 / 519.0	3.74	111764.97	261.791382	170.8	false
PFUnA_2	563.0 / 269.0	3.73	5646.17	230.088303	78.7	false
PFDoA_1	613.0 / 569.0	4.02	98634.96	258.738908	216.2	false
PFDoA_2	613.0 / 319.0	4.02	14696.84	242.744499	193.1	false
PFTrDA_1	663.0 / 619.0	4.27	84630.64	245.151049	398.6	false
PFTrDA_2	663.0 / 169.0	4.27	5902.34	239.586679	190.8	false
PFTeDA_1	713.0 / 669.0	4.48	91797.33	255.815368	529.6	false
PFTeDA_2	713.0 / 169.0	4.48	4348.48	259.328010	241.7	false
NMeFOSAA_1	570.0 / 419.0	3.57	14929.88	239.761289	247.3	false
NMeFOSAA_2	570.0 / 512.0	3.57	10414.90	248.838672	212.0	false
NEtFOSAA_1	584.0 / 419.0	3.73	17392.72	254.232760	366.0	false
NEtFOSAA_2	584.0 / 483.0	3.73	1502.74	291.786269	3090.0	false

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Summary Quant Report

Sample Name	KB75	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:45:42	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	209448.64	501.747793	252.0	false
PFBS_2	298.9 / 99.0	1.54	58337.76	479.514815	239.7	false
PFHxA_1	313.0 / 269.0	1.85	148804.01	484.269965	19.3	false
PFHxA_2	313.0 / 119.0	1.85	10324.76	450.264398	17.6	false
PFHpA_1	363.0 / 319.0	2.26	138147.87	436.260886	60.3	false
PFHpA_2	363.0 / 169.0	2.26	3287.68	483.245848	64.3	false
PFHxS_1	399.0 / 80.0	2.29	207484.10	462.383044	128.3	false
PFHxS_2	399.0 / 99.0	2.28	60615.02	470.641483	140.8	false
PFOA_1	413.0 / 369.0	2.67	210694.85	467.890925	182.7	false
PFOA_2	413.0 / 169.0	2.67	14098.76	494.585149	172.3	false
PFNA_1	463.0 / 419.0	3.07	183646.88	458.096812	254.3	false
PFNA_2	463.0 / 219.0	3.07	55357.25	439.242975	155.1	false
PFOS_1	499.0 / 80.0	3.07	278158.80	416.739485	115.4	false
PFOS_2	499.0 / 99.0	3.07	51972.14	437.157438	284.6	false
PFDA_1	513.0 / 469.0	3.41	212490.61	475.258996	225.0	false
PFDA_2	513.0 / 219.0	3.41	10493.10	548.209451	143.9	false
PFUnA_1	563.0 / 519.0	3.73	215680.80	463.269773	214.2	false
PFUnA_2	563.0 / 269.0	3.73	12256.15	496.082844	121.7	false
PFDoA_1	613.0 / 569.0	4.02	194425.59	502.828604	279.1	false
PFDoA_2	613.0 / 319.0	4.02	30602.63	505.129580	272.1	false
PFTrDA_1	663.0 / 619.0	4.26	172463.55	495.489263	431.2	false
PFTrDA_2	663.0 / 169.0	4.26	11479.59	485.093333	225.3	false
PFTeDA_1	713.0 / 669.0	4.48	185688.41	511.901320	977.0	false
PFTeDA_2	713.0 / 169.0	4.48	8451.11	495.242531	444.3	false
NMeFOSAA_1	570.0 / 419.0	3.57	31021.47	455.455702	377.8	false
NMeFOSAA_2	570.0 / 512.0	3.57	16764.38	383.636478	242.1	false
NEtFOSAA_1	584.0 / 419.0	3.73	34443.56	543.540008	400.8	false
NEtFOSAA_2	584.0 / 483.0	3.73	2299.66	528.277193	77.6	false

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Summary Quant Report

Sample Name	KB76	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:56:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	423209.09	945.114053	320.3	false
PFBS_2	298.9 / 99.0	1.53	125769.33	966.281410	308.8	false
PFHxA_1	313.0 / 269.0	1.85	303932.67	988.363810	34.5	false
PFHxA_2	313.0 / 119.0	1.85	24584.71	1081.698888	33.3	false
PFHpA_1	363.0 / 319.0	2.26	297343.40	958.179117	87.4	false
PFHpA_2	363.0 / 169.0	2.26	5725.24	879.401217	77.5	false
PFHxS_1	399.0 / 80.0	2.28	418642.83	965.005837	260.9	false
PFHxS_2	399.0 / 99.0	2.28	119110.35	964.740500	440.2	false
PFOA_1	413.0 / 369.0	2.67	433589.38	960.811481	297.6	false
PFOA_2	413.0 / 169.0	2.67	26060.63	920.725235	184.7	false
PFNA_1	463.0 / 419.0	3.06	360462.84	958.283433	319.1	false
PFNA_2	463.0 / 219.0	3.06	119283.72	1034.787134	302.4	false
PFOS_1	499.0 / 80.0	3.06	593820.64	865.212758	151.6	false
PFOS_2	499.0 / 99.0	3.06	106258.07	884.032705	382.2	true
PFDA_1	513.0 / 469.0	3.42	421405.82	921.872693	458.1	false
PFDA_2	513.0 / 219.0	3.42	16615.63	850.548167	223.6	false
PFUnA_1	563.0 / 519.0	3.74	435554.62	952.898017	310.1	false
PFUnA_2	563.0 / 269.0	3.74	22982.02	982.432584	207.2	false
PFDoA_1	613.0 / 569.0	4.02	390262.87	1015.595853	393.9	false
PFDoA_2	613.0 / 319.0	4.02	62655.12	1044.394656	333.0	false
PFTrDA_1	663.0 / 619.0	4.26	366292.23	1097.355339	572.8	false
PFTrDA_2	663.0 / 169.0	4.26	23239.89	1054.043404	326.3	false
PFTeDA_1	713.0 / 669.0	4.48	374132.70	1072.623294	1072.5	false
PFTeDA_2	713.0 / 169.0	4.48	17744.84	1082.652188	614.8	false
NMeFOSAA_1	570.0 / 419.0	3.57	72134.57	1099.137764	439.0	false
NMeFOSAA_2	570.0 / 512.0	3.57	39317.07	1034.449547	309.6	false
NEtFOSAA_1	584.0 / 419.0	3.73	68906.48	874.090352	686.1	false
NEtFOSAA_2	584.0 / 483.0	3.73	4157.34	806.825087	148.2	false

BATTELLE

Summary Quant Report

Sample Name	KB77	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:07:29	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	1094211.62	2487.264910	768.4	false
PFBS_2	298.9 / 99.0	1.53	315636.50	2470.569912	678.0	false
PFHxA_1	313.0 / 269.0	1.85	784417.99	2405.394912	60.6	false
PFHxA_2	313.0 / 119.0	1.85	58839.03	2446.267317	54.0	false
PFHpA_1	363.0 / 319.0	2.26	747503.85	2420.399563	132.1	false
PFHpA_2	363.0 / 169.0	2.26	16869.11	2683.726322	141.3	false
PFHxS_1	399.0 / 80.0	2.28	1103523.38	2454.175508	394.3	false
PFHxS_2	399.0 / 99.0	2.28	315386.48	2476.462901	595.9	false
PFOA_1	413.0 / 369.0	2.67	1076945.19	2327.910032	463.4	false
PFOA_2	413.0 / 169.0	2.67	64316.50	2235.852750	351.3	false
PFNA_1	463.0 / 419.0	3.06	958289.14	2586.151199	473.8	false
PFNA_2	463.0 / 219.0	3.06	287044.48	2550.156239	417.9	false
PFOS_1	499.0 / 80.0	3.06	1569293.42	2614.099426	275.6	false
PFOS_2	499.0 / 99.0	3.06	277911.59	2673.203851	676.6	false
PFDA_1	513.0 / 469.0	3.41	1109598.52	2312.948548	538.9	false
PFDA_2	513.0 / 219.0	3.41	48855.58	2396.957040	267.8	false
PFUnA_1	563.0 / 519.0	3.74	1151419.60	2421.740228	440.3	false
PFUnA_2	563.0 / 269.0	3.74	59416.41	2498.888766	321.0	false
PFDoA_1	613.0 / 569.0	4.02	1006130.39	2604.748205	671.5	false
PFDoA_2	613.0 / 319.0	4.02	158409.49	2629.555885	459.0	false
PFTrDA_1	663.0 / 619.0	4.27	880720.14	2612.536447	822.6	false
PFTrDA_2	663.0 / 169.0	4.27	61466.84	2813.870237	509.5	false
PFTeDA_1	713.0 / 669.0	4.48	958179.92	2724.629761	1223.1	false
PFTeDA_2	713.0 / 169.0	4.48	44451.46	2686.150282	841.6	false
NMeFOSAA_1	570.0 / 419.0	3.57	180443.35	3072.377694	779.2	false
NMeFOSAA_2	570.0 / 512.0	3.57	95654.24	2931.022341	591.8	false
NEtFOSAA_1	584.0 / 419.0	3.73	167987.93	2307.360809	825.4	false
NEtFOSAA_2	584.0 / 483.0	3.73	10214.26	2304.888201	389.9	false

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Summary Quant Report

Sample Name	KB78	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:18:21	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4886423.97	10180.630834	1689.9	false
PFBS_2	298.9 / 99.0	1.53	1393434.85	10002.159455	1275.2	false
PFHxA_1	313.0 / 269.0	1.85	3273467.59	9700.303090	113.2	false
PFHxA_2	313.0 / 119.0	1.85	246324.61	9913.438478	111.2	false
PFHpA_1	363.0 / 319.0	2.26	3089230.26	10286.800754	313.7	false
PFHpA_2	363.0 / 169.0	2.26	61392.26	10136.930324	243.7	false
PFHxS_1	399.0 / 80.0	2.28	4357009.96	9972.939784	613.6	false
PFHxS_2	399.0 / 99.0	2.28	1240532.22	10048.956168	770.2	false
PFOA_1	413.0 / 369.0	2.67	4169372.36	10116.348977	943.7	false
PFOA_2	413.0 / 169.0	2.67	252460.97	9898.791253	677.1	false
PFNA_1	463.0 / 419.0	3.06	3691725.97	9534.845171	1076.6	false
PFNA_2	463.0 / 219.0	3.06	1141274.13	9756.983753	676.4	false
PFOS_1	499.0 / 80.0	3.06	6284291.92	10912.001070	476.6	false
PFOS_2	499.0 / 99.0	3.06	1086503.56	10940.024881	1163.7	false
PFDA_1	513.0 / 469.0	3.41	4413654.07	10772.772925	1068.1	false
PFDA_2	513.0 / 219.0	3.41	171239.91	9856.917615	449.6	false
PFUnA_1	563.0 / 519.0	3.73	4459308.08	10227.447430	796.9	false
PFUnA_2	563.0 / 269.0	3.73	221844.89	10292.130524	534.3	false
PFDoA_1	613.0 / 569.0	4.01	4053759.86	10030.489734	775.6	false
PFDoA_2	613.0 / 319.0	4.01	628803.12	9983.861332	697.4	false
PFTrDA_1	663.0 / 619.0	4.26	3639404.67	10254.331665	1287.6	false
PFTrDA_2	663.0 / 169.0	4.26	236820.18	10365.811177	788.6	false
PFTeDA_1	713.0 / 669.0	4.48	3705346.67	10002.184988	1761.2	false
PFTeDA_2	713.0 / 169.0	4.47	177916.86	10204.623109	1504.5	false
NMeFOSAA_1	570.0 / 419.0	3.57	686118.35	10793.294331	1516.4	false
NMeFOSAA_2	570.0 / 512.0	3.57	380349.31	10958.224531	1071.7	false
NEtFOSAA_1	584.0 / 419.0	3.73	713742.60	10410.190312	837.6	false
NEtFOSAA_2	584.0 / 483.0	3.73	42994.63	10632.180153	369.2	false

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Summary Quant Report

Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:29:13	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	9737589.46	20215.103657	2378.2	false
PFBS_2	298.9 / 99.0	1.53	2851472.92	20396.860018	2195.2	false
PFHxA_1	313.0 / 269.0	1.85	6637877.76	20738.713359	177.9	false
PFHxA_2	313.0 / 119.0	1.85	481595.53	20440.427988	147.4	false
PFHpA_1	363.0 / 319.0	2.25	6050787.11	19865.578690	411.6	false
PFHpA_2	363.0 / 169.0	2.25	121599.92	19832.980552	489.5	false
PFHxS_1	399.0 / 80.0	2.28	8526096.38	20459.618602	658.2	false
PFHxS_2	399.0 / 99.0	2.28	2395964.90	20355.172762	746.6	false
PFOA_1	413.0 / 369.0	2.66	7897877.44	20107.386651	1162.9	false
PFOA_2	413.0 / 169.0	2.66	496164.69	20428.035836	894.7	false
PFNA_1	463.0 / 419.0	3.06	7313667.46	20435.942294	1326.6	false
PFNA_2	463.0 / 219.0	3.06	2182572.97	20205.695014	996.2	false
PFOS_1	499.0 / 80.0	3.06	11889839.40	19179.856685	681.6	false
PFOS_2	499.0 / 99.0	3.06	2037658.65	19071.856096	1280.5	false
PFDA_1	513.0 / 469.0	3.42	8014712.87	19496.625718	1123.8	false
PFDA_2	513.0 / 219.0	3.42	354702.76	20357.795409	691.9	false
PFUnA_1	563.0 / 519.0	3.74	8563709.05	19914.228706	800.0	false
PFUnA_2	563.0 / 269.0	3.74	418935.80	19741.456264	589.9	false
PFDoA_1	613.0 / 569.0	4.02	7962073.64	19846.949136	869.8	false
PFDoA_2	613.0 / 319.0	4.02	1240856.33	19851.153847	757.2	false
PFTrDA_1	663.0 / 619.0	4.26	7151608.57	19556.859113	1348.8	false
PFTrDA_2	663.0 / 169.0	4.26	453796.30	19302.578663	919.5	false
PFTeDA_1	713.0 / 669.0	4.48	7519237.86	19702.332714	1932.3	false
PFTeDA_2	713.0 / 169.0	4.47	351032.44	19540.242263	1719.4	false
NMeFOSAA_1	570.0 / 419.0	3.57	1340823.38	18610.764527	991.9	false
NMeFOSAA_2	570.0 / 512.0	3.57	733478.79	18693.828431	894.5	false
NEtFOSAA_1	584.0 / 419.0	3.73	1302541.31	19854.062549	1172.6	false
NEtFOSAA_2	584.0 / 483.0	3.73	75866.35	19686.043096	877.4	false

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Summary Quant Report

Sample Name	KB73	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:23:54	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	92805.88	248.693897	978.5	false
d3-MeFOSAA	573.0 / 419.0	3.56	15679.50	289.112520	154.3	false
d5-EtFOSAA	589.0 / 419.0	3.72	18386.91	305.213878	186.4	false
13C5-PFHxA	318.0 / 273.0	1.84	71025.98	269.150973	599.8	false
13C4-PFHpA	367.0 / 322.0	2.25	75954.56	261.702496	459.0	false
13C8-PFOA	421.0 / 376.0	2.66	91404.69	263.847727	1368.4	false
13C9-PFNA	472.0 / 427.0	3.05	85775.98	252.156514	686.3	false
13C6-PFDA	519.0 / 474.0	3.40	94235.06	257.652724	945.5	false
13C7-PFUnA	570.0 / 525.0	3.72	96712.96	265.628887	665.7	false
13C2-PFTeDA	715.0 / 670.0	4.47	70091.27	248.775228	1398.6	false
13C3-PFBS	302.0 / 99.0	1.52	29075.64	237.405175	482.7	false
13C3-PFHxS	402.0 / 99.0	2.27	27295.01	269.763002	326.5	false
13C8-PFOS	507.0 / 99.0	3.05	25140.74	247.383980	225.8	false

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Summary Quant Report

Sample Name	KB74	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:34:48	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	96573.26	248.884664	1220.2	false
d3-MeFOSAA	573.0 / 419.0	3.56	14180.34	223.271020	158.8	false
d5-EtFOSAA	589.0 / 419.0	3.73	16866.97	239.080225	205.7	false
13C5-PFHxA	318.0 / 273.0	1.84	72934.73	235.455610	656.6	false
13C4-PFHpA	367.0 / 322.0	2.25	74700.98	219.268506	786.4	false
13C8-PFOA	421.0 / 376.0	2.66	95246.38	234.222879	1072.1	false
13C9-PFNA	472.0 / 427.0	3.05	90088.74	225.616535	797.3	false
13C6-PFDA	519.0 / 474.0	3.40	99100.76	260.585869	710.3	false
13C7-PFUnA	570.0 / 525.0	3.72	98788.14	260.943861	715.8	false
13C2-PFTeDA	715.0 / 670.0	4.48	72831.31	248.606755	1206.4	false
13C3-PFBS	302.0 / 99.0	1.52	29613.70	206.473633	436.1	false
13C3-PFHxS	402.0 / 99.0	2.28	26345.79	222.341947	332.0	false
13C8-PFOS	507.0 / 99.0	3.05	29858.69	250.885376	227.1	false

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Summary Quant Report

Sample Name	KB75	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:45:42	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	103770.76	235.026619	1098.2	false
d3-MeFOSAA	573.0 / 419.0	3.56	17206.61	245.672141	188.4	false
d5-EtFOSAA	589.0 / 419.0	3.72	16103.72	206.989127	153.4	false
13C5-PFHxA	318.0 / 273.0	1.84	73868.47	243.730897	614.6	false
13C4-PFHpA	367.0 / 322.0	2.25	86724.80	260.177699	496.9	false
13C8-PFOA	421.0 / 376.0	2.66	104735.07	263.238726	1302.1	false
13C9-PFNA	472.0 / 427.0	3.05	105875.32	271.001659	1013.0	false
13C6-PFDA	519.0 / 474.0	3.40	106526.80	246.169094	840.7	false
13C7-PFUnA	570.0 / 525.0	3.72	107744.48	250.114047	805.8	false
13C2-PFTeDA	715.0 / 670.0	4.47	78945.88	236.823646	1539.6	false
13C3-PFBS	302.0 / 99.0	1.52	33291.63	210.485247	560.7	false
13C3-PFHxS	402.0 / 99.0	2.27	30539.43	233.714630	333.4	false
13C8-PFOS	507.0 / 99.0	3.05	31381.94	239.110739	213.0	false

BATTELLE

Summary Quant Report

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Sample Name	KB76	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:56:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	106513.57	246.681415	705.0	false
d3-MeFOSAA	573.0 / 419.0	3.56	16527.14	237.387057	173.0	false
d5-EtFOSAA	589.0 / 419.0	3.72	20064.71	259.449505	181.9	false
13C5-PFHxA	318.0 / 273.0	1.84	74735.55	232.154227	595.0	false
13C4-PFHpA	367.0 / 322.0	2.25	87447.15	246.984853	554.6	false
13C8-PFOA	421.0 / 376.0	2.66	106717.67	252.517718	273.5	false
13C9-PFNA	472.0 / 427.0	3.05	101428.95	244.420161	796.4	false
13C6-PFDA	519.0 / 474.0	3.40	109679.49	259.172875	1544.8	false
13C7-PFUnA	570.0 / 525.0	3.72	105792.73	251.124061	621.4	false
13C2-PFTeDA	715.0 / 670.0	4.47	78890.34	241.996398	1197.8	false
13C3-PFBS	302.0 / 99.0	1.52	35963.31	228.741517	490.9	false
13C3-PFHxS	402.0 / 99.0	2.27	30058.63	231.415753	316.5	false
13C8-PFOS	507.0 / 99.0	3.05	32873.32	251.977456	358.8	false

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Summary Quant Report

Sample Name	KB77	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:07:29	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	109212.17	242.122653	793.4	false
d3-MeFOSAA	573.0 / 419.0	3.56	15308.24	211.861972	120.6	false
d5-EtFOSAA	589.0 / 419.0	3.72	19161.19	238.732216	174.5	false
13C5-PFHxA	318.0 / 273.0	1.84	79749.96	240.893065	566.9	false
13C4-PFHpA	367.0 / 322.0	2.25	88318.83	242.561847	577.1	false
13C8-PFOA	421.0 / 376.0	2.66	110432.47	254.095411	1122.0	false
13C9-PFNA	472.0 / 427.0	3.05	101141.30	236.999906	771.5	false
13C6-PFDA	519.0 / 474.0	3.40	115626.33	261.549414	707.4	false
13C7-PFUnA	570.0 / 525.0	3.72	110049.96	250.066360	609.8	false
13C2-PFTeDA	715.0 / 670.0	4.48	81305.75	238.747718	1288.4	false
13C3-PFBS	302.0 / 99.0	1.52	35507.34	217.606564	649.9	false
13C3-PFHxS	402.0 / 99.0	2.27	30589.81	226.918022	354.8	false
13C8-PFOS	507.0 / 99.0	3.05	29879.38	220.677582	256.5	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 4:47:43 PM

Sample Name	KB78	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:18:21	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	115359.70	271.508720	1242.2	false
d3-MeFOSAA	573.0 / 419.0	3.56	16566.69	245.938580	117.5	false
d5-EtFOSAA	589.0 / 419.0	3.72	18811.17	251.401210	166.5	false
13C5-PFHxA	318.0 / 273.0	1.84	82797.34	272.133878	786.8	false
13C4-PFHpA	367.0 / 322.0	2.25	86523.92	258.569751	822.0	false
13C8-PFOA	421.0 / 376.0	2.66	98886.36	247.576155	1574.4	false
13C9-PFNA	472.0 / 427.0	3.05	106240.78	270.883952	1710.3	false
13C6-PFDA	519.0 / 474.0	3.40	98980.96	237.691666	778.2	false
13C7-PFUnA	570.0 / 525.0	3.72	100924.36	243.459467	654.4	false
13C2-PFTeDA	715.0 / 670.0	4.47	86555.50	269.822330	2021.7	false
13C3-PFBS	302.0 / 99.0	1.52	38828.86	255.253476	623.7	false
13C3-PFHxS	402.0 / 99.0	2.27	29549.30	235.126998	335.7	false
13C8-PFOS	507.0 / 99.0	3.05	28009.52	221.899031	241.7	false

BATTELLE

Summary Quant Report

Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:29:13	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	114702.33	257.082031	1166.7	false
d3-MeFOSAA	573.0 / 419.0	3.56	18988.21	296.756710	118.6	false
d5-EtFOSAA	589.0 / 419.0	3.72	17707.43	249.133839	143.4	false
13C5-PFHxA	318.0 / 273.0	1.84	78576.29	256.481350	612.9	false
13C4-PFHpA	367.0 / 322.0	2.24	87853.59	260.734848	837.9	false
13C8-PFOA	421.0 / 376.0	2.66	94313.74	234.501383	1046.2	false
13C9-PFNA	472.0 / 427.0	3.05	98304.18	248.921273	952.5	false
13C6-PFDA	519.0 / 474.0	3.40	99342.44	227.178358	686.6	false
13C7-PFUnA	570.0 / 525.0	3.72	99539.62	228.663316	683.3	false
13C2-PFTeDA	715.0 / 670.0	4.47	89344.16	265.227924	2003.4	false
13C3-PFBS	302.0 / 99.0	1.51	38982.91	269.784388	514.9	false
13C3-PFHxS	402.0 / 99.0	2.27	28199.09	236.219649	348.1	false
13C8-PFOS	507.0 / 99.0	3.04	29113.99	242.815836	262.9	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 4:51:15 PM

Sample Name	KB73	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:28:31	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.87	31980.18	113.463123	6.6	false
PFHxA_2	313.0 / 119.0	1.86	2470.79	108.442717	6.0	false
PFHpA_1	363.0 / 319.0	2.28	30159.55	101.506515	23.9	false
PFHpA_2	363.0 / 169.0	2.29	843.53	77.666828	20.6	false
PFHxS_1	399.0 / 80.0	2.30	42674.77	96.189067	95.2	false
PFHxS_2	399.0 / 99.0	2.30	15508.36	95.061118	136.2	false
PFOA_1	413.0 / 369.0	2.69	40895.50	111.759164	55.2	false
PFOA_2	413.0 / 169.0	2.69	1388.86	82.127204	31.2	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 4:51:19 PM

Sample Name	KB74	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:39:24	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.86	79029.18	258.220575	12.8	false
PFHxA_2	313.0 / 119.0	1.86	6331.05	267.909760	12.5	false
PFHpA_1	363.0 / 319.0	2.27	68372.02	267.303609	42.7	false
PFHpA_2	363.0 / 169.0	2.26	1730.59	268.737630	38.1	false
PFHxS_1	399.0 / 80.0	2.29	101428.38	261.547957	139.7	false
PFHxS_2	399.0 / 99.0	2.29	30246.47	248.171296	171.5	false
PFOA_1	413.0 / 369.0	2.68	96187.79	235.445902	103.9	false
PFOA_2	413.0 / 169.0	2.68	6413.92	266.393231	97.0	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 4:51:22 PM

Sample Name	KB75	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:50:18	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.86	110956.53	482.572019	17.9	false
PFHxA_2	313.0 / 119.0	1.86	8493.02	484.438769	15.4	false
PFHpA_1	363.0 / 319.0	2.27	107951.70	464.409874	60.9	false
PFHpA_2	363.0 / 169.0	2.27	3266.15	634.179378	55.7	false
PFHxS_1	399.0 / 80.0	2.29	151884.64	466.566995	151.3	false
PFHxS_2	399.0 / 99.0	2.29	48867.31	508.104811	227.4	false
PFOA_1	413.0 / 369.0	2.68	163144.44	495.870315	145.7	false
PFOA_2	413.0 / 169.0	2.68	10890.88	539.896756	140.5	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 4:51:26 PM

Sample Name	KB76	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:01:11	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.86	266688.36	945.287318	33.0	false
PFHxA_2	313.0 / 119.0	1.86	20318.35	952.719147	28.5	false
PFHpA_1	363.0 / 319.0	2.27	257449.98	1044.768290	96.9	false
PFHpA_2	363.0 / 169.0	2.27	5180.67	967.461735	95.6	false
PFHxS_1	399.0 / 80.0	2.29	407122.71	1058.906196	250.8	false
PFHxS_2	399.0 / 99.0	2.29	112230.37	1016.816934	361.5	false
PFOA_1	413.0 / 369.0	2.68	385264.33	949.074725	308.3	false
PFOA_2	413.0 / 169.0	2.68	25910.08	1022.757278	270.1	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 4:51:30 PM

Sample Name	KB77	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:12:02	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.86	528465.63	2419.069151	55.9	false
PFHxA_2	313.0 / 119.0	1.86	39346.55	2395.486932	53.8	false
PFHpA_1	363.0 / 319.0	2.27	504730.59	2318.952299	128.5	false
PFHpA_2	363.0 / 169.0	2.27	10202.56	2244.844631	120.7	false
PFHxS_1	399.0 / 80.0	2.29	790333.54	2725.211879	339.8	false
PFHxS_2	399.0 / 99.0	2.29	229335.26	2811.160039	440.9	false
PFOA_1	413.0 / 369.0	2.68	768335.68	2522.264999	443.1	false
PFOA_2	413.0 / 169.0	2.68	48709.83	2533.071951	350.1	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 4:51:34 PM

Sample Name	KB78	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:22:53	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.85	2578900.91	10013.661360	113.5	false
PFHxA_2	313.0 / 119.0	1.85	196911.98	10198.343892	116.8	false
PFHpA_1	363.0 / 319.0	2.26	2371766.59	10137.969780	332.5	false
PFHpA_2	363.0 / 169.0	2.26	48326.46	10135.347293	245.2	false
PFHxS_1	399.0 / 80.0	2.29	3557665.99	9510.773371	622.8	false
PFHxS_2	399.0 / 99.0	2.29	978130.87	9370.075513	735.1	false
PFOA_1	413.0 / 369.0	2.67	3442692.10	9782.483021	740.3	false
PFOA_2	413.0 / 169.0	2.67	224409.77	10041.755775	662.5	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 4:51:38 PM

Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:33:45	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.85	4790596.07	20461.226455	175.6	false
PFHxA_2	313.0 / 119.0	1.85	355942.44	20286.158782	162.7	false
PFHpA_1	363.0 / 319.0	2.26	4362577.39	20015.089633	430.5	false
PFHpA_2	363.0 / 169.0	2.26	88637.94	20021.762504	317.9	false
PFHxS_1	399.0 / 80.0	2.28	6441425.63	20574.304535	1030.8	false
PFHxS_2	399.0 / 99.0	2.28	1800216.62	20644.110289	1645.7	false
PFOA_1	413.0 / 369.0	2.67	6165314.52	20253.101875	1390.0	false
PFOA_2	413.0 / 169.0	2.67	384354.07	19863.997806	1137.8	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 4:50:36 PM

Sample Name	KB73	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:28:31	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.85	61875.10	240.339110	629.3	false
13C4-PFHpA	367.0 / 322.0	2.27	70196.92	244.968087	596.7	false
13C8-PFOA	421.0 / 376.0	2.68	91105.89	250.481742	1399.7	false
13C3-PFHxS	402.0 / 99.0	2.29	28201.29	248.636899	477.9	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 4:50:40 PM

Sample Name	KB74	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:39:24	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.85	70054.12	257.108193	793.2	false
13C4-PFHpA	367.0 / 322.0	2.26	68080.35	224.484788	608.4	false
13C8-PFOA	421.0 / 376.0	2.67	99019.82	257.232271	1503.2	false
13C3-PFHxS	402.0 / 99.0	2.28	26770.18	234.557667	705.8	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 4:50:44 PM

Sample Name	KB75	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:50:18	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.85	53460.60	235.009964	608.0	false
13C4-PFHpA	367.0 / 322.0	2.26	63973.57	252.659703	555.6	false
13C8-PFOA	421.0 / 376.0	2.67	78753.82	245.044603	46524.4	false
13C3-PFHxS	402.0 / 99.0	2.28	22120.79	239.525159	323.1	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 4:50:47 PM

Sample Name	KB76	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:01:11	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.85	66185.88	260.345239	604.0	false
13C4-PFHpA	367.0 / 322.0	2.25	69601.25	245.971202	610.1	false
13C8-PFOA	421.0 / 376.0	2.67	96650.51	269.097434	1344.1	false
13C3-PFHxS	402.0 / 99.0	2.28	26289.36	250.535307	464.1	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 4:50:51 PM

Sample Name	KB77	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:12:02	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.85	51544.02	263.363899	755.2	false
13C4-PFHpA	367.0 / 322.0	2.26	62195.95	285.511098	792.6	false
13C8-PFOA	421.0 / 376.0	2.67	72265.13	261.353204	3709.2	false
13C3-PFHxS	402.0 / 99.0	2.28	19694.99	219.859548	331.4	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 4:50:55 PM

Sample Name	KB78	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:22:53	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.84	60934.81	255.869016	536.5	false
13C4-PFHpA	367.0 / 322.0	2.25	67350.29	254.082474	618.4	false
13C8-PFOA	421.0 / 376.0	2.66	83351.46	247.734550	1113.4	false
13C3-PFHxS	402.0 / 99.0	2.28	25470.53	239.950225	347.0	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 4:50:58 PM

Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:33:45	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.84	55421.63	237.964579	461.4	false
13C4-PFHpA	367.0 / 322.0	2.25	62817.12	242.322648	418.9	false
13C8-PFOA	421.0 / 376.0	2.66	72077.78	219.056196	951.8	false
13C3-PFHxS	402.0 / 99.0	2.27	21157.56	222.435195	350.0	false

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 4:53:51 PM

Sample Name	KB73	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:23:54	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.080	0.075	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.030	0.022	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.290	0.288	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	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.360	0.314	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	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.050	0.043	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	PFUnA	0.070	0.054	ü
PFDoA_1	613.0 / 569.0	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	4.02	PFDoA	0.160	0.157	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.080	0.068	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	0.580	0.569	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.040	0.066	ü

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Summary Ion Ratio Report

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Printed: 05/10/2018 4:53:56 PM

Sample Name	KB74	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:34:48	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	0.292	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.290	0.288	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	3.07	PFNA	0.300	0.314	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	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.040	0.043	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.050	0.054	ü
PFDoA_1	613.0 / 569.0	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	4.02	PFDoA	0.150	0.157	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.070	0.068	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	0.700	0.569	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.090	0.066	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
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Sample Name	KB75	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:45:42	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.280	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.290	0.288	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	3.07	PFNA	0.300	0.314	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	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.050	0.043	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.060	0.054	ü
PFDoA_1	613.0 / 569.0	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	4.02	PFDoA	0.160	0.157	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.070	0.068	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	0.540	0.569	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.070	0.066	ü

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Summary Ion Ratio Report

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Sample Name	KB76	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:56:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.080	0.075	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	0.288	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	0.330	0.314	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	0.043	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.050	0.054	ü
PFDoA_1	613.0 / 569.0	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	4.02	PFDoA	0.160	0.157	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.060	0.068	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	0.550	0.569	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.060	0.066	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
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Sample Name	KB77	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:07:29	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.080	0.075	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.290	0.288	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	0.314	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	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.040	0.043	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.050	0.054	ü
PFDoA_1	613.0 / 569.0	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	4.02	PFDoA	0.160	0.157	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.070	0.068	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	0.530	0.569	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.060	0.066	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 4:54:12 PM

Sample Name	KB78	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:18:21	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.080	0.075	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	0.288	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	0.310	0.314	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	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.040	0.043	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.050	0.054	ü
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.160	0.157	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.070	0.068	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.550	0.569	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.060	0.066	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 4:54:16 PM

Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:29:13	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	0.288	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	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	0.314	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	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.040	0.043	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.050	0.054	ü
PFDoA_1	613.0 / 569.0	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	4.02	PFDoA	0.160	0.157	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.060	0.068	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.550	0.569	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.060	0.066	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 4:55:51 PM

Sample Name	KB73	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:28:31	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.28	PFHpA			
PFHpA_2	363.0 / 169.0	2.29	PFHpA	0.030	0.024	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.360	0.301	ü
PFOA_1	413.0 / 369.0	2.69	PFOA			
PFOA_2	413.0 / 169.0	2.69	PFOA	0.030	0.061	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 4:55:55 PM

Sample Name	KB74	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:39:24	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.030	0.024	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.300	0.301	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.070	0.061	ü

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 4:55:58 PM

Sample Name	KB75	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:50:18	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.030	0.024	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.320	0.301	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.070	0.061	ü

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 4:56:02 PM

Sample Name	KB76	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:01:11	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.020	0.024	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.280	0.301	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.070	0.061	ü

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 4:56:05 PM

Sample Name	KB77	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:12:02	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.020	0.024	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.290	0.301	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.060	0.061	ü

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Summary Ion Ratio Report

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Printed: 05/10/2018 4:56:09 PM

Sample Name	KB78	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:22:53	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.024	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.270	0.301	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.070	0.061	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 4:56:13 PM

Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:33:45	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.024	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	0.301	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.060	0.061	ü

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Summary Internal Standard Report

Sample Name	KB73	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:23:54	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	29075.64	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	29075.64	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	71025.98	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	71025.98	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	75954.56	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	75954.56	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	25875.30	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	25875.30	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	91404.69	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	91404.69	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	85775.98	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	85775.98	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	25830.08	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	25830.08	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	94235.06	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	94235.06	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	96712.96	250.00
PFUnA_2	563.0 / 269.0	3.72	13C7-PFUnA	570.0 / 525.0	96712.96	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	92805.88	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	92805.88	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	70091.27	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	70091.27	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	70091.27	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	70091.27	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	15755.68	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	15755.68	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	18355.38	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	18355.38	250.00

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Summary Internal Standard Report

Sample Name	KB74	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:34:48	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	29613.70	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	29613.70	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	72934.73	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	72934.73	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	74700.98	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	74700.98	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	26010.52	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	26010.52	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	95246.38	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	95246.38	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	90088.74	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	90088.74	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	30671.79	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	30671.79	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	99100.76	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	99100.76	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	98788.14	250.00
PFUnA_2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	98788.14	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	96573.26	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	96573.26	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	72831.31	250.00
PFTrDA_2	663.0 / 169.0	4.27	13C2-PFTeDA	715.0 / 670.0	72831.31	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	72831.31	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	72831.31	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	14349.81	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	14349.81	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	16659.81	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	16659.81	250.00

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Summary Internal Standard Report

Sample Name	KB75	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:45:42	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	33291.63	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	33291.63	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	73868.47	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	73868.47	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	86724.80	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	86724.80	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	30456.31	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	30456.31	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	104735.07	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	104735.07	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	105875.32	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	105875.32	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	32209.41	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	32209.41	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	106526.80	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	106526.80	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	107744.48	250.00
PFUnA_2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	107744.48	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	103770.76	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	103770.76	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	78945.88	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	78945.88	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	78945.88	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	78945.88	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	16743.98	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	16743.98	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	16217.06	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	16217.06	250.00

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Summary Internal Standard Report

Sample Name	KB76	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:56:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	35963.31	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	35963.31	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	74735.55	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	74735.55	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	87447.15	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	87447.15	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	29302.03	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	29302.03	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	106717.67	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	106717.67	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	101428.95	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	101428.95	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	33108.73	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	33108.73	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	109679.49	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	109679.49	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	105792.73	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	105792.73	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	106513.57	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	106513.57	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	78890.34	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	78890.34	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	78890.34	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	78890.34	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	16866.89	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	16866.89	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	20521.46	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	20521.46	250.00

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Summary Internal Standard Report

Sample Name	KB77	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:07:29	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	35507.34	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	35507.34	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	79749.96	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	79749.96	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	88318.83	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	88318.83	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	30289.10	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	30289.10	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	110432.47	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	110432.47	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	101141.30	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	101141.30	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	28953.59	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	28953.59	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	115626.33	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	115626.33	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	110049.96	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	110049.96	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	109212.17	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	109212.17	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	81305.75	250.00
PFTrDA_2	663.0 / 169.0	4.27	13C2-PFTeDA	715.0 / 670.0	81305.75	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	81305.75	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	81305.75	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	15412.50	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	15412.50	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	19291.57	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	19291.57	250.00

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Summary Internal Standard Report

Sample Name	KB78	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:18:21	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	38828.86	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	38828.86	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	82797.34	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	82797.34	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	86523.92	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	86523.92	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	29390.27	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	29390.27	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	98886.36	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	98886.36	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	106240.78	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	106240.78	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	27774.00	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	27774.00	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	98980.96	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	98980.96	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	100924.36	250.00
PFUnA_2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	100924.36	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	115359.70	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	115359.70	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	86555.50	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	86555.50	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	86555.50	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	86555.50	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	16823.50	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	16823.50	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	18322.79	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	18322.79	250.00

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Summary Internal Standard Report

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Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:29:13	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	38982.91	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	38982.91	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	78576.29	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	78576.29	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	87853.59	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	87853.59	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	28028.20	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	28028.20	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	94313.74	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	94313.74	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	98304.18	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	98304.18	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	29895.97	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	29895.97	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	99342.44	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	99342.44	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	99539.62	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	99539.62	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	114702.33	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	114702.33	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	89344.16	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	89344.16	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	89344.16	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	89344.16	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	19093.88	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	19093.88	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	17553.14	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	17553.14	250.00

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Summary Internal Standard Report

Sample Name	KB73	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:23:54	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	95600.93	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	25284.45	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	25284.45	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	83195.21	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	83195.21	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	83195.21	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	83195.21	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	95600.93	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	95600.93	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	95600.93	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	25284.45	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	25284.45	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	25284.45	239.25

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Summary Internal Standard Report

Sample Name	KB74	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:34:48	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	99405.52	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	29610.27	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	29610.27	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	97656.77	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	97656.77	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	97656.77	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	97656.77	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	99405.52	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	99405.52	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	99405.52	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	29610.27	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	29610.27	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	29610.27	239.25

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Summary Internal Standard Report

Sample Name	KB75	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:45:42	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	113112.27	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	32653.35	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	32653.35	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	95548.87	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	95548.87	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	95548.87	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	95548.87	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	113112.27	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	113112.27	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	113112.27	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	32653.35	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	32653.35	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	32653.35	239.25

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Summary Internal Standard Report

Sample Name	KB76	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:56:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	110616.59	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	32458.54	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	32458.54	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	101491.04	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	101491.04	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	101491.04	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	101491.04	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	110616.59	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	110616.59	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	110616.59	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	32458.54	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	32458.54	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	32458.54	239.25

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Summary Internal Standard Report

Sample Name	KB77	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:07:29	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	115554.63	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	33686.85	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	33686.85	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	104371.80	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	104371.80	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	104371.80	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	104371.80	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	115554.63	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	115554.63	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	115554.63	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	33686.85	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	33686.85	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	33686.85	239.25

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Summary Internal Standard Report

Sample Name	KB78	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:18:21	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	108848.41	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	31404.89	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	31404.89	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	95920.36	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	95920.36	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	95920.36	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	95920.36	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	108848.41	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	108848.41	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	108848.41	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	31404.89	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	31404.89	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	31404.89	239.25

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Summary Internal Standard Report

Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:29:13	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	114301.58	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	29831.27	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	29831.27	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	96585.69	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	96585.69	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	96585.69	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	96585.69	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	114301.58	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	114301.58	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	114301.58	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	29831.27	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	29831.27	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	29831.27	239.25

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Summary Internal Standard Report

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Sample Name	KB73	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:28:31	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	61875.10	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	61875.10	250.00
PFHpA_1	363.0 / 319.0	2.28	13C4-PFHpA	367.0 / 322.0	70196.92	250.00
PFHpA_2	363.0 / 169.0	2.29	13C4-PFHpA	367.0 / 322.0	70196.92	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	27961.00	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	27961.00	236.50
PFOA_1	413.0 / 369.0	2.69	13C8-PFOA	421.0 / 376.0	91105.89	250.00
PFOA_2	413.0 / 169.0	2.69	13C8-PFOA	421.0 / 376.0	91105.89	250.00

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Summary Internal Standard Report

Sample Name	KB74	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:39:24	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	70054.12	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	70054.12	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	68080.35	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	68080.35	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	25546.46	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	25546.46	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	99019.82	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	99019.82	250.00

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Summary Internal Standard Report

Sample Name	KB75	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:50:18	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	53460.60	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	53460.60	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	63973.57	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	63973.57	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	21695.70	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	21695.70	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	78753.82	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	78753.82	250.00

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Summary Internal Standard Report

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Sample Name	KB76	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:01:11	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	66185.88	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	66185.88	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	69601.25	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	69601.25	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	25839.40	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	25839.40	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	96650.51	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	96650.51	250.00

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Summary Internal Standard Report

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Sample Name	KB77	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:12:02	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	51544.02	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	51544.02	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	62195.95	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	62195.95	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	19569.93	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	19569.93	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	72265.13	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	72265.13	250.00

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Summary Internal Standard Report

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Sample Name	KB78	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:22:53	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	60934.81	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	60934.81	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	67350.29	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	67350.29	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	25288.95	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	25288.95	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	83351.46	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	83351.46	250.00

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Summary Internal Standard Report

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Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:33:45	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	55421.63	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	55421.63	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	62817.12	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	62817.12	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	21174.43	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	21174.43	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	72077.78	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	72077.78	250.00

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Summary Internal Standard Report

Sample Name	KB73	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:28:31	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	87694.12	250.00
13C4-PFHpA	367.0 / 322.0	2.27	13C2-PFOA	415.0 / 370.0	87694.12	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	87694.12	250.00
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	31921.29	239.25

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Summary Internal Standard Report

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Sample Name	KB74	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:39:24	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	92810.43	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	92810.43	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	92810.43	250.00
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	32120.24	239.25

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Summary Internal Standard Report

Sample Name	KB75	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:50:18	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	77486.60	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	77486.60	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	77486.60	250.00
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	25991.21	239.25

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Summary Internal Standard Report

Sample Name	KB76	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:01:11	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	86595.38	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	86595.38	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	86595.38	250.00
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	29531.69	239.25

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Summary Internal Standard Report

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Sample Name	KB77	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:12:02	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	66665.49	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	66665.49	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	66665.49	250.00
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	25210.85	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
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Sample Name	KB78	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:22:53	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	81119.78	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	81119.78	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	81119.78	250.00
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	29874.04	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
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Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:33:45	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	79331.56	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	79331.56	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	79331.56	250.00
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	26769.43	239.25

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QC Summary Report

Created with Analyst Reporter
Printed: 05/10/2018 5:01:21 PM

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:50:56	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	903.732031	1010.00	89.48
PFBS_2	298.9 / 99.0	1.53	880.713156	1010.00	87.20
PFHxA_1	313.0 / 269.0	1.85	947.928748	1010.00	93.85
PFHxA_2	313.0 / 119.0	1.85	936.372033	1010.00	92.71
PFHpA_1	363.0 / 319.0	2.25	900.138047	1000.00	90.01
PFHpA_2	363.0 / 169.0	2.25	861.081228	1000.00	86.11
PFHxS_1	399.0 / 80.0	2.28	1017.710335	1010.00	100.76
PFHxS_2	399.0 / 99.0	2.28	1018.822799	1010.00	100.87
PFOA_1	413.0 / 369.0	2.66	915.923742	1000.00	91.59
PFOA_2	413.0 / 169.0	2.66	917.049904	1000.00	91.70
PFNA_1	463.0 / 419.0	3.06	951.402426	1000.00	95.14
PFNA_2	463.0 / 219.0	3.06	977.494498	1000.00	97.75
PFOS_1	499.0 / 80.0	3.06	888.011474	1000.00	88.80
PFOS_2	499.0 / 99.0	3.06	902.005259	1000.00	90.20
PFDA_1	513.0 / 469.0	3.41	944.394983	1000.00	94.44
PFDA_2	513.0 / 219.0	3.41	937.238784	1000.00	93.72
PFUnA_1	563.0 / 519.0	3.73	920.059946	1000.00	92.01
PFUnA_2	563.0 / 269.0	3.73	909.228809	1000.00	90.92
PFDoA_1	613.0 / 569.0	4.01	977.299662	1000.00	97.73
PFDoA_2	613.0 / 319.0	4.01	964.345034	1000.00	96.43
PFTrDA_1	663.0 / 619.0	4.26	1028.502704	1000.00	102.85
PFTrDA_2	663.0 / 169.0	4.26	958.719982	1000.00	95.87
PFTeDA_1	713.0 / 669.0	4.47	986.182223	1000.00	98.62
PFTeDA_2	713.0 / 169.0	4.47	998.533430	1000.00	99.85
NMeFOSAA_1	570.0 / 419.0	3.57	1148.551573	1000.00	114.86
NMeFOSAA_2	570.0 / 512.0	3.56	996.659633	1000.00	99.67
NEtFOSAA_1	584.0 / 419.0	3.73	1014.960769	1000.00	101.50
NEtFOSAA_2	584.0 / 483.0	3.73	1004.884953	1000.00	100.49

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QC Summary Report

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Sample Name	KB79 CCV	**Injection Vial**	8
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T22:28:49	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.53	19555.079979	20200.00	96.81
PFBS_2	298.9 / 99.0	1.53	19837.784898	20200.00	98.21
PFHxA_1	313.0 / 269.0	1.85	20141.720614	20200.00	99.71
PFHxA_2	313.0 / 119.0	1.85	20185.402285	20200.00	99.93
PFHpA_1	363.0 / 319.0	2.25	20034.977497	20000.00	100.17
PFHpA_2	363.0 / 169.0	2.25	19645.920117	20000.00	98.23
PFHxS_1	399.0 / 80.0	2.27	19916.986261	20200.00	98.60
PFHxS_2	399.0 / 99.0	2.27	20263.416100	20200.00	100.31
PFOA_1	413.0 / 369.0	2.66	20326.821467	20000.00	101.63
PFOA_2	413.0 / 169.0	2.66	21575.112217	20000.00	107.88
PFNA_1	463.0 / 419.0	3.05	19486.557803	20000.00	97.43
PFNA_2	463.0 / 219.0	3.05	19836.279877	20000.00	99.18
PFOS_1	499.0 / 80.0	3.05	19636.349002	20000.00	98.18
PFOS_2	499.0 / 99.0	3.05	19885.154880	20000.00	99.43
PFDA_1	513.0 / 469.0	3.41	20187.897946	20000.00	100.94
PFDA_2	513.0 / 219.0	3.41	20364.226471	20000.00	101.82
PFUnA_1	563.0 / 519.0	3.73	20263.854172	20000.00	101.32
PFUnA_2	563.0 / 269.0	3.73	21075.752538	20000.00	105.38
PFDoA_1	613.0 / 569.0	4.01	19556.469694	20000.00	97.78
PFDoA_2	613.0 / 319.0	4.01	19441.186724	20000.00	97.21
PFTrDA_1	663.0 / 619.0	4.26	19459.829222	20000.00	97.30
PFTrDA_2	663.0 / 169.0	4.25	19497.813958	20000.00	97.49
PFTeDA_1	713.0 / 669.0	4.47	18929.385636	20000.00	94.65
PFTeDA_2	713.0 / 169.0	4.47	19155.073943	20000.00	95.78
NMeFOSAA_1	570.0 / 419.0	3.56	19594.514748	20000.00	97.97
NMeFOSAA_2	570.0 / 512.0	3.56	19831.658547	20000.00	99.16
NEtFOSAA_1	584.0 / 419.0	3.72	21340.777928	20000.00	106.70
NEtFOSAA_2	584.0 / 483.0	3.72	22378.633289	20000.00	111.89

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QC Summary Report

Sample Name	KB76 CCV	**Injection Vial**	29
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:39:21	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	964.958404	1010.00	95.54
PFBS_2	298.9 / 99.0	1.54	1004.643757	1010.00	99.47
PFHxA_1	313.0 / 269.0	1.85	998.541187	1010.00	98.87
PFHxA_2	313.0 / 119.0	1.85	1021.444998	1010.00	101.13
PFHpA_1	363.0 / 319.0	2.26	963.687134	1000.00	96.37
PFHpA_2	363.0 / 169.0	2.26	1027.643078	1000.00	102.76
PFHxS_1	399.0 / 80.0	2.28	1020.149680	1010.00	101.00
PFHxS_2	399.0 / 99.0	2.28	1038.603775	1010.00	102.83
PFOA_1	413.0 / 369.0	2.66	1023.016342	1000.00	102.30
PFOA_2	413.0 / 169.0	2.66	1006.196248	1000.00	100.62
PFNA_1	463.0 / 419.0	3.06	984.321078	1000.00	98.43
PFNA_2	463.0 / 219.0	3.06	955.803407	1000.00	95.58
PFOS_1	499.0 / 80.0	3.06	946.650362	1000.00	94.67
PFOS_2	499.0 / 99.0	3.06	1024.979760	1000.00	102.50
PFDA_1	513.0 / 469.0	3.41	1010.654060	1000.00	101.07
PFDA_2	513.0 / 219.0	3.41	986.540143	1000.00	98.65
PFUnA_1	563.0 / 519.0	3.73	932.994572	1000.00	93.30
PFUnA_2	563.0 / 269.0	3.73	1041.054040	1000.00	104.11
PFDoA_1	613.0 / 569.0	4.01	1072.517850	1000.00	107.25
PFDoA_2	613.0 / 319.0	4.01	1082.452114	1000.00	108.25
PFTrDA_1	663.0 / 619.0	4.25	1117.849666	1000.00	111.78
PFTrDA_2	663.0 / 169.0	4.25	1032.924043	1000.00	103.29
PFTeDA_1	713.0 / 669.0	4.47	1064.108416	1000.00	106.41
PFTeDA_2	713.0 / 169.0	4.47	1107.569534	1000.00	110.76
NMeFOSAA_1	570.0 / 419.0	3.56	1003.139528	1000.00	100.31
NMeFOSAA_2	570.0 / 512.0	3.56	969.673141	1000.00	96.97
NEtFOSAA_1	584.0 / 419.0	3.73	1102.826693	1000.00	110.28
NEtFOSAA_2	584.0 / 483.0	3.73	1284.323494	1000.00	128.43

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QC Summary Report

Sample Name	KB77 CCV	**Injection Vial**	40
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:49:54	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.53	2504.043033	2525.00	99.17
PFBS_2	298.9 / 99.0	1.53	2592.315945	2525.00	102.67
PFHxA_1	313.0 / 269.0	1.85	2389.356416	2525.00	94.63
PFHxA_2	313.0 / 119.0	1.85	2507.278024	2525.00	99.30
PFHpA_1	363.0 / 319.0	2.25	2391.824804	2500.00	95.67
PFHpA_2	363.0 / 169.0	2.25	2544.294140	2500.00	101.77
PFHxS_1	399.0 / 80.0	2.27	2853.554341	2525.00	113.01
PFHxS_2	399.0 / 99.0	2.27	2796.824303	2525.00	110.77
PFOA_1	413.0 / 369.0	2.65	2497.804307	2500.00	99.91
PFOA_2	413.0 / 169.0	2.65	2461.844667	2500.00	98.47
PFNA_1	463.0 / 419.0	3.04	2237.930351	2500.00	89.52
PFNA_2	463.0 / 219.0	3.04	2437.515983	2500.00	97.50
PFOS_1	499.0 / 80.0	3.04	2214.452724	2500.00	88.58
PFOS_2	499.0 / 99.0	3.04	2338.624837	2500.00	93.54
PFDA_1	513.0 / 469.0	3.40	2447.531026	2500.00	97.90
PFDA_2	513.0 / 219.0	3.40	2421.488547	2500.00	96.86
PFUnA_1	563.0 / 519.0	3.72	2436.945317	2500.00	97.48
PFUnA_2	563.0 / 269.0	3.72	2620.567824	2500.00	104.82
PFDoA_1	613.0 / 569.0	4.01	2726.162716	2500.00	109.05
PFDoA_2	613.0 / 319.0	4.01	2616.257126	2500.00	104.65
PFTrDA_1	663.0 / 619.0	4.25	2750.899270	2500.00	110.04
PFTrDA_2	663.0 / 169.0	4.25	2743.932289	2500.00	109.76
PFTeDA_1	713.0 / 669.0	4.47	2704.966928	2500.00	108.20
PFTeDA_2	713.0 / 169.0	4.46	2689.710862	2500.00	107.59
NMeFOSAA_1	570.0 / 419.0	3.55	3054.288926	2500.00	122.17
NMeFOSAA_2	570.0 / 512.0	3.55	2854.930073	2500.00	114.20
NEtFOSAA_1	584.0 / 419.0	3.72	2732.160442	2500.00	109.29
NEtFOSAA_2	584.0 / 483.0	3.71	2761.997552	2500.00	110.48

Sample Name	KB76 CCV	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T05:11:17	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.53	984.286435	1010.00	97.45
PFBS_2	298.9 / 99.0	1.53	1053.992846	1010.00	104.36
PFHxA_1	313.0 / 269.0	1.84	1046.411505	1010.00	103.61
PFHxA_2	313.0 / 119.0	1.84	1021.690899	1010.00	101.16
PFHpA_1	363.0 / 319.0	2.25	972.242357	1000.00	97.22
PFHpA_2	363.0 / 169.0	2.25	867.813205	1000.00	86.78
PFHxS_1	399.0 / 80.0	2.27	1073.659821	1010.00	106.30
PFHxS_2	399.0 / 99.0	2.27	1086.267779	1010.00	107.55
PFOA_1	413.0 / 369.0	2.65	1048.406884	1000.00	104.84
PFOA_2	413.0 / 169.0	2.65	1109.786134	1000.00	110.98
PFNA_1	463.0 / 419.0	3.05	987.471790	1000.00	98.75
PFNA_2	463.0 / 219.0	3.05	975.657919	1000.00	97.57
PFOS_1	499.0 / 80.0	3.05	994.463160	1000.00	99.45
PFOS_2	499.0 / 99.0	3.05	1029.526065	1000.00	102.95
PFDA_1	513.0 / 469.0	3.40	975.163947	1000.00	97.52
PFDA_2	513.0 / 219.0	3.40	879.250953	1000.00	87.93
PFUnA_1	563.0 / 519.0	3.72	1005.980555	1000.00	100.60
PFUnA_2	563.0 / 269.0	3.72	1001.597593	1000.00	100.16
PFDoA_1	613.0 / 569.0	4.01	1062.876618	1000.00	106.29
PFDoA_2	613.0 / 319.0	4.01	1067.750262	1000.00	106.78
PFTrDA_1	663.0 / 619.0	4.25	1078.440955	1000.00	107.84
PFTrDA_2	663.0 / 169.0	4.25	1120.547351	1000.00	112.05
PFTeDA_1	713.0 / 669.0	4.47	1045.669794	1000.00	104.57
PFTeDA_2	713.0 / 169.0	4.46	1077.809090	1000.00	107.78
NMeFOSAA_1	570.0 / 419.0	3.56	984.068318	1000.00	98.41
NMeFOSAA_2	570.0 / 512.0	3.56	811.360433	1000.00	81.14
NEtFOSAA_1	584.0 / 419.0	3.72	1108.406197	1000.00	110.84
NEtFOSAA_2	584.0 / 483.0	3.71	1221.972190	1000.00	122.20

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QC Summary Report

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Sample Name	KB76 CCV	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T15:54:52	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	1044.934316	1010.00	103.46
PFBS_2	298.9 / 99.0	1.54	1033.288235	1010.00	102.31
PFHxA_1	313.0 / 269.0	1.87	1164.804778	1010.00	115.33
PFHxA_2	313.0 / 119.0	1.86	1152.727123	1010.00	114.13
PFHpA_1	363.0 / 319.0	2.28	979.824748	1000.00	97.98
PFHpA_2	363.0 / 169.0	2.27	1067.520512	1000.00	106.75
PFHxS_1	399.0 / 80.0	2.30	1101.330576	1010.00	109.04
PFHxS_2	399.0 / 99.0	2.30	1136.910339	1010.00	112.57
PFOA_1	413.0 / 369.0	2.69	1132.076160	1000.00	113.21
PFOA_2	413.0 / 169.0	2.69	1237.777996	1000.00	123.78
PFNA_1	463.0 / 419.0	3.09	978.048619	1000.00	97.80
PFNA_2	463.0 / 219.0	3.08	974.601142	1000.00	97.46
PFOS_1	499.0 / 80.0	3.08	895.700308	1000.00	89.57
PFOS_2	499.0 / 99.0	3.08	995.915026	1000.00	99.59
PFDA_1	513.0 / 469.0	3.44	1011.340201	1000.00	101.13
PFDA_2	513.0 / 219.0	3.44	1040.472830	1000.00	104.05
PFUnA_1	563.0 / 519.0	3.76	944.402446	1000.00	94.44
PFUnA_2	563.0 / 269.0	3.76	881.845505	1000.00	88.18
PFDoA_1	613.0 / 569.0	4.05	1009.220290	1000.00	100.92
PFDoA_2	613.0 / 319.0	4.05	1030.283159	1000.00	103.03
PFTrDA_1	663.0 / 619.0	4.29	1085.781304	1000.00	108.58
PFTrDA_2	663.0 / 169.0	4.29	1148.964301	1000.00	114.90
PFTeDA_1	713.0 / 669.0	4.51	1111.808102	1000.00	111.18
PFTeDA_2	713.0 / 169.0	4.51	1165.343477	1000.00	116.53
NMeFOSAA_1	570.0 / 419.0	3.59	1109.892738	1000.00	110.99
NMeFOSAA_2	570.0 / 512.0	3.59	1025.403670	1000.00	102.54
NEtFOSAA_1	584.0 / 419.0	3.76	931.112593	1000.00	93.11
NEtFOSAA_2	584.0 / 483.0	3.75	1140.294553	1000.00	114.03

QC Summary Report

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:50:56	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.00	239.438434	250.00	95.78
d3-MeFOSAA	573.0 / 419.0	3.56	246.709321	250.00	98.68
d5-EtFOSAA	589.0 / 419.0	3.72	277.964847	250.00	111.19
13C5-PFHxA	318.0 / 273.0	1.84	246.441035	250.00	98.58
13C4-PFHpA	367.0 / 322.0	2.24	246.741460	250.00	98.70
13C8-PFOA	421.0 / 376.0	2.65	262.120486	250.00	104.85
13C9-PFNA	472.0 / 427.0	3.05	257.472167	250.00	102.99
13C6-PFDA	519.0 / 474.0	3.40	249.163337	250.00	99.67
13C7-PFUnA	570.0 / 525.0	3.72	251.362450	250.00	100.54
13C2-PFTeDA	715.0 / 670.0	4.47	233.236021	250.00	93.29
13C3-PFBS	302.0 / 99.0	1.52	260.851494	232.25	112.31
13C3-PFHxS	402.0 / 99.0	2.27	237.679681	236.50	100.50
13C8-PFOS	507.0 / 99.0	3.04	278.815540	239.25	116.54

Sample Name	KB76 CCV	**Injection Vial**	29
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:39:21	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.00	232.801188	250.00	93.12
d3-MeFOSAA	573.0 / 419.0	3.56	255.915222	250.00	102.37
d5-EtFOSAA	589.0 / 419.0	3.72	217.719717	250.00	87.09
13C5-PFHxA	318.0 / 273.0	1.84	247.989793	250.00	99.20
13C4-PFHpA	367.0 / 322.0	2.25	259.240179	250.00	103.70
13C8-PFOA	421.0 / 376.0	2.66	272.436460	250.00	108.97
13C9-PFNA	472.0 / 427.0	3.04	262.758704	250.00	105.10
13C6-PFDA	519.0 / 474.0	3.40	263.139032	250.00	105.26
13C7-PFUnA	570.0 / 525.0	3.71	255.362040	250.00	102.14
13C2-PFTeDA	715.0 / 670.0	4.46	241.237710	250.00	96.50
13C3-PFBS	302.0 / 99.0	1.52	227.761426	232.25	98.07
13C3-PFHxS	402.0 / 99.0	2.27	227.345178	236.50	96.13
13C8-PFOS	507.0 / 99.0	3.04	240.326584	239.25	100.45

Sample Name	KB77 CCV	**Injection Vial**	40
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:49:54	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.00	228.635669	250.00	91.45
d3-MeFOSAA	573.0 / 419.0	3.55	216.245567	250.00	86.50
d5-EtFOSAA	589.0 / 419.0	3.71	240.031348	250.00	96.01
13C5-PFHxA	318.0 / 273.0	1.84	247.924498	250.00	99.17
13C4-PFHpA	367.0 / 322.0	2.24	255.359153	250.00	102.14
13C8-PFOA	421.0 / 376.0	2.64	259.198130	250.00	103.68
13C9-PFNA	472.0 / 427.0	3.03	283.990773	250.00	113.60
13C6-PFDA	519.0 / 474.0	3.38	247.161626	250.00	98.86
13C7-PFUnA	570.0 / 525.0	3.71	237.959865	250.00	95.18
13C2-PFTeDA	715.0 / 670.0	4.46	225.076165	250.00	90.03
13C3-PFBS	302.0 / 99.0	1.52	213.641506	232.25	91.99
13C3-PFHxS	402.0 / 99.0	2.26	203.805719	236.50	86.18
13C8-PFOS	507.0 / 99.0	3.03	254.014655	239.25	106.17

Sample Name	KB76 CCV	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T05:11:17	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	3.99	238.639632	250.00	95.46
d3-MeFOSAA	573.0 / 419.0	3.55	250.376350	250.00	100.15
d5-EtFOSAA	589.0 / 419.0	3.71	234.324664	250.00	93.73
13C5-PFHxA	318.0 / 273.0	1.83	227.228904	250.00	90.89
13C4-PFHpA	367.0 / 322.0	2.24	223.406867	250.00	89.36
13C8-PFOA	421.0 / 376.0	2.65	250.989172	250.00	100.40
13C9-PFNA	472.0 / 427.0	3.04	254.957336	250.00	101.98
13C6-PFDA	519.0 / 474.0	3.39	257.798312	250.00	103.12
13C7-PFUnA	570.0 / 525.0	3.71	249.506005	250.00	99.80
13C2-PFTeDA	715.0 / 670.0	4.46	233.534647	250.00	93.41
13C3-PFBS	302.0 / 99.0	1.52	201.614677	232.25	86.81
13C3-PFHxS	402.0 / 99.0	2.26	200.646616	236.50	84.84
13C8-PFOS	507.0 / 99.0	3.03	220.667979	239.25	92.23

Sample Name	KB79 CCV	**Injection Vial**	8
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T22:28:49	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.00	277.817135	250.00	111.13
d3-MeFOSAA	573.0 / 419.0	3.56	296.556125	250.00	118.62
d5-EtFOSAA	589.0 / 419.0	3.72	242.997922	250.00	97.20
13C5-PFHxA	318.0 / 273.0	1.84	260.419234	250.00	104.17
13C4-PFHpA	367.0 / 322.0	2.24	250.784235	250.00	100.31
13C8-PFOA	421.0 / 376.0	2.65	227.523802	250.00	91.01
13C9-PFNA	472.0 / 427.0	3.04	249.251249	250.00	99.70
13C6-PFDA	519.0 / 474.0	3.39	234.164968	250.00	93.67
13C7-PFUnA	570.0 / 525.0	3.71	234.035724	250.00	93.61
13C2-PFTeDA	715.0 / 670.0	4.47	286.986431	250.00	114.79
13C3-PFBS	302.0 / 99.0	1.52	286.209188	232.25	123.23
13C3-PFHxS	402.0 / 99.0	2.26	247.855709	236.50	104.80
13C8-PFOS	507.0 / 99.0	3.04	250.743079	239.25	104.80

Sample Name	KB76 CCV	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T15:54:52	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.04	245.010734	250.00	98.00
d3-MeFOSAA	573.0 / 419.0	3.59	222.148506	250.00	88.86
d5-EtFOSAA	589.0 / 419.0	3.75	215.718903	250.00	86.29
13C5-PFHxA	318.0 / 273.0	1.85	228.789901	250.00	91.52
13C4-PFHpA	367.0 / 322.0	2.26	252.473850	250.00	100.99
13C8-PFOA	421.0 / 376.0	2.68	242.863793	250.00	97.15
13C9-PFNA	472.0 / 427.0	3.07	268.335584	250.00	107.33
13C6-PFDA	519.0 / 474.0	3.43	255.514751	250.00	102.21
13C7-PFUnA	570.0 / 525.0	3.75	227.359033	250.00	90.94
13C2-PFTeDA	715.0 / 670.0	4.50	235.375833	250.00	94.15
13C3-PFBS	302.0 / 99.0	1.53	196.153360	232.25	84.46
13C3-PFHxS	402.0 / 99.0	2.29	224.435148	236.50	94.90
13C8-PFOS	507.0 / 99.0	3.07	246.966085	239.25	103.23

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:55:29	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFHxA_1	313.0 / 269.0	1.85	968.776354	1010.00	95.92
PFHxA_2	313.0 / 119.0	1.85	924.540974	1010.00	91.54
PFHpA_1	363.0 / 319.0	2.26	817.749195	1000.00	81.77
PFHpA_2	363.0 / 169.0	2.25	723.789535	1000.00	72.38
PFHxS_1	399.0 / 80.0	2.28	1000.435431	1010.00	99.05
PFHxS_2	399.0 / 99.0	2.28	987.914601	1010.00	97.81
PFOA_1	413.0 / 369.0	2.67	981.693812	1000.00	98.17
PFOA_2	413.0 / 169.0	2.67	1017.229982	1000.00	101.72

Sample Name	KB76	**Injection Vial**	17
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:28:21	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFHxA_1	313.0 / 269.0	1.86	924.328526	1010.00	91.52
PFHxA_2	313.0 / 119.0	1.86	875.510523	1010.00	86.68
PFHpA_1	363.0 / 319.0	2.27	996.801583	1000.00	99.68
PFHpA_2	363.0 / 169.0	2.27	830.517279	1000.00	83.05
PFHxS_1	399.0 / 80.0	2.29	969.844440	1010.00	96.02
PFHxS_2	399.0 / 99.0	2.29	1004.381497	1010.00	99.44
PFOA_1	413.0 / 369.0	2.68	956.521904	1000.00	95.65
PFOA_2	413.0 / 169.0	2.68	920.310244	1000.00	92.03

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QC Summary Report

Sample Name	KB77	**Injection Vial**	6
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T15:46:45	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFHxA_1	313.0 / 269.0	1.87	2287.396841	2525.00	90.59
PFHxA_2	313.0 / 119.0	1.87	2311.486543	2525.00	91.54
PFHpA_1	363.0 / 319.0	2.28	2178.731445	2500.00	87.15
PFHpA_2	363.0 / 169.0	2.28	2063.861124	2500.00	82.55
PFHxS_1	399.0 / 80.0	2.30	2647.528768	2525.00	104.85
PFHxS_2	399.0 / 99.0	2.30	2571.331982	2525.00	101.83
PFOA_1	413.0 / 369.0	2.70	2461.240018	2500.00	98.45
PFOA_2	413.0 / 169.0	2.70	2302.261854	2500.00	92.09

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QC Summary Report

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:55:29	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C5-PFHxA	318.0 / 273.0	1.84	236.098096	250.00	94.44
13C4-PFHpA	367.0 / 322.0	2.25	261.713136	250.00	104.69
13C8-PFOA	421.0 / 376.0	2.66	241.026559	250.00	96.41
13C3-PFHxS	402.0 / 99.0	2.27	215.015437	236.50	90.92

Sample Name	KB76	**Injection Vial**	17
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:28:21	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C5-PFHxA	318.0 / 273.0	1.85	251.047581	250.00	100.42
13C4-PFHpA	367.0 / 322.0	2.26	243.583129	250.00	97.43
13C8-PFOA	421.0 / 376.0	2.67	255.795586	250.00	102.32
13C3-PFHxS	402.0 / 99.0	2.28	255.995892	250.00	102.40

Sample Name	KB77	**Injection Vial**	6
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T15:46:45	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C5-PFHxA	318.0 / 273.0	1.86	257.376886	250.00	102.95
13C4-PFHpA	367.0 / 322.0	2.27	271.405320	250.00	108.56
13C8-PFOA	421.0 / 376.0	2.68	254.775691	250.00	101.91
13C3-PFHxS	402.0 / 99.0	2.29	228.060583	250.00	91.22

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Summary Quant Report

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:50:56	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	398412.79	903.732031	343.6	false
PFBS_2	298.9 / 99.0	1.53	112920.79	880.713156	370.0	false
PFHxA_1	313.0 / 269.0	1.85	289829.62	947.928748	33.4	false
PFHxA_2	313.0 / 119.0	1.85	21198.99	936.372033	32.9	false
PFHpA_1	363.0 / 319.0	2.25	261664.25	900.138047	83.5	false
PFHpA_2	363.0 / 169.0	2.25	5250.52	861.081228	75.4	false
PFHxS_1	399.0 / 80.0	2.28	397904.03	1017.710335	182.2	false
PFHxS_2	399.0 / 99.0	2.28	113317.81	1018.822799	326.7	false
PFOA_1	413.0 / 369.0	2.66	401996.38	915.923742	282.9	false
PFOA_2	413.0 / 169.0	2.66	25228.12	917.049904	218.3	false
PFNA_1	463.0 / 419.0	3.06	352987.64	951.402426	335.4	false
PFNA_2	463.0 / 219.0	3.06	111352.89	977.494498	271.2	false
PFOS_1	499.0 / 80.0	3.06	580106.36	888.011474	181.3	false
PFOS_2	499.0 / 99.0	3.06	103160.72	902.005259	358.2	false
PFDA_1	513.0 / 469.0	3.41	422095.96	944.394983	379.4	false
PFDA_2	513.0 / 219.0	3.41	17878.54	937.238784	195.8	false
PFUnA_1	563.0 / 519.0	3.73	428190.24	920.059946	295.8	false
PFUnA_2	563.0 / 269.0	3.73	21721.96	909.228809	157.0	false
PFDoA_1	613.0 / 569.0	4.01	371261.49	977.299662	352.4	false
PFDoA_2	613.0 / 319.0	4.01	57282.97	964.345034	302.6	false
PFTrDA_1	663.0 / 619.0	4.26	337355.79	1028.502704	645.2	false
PFTrDA_2	663.0 / 169.0	4.26	20851.06	958.719982	317.7	false
PFTeDA_1	713.0 / 669.0	4.47	338294.33	986.182223	1193.9	false
PFTeDA_2	713.0 / 169.0	4.47	16091.20	998.533430	533.0	false
NMeFOSAA_1	570.0 / 419.0	3.57	67226.12	1148.551573	655.2	true
NMeFOSAA_2	570.0 / 512.0	3.56	33950.71	996.659633	349.4	false
NEtFOSAA_1	584.0 / 419.0	3.73	71178.60	1014.960769	560.6	false
NEtFOSAA_2	584.0 / 483.0	3.73	4505.05	1004.884953	327.9	false

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Summary Quant Report

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Sample Name	KB79 CCV	**Injection Vial**	8
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T22:28:49	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	9707779.03	19555.079979	2085.2	false
PFBS_2	298.9 / 99.0	1.53	2858143.39	19837.784898	1836.6	false
PFHxA_1	313.0 / 269.0	1.85	6718992.96	20141.720614	181.4	false
PFHxA_2	313.0 / 119.0	1.85	495664.58	20185.402285	173.3	false
PFHpA_1	363.0 / 319.0	2.25	6024661.69	20034.977497	444.7	false
PFHpA_2	363.0 / 169.0	2.25	118923.59	19645.920117	475.8	false
PFHxS_1	399.0 / 80.0	2.27	8544309.68	19916.986261	568.2	false
PFHxS_2	399.0 / 99.0	2.27	2455397.30	20263.416100	998.9	false
PFOA_1	413.0 / 369.0	2.66	7951305.34	20326.821467	1412.5	false
PFOA_2	413.0 / 169.0	2.66	521840.21	21575.112217	999.0	false
PFNA_1	463.0 / 419.0	3.05	7168145.79	19486.557803	1393.2	false
PFNA_2	463.0 / 219.0	3.05	2202327.47	19836.279877	986.5	false
PFOS_1	499.0 / 80.0	3.05	12125234.38	19636.349002	561.2	false
PFOS_2	499.0 / 99.0	3.05	2116179.01	19885.154880	936.7	false
PFDA_1	513.0 / 469.0	3.41	8197077.50	20187.897946	888.8	false
PFDA_2	513.0 / 219.0	3.41	350466.39	20364.226471	827.3	false
PFUnA_1	563.0 / 519.0	3.73	8546648.71	20263.854172	856.4	false
PFUnA_2	563.0 / 269.0	3.73	438604.67	21075.752538	565.2	false
PFDoA_1	613.0 / 569.0	4.01	8124767.16	19556.469694	847.5	false
PFDoA_2	613.0 / 319.0	4.01	1258498.32	19441.186724	746.1	false
PFTrDA_1	663.0 / 619.0	4.26	7378700.48	19459.829222	1385.9	false
PFTrDA_2	663.0 / 169.0	4.25	475278.12	19497.813958	960.1	false
PFTeDA_1	713.0 / 669.0	4.47	7491354.85	18929.385636	2336.4	false
PFTeDA_2	713.0 / 169.0	4.47	356820.72	19155.073943	1664.8	false
NMeFOSAA_1	570.0 / 419.0	3.56	1393777.50	19594.514748	1236.3	false
NMeFOSAA_2	570.0 / 512.0	3.56	768071.45	19831.658547	1342.1	false
NEtFOSAA_1	584.0 / 419.0	3.72	1333320.28	21340.777928	883.6	false
NEtFOSAA_2	584.0 / 483.0	3.72	82077.53	22378.633289	659.1	false

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Summary Quant Report

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Sample Name	KB76 CCV	**Injection Vial**	29
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:39:21	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	407933.66	964.958404	384.4	false
PFBS_2	298.9 / 99.0	1.54	123425.73	1004.643757	378.1	false
PFHxA_1	313.0 / 269.0	1.85	301082.45	998.541187	34.7	false
PFHxA_2	313.0 / 119.0	1.85	22785.48	1021.444998	34.6	false
PFHpA_1	363.0 / 319.0	2.26	288116.36	963.687134	90.9	false
PFHpA_2	363.0 / 169.0	2.26	6385.66	1027.643078	76.6	false
PFHxS_1	399.0 / 80.0	2.28	421078.06	1020.149680	215.5	false
PFHxS_2	399.0 / 99.0	2.28	121944.60	1038.603775	353.9	false
PFOA_1	413.0 / 369.0	2.66	456798.54	1023.016342	248.9	false
PFOA_2	413.0 / 169.0	2.66	28134.31	1006.196248	211.7	false
PFNA_1	463.0 / 419.0	3.06	365216.73	984.321078	326.4	false
PFNA_2	463.0 / 219.0	3.06	109048.47	955.803407	255.6	false
PFOS_1	499.0 / 80.0	3.06	595990.65	946.650362	182.2	false
PFOS_2	499.0 / 99.0	3.06	112755.37	1024.979760	414.7	false
PFDA_1	513.0 / 469.0	3.41	449335.64	1010.654060	386.9	false
PFDA_2	513.0 / 219.0	3.41	18715.47	986.540143	210.4	false
PFUnA_1	563.0 / 519.0	3.73	415693.36	932.994572	275.1	false
PFUnA_2	563.0 / 269.0	3.73	23688.19	1041.054040	227.3	false
PFDoA_1	613.0 / 569.0	4.01	372199.63	1072.517850	341.2	false
PFDoA_2	613.0 / 319.0	4.01	58675.27	1082.452114	281.5	false
PFTrDA_1	663.0 / 619.0	4.25	356330.90	1117.849666	686.6	false
PFTrDA_2	663.0 / 169.0	4.25	21790.05	1032.924043	355.0	false
PFTeDA_1	713.0 / 669.0	4.47	354775.81	1064.108416	1051.0	false
PFTeDA_2	713.0 / 169.0	4.47	17333.50	1107.569534	509.5	false
NMeFOSAA_1	570.0 / 419.0	3.56	66443.76	1003.139528	621.3	false
NMeFOSAA_2	570.0 / 512.0	3.56	37313.07	969.673141	441.0	false
NEtFOSAA_1	584.0 / 419.0	3.73	68120.06	1102.826693	588.3	false
NEtFOSAA_2	584.0 / 483.0	3.73	4961.93	1284.323494	348.6	true

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Summary Quant Report

Sample Name	KB77 CCV	**Injection Vial**	40
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:49:54	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	967435.06	2504.043033	715.9	false
PFBS_2	298.9 / 99.0	1.53	290810.96	2592.315945	852.7	false
PFHxA_1	313.0 / 269.0	1.85	676564.71	2389.356416	51.9	false
PFHxA_2	313.0 / 119.0	1.85	52353.88	2507.278024	46.4	false
PFHpA_1	363.0 / 319.0	2.25	656136.95	2391.824804	124.4	false
PFHpA_2	363.0 / 169.0	2.25	14221.44	2544.294140	101.1	false
PFHxS_1	399.0 / 80.0	2.27	1050636.11	2853.554341	269.1	false
PFHxS_2	399.0 / 99.0	2.27	291536.77	2796.824303	437.2	false
PFOA_1	413.0 / 369.0	2.65	993995.87	2497.804307	357.4	false
PFOA_2	413.0 / 169.0	2.65	60873.16	2461.844667	305.6	false
PFNA_1	463.0 / 419.0	3.04	839251.20	2237.930351	503.9	false
PFNA_2	463.0 / 219.0	3.04	277546.59	2437.515983	437.7	false
PFOS_1	499.0 / 80.0	3.04	1456044.87	2214.452724	267.9	false
PFOS_2	499.0 / 99.0	3.04	266507.23	2338.624837	467.1	false
PFDA_1	513.0 / 469.0	3.40	1044906.47	2447.531026	609.0	false
PFDA_2	513.0 / 219.0	3.40	43927.06	2421.488547	320.2	false
PFUnA_1	563.0 / 519.0	3.72	1038469.73	2436.945317	399.6	false
PFUnA_2	563.0 / 269.0	3.72	55807.26	2620.567824	230.4	false
PFDoA_1	613.0 / 569.0	4.01	936040.87	2726.162716	622.4	false
PFDoA_2	613.0 / 319.0	4.01	140188.40	2616.257126	491.4	false
PFTrDA_1	663.0 / 619.0	4.25	822830.06	2750.899270	834.6	false
PFTrDA_2	663.0 / 169.0	4.25	53255.06	2743.932289	572.6	false
PFTeDA_1	713.0 / 669.0	4.47	844755.37	2704.966928	1210.6	false
PFTeDA_2	713.0 / 169.0	4.46	39521.84	2689.710862	957.4	false
NMeFOSAA_1	570.0 / 419.0	3.55	168299.83	3054.288926	953.4	false
NMeFOSAA_2	570.0 / 512.0	3.55	87490.88	2854.930073	544.6	false
NEtFOSAA_1	584.0 / 419.0	3.72	169548.53	2732.160442	787.1	false
NEtFOSAA_2	584.0 / 483.0	3.71	10363.96	2761.997552	477.0	false

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Summary Quant Report

Sample Name	KB76 CCV	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T05:11:17	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	373388.11	984.286435	397.6	false
PFBS_2	298.9 / 99.0	1.53	116163.17	1053.992846	373.4	false
PFHxA_1	313.0 / 269.0	1.84	294140.50	1046.411505	29.9	false
PFHxA_2	313.0 / 119.0	1.84	21256.96	1021.690899	27.7	false
PFHpA_1	363.0 / 319.0	2.25	254928.81	972.242357	77.9	false
PFHpA_2	363.0 / 169.0	2.25	4779.66	867.813205	62.9	false
PFHxS_1	399.0 / 80.0	2.27	406057.10	1073.659821	184.1	false
PFHxS_2	399.0 / 99.0	2.27	116820.44	1086.267779	310.1	false
PFOA_1	413.0 / 369.0	2.65	438848.67	1048.406884	239.8	false
PFOA_2	413.0 / 169.0	2.65	29024.23	1109.786134	258.8	false
PFNA_1	463.0 / 419.0	3.05	361853.90	987.471790	334.8	false
PFNA_2	463.0 / 219.0	3.05	109859.01	975.657919	263.0	false
PFOS_1	499.0 / 80.0	3.05	565245.55	994.463160	173.6	false
PFOS_2	499.0 / 99.0	3.05	102240.95	1029.526065	385.3	false
PFDA_1	513.0 / 469.0	3.40	414758.67	975.163947	399.2	false
PFDA_2	513.0 / 219.0	3.40	15979.76	879.250953	183.3	false
PFUnA_1	563.0 / 519.0	3.72	427515.54	1005.980555	346.1	false
PFUnA_2	563.0 / 269.0	3.72	21768.74	1001.597593	221.6	false
PFDoA_1	613.0 / 569.0	4.01	369214.32	1062.876618	399.2	false
PFDoA_2	613.0 / 319.0	4.01	57945.25	1067.750262	360.2	false
PFTrDA_1	663.0 / 619.0	4.25	325280.63	1078.440955	667.8	false
PFTrDA_2	663.0 / 169.0	4.25	22229.33	1120.547351	306.7	false
PFTeDA_1	713.0 / 669.0	4.47	329679.38	1045.669794	1082.8	false
PFTeDA_2	713.0 / 169.0	4.46	15955.47	1077.809090	590.8	false
NMeFOSAA_1	570.0 / 419.0	3.56	65739.52	984.068318	558.0	false
NMeFOSAA_2	570.0 / 512.0	3.56	32074.44	811.360433	394.3	false
NEtFOSAA_1	584.0 / 419.0	3.72	70752.17	1108.406197	580.7	false
NEtFOSAA_2	584.0 / 483.0	3.71	4900.86	1221.972190	1735.6	true

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:04:32 PM

Sample Name	KB76 CCV	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T15:54:52	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	420181.85	1044.934316	609.7	false
PFBS_2	298.9 / 99.0	1.54	120789.99	1033.288235	462.9	false
PFHxA_1	313.0 / 269.0	1.87	337834.29	1164.804778	37.0	false
PFHxA_2	313.0 / 119.0	1.86	24727.05	1152.727123	32.5	false
PFHpA_1	363.0 / 319.0	2.28	297781.05	979.824748	95.0	false
PFHpA_2	363.0 / 169.0	2.27	6731.47	1067.520512	79.7	false
PFHxS_1	399.0 / 80.0	2.30	470102.73	1101.330576	290.0	false
PFHxS_2	399.0 / 99.0	2.30	137962.09	1136.910339	413.7	false
PFOA_1	413.0 / 369.0	2.69	469855.58	1132.076160	266.4	false
PFOA_2	413.0 / 169.0	2.69	32047.67	1237.777996	362.1	false
PFNA_1	463.0 / 419.0	3.09	387010.22	978.048619	342.1	false
PFNA_2	463.0 / 219.0	3.08	118483.46	974.601142	295.2	false
PFOS_1	499.0 / 80.0	3.08	639176.28	895.700308	174.6	false
PFOS_2	499.0 / 99.0	3.08	124233.41	995.915026	525.8	false
PFDA_1	513.0 / 469.0	3.44	471888.69	1011.340201	373.1	false
PFDA_2	513.0 / 219.0	3.44	20700.56	1040.472830	218.8	false
PFUnA_1	563.0 / 519.0	3.76	404903.68	944.402446	299.3	false
PFUnA_2	563.0 / 269.0	3.76	19433.05	881.845505	200.6	false
PFDoA_1	613.0 / 569.0	4.05	399147.53	1009.220290	477.3	false
PFDoA_2	613.0 / 319.0	4.05	63631.92	1030.283159	333.4	false
PFTrDA_1	663.0 / 619.0	4.29	365350.79	1085.781304	691.3	false
PFTrDA_2	663.0 / 169.0	4.29	25397.09	1148.964301	420.3	false
PFTeDA_1	713.0 / 669.0	4.51	390289.44	1111.808102	928.1	false
PFTeDA_2	713.0 / 169.0	4.51	19200.52	1165.343477	569.9	false
NMeFOSAA_1	570.0 / 419.0	3.59	72805.07	1109.892738	629.5	false
NMeFOSAA_2	570.0 / 512.0	3.59	38998.55	1025.403670	1205.2	false
NEtFOSAA_1	584.0 / 419.0	3.76	64390.88	931.112593	628.4	false
NEtFOSAA_2	584.0 / 483.0	3.75	4965.50	1140.294553	522.3	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:03:25 PM

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:50:56	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	105165.51	239.438434	1192.9	false
d3-MeFOSAA	573.0 / 419.0	3.56	14823.22	246.709321	139.8	false
d5-EtFOSAA	589.0 / 419.0	3.72	18551.80	277.964847	178.1	false
13C5-PFHxA	318.0 / 273.0	1.84	74274.33	246.441035	586.6	false
13C4-PFHpA	367.0 / 322.0	2.24	81788.55	246.741460	685.6	false
13C8-PFOA	421.0 / 376.0	2.65	103709.97	262.120486	1371.0	false
13C9-PFNA	472.0 / 427.0	3.05	100029.99	257.472167	1265.3	false
13C6-PFDA	519.0 / 474.0	3.40	107258.31	249.163337	1002.1	false
13C7-PFUnA	570.0 / 525.0	3.72	107715.66	251.362450	515.2	false
13C2-PFTeDA	715.0 / 670.0	4.47	77343.09	233.236021	1575.4	false
13C3-PFBS	302.0 / 99.0	1.52	35393.55	260.851494	657.8	false
13C3-PFHxS	402.0 / 99.0	2.27	26643.08	237.679681	344.1	false
13C8-PFOS	507.0 / 99.0	3.04	31391.71	278.815540	252.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:03:30 PM

Sample Name	KB76 CCV	**Injection Vial**	29
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:39:21	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	96356.86	232.801188	886.6	false
d3-MeFOSAA	573.0 / 419.0	3.56	16895.97	255.915222	136.3	false
d5-EtFOSAA	589.0 / 419.0	3.72	15967.02	217.719717	190.8	false
13C5-PFHxA	318.0 / 273.0	1.84	73287.99	247.989793	745.5	false
13C4-PFHpA	367.0 / 322.0	2.25	84260.88	259.240179	867.9	false
13C8-PFOA	421.0 / 376.0	2.66	105695.87	272.436460	1419.6	false
13C9-PFNA	472.0 / 427.0	3.04	100099.13	262.758704	847.4	false
13C6-PFDA	519.0 / 474.0	3.40	106745.62	263.139032	1181.0	false
13C7-PFUnA	570.0 / 525.0	3.71	103122.34	255.362040	722.8	false
13C2-PFTeDA	715.0 / 670.0	4.46	75385.71	241.237710	1470.7	false
13C3-PFBS	302.0 / 99.0	1.52	33957.91	227.761426	626.3	false
13C3-PFHxS	402.0 / 99.0	2.27	28003.23	227.345178	390.5	false
13C8-PFOS	507.0 / 99.0	3.04	29732.39	240.326584	235.3	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:03:34 PM

Sample Name	KB77 CCV	**Injection Vial**	40
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:49:54	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	97134.44	228.635669	1298.0	false
d3-MeFOSAA	573.0 / 419.0	3.55	13977.05	216.245567	145.4	false
d5-EtFOSAA	589.0 / 419.0	3.71	17233.58	240.031348	155.3	false
13C5-PFHxA	318.0 / 273.0	1.84	69244.45	247.924498	542.7	false
13C4-PFHpA	367.0 / 322.0	2.24	78440.74	255.359153	670.9	false
13C8-PFOA	421.0 / 376.0	2.64	95036.68	259.198130	1105.2	false
13C9-PFNA	472.0 / 427.0	3.03	102245.46	283.990773	858.1	false
13C6-PFDA	519.0 / 474.0	3.38	102914.76	247.161626	1673.3	false
13C7-PFUnA	570.0 / 525.0	3.71	98635.21	237.959865	583.9	false
13C2-PFTeDA	715.0 / 670.0	4.46	72194.68	225.076165	1112.1	false
13C3-PFBS	302.0 / 99.0	1.52	31183.70	213.641506	512.6	false
13C3-PFHxS	402.0 / 99.0	2.26	24576.51	203.805719	264.1	false
13C8-PFOS	507.0 / 99.0	3.03	30765.79	254.014655	292.7	false

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Summary Quant Report

Sample Name	KB76 CCV	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T05:11:17	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.99	96424.33	238.639632	936.9	false
d3-MeFOSAA	573.0 / 419.0	3.55	16759.57	250.376350	158.5	false
d5-EtFOSAA	589.0 / 419.0	3.71	17423.15	234.324664	161.3	false
13C5-PFHxA	318.0 / 273.0	1.83	68355.40	227.228904	573.7	false
13C4-PFHpA	367.0 / 322.0	2.24	73914.63	223.406867	587.4	false
13C8-PFOA	421.0 / 376.0	2.65	99119.26	250.989172	1283.2	false
13C9-PFNA	472.0 / 427.0	3.04	98866.91	254.957336	1059.8	false
13C6-PFDA	519.0 / 474.0	3.39	102091.95	257.798312	984.9	false
13C7-PFUnA	570.0 / 525.0	3.71	98361.26	249.506005	1213.7	false
13C2-PFTeDA	715.0 / 670.0	4.46	71242.94	233.534647	1191.1	false
13C3-PFBS	302.0 / 99.0	1.52	30476.53	201.614677	565.3	false
13C3-PFHxS	402.0 / 99.0	2.26	25057.45	200.646616	461.2	false
13C8-PFOS	507.0 / 99.0	3.03	27678.97	220.667979	244.5	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:03:42 PM

Sample Name	KB79 CCV	**Injection Vial**	8
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T22:28:49	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	118781.63	277.817135	964.8	false
d3-MeFOSAA	573.0 / 419.0	3.56	18433.30	296.556125	91.4	false
d5-EtFOSAA	589.0 / 419.0	3.72	16777.91	242.997922	190.1	false
13C5-PFHxA	318.0 / 273.0	1.84	81892.70	260.419234	556.5	false
13C4-PFHpA	367.0 / 322.0	2.24	86735.53	250.784235	843.3	false
13C8-PFOA	421.0 / 376.0	2.65	93927.51	227.523802	1216.8	false
13C9-PFNA	472.0 / 427.0	3.04	101037.76	249.251249	972.3	false
13C6-PFDA	519.0 / 474.0	3.39	98124.98	234.164968	4456.6	false
13C7-PFUnA	570.0 / 525.0	3.71	97627.33	234.035724	698.1	false
13C2-PFTeDA	715.0 / 670.0	4.47	92639.90	286.986431	1056.4	false
13C3-PFBS	302.0 / 99.0	1.52	40174.78	286.209188	574.4	false
13C3-PFHxS	402.0 / 99.0	2.26	28742.90	247.855709	325.8	false
13C8-PFOS	507.0 / 99.0	3.04	29205.60	250.743079	216.6	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:03:45 PM

Sample Name	KB76 CCV	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T15:54:52	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	109604.35	245.010734	934.4	false
d3-MeFOSAA	573.0 / 419.0	3.59	16208.45	222.148506	162.0	false
d5-EtFOSAA	589.0 / 419.0	3.75	17483.39	215.718903	239.5	false
13C5-PFHxA	318.0 / 273.0	1.85	70600.96	228.789901	789.1	false
13C4-PFHpA	367.0 / 322.0	2.26	85686.98	252.473850	796.6	false
13C8-PFOA	421.0 / 376.0	2.68	98385.33	242.863793	1423.4	false
13C9-PFNA	472.0 / 427.0	3.07	106739.77	268.335584	1188.9	false
13C6-PFDA	519.0 / 474.0	3.43	112027.86	255.514751	28726.4	false
13C7-PFUnA	570.0 / 525.0	3.75	99232.49	227.359033	673.1	false
13C2-PFTeDA	715.0 / 670.0	4.50	79497.05	235.375833	1583.1	false
13C3-PFBS	302.0 / 99.0	1.53	32319.73	196.153360	833.7	false
13C3-PFHxS	402.0 / 99.0	2.29	30550.94	224.435148	453.1	false
13C8-PFOS	507.0 / 99.0	3.07	33765.76	246.966085	264.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:05:20 PM

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:55:29	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.85	259842.82	968.776354	34.5	false
PFHxA_2	313.0 / 119.0	1.85	18760.22	924.540974	29.4	false
PFHpA_1	363.0 / 319.0	2.26	226134.27	817.749195	86.8	false
PFHpA_2	363.0 / 169.0	2.25	4452.70	723.789535	62.2	false
PFHxS_1	399.0 / 80.0	2.28	369870.66	1000.435431	219.6	false
PFHxS_2	399.0 / 99.0	2.28	104927.89	987.914601	427.0	false
PFOA_1	413.0 / 369.0	2.67	374349.02	981.693812	246.7	false
PFOA_2	413.0 / 169.0	2.67	24199.88	1017.229982	210.4	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:05:24 PM

Sample Name	KB76	**Injection Vial**	17
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:28:21	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.86	275335.84	924.328526	35.6	false
PFHxA_2	313.0 / 119.0	1.86	19741.98	875.510523	34.2	false
PFHpA_1	363.0 / 319.0	2.27	266551.78	996.801583	105.0	false
PFHpA_2	363.0 / 169.0	2.27	4891.42	830.517279	87.0	false
PFHxS_1	399.0 / 80.0	2.29	409469.18	969.844440	224.5	false
PFHxS_2	399.0 / 99.0	2.29	121718.37	1004.381497	433.0	false
PFOA_1	413.0 / 369.0	2.68	404067.65	956.521904	251.7	false
PFOA_2	413.0 / 169.0	2.68	24192.34	920.310244	200.7	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:05:28 PM

Sample Name	KB77	**Injection Vial**	6
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T15:46:45	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.87	704889.15	2287.396841	64.2	false
PFHxA_2	313.0 / 119.0	1.87	53559.87	2311.486543	61.8	false
PFHpA_1	363.0 / 319.0	2.28	650939.16	2178.731445	147.9	false
PFHpA_2	363.0 / 169.0	2.28	12912.98	2063.861124	165.7	false
PFHxS_1	399.0 / 80.0	2.30	1087734.93	2647.528768	477.5	false
PFHxS_2	399.0 / 99.0	2.30	297542.41	2571.331982	932.2	false
PFOA_1	413.0 / 369.0	2.70	1054693.85	2461.240018	467.1	false
PFOA_2	413.0 / 169.0	2.70	62218.29	2302.261854	384.1	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:04:56 PM

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:55:29	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.84	62937.71	236.098096	656.0	false
13C4-PFHpA	367.0 / 322.0	2.25	77653.50	261.713136	527.1	false
13C8-PFOA	421.0 / 376.0	2.66	90774.16	241.026559	945.1	false
13C3-PFHxS	402.0 / 99.0	2.27	25235.51	215.015437	353.7	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:05:00 PM

Sample Name	KB76	**Injection Vial**	17
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:28:21	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.85	69866.55	251.047581	720.9	false
13C4-PFHpA	367.0 / 322.0	2.26	75453.18	243.583129	603.4	false
13C8-PFOA	421.0 / 376.0	2.67	100573.88	255.795586	1022.5	false
13C3-PFHxS	402.0 / 99.0	2.28	28891.39	255.995892	425.7	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:05:04 PM

Sample Name	KB77	**Injection Vial**	6
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T15:46:45	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.86	72693.76	257.376886	441.3	false
13C4-PFHpA	367.0 / 322.0	2.27	85322.39	271.405320	656.4	false
13C8-PFOA	421.0 / 376.0	2.68	101663.36	254.775691	2317.6	false
13C3-PFHxS	402.0 / 99.0	2.29	27855.31	228.060583	373.8	false

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 5:06:18 PM

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:50:56	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	0.288	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.060	0.064	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.320	0.314	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	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.040	0.043	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.050	0.054	ü
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.150	0.157	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.060	0.068	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.56	NMeFOSAA	0.510	0.569	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.060	0.066	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 5:06:22 PM

Sample Name	KB79 CCV	**Injection Vial**	8
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T22:28:49	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.290	0.288	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.070	0.064	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.310	0.314	ü
PFOS_1	499.0 / 80.0	3.05	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.170	0.178	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.040	0.043	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.050	0.054	ü
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.150	0.157	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.060	0.068	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.56	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.56	NMeFOSAA	0.550	0.569	ü
NEtFOSAA_1	584.0 / 419.0	3.72	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.72	NEtFOSAA	0.060	0.066	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 5:06:27 PM

Sample Name	KB76 CCV	**Injection Vial**	29
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:39:21	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.080	0.075	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.290	0.288	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	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	0.314	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	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.040	0.043	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.060	0.054	ü
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.160	0.157	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.060	0.068	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.56	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.56	NMeFOSAA	0.560	0.569	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.070	0.066	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
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Sample Name	KB77 CCV	**Injection Vial**	40
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:49:54	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.080	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.280	0.288	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.060	0.064	ü
PFNA_1	463.0 / 419.0	3.04	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.330	0.314	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.040	0.043	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	PFUnA	0.050	0.054	ü
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.150	0.157	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.060	0.068	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.46	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.520	0.569	ü
NEtFOSAA_1	584.0 / 419.0	3.72	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	NEtFOSAA	0.060	0.066	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 5:06:36 PM

Sample Name	KB76 CCV	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T05:11:17	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.310	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.290	0.288	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.070	0.064	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.300	0.314	ü
PFOS_1	499.0 / 80.0	3.05	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.040	0.043	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	PFUnA	0.050	0.054	ü
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.160	0.157	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.070	0.068	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.46	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.56	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.56	NMeFOSAA	0.490	0.569	ü
NEtFOSAA_1	584.0 / 419.0	3.72	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	NEtFOSAA	0.070	0.066	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 5:06:41 PM

Sample Name	KB76 CCV	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T15:54:52	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	0.292	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.28	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.290	0.288	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	3.08	PFNA	0.310	0.314	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	3.44	PFDA			
PFDA_2	513.0 / 219.0	3.44	PFDA	0.040	0.043	ü
PFUnA_1	563.0 / 519.0	3.76	PFUnA			
PFUnA_2	563.0 / 269.0	3.76	PFUnA	0.050	0.054	ü
PFDoA_1	613.0 / 569.0	4.05	PFDoA			
PFDoA_2	613.0 / 319.0	4.05	PFDoA	0.160	0.157	ü
PFTrDA_1	663.0 / 619.0	4.29	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.29	PFTrDA	0.070	0.068	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	0.540	0.569	ü
NEtFOSAA_1	584.0 / 419.0	3.76	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.75	NEtFOSAA	0.080	0.066	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 5:07:05 PM

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:55:29	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.024	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	0.301	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.060	0.061	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 5:07:09 PM

Sample Name	KB76	**Injection Vial**	17
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:28:21	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.020	0.024	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.300	0.301	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.060	0.061	ü

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 5:07:13 PM

Sample Name	KB77	**Injection Vial**	6
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T15:46:45	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.28	PFHpA			
PFHpA_2	363.0 / 169.0	2.28	PFHpA	0.020	0.024	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.270	0.301	ü
PFOA_1	413.0 / 369.0	2.70	PFOA			
PFOA_2	413.0 / 169.0	2.70	PFOA	0.060	0.061	ü

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Summary Internal Standard Report

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:50:56	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	35393.55	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	35393.55	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	74274.33	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	74274.33	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	81788.55	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	81788.55	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	26402.06	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	26402.06	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	103709.97	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	103709.97	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	100029.99	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	100029.99	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	31513.44	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	31513.44	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	107258.31	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	107258.31	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	107715.66	250.00
PFUnA_2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	107715.66	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	105165.51	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	105165.51	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	77343.09	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	77343.09	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	77343.09	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	77343.09	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	15063.73	250.00
NMeFOSAA_2	570.0 / 512.0	3.56	d3-MeFOSAA	573.0 / 419.0	15063.73	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	18327.93	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	18327.93	250.00

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Summary Internal Standard Report

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Sample Name	KB79 CCV	**Injection Vial**	8
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T22:28:49	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	40174.78	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	40174.78	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	81892.70	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	81892.70	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	86735.53	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	86735.53	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	28853.49	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	28853.49	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	93927.51	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	93927.51	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	101037.76	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	101037.76	250.00
PFOS_1	499.0 / 80.0	3.05	13C8-PFOS	507.0 / 99.0	29779.08	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	29779.08	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	98124.98	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	98124.98	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	97627.33	250.00
PFUnA_2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	97627.33	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	118781.63	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	118781.63	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	92639.90	250.00
PFTrDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	92639.90	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	92639.90	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	92639.90	250.00
NMeFOSAA_1	570.0 / 419.0	3.56	d3-MeFOSAA	573.0 / 419.0	18853.35	250.00
NMeFOSAA_2	570.0 / 512.0	3.56	d3-MeFOSAA	573.0 / 419.0	18853.35	250.00
NEtFOSAA_1	584.0 / 419.0	3.72	d5-EtFOSAA	589.0 / 419.0	16717.67	250.00
NEtFOSAA_2	584.0 / 483.0	3.72	d5-EtFOSAA	589.0 / 419.0	16717.67	250.00

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Summary Internal Standard Report

Sample Name	KB76 CCV	**Injection Vial**	29
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:39:21	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	33957.91	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	33957.91	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	73287.99	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	73287.99	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	84260.88	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	84260.88	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	27872.64	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	27872.64	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	105695.87	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	105695.87	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	100099.13	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	100099.13	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	30370.25	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	30370.25	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	106745.62	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	106745.62	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	103122.34	250.00
PFUnA_2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	103122.34	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	96356.86	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	96356.86	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	75385.71	250.00
PFTrDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	75385.71	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	75385.71	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	75385.71	250.00
NMeFOSAA_1	570.0 / 419.0	3.56	d3-MeFOSAA	573.0 / 419.0	16970.79	250.00
NMeFOSAA_2	570.0 / 512.0	3.56	d3-MeFOSAA	573.0 / 419.0	16970.79	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	16174.40	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	16174.40	250.00

Sample Name	KB77 CCV	**Injection Vial**	40
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:49:54	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	31183.70	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	31183.70	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	69244.45	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	69244.45	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	78440.74	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	78440.74	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	24795.35	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	24795.35	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	95036.68	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	95036.68	250.00
PFNA_1	463.0 / 419.0	3.04	13C9-PFNA	472.0 / 427.0	102245.46	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	102245.46	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	31712.95	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	31712.95	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	102914.76	250.00
PFDA_2	513.0 / 219.0	3.40	13C6-PFDA	519.0 / 474.0	102914.76	250.00
PFUnA_1	563.0 / 519.0	3.72	13C7-PFUnA	570.0 / 525.0	98635.21	250.00
PFUnA_2	563.0 / 269.0	3.72	13C7-PFUnA	570.0 / 525.0	98635.21	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	97134.44	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	97134.44	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	72194.68	250.00
PFTrDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	72194.68	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	72194.68	250.00
PFTeDA_2	713.0 / 169.0	4.46	13C2-PFTeDA	715.0 / 670.0	72194.68	250.00
NMeFOSAA_1	570.0 / 419.0	3.55	d3-MeFOSAA	573.0 / 419.0	14459.39	250.00
NMeFOSAA_2	570.0 / 512.0	3.55	d3-MeFOSAA	573.0 / 419.0	14459.39	250.00
NEtFOSAA_1	584.0 / 419.0	3.72	d5-EtFOSAA	589.0 / 419.0	16471.39	250.00
NEtFOSAA_2	584.0 / 483.0	3.71	d5-EtFOSAA	589.0 / 419.0	16471.39	250.00

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Summary Internal Standard Report

Sample Name	KB76 CCV	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T05:11:17	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	30476.53	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	30476.53	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	68355.40	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	68355.40	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	73914.63	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	73914.63	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	25533.39	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	25533.39	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	99119.26	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	99119.26	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	98866.91	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	98866.91	250.00
PFOS_1	499.0 / 80.0	3.05	13C8-PFOS	507.0 / 99.0	27418.34	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	27418.34	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	102091.95	250.00
PFDA_2	513.0 / 219.0	3.40	13C6-PFDA	519.0 / 474.0	102091.95	250.00
PFUnA_1	563.0 / 519.0	3.72	13C7-PFUnA	570.0 / 525.0	98361.26	250.00
PFUnA_2	563.0 / 269.0	3.72	13C7-PFUnA	570.0 / 525.0	98361.26	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	96424.33	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	96424.33	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	71242.94	250.00
PFTrDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	71242.94	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	71242.94	250.00
PFTeDA_2	713.0 / 169.0	4.46	13C2-PFTeDA	715.0 / 670.0	71242.94	250.00
NMeFOSAA_1	570.0 / 419.0	3.56	d3-MeFOSAA	573.0 / 419.0	17104.68	250.00
NMeFOSAA_2	570.0 / 512.0	3.56	d3-MeFOSAA	573.0 / 419.0	17104.68	250.00
NEtFOSAA_1	584.0 / 419.0	3.72	d5-EtFOSAA	589.0 / 419.0	16716.70	250.00
NEtFOSAA_2	584.0 / 483.0	3.71	d5-EtFOSAA	589.0 / 419.0	16716.70	250.00

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Summary Internal Standard Report

Sample Name	KB76 CCV	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T15:54:52	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	32319.73	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	32319.73	232.25
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	70600.96	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	70600.96	250.00
PFHpA_1	363.0 / 319.0	2.28	13C4-PFHpA	367.0 / 322.0	85686.98	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	85686.98	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	28815.05	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	28815.05	236.50
PFOA_1	413.0 / 369.0	2.69	13C8-PFOA	421.0 / 376.0	98385.33	250.00
PFOA_2	413.0 / 169.0	2.69	13C8-PFOA	421.0 / 376.0	98385.33	250.00
PFNA_1	463.0 / 419.0	3.09	13C9-PFNA	472.0 / 427.0	106739.77	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	106739.77	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	34424.17	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	34424.17	239.25
PFDA_1	513.0 / 469.0	3.44	13C6-PFDA	519.0 / 474.0	112027.86	250.00
PFDA_2	513.0 / 219.0	3.44	13C6-PFDA	519.0 / 474.0	112027.86	250.00
PFUnA_1	563.0 / 519.0	3.76	13C7-PFUnA	570.0 / 525.0	99232.49	250.00
PFUnA_2	563.0 / 269.0	3.76	13C7-PFUnA	570.0 / 525.0	99232.49	250.00
PFDoA_1	613.0 / 569.0	4.05	13C2-PFDoA	615.0 / 570.0	109604.35	250.00
PFDoA_2	613.0 / 319.0	4.05	13C2-PFDoA	615.0 / 570.0	109604.35	250.00
PFTrDA_1	663.0 / 619.0	4.29	13C2-PFTeDA	715.0 / 670.0	79497.05	250.00
PFTrDA_2	663.0 / 169.0	4.29	13C2-PFTeDA	715.0 / 670.0	79497.05	250.00
PFTeDA_1	713.0 / 669.0	4.51	13C2-PFTeDA	715.0 / 670.0	79497.05	250.00
PFTeDA_2	713.0 / 169.0	4.51	13C2-PFTeDA	715.0 / 670.0	79497.05	250.00
NMeFOSAA_1	570.0 / 419.0	3.59	d3-MeFOSAA	573.0 / 419.0	16863.96	250.00
NMeFOSAA_2	570.0 / 512.0	3.59	d3-MeFOSAA	573.0 / 419.0	16863.96	250.00
NEtFOSAA_1	584.0 / 419.0	3.76	d5-EtFOSAA	589.0 / 419.0	18033.49	250.00
NEtFOSAA_2	584.0 / 483.0	3.75	d5-EtFOSAA	589.0 / 419.0	18033.49	250.00

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Summary Internal Standard Report

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:50:56	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	112520.38	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	28012.06	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	28012.06	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	95017.31	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	95017.31	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	95017.31	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	95017.31	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	112520.38	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	112520.38	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	112520.38	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	28012.06	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	28012.06	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	28012.06	239.25

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Summary Internal Standard Report

Sample Name	KB76 CCV	**Injection Vial**	29
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:39:21	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	106034.98	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	30780.46	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	30780.46	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	93169.98	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	93169.98	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	93169.98	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	93169.98	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	106034.98	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	106034.98	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	106034.98	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	30780.46	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	30780.46	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	30780.46	239.25

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Summary Internal Standard Report

Sample Name	KB77 CCV	**Injection Vial**	40
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:49:54	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	108838.11	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	30133.97	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	30133.97	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	88052.68	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	88052.68	250.00
13C8-PFOA	421.0 / 376.0	2.64	13C2-PFOA	415.0 / 370.0	88052.68	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	88052.68	250.00
13C6-PFDA	519.0 / 474.0	3.38	13C2-PFDA	515.0 / 470.0	108838.11	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	108838.11	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	108838.11	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	30133.97	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	30133.97	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	30133.97	239.25

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Summary Internal Standard Report

Sample Name	KB76 CCV	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T05:11:17	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	103513.22	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	31207.41	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	31207.41	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	94838.84	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	94838.84	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	94838.84	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	94838.84	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	103513.22	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	103513.22	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	103513.22	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	31207.41	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	31207.41	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	31207.41	239.25

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Summary Internal Standard Report

Sample Name	KB79 CCV	**Injection Vial**	8
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T22:28:49	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	109532.25	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	28979.06	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	28979.06	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	99140.06	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	99140.06	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	99140.06	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	99140.06	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	109532.25	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	109532.25	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	109532.25	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	28979.06	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	28979.06	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	28979.06	239.25

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Summary Internal Standard Report

Sample Name	KB76 CCV	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T15:54:52	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	114602.59	250.00
d3-MeFOSAA	573.0 / 419.0	3.59	13C4-PFOS	503.0 / 99.0	34016.24	239.25
d5-EtFOSAA	589.0 / 419.0	3.75	13C4-PFOS	503.0 / 99.0	34016.24	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	97286.10	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	97286.10	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	97286.10	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	97286.10	250.00
13C6-PFDA	519.0 / 474.0	3.43	13C2-PFDA	515.0 / 470.0	114602.59	250.00
13C7-PFUnA	570.0 / 525.0	3.75	13C2-PFDA	515.0 / 470.0	114602.59	250.00
13C2-PFTeDA	715.0 / 670.0	4.50	13C2-PFDA	515.0 / 470.0	114602.59	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	34016.24	239.25
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	34016.24	239.25
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	34016.24	239.25

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Summary Internal Standard Report

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:55:29	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	62937.71	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	62937.71	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	77653.50	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	77653.50	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	24837.46	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	24837.46	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	90774.16	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	90774.16	250.00

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Summary Internal Standard Report

Sample Name	KB76	**Injection Vial**	17
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:28:21	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	69866.55	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	69866.55	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	75453.18	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	75453.18	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	28357.59	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	28357.59	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	100573.88	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	100573.88	250.00

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Summary Internal Standard Report

Sample Name	KB77	**Injection Vial**	6
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T15:46:45	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	72693.76	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	72693.76	250.00
PFHpA_1	363.0 / 319.0	2.28	13C4-PFHpA	367.0 / 322.0	85322.39	250.00
PFHpA_2	363.0 / 169.0	2.28	13C4-PFHpA	367.0 / 322.0	85322.39	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	27722.25	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	27722.25	236.50
PFOA_1	413.0 / 369.0	2.70	13C8-PFOA	421.0 / 376.0	101663.36	250.00
PFOA_2	413.0 / 169.0	2.70	13C8-PFOA	421.0 / 376.0	101663.36	250.00

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Summary Internal Standard Report

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:55:29	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	90802.43	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	90802.43	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	90802.43	250.00
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	33030.83	239.25

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Summary Internal Standard Report

Sample Name	KB76	**Injection Vial**	17
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:28:21	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	94796.50	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	94796.50	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	94796.50	250.00
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	31762.34	239.25

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Summary Internal Standard Report

Sample Name	KB77	**Injection Vial**	6
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T15:46:45	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	96206.99	250.00
13C4-PFHpA	367.0 / 322.0	2.27	13C2-PFOA	415.0 / 370.0	96206.99	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	96206.99	250.00
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	34374.39	239.25

Raw Analytical Data

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:13:47 PM

Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:40:04	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	8484.68	14.450016	21.7	true
PFBS_2	298.9 / 99.0	1.53	2670.16	14.556862	19.3	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	6008.74	18.885371	15.3	false
PFHxS_2	399.0 / 99.0	2.28	2164.98	15.289499	18.3	false
PFOA_1	413.0 / 369.0	2.67	6713.87	0.453738	22.9	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	3.06	8289.28	4.278921	27.0	false
PFNA_2	463.0 / 219.0	3.05	1880.90	< 0	24.7	false
PFOS_1	499.0 / 80.0	3.06	16022.42	25.869361	24.8	false
PFOS_2	499.0 / 99.0	3.06	2061.15	4.429605	22.2	false
PFDA_1	513.0 / 469.0	3.41	7373.10	10.021612	35.6	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.73	6379.14	14.711864	35.3	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.01	6457.95	< 0	61.7	false
PFDoA_2	613.0 / 319.0	4.01	957.16	< 0	41.1	false
PFTrDA_1	663.0 / 619.0	4.26	5185.79	< 0	95.2	false
PFTrDA_2	663.0 / 169.0	4.26	445.53	< 0	27.7	false
PFTeDA_1	713.0 / 669.0	4.47	6379.58	< 0	149.5	false
PFTeDA_2	713.0 / 169.0	4.48	342.28	< 0	33.6	false
NMeFOSAA_1	570.0 / 419.0	3.56	1440.92	< 0	48.7	false
NMeFOSAA_2	570.0 / 512.0	3.56	1174.17	< 0	42.9	false
NEtFOSAA_1	584.0 / 419.0	3.72	2174.81	4.698466	56.4	false
NEtFOSAA_2	584.0 / 483.0	3.73	166.28	< 0	6.7	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:13:58 PM

Sample Name	CR847PB-FS(0)	**Injection Vial**	19
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T22:50:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	2.66	65376.53	115.954045	89.7	false
PFOA_2	413.0 / 169.0	2.66	4401.16	114.357858	65.8	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	true
PFOS_1	499.0 / 80.0	3.02	21763.87	32.153367	21.1	true
PFOS_2	499.0 / 99.0	3.05	2210.03	4.106859	28.7	false
PFDA_1	513.0 / 469.0	3.42	1506.29	< 0	11.7	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.73	2042.57	3.962779	15.5	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.01	1892.50	< 0	27.2	false
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.25	1520.16	< 0	43.3	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	3.73	540.59	< 0	36.7	false
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	CR848LCS-FS(0)	**Injection Vial**	20
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:01:28	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	3281620.82	8209.608989	1138.2	false
PFBS_2	298.9 / 99.0	1.53	948088.21	8171.339273	1014.5	false
PFHxA_1	313.0 / 269.0	1.85	2323728.45	7280.576433	95.2	false
PFHxA_2	313.0 / 119.0	1.85	171944.80	7314.971170	90.6	false
PFHpA_1	363.0 / 319.0	2.25	2181559.21	7383.427557	234.6	false
PFHpA_2	363.0 / 169.0	2.25	42661.71	7148.075044	273.7	false
PFHxS_1	399.0 / 80.0	2.28	3121126.93	7342.268438	445.8	false
PFHxS_2	399.0 / 99.0	2.28	887863.89	7389.662966	651.5	false
PFOA_1	413.0 / 369.0	2.66	3247970.75	8248.491861	829.2	false
PFOA_2	413.0 / 169.0	2.66	199436.16	8182.518229	749.9	false
PFNA_1	463.0 / 419.0	3.06	2903546.19	8335.296019	855.9	false
PFNA_2	463.0 / 219.0	3.05	889079.12	8445.768112	611.3	false
PFOS_1	499.0 / 80.0	3.05	4461414.52	7694.034075	433.7	false
PFOS_2	499.0 / 99.0	3.05	771559.61	7711.552949	994.7	false
PFDA_1	513.0 / 469.0	3.41	3188289.81	7459.322469	870.8	false
PFDA_2	513.0 / 219.0	3.41	137990.57	7612.784721	492.4	false
PFUnA_1	563.0 / 519.0	3.73	3380859.28	7589.036329	632.7	false
PFUnA_2	563.0 / 269.0	3.73	160651.39	7283.378878	459.3	false
PFDoA_1	613.0 / 569.0	4.01	3011103.74	8234.890004	724.7	false
PFDoA_2	613.0 / 319.0	4.01	479547.16	8415.926777	599.4	false
PFTrDA_1	663.0 / 619.0	4.26	2558802.58	7813.088428	1240.7	false
PFTrDA_2	663.0 / 169.0	4.25	167099.12	7919.415561	737.2	false
PFTeDA_1	713.0 / 669.0	4.47	2670260.58	7812.028363	2052.5	false
PFTeDA_2	713.0 / 169.0	4.47	131490.37	8175.212578	1657.4	false
NMeFOSAA_1	570.0 / 419.0	3.56	532744.98	9416.105060	1162.6	false
NMeFOSAA_2	570.0 / 512.0	3.56	281623.25	9103.054338	1184.5	false
NEtFOSAA_1	584.0 / 419.0	3.73	526958.11	8280.058660	876.8	false
NEtFOSAA_2	584.0 / 483.0	3.73	33680.39	8959.462530	612.1	false

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Summary Quant Report

Sample Name	J8246-FS(0)	**Injection Vial**	21
Sample ID	VC-AQ-FB01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:12:20	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	2.66	101885.58	199.991137	123.3	false
PFOA_2	413.0 / 169.0	2.67	5947.97	174.724283	85.8	false
PFNA_1	463.0 / 419.0	3.06	11672.88	12.433941	37.5	false
PFNA_2	463.0 / 219.0	3.06	2411.83	< 0	21.5	false
PFOS_1	499.0 / 80.0	3.06	20211.83	30.838014	25.4	false
PFOS_2	499.0 / 99.0	3.05	2958.44	11.288564	35.2	false
PFDA_1	513.0 / 469.0	3.41	19064.11	34.428939	66.8	false
PFDA_2	513.0 / 219.0	3.41	1126.51	43.922417	26.4	true
PFUnA_1	563.0 / 519.0	3.73	28834.27	52.627798	81.0	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.01	38251.18	62.738134	138.9	false
PFDoA_2	613.0 / 319.0	4.01	5113.53	45.789222	111.8	false
PFTrDA_1	663.0 / 619.0	4.25	51557.30	120.083764	287.8	false
PFTrDA_2	663.0 / 169.0	4.25	4007.96	123.553693	115.3	false
PFTeDA_1	713.0 / 669.0	4.47	62010.08	143.861093	396.1	false
PFTeDA_2	713.0 / 169.0	4.47	3083.07	155.836019	248.5	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

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Summary Quant Report

Sample Name	J8247-FS(0)	**Injection Vial**	22
Sample ID	VC-AQ-EB01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:23:13	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	12959.73	30.142099	26.1	false
PFHxS_2	399.0 / 99.0	2.27	3485.80	21.289751	26.2	false
PFOA_1	413.0 / 369.0	2.66	65541.91	117.818166	84.8	false
PFOA_2	413.0 / 169.0	2.66	3740.08	94.258991	78.9	false
PFNA_1	463.0 / 419.0	3.05	8341.17	1.268957	22.7	false
PFNA_2	463.0 / 219.0	3.05	3518.13	< 0	27.9	false
PFOS_1	499.0 / 80.0	3.05	1625329.81	2275.147278	247.4	false
PFOS_2	499.0 / 99.0	3.05	298065.79	2407.794220	687.2	false
PFDA_1	513.0 / 469.0	3.40	19272.72	25.852074	60.2	false
PFDA_2	513.0 / 219.0	3.41	884.62	21.746939	21.7	true
PFUnA_1	563.0 / 519.0	3.72	29087.60	49.361204	90.3	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.01	39401.52	50.069962	158.5	false
PFDoA_2	613.0 / 319.0	4.01	4969.12	30.845214	99.7	false
PFTrDA_1	663.0 / 619.0	4.25	52235.15	81.777980	293.2	false
PFTrDA_2	663.0 / 169.0	4.25	2936.63	36.562722	108.9	false
PFTeDA_1	713.0 / 669.0	4.47	63402.86	100.998155	452.6	false
PFTeDA_2	713.0 / 169.0	4.47	3168.74	111.340795	246.0	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

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Summary Quant Report

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Sample Name	J8276-FS(0)	**Injection Vial**	23
Sample ID	VC-SO-FB02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:34:06	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	2.66	66940.04	175.647265	96.2	false
PFOA_2	413.0 / 169.0	2.66	3858.05	149.423527	77.4	false
PFNA_1	463.0 / 419.0	3.06	9205.09	13.367096	35.2	false
PFNA_2	463.0 / 219.0	3.06	3517.05	3.276184	32.4	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	3.41	18616.02	42.458398	68.3	false
PFDA_2	513.0 / 219.0	3.40	1232.01	63.388815	34.3	false
PFUnA_1	563.0 / 519.0	3.73	37488.12	100.621651	97.3	false
PFUnA_2	563.0 / 269.0	3.72	2891.85	119.211520	36.4	false
PFDoA_1	613.0 / 569.0	4.01	44933.65	120.775282	162.8	false
PFDoA_2	613.0 / 319.0	4.01	7952.13	138.540896	108.1	false
PFTrDA_1	663.0 / 619.0	4.26	58792.76	193.305706	281.5	false
PFTrDA_2	663.0 / 169.0	4.25	3982.57	175.994946	122.1	false
PFTeDA_1	713.0 / 669.0	4.47	56066.65	172.719013	435.7	false
PFTeDA_2	713.0 / 169.0	4.47	3015.20	204.648135	222.9	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

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Summary Quant Report

Sample Name	J8277-FS(0)	**Injection Vial**	24
Sample ID	VC-SO-EB02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:44:58	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	6216.65	5.900051	15.4	true
PFBS_2	298.9 / 99.0	1.52	2180.94	6.963666	14.5	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	2.26	16395.22	29.571121	11.5	false
PFHpA_2	363.0 / 169.0	2.25	482.61	16.479533	7.9	false
PFHxS_1	399.0 / 80.0	2.28	54650.54	130.042709	65.7	false
PFHxS_2	399.0 / 99.0	2.28	17821.71	141.902322	88.7	false
PFOA_1	413.0 / 369.0	2.66	105383.05	214.080202	134.7	false
PFOA_2	413.0 / 169.0	2.66	6809.09	211.195431	112.6	false
PFNA_1	463.0 / 419.0	3.05	9856.84	8.038030	34.5	false
PFNA_2	463.0 / 219.0	3.06	4366.03	1.940151	34.2	false
PFOS_1	499.0 / 80.0	3.06	414856.29	630.291749	175.4	false
PFOS_2	499.0 / 99.0	3.06	73006.67	629.111083	406.8	false
PFDA_1	513.0 / 469.0	3.41	26630.03	52.175989	75.1	false
PFDA_2	513.0 / 219.0	3.42	642.43	19.873001	22.2	true
PFUnA_1	563.0 / 519.0	3.73	44176.94	91.729052	104.6	false
PFUnA_2	563.0 / 269.0	3.73	3546.25	111.124718	50.7	false
PFDoA_1	613.0 / 569.0	4.01	56782.56	122.868115	180.3	false
PFDoA_2	613.0 / 319.0	4.01	7833.61	101.686136	136.0	false
PFTrDA_1	663.0 / 619.0	4.25	77765.73	173.263872	342.4	false
PFTrDA_2	663.0 / 169.0	4.25	5069.92	146.417306	167.2	false
PFTeDA_1	713.0 / 669.0	4.47	71818.72	148.273043	423.4	false
PFTeDA_2	713.0 / 169.0	4.46	3771.76	171.680804	259.1	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

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Summary Quant Report

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Sample Name	J8259-FS(0)	**Injection Vial**	25
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:55:49	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.52	15308866.33	72357.385618	288.6	false
PFBS_2	298.9 / 99.0	1.52	4443669.35	72372.985914	531.3	false
PFHxA_1	313.0 / 269.0	1.83	71451263.35	393846.452085	260.7	false
PFHxA_2	313.0 / 119.0	1.84	5889078.48	441102.829758	616.5	false
PFHpA_1	363.0 / 319.0	2.24	42147142.66	200736.782289	374.5	false
PFHpA_2	363.0 / 169.0	2.21	1165690.29	276306.228628	596.3	false
PFHxS_1	399.0 / 80.0	2.27	92059455.05	288554.471900	491.3	false
PFHxS_2	399.0 / 99.0	2.27	32562645.44	361474.725948	1028.9	false
PFOA_1	413.0 / 369.0	2.60	154883171.80	1094858.482289	402.3	false
PFOA_2	413.0 / 169.0	2.65	18661319.51	2134666.770878	408.8	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	2.96	621339.04	1290.210121	42.3	true
PFOS_2	499.0 / 99.0	3.04	96189.10	1144.884284	108.5	true
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.73	6120.51	14.349527	23.9	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.25	2054.61	< 0	32.4	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8259-FS-D(3)	**Injection Vial**	26
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:06:43	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	3161322.71	6365.564128	254.5	false
PFBS_2	298.9 / 99.0	1.53	959059.62	6653.146666	350.6	false
PFHxA_1	313.0 / 269.0	1.84	18377414.00	45536.558747	214.1	false
PFHxA_2	313.0 / 119.0	1.85	1194477.26	40212.254048	321.7	false
PFHpA_1	363.0 / 319.0	2.25	8229470.98	20224.064161	332.4	false
PFHpA_2	363.0 / 169.0	2.22	204893.83	25030.011682	326.2	false
PFHxS_1	399.0 / 80.0	2.27	18256781.12	38809.777927	581.1	false
PFHxS_2	399.0 / 99.0	2.27	5007690.66	37694.440094	863.7	false
PFOA_1	413.0 / 369.0	2.65	68636688.06	177727.766089	800.9	false
PFOA_2	413.0 / 169.0	2.64	4643418.11	194555.694951	522.4	false
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	2.97	86572.10	142.008145	27.8	true
PFOS_2	499.0 / 99.0	3.03	13205.66	110.853140	54.3	true
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.24	889.54	< 0	22.7	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8259-FS-D(7)	**Injection Vial**	27
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:17:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	125304.04	211.674551	112.0	false
PFBS_2	298.9 / 99.0	1.53	39641.35	229.688311	124.8	false
PFHxA_1	313.0 / 269.0	1.84	608844.31	1455.550091	44.5	false
PFHxA_2	313.0 / 119.0	1.85	41637.33	1346.169822	37.2	false
PFHpA_1	363.0 / 319.0	2.25	280185.84	758.339206	91.6	false
PFHpA_2	363.0 / 169.0	2.23	8432.50	1109.907867	76.9	false
PFHxS_1	399.0 / 80.0	2.28	625553.95	1205.876850	237.0	false
PFHxS_2	399.0 / 99.0	2.28	170277.91	1155.061357	401.1	false
PFOA_1	413.0 / 369.0	2.66	4407073.09	8023.708384	650.1	false
PFOA_2	413.0 / 169.0	2.65	234388.00	6889.971380	402.7	false
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	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	3.41	5207.98	1.720686	27.7	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.76	2462.63	4.335805	11.5	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8260-FS(0)	**Injection Vial**	30
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:01:07	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	62097860.87	260219.690480	380.3	false
PFBS_2	298.9 / 99.0	1.52	21344122.82	308210.025763	878.9	false
PFHxA_1	313.0 / 269.0	1.83	107723652.62	636944.587929	299.0	false
PFHxA_2	313.0 / 119.0	1.84	11878931.75	954437.781446	728.3	false
PFHpA_1	363.0 / 319.0	2.23	18738927.32	125672.923599	244.1	false
PFHpA_2	363.0 / 169.0	2.19	551216.67	183971.303158	388.2	false
PFHxS_1	399.0 / 80.0	2.32	79508291.62	313753.835933	174.5	true
PFHxS_2	399.0 / 99.0	2.26	126869596.79	1773114.348818	735.9	false
PFOA_1	413.0 / 369.0	2.64	52824138.83	308957.120534	582.4	false
PFOA_2	413.0 / 169.0	2.65	2122097.50	200827.977115	452.8	true
PFNA_1	463.0 / 419.0	3.04	143306.68	708.694750	80.9	false
PFNA_2	463.0 / 219.0	3.03	36601.98	578.716631	98.4	false
PFOS_1	499.0 / 80.0	2.97	207828279.70	574085.979533	230.9	false
PFOS_2	499.0 / 99.0	3.05	57053099.63	915117.947010	1086.5	false
PFDA_1	513.0 / 469.0	3.40	29443.07	68.947580	34.9	true
PFDA_2	513.0 / 219.0	3.41	1323.72	66.745566	29.5	true
PFUnA_1	563.0 / 519.0	3.71	5557.94	13.141447	18.1	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.01	4704.79	< 0	30.4	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8260-FS-D(3)	**Injection Vial**	31
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:11:59	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	18498786.69	30870.998577	501.8	false
PFBS_2	298.9 / 99.0	1.53	5592998.00	32161.636080	741.9	false
PFHxA_1	313.0 / 269.0	1.85	46802173.62	99343.712087	372.3	false
PFHxA_2	313.0 / 119.0	1.85	3152529.70	90924.683143	493.6	false
PFHpA_1	363.0 / 319.0	2.25	4731671.10	12482.360123	250.8	false
PFHpA_2	363.0 / 169.0	2.21	129886.90	17025.412748	228.4	false
PFHxS_1	399.0 / 80.0	2.28	104158329.21	210592.595567	580.1	false
PFHxS_2	399.0 / 99.0	2.28	48090491.08	344353.550213	1233.7	false
PFOA_1	413.0 / 369.0	2.65	10887618.15	25528.098680	515.3	false
PFOA_2	413.0 / 169.0	2.66	468590.14	17761.150805	451.6	true
PFNA_1	463.0 / 419.0	3.05	33486.23	60.218684	37.3	false
PFNA_2	463.0 / 219.0	3.05	7010.75	17.384187	42.5	false
PFOS_1	499.0 / 80.0	2.98	67856689.03	102176.793497	310.1	false
PFOS_2	499.0 / 99.0	3.05	9489767.90	82960.210541	694.8	true
PFDA_1	513.0 / 469.0	3.41	3913.26	< 0	14.1	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	3.62	4725.03	108.413665	44.3	false
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8260-FS-D(9)	**Injection Vial**	32
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:22:52	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	1018157.65	1745.394812	330.8	false
PFBS_2	298.9 / 99.0	1.53	308288.67	1819.708036	397.2	false
PFHxA_1	313.0 / 269.0	1.84	2403539.61	6165.033983	85.8	false
PFHxA_2	313.0 / 119.0	1.84	159939.72	5567.947406	78.9	false
PFHpA_1	363.0 / 319.0	2.25	276692.67	712.424385	88.8	false
PFHpA_2	363.0 / 169.0	2.21	6177.09	756.372396	44.5	false
PFHxS_1	399.0 / 80.0	2.27	9871069.34	20164.227476	625.0	false
PFHxS_2	399.0 / 99.0	2.27	2868058.40	20742.085442	844.8	false
PFOA_1	413.0 / 369.0	2.65	804815.18	1634.069918	317.5	false
PFOA_2	413.0 / 169.0	2.64	41531.99	1348.647562	212.2	true
PFNA_1	463.0 / 419.0	3.05	8655.66	< 0	28.4	false
PFNA_2	463.0 / 219.0	3.04	2001.44	< 0	14.9	false
PFOS_1	499.0 / 80.0	2.98	4290883.76	4862.029351	205.4	false
PFOS_2	499.0 / 99.0	3.05	648635.37	4252.871517	510.9	false
PFDA_1	513.0 / 469.0	3.40	10078.01	10.332755	41.0	false
PFDA_2	513.0 / 219.0	3.41	413.50	2.947458	11.2	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8261-FS(0)	**Injection Vial**	33
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:33:45	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	61199981.90	255020.740087	383.5	false
PFBS_2	298.9 / 99.0	1.52	21080051.95	302691.926680	904.4	false
PFHxA_1	313.0 / 269.0	1.83	106735242.82	631738.092768	307.0	false
PFHxA_2	313.0 / 119.0	1.84	11471143.27	922604.109409	698.3	false
PFHpA_1	363.0 / 319.0	2.24	19114804.08	125705.600639	264.1	false
PFHpA_2	363.0 / 169.0	2.19	566205.10	185306.359997	460.9	false
PFHxS_1	399.0 / 80.0	2.32	79633554.89	341256.856669	169.1	true
PFHxS_2	399.0 / 99.0	2.27	125751963.09	1908548.298307	578.5	false
PFOA_1	413.0 / 369.0	2.65	56016390.26	322745.603154	504.6	false
PFOA_2	413.0 / 169.0	2.65	2507792.71	233796.399555	398.2	true
PFNA_1	463.0 / 419.0	3.04	165069.77	803.113411	80.6	false
PFNA_2	463.0 / 219.0	3.04	41342.39	645.181566	105.8	false
PFOS_1	499.0 / 80.0	2.97	208452742.60	558311.765191	240.6	false
PFOS_2	499.0 / 99.0	3.05	61994836.42	964163.228973	1287.3	false
PFDA_1	513.0 / 469.0	3.40	21126.17	53.459849	30.3	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8261-FS-D(3)	**Injection Vial**	34
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:44:38	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	15630984.54	29774.335010	453.2	false
PFBS_2	298.9 / 99.0	1.53	4617603.47	30307.814885	845.2	false
PFHxA_1	313.0 / 269.0	1.84	40140265.37	100251.751478	309.1	false
PFHxA_2	313.0 / 119.0	1.84	2651995.72	89997.735354	462.6	false
PFHpA_1	363.0 / 319.0	2.24	3986316.58	12392.143271	224.8	false
PFHpA_2	363.0 / 169.0	2.21	109244.56	16873.941475	239.2	false
PFHxS_1	399.0 / 80.0	2.27	97237179.81	227290.461853	780.3	false
PFHxS_2	399.0 / 99.0	2.27	42231618.25	349609.763665	1108.4	false
PFOA_1	413.0 / 369.0	2.65	9679428.11	26064.931269	558.9	false
PFOA_2	413.0 / 169.0	2.65	461139.87	20077.415387	543.4	true
PFNA_1	463.0 / 419.0	3.05	26370.39	51.238948	40.5	false
PFNA_2	463.0 / 219.0	3.04	6061.74	15.912310	38.4	false
PFOS_1	499.0 / 80.0	2.98	63598232.94	101086.230488	309.0	false
PFOS_2	499.0 / 99.0	3.05	9596155.19	88553.088245	603.0	true
PFDA_1	513.0 / 469.0	3.41	3517.83	0.040981	13.4	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.25	629.64	< 0	17.5	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

Sample Name	J8261-FS-D(9)	**Injection Vial**	35
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:55:30	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	1114181.23	1755.293242	374.0	false
PFBS_2	298.9 / 99.0	1.53	335617.29	1820.514104	450.2	false
PFHxA_1	313.0 / 269.0	1.84	2615027.54	6536.694674	87.9	false
PFHxA_2	313.0 / 119.0	1.85	175021.99	5938.352156	85.9	false
PFHpA_1	363.0 / 319.0	2.25	292466.75	750.115310	87.1	false
PFHpA_2	363.0 / 169.0	2.21	7791.08	964.437521	52.5	false
PFHxS_1	399.0 / 80.0	2.27	10962316.14	21903.001261	629.9	false
PFHxS_2	399.0 / 99.0	2.27	3197856.78	22621.453136	789.7	false
PFOA_1	413.0 / 369.0	2.65	925389.25	1834.331908	324.3	false
PFOA_2	413.0 / 169.0	2.61	85582.51	2739.548447	193.7	false
PFNA_1	463.0 / 419.0	3.05	7285.91	< 0	25.2	false
PFNA_2	463.0 / 219.0	3.05	3353.57	< 0	24.3	false
PFOS_1	499.0 / 80.0	2.99	5155469.63	6641.383454	177.2	false
PFOS_2	499.0 / 99.0	3.05	772267.21	5761.916485	453.7	false
PFDA_1	513.0 / 469.0	3.41	11564.20	13.835078	48.3	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.72	1274.15	2.011640	12.8	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.24	646.96	< 0	23.1	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8262-FS(0)	**Injection Vial**	36
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:06:22	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	88667100.88	513497.402012	598.9	false
PFBS_2	298.9 / 99.0	1.52	45904918.80	916098.956992	1383.7	false
PFHxA_1	313.0 / 269.0	1.82	106591819.48	1106557.992711	320.0	false
PFHxA_2	313.0 / 119.0	1.84	9888993.31	1395022.887630	592.9	false
PFHpA_1	363.0 / 319.0	2.22	31086333.24	283188.410264	309.4	false
PFHpA_2	363.0 / 169.0	2.17	1029868.05	466939.727432	578.0	false
PFHxS_1	399.0 / 80.0	2.31	70419598.73	340637.277169	254.6	true
PFHxS_2	399.0 / 99.0	2.25	135368238.85	2319095.475547	507.0	false
PFOA_1	413.0 / 369.0	2.63	47609970.41	288780.559579	541.1	false
PFOA_2	413.0 / 169.0	2.64	1748437.89	171594.846737	362.8	true
PFNA_1	463.0 / 419.0	3.04	226975.45	1385.658540	80.9	false
PFNA_2	463.0 / 219.0	3.04	75176.55	1505.155136	142.1	false
PFOS_1	499.0 / 80.0	2.96	211384136.74	827115.105756	251.9	false
PFOS_2	499.0 / 99.0	3.04	59640795.35	1355079.711587	1005.4	false
PFDA_1	513.0 / 469.0	3.39	29838.00	85.833835	35.4	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.71	6107.07	17.037475	20.6	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.00	4752.58	< 0	25.6	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.25	702.52	< 0	12.1	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8262-FS-D(7)	**Injection Vial**	37
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:17:15	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	1836917.28	3132.112895	671.4	false
PFBS_2	298.9 / 99.0	1.53	571670.43	3357.709972	645.4	false
PFHxA_1	313.0 / 269.0	1.84	1816940.64	4616.687178	74.7	false
PFHxA_2	313.0 / 119.0	1.85	113837.94	3923.285648	66.6	false
PFHpA_1	363.0 / 319.0	2.24	331622.03	887.213715	90.1	false
PFHpA_2	363.0 / 169.0	2.21	8421.99	1089.865020	55.9	false
PFHxS_1	399.0 / 80.0	2.27	6235662.21	12321.576813	521.4	false
PFHxS_2	399.0 / 99.0	2.27	1956104.10	13681.315284	800.8	false
PFOA_1	413.0 / 369.0	2.65	467259.33	846.371884	250.9	false
PFOA_2	413.0 / 169.0	2.55	26293.13	755.954121	147.5	false
PFNA_1	463.0 / 419.0	3.05	8034.60	< 0	28.6	false
PFNA_2	463.0 / 219.0	3.05	1934.16	< 0	16.4	false
PFOS_1	499.0 / 80.0	2.97	3129950.81	3579.037848	183.6	false
PFOS_2	499.0 / 99.0	3.05	457888.10	3025.408941	395.0	false
PFDA_1	513.0 / 469.0	3.41	10750.47	12.253398	47.1	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.02	1778.85	< 0	20.2	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.24	950.55	< 0	34.8	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8262-FS-D(9)	**Injection Vial**	38
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:28:08	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	15713958.98	35161.715598	813.8	false
PFBS_2	298.9 / 99.0	1.53	4825184.64	37203.901330	966.3	false
PFHxA_1	313.0 / 269.0	1.84	16632225.96	54652.423533	272.2	false
PFHxA_2	313.0 / 119.0	1.85	998658.56	44584.230281	277.7	false
PFHpA_1	363.0 / 319.0	2.25	2625105.10	9713.390334	220.1	false
PFHpA_2	363.0 / 169.0	2.20	73571.95	13521.216968	173.3	false
PFHxS_1	399.0 / 80.0	2.27	48944248.55	134913.443025	761.5	false
PFHxS_2	399.0 / 99.0	2.27	17009600.35	166048.305307	997.5	false
PFOA_1	413.0 / 369.0	2.64	2802594.73	8116.305818	479.7	false
PFOA_2	413.0 / 169.0	2.64	118386.34	5529.702479	272.3	true
PFNA_1	463.0 / 419.0	3.04	14309.44	25.626968	34.3	false
PFNA_2	463.0 / 219.0	3.04	2598.90	< 0	21.9	false
PFOS_1	499.0 / 80.0	2.97	23061030.83	40753.022951	370.2	false
PFOS_2	499.0 / 99.0	3.04	3373831.63	34605.888114	774.3	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

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Summary Quant Report

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Sample Name	J8272-FS(0)	**Injection Vial**	41
Sample ID	VC-PM553-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:11:39	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	1428623.19	6474.890111	143.6	false
PFBS_2	298.9 / 99.0	1.53	414149.32	6466.343422	226.4	false
PFHxA_1	313.0 / 269.0	1.84	29658381.80	147404.502498	211.9	false
PFHxA_2	313.0 / 119.0	1.84	2124685.40	143489.333225	404.8	false
PFHpA_1	363.0 / 319.0	2.25	12238775.39	60381.441053	294.6	false
PFHpA_2	363.0 / 169.0	2.24	250252.79	61414.894312	411.0	false
PFHxS_1	399.0 / 80.0	2.27	21292147.18	81783.646257	524.1	false
PFHxS_2	399.0 / 99.0	2.27	6068198.71	82542.149910	955.7	false
PFOA_1	413.0 / 369.0	2.65	66551564.14	328252.070567	782.3	false
PFOA_2	413.0 / 169.0	2.64	4737282.04	378093.776943	616.1	false
PFNA_1	463.0 / 419.0	3.01	96645.43	371.377070	63.8	false
PFNA_2	463.0 / 219.0	2.93	41016.78	511.669979	93.5	false
PFOS_1	499.0 / 80.0	3.04	6394290.97	17222.808174	217.4	false
PFOS_2	499.0 / 99.0	3.05	1016467.78	15882.890020	557.8	false
PFDA_1	513.0 / 469.0	3.41	7283.97	16.851638	17.4	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.72	10383.70	29.049763	34.0	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.00	20033.00	33.709998	103.3	false
PFDoA_2	613.0 / 319.0	4.00	2340.26	13.574762	37.1	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8272-FS-D(5)	**Injection Vial**	42
Sample ID	VC-PM553-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:22:32	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	149592.53	279.583281	77.8	false
PFBS_2	298.9 / 99.0	1.53	44405.86	284.407089	80.0	false
PFHxA_1	313.0 / 269.0	1.84	2261911.89	6023.060787	77.5	false
PFHxA_2	313.0 / 119.0	1.84	163280.59	5902.279599	88.5	false
PFHpA_1	363.0 / 319.0	2.25	810001.50	2266.630785	124.4	false
PFHpA_2	363.0 / 169.0	2.24	18617.68	2558.600890	127.2	false
PFHxS_1	399.0 / 80.0	2.27	1417409.34	3406.169986	318.3	false
PFHxS_2	399.0 / 99.0	2.27	394704.02	3351.755847	572.7	false
PFOA_1	413.0 / 369.0	2.65	7103849.35	15632.820512	737.8	false
PFOA_2	413.0 / 169.0	2.64	371255.49	13204.828140	494.5	false
PFNA_1	463.0 / 419.0	3.02	8589.53	2.942199	20.6	false
PFNA_2	463.0 / 219.0	2.91	1491.74	< 0	14.3	false
PFOS_1	499.0 / 80.0	3.03	502126.34	733.104653	124.5	false
PFOS_2	499.0 / 99.0	3.04	80944.28	671.288320	340.8	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	4.00	1146.85	< 0	15.3	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8273-FS(0)	**Injection Vial**	43
Sample ID	VC-PM553-DW01P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:33:25	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.52	1413514.23	5461.910410	158.8	false
PFBS_2	298.9 / 99.0	1.52	409638.05	5452.674710	205.7	false
PFHxA_1	313.0 / 269.0	1.84	32350035.48	134276.504208	226.1	false
PFHxA_2	313.0 / 119.0	1.84	2365378.82	133409.565496	376.5	false
PFHpA_1	363.0 / 319.0	2.25	14221403.17	54865.502255	318.1	false
PFHpA_2	363.0 / 169.0	2.24	302643.46	58077.729710	412.1	false
PFHxS_1	399.0 / 80.0	2.27	25077686.13	79569.809769	538.0	false
PFHxS_2	399.0 / 99.0	2.27	7089961.59	79665.895959	1023.8	false
PFOA_1	413.0 / 369.0	2.65	73989188.70	273257.514291	751.4	false
PFOA_2	413.0 / 169.0	2.64	5475884.10	327248.871394	694.1	false
PFNA_1	463.0 / 419.0	3.02	96604.40	310.077289	54.5	false
PFNA_2	463.0 / 219.0	3.04	17813.70	163.635600	59.3	true
PFOS_1	499.0 / 80.0	2.98	3796295.40	8400.060057	119.6	false
PFOS_2	499.0 / 99.0	3.05	520843.35	6677.189128	328.7	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.73	3689.12	8.422563	17.2	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.01	5782.18	< 0	33.7	false
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8273-FS-D(5)	**Injection Vial**	44
Sample ID	VC-PM553-DW01P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:44:17	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	125926.85	258.015795	69.5	false
PFBS_2	298.9 / 99.0	1.53	37045.14	259.905900	75.4	false
PFHxA_1	313.0 / 269.0	1.85	2218128.83	6621.116694	74.9	false
PFHxA_2	313.0 / 119.0	1.85	158929.07	6440.546635	85.5	false
PFHpA_1	363.0 / 319.0	2.25	827541.40	2436.062544	116.5	false
PFHpA_2	363.0 / 169.0	2.25	18345.63	2652.540217	148.9	false
PFHxS_1	399.0 / 80.0	2.28	1402310.60	3091.313550	372.4	false
PFHxS_2	399.0 / 99.0	2.28	386184.64	3007.588553	632.9	false
PFOA_1	413.0 / 369.0	2.65	6862707.22	16254.950274	708.4	false
PFOA_2	413.0 / 169.0	2.61	642278.02	24612.307462	508.2	false
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	2.98	246699.17	347.254563	63.9	false
PFOS_2	499.0 / 99.0	3.05	34551.27	267.495763	142.9	true
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8274-FS(0)	**Injection Vial**	45
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:55:09	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	17771832.60	73431.409542	356.9	false
PFBS_2	298.9 / 99.0	1.52	5407912.02	76997.546758	502.5	false
PFHxA_1	313.0 / 269.0	1.85	102979473.27	704837.750728	394.4	false
PFHxA_2	313.0 / 119.0	1.84	21060351.19	1958785.380894	782.0	false
PFHpA_1	363.0 / 319.0	2.24	67146559.58	391112.390197	609.8	false
PFHpA_2	363.0 / 169.0	2.24	1862411.36	539913.743736	666.8	false
PFHxS_1	399.0 / 80.0	2.27	108181907.50	458781.831291	534.0	false
PFHxS_2	399.0 / 99.0	2.27	46169729.93	693445.081868	951.8	false
PFOA_1	413.0 / 369.0	2.61	150191618.49	1407016.794175	380.0	false
PFOA_2	413.0 / 169.0	2.66	15074807.21	2285274.424436	325.1	true
PFNA_1	463.0 / 419.0	3.03	164304.39	668.769056	98.0	true
PFNA_2	463.0 / 219.0	3.04	44234.48	576.394024	86.4	true
PFOS_1	499.0 / 80.0	2.92	26002364.92	62246.692716	368.3	false
PFOS_2	499.0 / 99.0	3.02	3079815.92	42796.666187	561.7	false
PFDA_1	513.0 / 469.0	3.40	11090.79	27.893877	20.9	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.73	3744.08	11.189780	18.0	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.01	4662.71	< 0	45.3	false
PFDoA_2	613.0 / 319.0	4.01	594.47	< 0	14.5	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8274-FS-D(9)	**Injection Vial**	46
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:06:02	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	896928.89	1562.416954	249.1	false
PFBS_2	298.9 / 99.0	1.53	271694.35	1629.469546	272.9	false
PFHxA_1	313.0 / 269.0	1.84	14856269.68	40090.111465	309.2	false
PFHxA_2	313.0 / 119.0	1.84	1064636.91	39033.910303	280.0	false
PFHpA_1	363.0 / 319.0	2.25	4012838.50	11762.568456	290.4	false
PFHpA_2	363.0 / 169.0	2.24	88572.27	12886.826700	279.9	false
PFHxS_1	399.0 / 80.0	2.27	6709372.14	14610.747020	674.8	false
PFHxS_2	399.0 / 99.0	2.27	1904891.12	14683.980215	1177.1	false
PFOA_1	413.0 / 369.0	2.65	24363122.37	58365.084395	903.1	false
PFOA_2	413.0 / 169.0	2.65	1373700.52	53238.521331	597.7	false
PFNA_1	463.0 / 419.0	3.00	14620.14	15.539067	24.6	false
PFNA_2	463.0 / 219.0	3.04	2627.27	< 0	17.8	true
PFOS_1	499.0 / 80.0	2.93	977732.82	1304.502105	139.7	false
PFOS_2	499.0 / 99.0	3.01	112999.40	860.580020	188.6	false
PFDA_1	513.0 / 469.0	3.40	4201.47	0.833763	22.9	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

Sample Name	J8275-FS(0)	**Injection Vial**	48
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:27:47	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	10378483.72	44378.218115	298.4	false
PFBS_2	298.9 / 99.0	1.53	3056577.71	45036.123417	464.7	false
PFHxA_1	313.0 / 269.0	1.86	101726629.62	596579.892903	347.1	false
PFHxA_2	313.0 / 119.0	1.84	27673678.82	2205388.907793	657.8	false
PFHpA_1	363.0 / 319.0	2.25	65935026.16	347438.258967	539.8	false
PFHpA_2	363.0 / 169.0	2.24	1798833.71	471758.341302	726.6	false
PFHxS_1	399.0 / 80.0	2.27	111842905.45	391530.922166	533.6	false
PFHxS_2	399.0 / 99.0	2.27	51752773.17	641643.131766	1037.6	false
PFOA_1	413.0 / 369.0	2.63	114703893.85	595134.639116	513.2	false
PFOA_2	413.0 / 169.0	2.65	12147609.41	1019907.122121	501.5	false
PFNA_1	463.0 / 419.0	3.04	711977.85	2453.567391	185.0	false
PFNA_2	463.0 / 219.0	3.04	189795.35	2148.182999	203.4	false
PFOS_1	499.0 / 80.0	2.94	81756054.79	181767.327563	456.2	false
PFOS_2	499.0 / 99.0	3.02	11042366.82	142542.825968	788.6	false
PFDA_1	513.0 / 469.0	3.40	264101.44	643.838408	130.1	false
PFDA_2	513.0 / 219.0	3.40	11223.87	638.960021	132.3	true
PFUnA_1	563.0 / 519.0	3.73	9175.46	21.365014	27.7	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8275-FS-D(7)	**Injection Vial**	49
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:38:40	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	692811.00	1505.864861	249.4	false
PFBS_2	298.9 / 99.0	1.54	207471.18	1552.428778	259.1	false
PFHxA_1	313.0 / 269.0	1.85	25211089.75	84574.500687	397.7	false
PFHxA_2	313.0 / 119.0	1.85	1832344.28	83522.657143	338.8	false
PFHpA_1	363.0 / 319.0	2.25	5849355.74	19930.637297	381.5	false
PFHpA_2	363.0 / 169.0	2.25	121070.51	20495.508669	366.5	false
PFHxS_1	399.0 / 80.0	2.27	10578904.49	25315.560891	811.0	false
PFHxS_2	399.0 / 99.0	2.27	2973583.51	25194.467724	1115.9	false
PFOA_1	413.0 / 369.0	2.65	16967056.35	45172.248537	800.3	false
PFOA_2	413.0 / 169.0	2.63	1512504.80	65155.711261	514.9	false
PFNA_1	463.0 / 419.0	3.05	38724.58	79.502062	63.6	false
PFNA_2	463.0 / 219.0	3.05	15092.86	89.574994	51.9	false
PFOS_1	499.0 / 80.0	2.94	4045323.99	5726.084497	241.9	false
PFOS_2	499.0 / 99.0	3.03	544651.72	4461.775911	401.1	false
PFDA_1	513.0 / 469.0	3.40	25851.38	47.592263	65.7	false
PFDA_2	513.0 / 219.0	3.41	1528.23	62.313051	39.0	false
PFUnA_1	563.0 / 519.0	3.73	2661.14	5.239740	18.4	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.01	1998.63	< 0	23.9	false
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.26	619.73	< 0	23.9	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8275-FS-D(9)	**Injection Vial**	50
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:49:33	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	261475.54	446.384620	170.4	false
PFBS_2	298.9 / 99.0	1.53	77797.33	456.103186	199.1	false
PFHxA_1	313.0 / 269.0	1.85	9553748.06	24513.745218	238.6	false
PFHxA_2	313.0 / 119.0	1.85	689800.93	24045.424770	190.0	false
PFHpA_1	363.0 / 319.0	2.25	2201008.31	5717.882309	240.5	false
PFHpA_2	363.0 / 169.0	2.25	45784.16	5882.964052	216.9	false
PFHxS_1	399.0 / 80.0	2.28	3939977.59	7727.006548	509.9	false
PFHxS_2	399.0 / 99.0	2.28	1065073.47	7390.420600	588.0	false
PFOA_1	413.0 / 369.0	2.66	7134355.49	14140.360734	721.9	false
PFOA_2	413.0 / 169.0	2.63	595360.69	19087.088509	468.7	false
PFNA_1	463.0 / 419.0	3.05	17063.17	16.274095	44.2	false
PFNA_2	463.0 / 219.0	3.05	6831.08	9.083614	44.9	false
PFOS_1	499.0 / 80.0	2.94	1608684.59	1925.491239	177.5	false
PFOS_2	499.0 / 99.0	3.03	214847.61	1478.352526	248.7	false
PFDA_1	513.0 / 469.0	3.41	18038.68	24.229583	55.2	false
PFDA_2	513.0 / 219.0	3.40	850.79	20.920406	32.4	true
PFUnA_1	563.0 / 519.0	3.73	2511.28	3.975610	22.2	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.26	759.34	< 0	23.1	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8274-FS-D(11)	**Injection Vial**	53
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T15:43:57	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	680431.00	1401.599092	215.5	false
PFBS_2	298.9 / 99.0	1.56	198454.14	1406.941200	289.8	false
PFHxA_1	313.0 / 269.0	1.88	7276918.12	22119.617220	151.4	false
PFHxA_2	313.0 / 119.0	1.88	507645.91	20962.391908	131.1	false
PFHpA_1	363.0 / 319.0	2.29	2005691.99	6332.785251	120.3	false
PFHpA_2	363.0 / 169.0	2.29	45161.27	7062.237697	107.1	false
PFHxS_1	399.0 / 80.0	2.32	3594607.97	8345.857560	371.4	false
PFHxS_2	399.0 / 99.0	2.32	961971.19	7902.857632	801.5	false
PFOA_1	413.0 / 369.0	2.71	12195505.46	35641.172912	1154.2	false
PFOA_2	413.0 / 169.0	2.70	653754.06	30901.804828	655.9	false
PFNA_1	463.0 / 419.0	3.11	11167.70	13.388394	16.8	true
PFNA_2	463.0 / 219.0	3.11	2628.55	< 0	14.1	false
PFOS_1	499.0 / 80.0	3.00	603579.05	953.700035	106.5	false
PFOS_2	499.0 / 99.0	3.11	74740.80	670.866537	168.2	false
PFDA_1	513.0 / 469.0	3.47	14968.69	30.770923	29.2	false
PFDA_2	513.0 / 219.0	3.46	863.12	37.548444	12.7	true
PFUnA_1	563.0 / 519.0	3.79	4162.26	10.289931	14.9	false
PFUnA_2	563.0 / 269.0	3.53	13357.93	637.673869	56.8	false
PFDoA_1	613.0 / 569.0	4.07	3630.13	< 0	31.0	false
PFDoA_2	613.0 / 319.0	3.59	1893.79	< 0	22.0	false
PFTrDA_1	663.0 / 619.0	4.32	3091.87	< 0	64.0	false
PFTrDA_2	663.0 / 169.0	4.29	380.74	< 0	17.8	false
PFTeDA_1	713.0 / 669.0	4.53	3991.91	< 0	47.3	false
PFTeDA_2	713.0 / 169.0	3.96	162.05	< 0	7.6	false
NMeFOSAA_1	570.0 / 419.0	3.65	396.19	< 0	9.7	false
NMeFOSAA_2	570.0 / 512.0	3.63	421.19	< 0	8.7	false
NEtFOSAA_1	584.0 / 419.0	3.72	591.88	< 0	9.5	false
NEtFOSAA_2	584.0 / 483.0	3.27	116.78	< 0	14.5	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:10:19 PM

Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:40:04	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	99815.86	233.399646	1063.3	false
d3-MeFOSAA	573.0 / 419.0	3.56	14550.35	209.450413	189.4	false
d5-EtFOSAA	589.0 / 419.0	3.72	19175.56	248.494390	199.8	false
13C5-PFHxA	318.0 / 273.0	1.84	73197.71	231.343105	696.8	false
13C4-PFHpA	367.0 / 322.0	2.24	80987.01	232.728567	754.4	false
13C8-PFOA	421.0 / 376.0	2.65	100995.54	243.146163	1524.0	false
13C9-PFNA	472.0 / 427.0	3.04	98771.97	242.168995	851.7	false
13C6-PFDA	519.0 / 474.0	3.40	104976.95	250.453551	2410.9	false
13C7-PFUnA	570.0 / 525.0	3.71	99774.68	239.123349	660.3	false
13C2-PFTeDA	715.0 / 670.0	4.47	74663.45	231.239632	1418.8	false
13C3-PFBS	302.0 / 99.0	1.51	31169.08	198.681775	517.0	false
13C3-PFHxS	402.0 / 99.0	2.27	28156.02	217.241892	323.1	false
13C8-PFOS	507.0 / 99.0	3.04	29233.51	224.567933	238.1	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:10:24 PM

Sample Name	CR847PB-FS(0)	**Injection Vial**	19
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T22:50:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	111756.18	220.503058	900.7	false
d3-MeFOSAA	573.0 / 419.0	3.56	17751.17	233.495649	222.1	false
d5-EtFOSAA	589.0 / 419.0	3.72	20227.31	239.524978	190.6	false
13C5-PFHxA	318.0 / 273.0	1.83	86555.16	233.765309	541.9	false
13C4-PFHpA	367.0 / 322.0	2.24	101300.77	248.756924	726.8	false
13C8-PFOA	421.0 / 376.0	2.65	119490.89	245.826158	3097.1	false
13C9-PFNA	472.0 / 427.0	3.04	110643.46	231.813458	733.6	false
13C6-PFDA	519.0 / 474.0	3.39	123970.85	249.571672	966.5	false
13C7-PFUnA	570.0 / 525.0	3.71	116734.15	236.070645	778.1	false
13C2-PFTeDA	715.0 / 670.0	4.47	84329.02	220.380775	1617.9	false
13C3-PFBS	302.0 / 99.0	1.51	37115.93	216.191377	409.4	false
13C3-PFHxS	402.0 / 99.0	2.27	31058.08	218.973189	366.5	false
13C8-PFOS	507.0 / 99.0	3.04	32996.25	231.619629	288.1	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:10:28 PM

Sample Name	CR848LCS-FS(0)	**Injection Vial**	20
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:01:28	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	104296.19	260.393671	793.3	false
d3-MeFOSAA	573.0 / 419.0	3.56	14533.75	253.272346	106.1	false
d5-EtFOSAA	589.0 / 419.0	3.72	17301.25	271.423958	165.2	false
13C5-PFHxA	318.0 / 273.0	1.83	78281.10	259.624390	572.8	false
13C4-PFHpA	367.0 / 322.0	2.24	85051.50	256.475493	954.4	false
13C8-PFOA	421.0 / 376.0	2.65	94444.45	238.600418	839.3	false
13C9-PFNA	472.0 / 427.0	3.04	95556.50	245.852468	939.8	false
13C6-PFDA	519.0 / 474.0	3.39	103232.11	262.971936	821.1	false
13C7-PFUnA	570.0 / 525.0	3.72	103118.11	263.874814	568.7	false
13C2-PFTeDA	715.0 / 670.0	4.47	79775.15	263.805098	1337.1	false
13C3-PFBS	302.0 / 99.0	1.52	32331.54	249.495379	561.4	false
13C3-PFHxS	402.0 / 99.0	2.26	28847.36	269.451369	390.3	false
13C8-PFOS	507.0 / 99.0	3.04	27003.30	251.122548	212.8	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:10:32 PM

Sample Name	J8246-FS(0)	**Injection Vial**	21
Sample ID	VC-AQ-FB01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:12:20	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	113506.10	241.618806	756.6	false
d3-MeFOSAA	573.0 / 419.0	3.56	16014.63	224.247073	173.5	false
d5-EtFOSAA	589.0 / 419.0	3.71	20538.29	258.901606	209.5	false
13C5-PFHxA	318.0 / 273.0	1.84	78682.42	230.350685	759.0	false
13C4-PFHpA	367.0 / 322.0	2.24	89005.93	236.922362	628.4	false
13C8-PFOA	421.0 / 376.0	2.65	113604.85	253.346466	209.3	false
13C9-PFNA	472.0 / 427.0	3.04	102767.80	233.396661	697.2	false
13C6-PFDA	519.0 / 474.0	3.40	111357.34	241.859416	1029.2	false
13C7-PFUnA	570.0 / 525.0	3.71	126611.24	276.238868	787.9	false
13C2-PFTeDA	715.0 / 670.0	4.46	79180.09	223.244658	1002.9	false
13C3-PFBS	302.0 / 99.0	1.51	34491.97	213.872030	504.7	false
13C3-PFHxS	402.0 / 99.0	2.27	30184.53	226.547166	281.7	false
13C8-PFOS	507.0 / 99.0	3.04	31708.83	236.945737	247.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:10:36 PM

Sample Name	J8247-FS(0)	**Injection Vial**	22
Sample ID	VC-AQ-EB01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:23:13	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	134584.23	244.435249	762.3	false
d3-MeFOSAA	573.0 / 419.0	3.55	20366.50	260.192965	206.5	false
d5-EtFOSAA	589.0 / 419.0	3.71	21727.44	249.889727	189.2	false
13C5-PFHxA	318.0 / 273.0	1.84	80394.75	226.921846	564.0	false
13C4-PFHpA	367.0 / 322.0	2.24	96553.26	247.794047	491.3	false
13C8-PFOA	421.0 / 376.0	2.65	118118.41	253.964137	1616.1	false
13C9-PFNA	472.0 / 427.0	3.04	114300.84	250.278644	733.9	false
13C6-PFDA	519.0 / 474.0	3.39	142004.61	263.150818	706.7	false
13C7-PFUnA	570.0 / 525.0	3.71	136161.06	253.468273	710.2	false
13C2-PFTeDA	715.0 / 670.0	4.46	105595.95	254.021512	1226.9	false
13C3-PFBS	302.0 / 99.0	1.52	43525.86	246.236622	522.9	false
13C3-PFHxS	402.0 / 99.0	2.27	34145.81	233.819705	287.5	false
13C8-PFOS	507.0 / 99.0	3.03	33878.99	230.976880	247.5	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:10:40 PM

Sample Name	J8276-FS(0)	**Injection Vial**	23
Sample ID	VC-SO-FB02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:34:06	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	83266.29	233.811769	1083.3	false
d3-MeFOSAA	573.0 / 419.0	3.55	12871.74	234.892300	182.7	false
d5-EtFOSAA	589.0 / 419.0	3.72	13729.53	225.552600	193.7	false
13C5-PFHxA	318.0 / 273.0	1.84	61652.79	248.614284	572.4	false
13C4-PFHpA	367.0 / 322.0	2.25	69658.85	255.402418	421.7	false
13C8-PFOA	421.0 / 376.0	2.65	84144.58	258.467338	907.4	false
13C9-PFNA	472.0 / 427.0	3.04	78690.00	246.160690	862.2	false
13C6-PFDA	519.0 / 474.0	3.39	91071.12	260.921849	751.8	false
13C7-PFUnA	570.0 / 525.0	3.71	86163.72	247.983376	771.1	false
13C2-PFTeDA	715.0 / 670.0	4.46	61871.91	230.114616	1857.7	false
13C3-PFBS	302.0 / 99.0	1.52	27586.29	222.921048	454.3	false
13C3-PFHxS	402.0 / 99.0	2.27	22492.28	220.003471	268.8	false
13C8-PFOS	507.0 / 99.0	3.04	23312.42	227.027132	213.3	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:10:44 PM

Sample Name	J8277-FS(0)	**Injection Vial**	24
Sample ID	VC-SO-EB02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:44:58	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	103817.65	218.778532	868.5	false
d3-MeFOSAA	573.0 / 419.0	3.56	17543.09	254.210096	169.2	false
d5-EtFOSAA	589.0 / 419.0	3.72	21442.02	279.713243	208.5	false
13C5-PFHxA	318.0 / 273.0	1.84	82609.46	271.674751	675.2	false
13C4-PFHpA	367.0 / 322.0	2.24	88793.39	265.506671	545.9	false
13C8-PFOA	421.0 / 376.0	2.65	110294.15	276.298248	1158.8	false
13C9-PFNA	472.0 / 427.0	3.04	100996.24	257.662051	827.8	false
13C6-PFDA	519.0 / 474.0	3.40	108867.63	234.080317	750.9	false
13C7-PFUnA	570.0 / 525.0	3.72	111371.59	240.551969	631.9	false
13C2-PFTeDA	715.0 / 670.0	4.46	89553.94	249.960722	1569.5	false
13C3-PFBS	302.0 / 99.0	1.52	37313.67	239.431225	451.9	false
13C3-PFHxS	402.0 / 99.0	2.27	29988.85	232.922245	278.6	false
13C8-PFOS	507.0 / 99.0	3.04	31063.13	240.209826	208.8	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:10:48 PM

Sample Name	J8259-FS(0)	**Injection Vial**	25
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:55:49	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.99	104187.87	322.056687	647.5	false
d3-MeFOSAA	573.0 / 419.0	3.55	13780.24	276.678150	144.5	false
d5-EtFOSAA	589.0 / 419.0	3.71	16028.15	289.709109	130.6	false
13C5-PFHxA	318.0 / 273.0	1.82	44559.03	33.968167	80.8	false
13C4-PFHpA	367.0 / 322.0	2.23	60625.81	42.021284	244.9	false
13C8-PFOA	421.0 / 376.0	2.64	33993.46	19.739584	199.4	false
13C9-PFNA	472.0 / 427.0	3.04	75896.25	44.883068	280.8	false
13C6-PFDA	519.0 / 474.0	3.39	96140.14	303.216308	520.8	false
13C7-PFUnA	570.0 / 525.0	3.71	98132.05	310.904528	384.3	false
13C2-PFTeDA	715.0 / 670.0	4.46	72383.77	296.353423	1068.8	false
13C3-PFBS	302.0 / 99.0	1.50	17126.81	152.272166	168.6	false
13C3-PFHxS	402.0 / 99.0	2.26	22507.39	242.218710	180.5	false
13C8-PFOS	507.0 / 99.0	3.04	23623.91	253.121330	121.7	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:10:52 PM

Sample Name	J8259-FS-D(3)	**Injection Vial**	26
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:06:43	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	128799.29	295.313410	1205.2	false
d3-MeFOSAA	573.0 / 419.0	3.55	17004.25	281.813547	214.9	false
d5-EtFOSAA	589.0 / 419.0	3.71	21061.06	314.228363	190.8	false
13C5-PFHxA	318.0 / 273.0	1.84	99103.32	211.077988	270.3	false
13C4-PFHpA	367.0 / 322.0	2.24	117371.20	227.295898	511.4	false
13C8-PFOA	421.0 / 376.0	2.65	92793.69	150.549512	621.1	false
13C9-PFNA	472.0 / 427.0	3.04	107711.03	177.967494	587.6	false
13C6-PFDA	519.0 / 474.0	3.39	125290.87	293.104012	859.3	false
13C7-PFUnA	570.0 / 525.0	3.71	123702.22	290.702129	903.6	false
13C2-PFTeDA	715.0 / 670.0	4.47	89908.46	273.038450	1698.8	false
13C3-PFBS	302.0 / 99.0	1.51	40158.39	294.718172	306.3	false
13C3-PFHxS	402.0 / 99.0	2.26	32933.67	292.556024	321.5	false
13C8-PFOS	507.0 / 99.0	3.04	28731.02	254.105668	222.5	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:10:56 PM

Sample Name	J8259-FS-D(7)	**Injection Vial**	27
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:17:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	136302.49	281.270832	1194.5	false
d3-MeFOSAA	573.0 / 419.0	3.55	22452.59	283.351809	221.1	false
d5-EtFOSAA	589.0 / 419.0	3.72	23974.55	272.377180	224.6	false
13C5-PFHxA	318.0 / 273.0	1.83	102003.76	292.734944	527.0	false
13C4-PFHpA	367.0 / 322.0	2.24	103456.39	269.954775	790.6	false
13C8-PFOA	421.0 / 376.0	2.65	131731.96	287.975614	938.0	false
13C9-PFNA	472.0 / 427.0	3.04	124395.73	276.942502	1003.7	false
13C6-PFDA	519.0 / 474.0	3.40	145076.47	305.457307	1166.1	false
13C7-PFUnA	570.0 / 525.0	3.72	128871.45	272.570350	807.9	false
13C2-PFTeDA	715.0 / 670.0	4.47	97477.98	266.428690	1657.7	false
13C3-PFBS	302.0 / 99.0	1.51	46266.04	258.552003	528.9	false
13C3-PFHxS	402.0 / 99.0	2.27	35601.52	240.819985	387.5	false
13C8-PFOS	507.0 / 99.0	3.04	39447.09	265.664380	265.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:11:00 PM

Sample Name	J8260-FS(0)	**Injection Vial**	30
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:01:07	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.99	107719.14	300.166573	663.9	false
d3-MeFOSAA	573.0 / 419.0	3.55	13419.93	347.345136	114.9	false
d5-EtFOSAA	589.0 / 419.0	3.71	15995.52	372.709146	136.5	true
13C5-PFHxA	318.0 / 273.0	1.83	41540.01	156.478808	90.0	false
13C4-PFHpA	367.0 / 322.0	2.23	43051.54	147.452791	155.7	false
13C8-PFOA	421.0 / 376.0	2.65	41083.53	117.886170	214.5	false
13C9-PFNA	472.0 / 427.0	3.03	54158.98	158.265118	219.9	false
13C6-PFDA	519.0 / 474.0	3.39	93771.95	266.609119	507.5	false
13C7-PFUnA	570.0 / 525.0	3.71	97250.07	277.754041	608.8	false
13C2-PFTeDA	715.0 / 670.0	4.46	81500.68	300.804446	1273.6	false
13C3-PFBS	302.0 / 99.0	1.51	19319.04	221.422994	169.3	false
13C3-PFHxS	402.0 / 99.0	2.26	16477.88	228.600313	112.1	false
13C8-PFOS	507.0 / 99.0	3.03	16824.84	232.391812	99.7	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:11:04 PM

Sample Name	J8260-FS-D(3)	**Injection Vial**	31
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:11:59	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	152961.14	324.686808	869.4	false
d3-MeFOSAA	573.0 / 419.0	3.56	23342.03	356.112153	181.6	false
d5-EtFOSAA	589.0 / 419.0	3.71	25343.17	348.072512	207.3	false
13C5-PFHxA	318.0 / 273.0	1.84	115702.83	385.957624	211.4	false
13C4-PFHpA	367.0 / 322.0	2.24	109259.71	331.383607	394.3	false
13C8-PFOA	421.0 / 376.0	2.65	102424.95	260.260098	837.5	false
13C9-PFNA	472.0 / 427.0	3.04	116519.01	301.521444	696.0	false
13C6-PFDA	519.0 / 474.0	3.39	142994.08	309.695005	683.5	false
13C7-PFUnA	570.0 / 525.0	3.71	151129.92	328.802399	634.3	false
13C2-PFTeDA	715.0 / 670.0	4.47	107640.70	302.631138	1769.4	false
13C3-PFBS	302.0 / 99.0	1.52	48500.65	327.658772	304.9	false
13C3-PFHxS	402.0 / 99.0	2.27	34365.48	281.018497	259.0	false
13C8-PFOS	507.0 / 99.0	3.04	31305.01	254.871215	226.3	false

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Summary Quant Report

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Sample Name	J8260-FS-D(9)	**Injection Vial**	32
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:22:52	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	129423.62	275.700269	971.2	false
d3-MeFOSAA	573.0 / 419.0	3.55	21046.21	293.984111	213.4	false
d5-EtFOSAA	589.0 / 419.0	3.71	22703.92	285.503567	199.0	false
13C5-PFHxA	318.0 / 273.0	1.83	95596.01	287.723451	490.0	false
13C4-PFHpA	367.0 / 322.0	2.24	108538.64	297.026489	686.6	false
13C8-PFOA	421.0 / 376.0	2.65	117239.86	268.792388	1274.0	false
13C9-PFNA	472.0 / 427.0	3.04	129556.99	302.497716	833.7	false
13C6-PFDA	519.0 / 474.0	3.39	140906.88	306.258726	1342.1	false
13C7-PFUnA	570.0 / 525.0	3.71	132880.25	290.124960	731.5	false
13C2-PFTeDA	715.0 / 670.0	4.46	93399.62	263.525309	1450.1	false
13C3-PFBS	302.0 / 99.0	1.51	47021.78	290.854092	640.1	false
13C3-PFHxS	402.0 / 99.0	2.26	33677.93	252.150458	358.0	false
13C8-PFOS	507.0 / 99.0	3.03	41833.16	311.838334	365.4	false

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Summary Quant Report

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Sample Name	J8261-FS(0)	**Injection Vial**	33
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:33:45	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	108616.43	296.075500	751.3	false
d3-MeFOSAA	573.0 / 419.0	3.55	15465.90	472.488544	148.9	false
d5-EtFOSAA	589.0 / 419.0	3.71	14770.26	406.223574	178.7	true
13C5-PFHxA	318.0 / 273.0	1.83	41498.07	146.651269	92.1	false
13C4-PFHpA	367.0 / 322.0	2.23	43903.68	141.069859	163.4	false
13C8-PFOA	421.0 / 376.0	2.65	41705.11	112.267320	212.6	false
13C9-PFNA	472.0 / 427.0	3.04	55217.28	151.376595	213.5	false
13C6-PFDA	519.0 / 474.0	3.39	84531.73	235.103644	409.7	false
13C7-PFUnA	570.0 / 525.0	3.71	100389.71	280.476932	399.6	false
13C2-PFTeDA	715.0 / 670.0	4.47	75946.67	274.201154	1308.0	false
13C3-PFBS	302.0 / 99.0	1.51	19427.84	262.825149	231.4	false
13C3-PFHxS	402.0 / 99.0	2.26	16560.27	271.174030	125.3	false
13C8-PFOS	507.0 / 99.0	3.04	17291.95	281.915475	134.2	false

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Summary Quant Report

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Sample Name	J8261-FS-D(3)	**Injection Vial**	34
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:44:38	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	116692.10	275.173361	682.8	false
d3-MeFOSAA	573.0 / 419.0	3.55	16690.44	327.416201	180.2	false
d5-EtFOSAA	589.0 / 419.0	3.71	20035.99	353.837540	172.6	false
13C5-PFHxA	318.0 / 273.0	1.83	98334.75	372.784063	271.7	false
13C4-PFHpA	367.0 / 322.0	2.24	92717.47	319.585600	444.0	false
13C8-PFOA	421.0 / 376.0	2.65	89184.61	257.541009	1030.8	false
13C9-PFNA	472.0 / 427.0	3.04	103524.02	304.450853	518.5	false
13C6-PFDA	519.0 / 474.0	3.39	121514.14	292.364311	628.9	false
13C7-PFUnA	570.0 / 525.0	3.71	126254.72	305.150117	637.6	false
13C2-PFTeDA	715.0 / 670.0	4.46	88459.64	276.289020	1661.0	false
13C3-PFBS	302.0 / 99.0	1.51	42490.84	369.108374	356.7	false
13C3-PFHxS	402.0 / 99.0	2.27	29022.67	305.164614	252.9	false
13C8-PFOS	507.0 / 99.0	3.04	29947.84	313.513872	261.4	false

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Summary Quant Report

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Sample Name	J8261-FS-D(9)	**Injection Vial**	35
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:55:30	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	130028.11	283.831639	1051.9	false
d3-MeFOSAA	573.0 / 419.0	3.56	19983.10	309.144279	177.7	false
d5-EtFOSAA	589.0 / 419.0	3.72	22179.56	308.895838	193.8	false
13C5-PFHxA	318.0 / 273.0	1.84	98103.41	302.394108	425.9	false
13C4-PFHpA	367.0 / 322.0	2.24	109138.64	305.874381	709.3	false
13C8-PFOA	421.0 / 376.0	2.65	120210.57	282.252668	1670.4	false
13C9-PFNA	472.0 / 427.0	3.04	122757.76	293.537742	1302.6	false
13C6-PFDA	519.0 / 474.0	3.39	134451.76	299.448872	876.1	false
13C7-PFUnA	570.0 / 525.0	3.71	140503.78	314.349363	505.4	false
13C2-PFTeDA	715.0 / 670.0	4.46	95632.94	276.493326	1334.8	false
13C3-PFBS	302.0 / 99.0	1.52	50735.11	347.562658	634.0	true
13C3-PFHxS	402.0 / 99.0	2.26	34029.68	282.176389	393.4	false
13C8-PFOS	507.0 / 99.0	3.04	36908.15	304.704936	305.0	false

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Summary Quant Report

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Sample Name	J8262-FS(0)	**Injection Vial**	36
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:06:22	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.98	89217.72	288.511701	620.3	false
d3-MeFOSAA	573.0 / 419.0	3.53	10166.21	337.677745	132.5	false
d5-EtFOSAA	589.0 / 419.0	3.69	14080.82	421.048483	150.7	false
13C5-PFHxA	318.0 / 273.0	1.82	23659.74	107.371601	81.5	false
13C4-PFHpA	367.0 / 322.0	2.22	31697.53	130.791715	152.2	false
13C8-PFOA	421.0 / 376.0	2.64	39615.21	136.945464	237.8	false
13C9-PFNA	472.0 / 427.0	3.03	44432.66	156.425528	222.4	false
13C6-PFDA	519.0 / 474.0	3.38	77736.15	256.488552	530.6	false
13C7-PFUnA	570.0 / 525.0	3.69	82547.48	273.600667	410.3	false
13C2-PFTeDA	715.0 / 670.0	4.46	61730.58	264.402925	1149.1	false
13C3-PFBS	302.0 / 99.0	1.50	13979.11	205.612374	194.3	false
13C3-PFHxS	402.0 / 99.0	2.26	13332.27	237.362517	118.1	false
13C8-PFOS	507.0 / 99.0	3.02	12677.70	224.720627	88.5	false

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Summary Quant Report

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Sample Name	J8262-FS-D(7)	**Injection Vial**	37
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:17:15	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.99	135647.15	286.555245	890.5	false
d3-MeFOSAA	573.0 / 419.0	3.55	18638.58	256.895089	212.6	false
d5-EtFOSAA	589.0 / 419.0	3.71	22875.24	283.837188	261.5	false
13C5-PFHxA	318.0 / 273.0	1.83	96446.45	272.483467	542.2	false
13C4-PFHpA	367.0 / 322.0	2.24	105125.91	270.046796	605.1	false
13C8-PFOA	421.0 / 376.0	2.65	130274.72	280.362715	1495.2	false
13C9-PFNA	472.0 / 427.0	3.04	130801.93	286.677653	925.0	false
13C6-PFDA	519.0 / 474.0	3.39	135281.66	291.587733	1101.2	false
13C7-PFUnA	570.0 / 525.0	3.71	134139.40	290.439084	900.8	false
13C2-PFTeDA	715.0 / 670.0	4.46	96944.95	271.254207	1229.1	false
13C3-PFBS	302.0 / 99.0	1.51	47365.60	289.089339	808.7	false
13C3-PFHxS	402.0 / 99.0	2.26	34347.60	253.748665	378.0	false
13C8-PFOS	507.0 / 99.0	3.04	41175.89	302.861965	314.7	false

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Summary Quant Report

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Sample Name	J8262-FS-D(9)	**Injection Vial**	38
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:28:08	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	3.99	101972.68	280.328083	968.4	false
d3-MeFOSAA	573.0 / 419.0	3.55	14747.96	263.466479	199.2	false
d5-EtFOSAA	589.0 / 419.0	3.71	19348.07	311.165673	242.9	false
13C5-PFHxA	318.0 / 273.0	1.84	74734.60	308.567539	376.4	false
13C4-PFHpA	367.0 / 322.0	2.24	77854.37	292.271776	567.4	false
13C8-PFOA	421.0 / 376.0	2.65	82818.53	260.472714	800.8	false
13C9-PFNA	472.0 / 427.0	3.03	88564.43	283.670156	662.3	false
13C6-PFDA	519.0 / 474.0	3.39	98491.97	276.258861	787.7	false
13C7-PFUnA	570.0 / 525.0	3.71	100365.54	282.792821	527.3	false
13C2-PFTeDA	715.0 / 670.0	4.46	71274.17	259.518601	1409.9	false
13C3-PFBS	302.0 / 99.0	1.51	36172.92	286.156182	404.6	false
13C3-PFHxS	402.0 / 99.0	2.26	24342.72	233.091807	263.0	false
13C8-PFOS	507.0 / 99.0	3.03	26427.66	251.948022	194.7	false

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Summary Quant Report

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Sample Name	J8272-FS(0)	**Injection Vial**	41
Sample ID	VC-PM553-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:11:39	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	85014.30	274.329730	726.5	false
d3-MeFOSAA	573.0 / 419.0	3.55	9574.02	202.785464	127.8	false
d5-EtFOSAA	589.0 / 419.0	3.71	15054.07	287.049546	153.9	false
13C5-PFHxA	318.0 / 273.0	1.83	49416.28	130.567347	135.5	false
13C4-PFHpA	367.0 / 322.0	2.24	58510.19	140.563105	247.4	false
13C8-PFOA	421.0 / 376.0	2.65	48717.57	98.051965	303.0	false
13C9-PFNA	472.0 / 427.0	3.04	68101.44	139.587523	357.5	false
13C6-PFDA	519.0 / 474.0	3.39	73957.84	243.499311	457.3	false
13C7-PFUnA	570.0 / 525.0	3.71	82490.40	272.825726	440.2	false
13C2-PFTeDA	715.0 / 670.0	4.46	57338.53	245.064851	1313.8	false
13C3-PFBS	302.0 / 99.0	1.51	17841.79	167.342712	156.2	false
13C3-PFHxS	402.0 / 99.0	2.26	18077.07	205.227114	153.1	false
13C8-PFOS	507.0 / 99.0	3.03	17762.25	200.770122	110.6	false

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Summary Quant Report

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Sample Name	J8272-FS-D(5)	**Injection Vial**	42
Sample ID	VC-PM553-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:22:32	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	116519.13	268.856590	1093.3	false
d3-MeFOSAA	573.0 / 419.0	3.54	16524.60	229.764918	200.1	false
d5-EtFOSAA	589.0 / 419.0	3.71	22875.92	286.346574	192.2	false
13C5-PFHxA	318.0 / 273.0	1.83	92079.92	314.730157	344.5	false
13C4-PFHpA	367.0 / 322.0	2.24	102128.23	317.390929	523.6	false
13C8-PFOA	421.0 / 376.0	2.64	109088.95	284.027460	848.9	false
13C9-PFNA	472.0 / 427.0	3.03	108643.70	288.073762	671.0	false
13C6-PFDA	519.0 / 474.0	3.38	115541.13	272.014896	1026.7	false
13C7-PFUnA	570.0 / 525.0	3.70	117575.07	278.060753	905.2	false
13C2-PFTeDA	715.0 / 670.0	4.46	84442.01	258.068853	1403.3	false
13C3-PFBS	302.0 / 99.0	1.51	42172.62	259.662640	361.0	false
13C3-PFHxS	402.0 / 99.0	2.26	28553.43	212.801866	368.3	false
13C8-PFOS	507.0 / 99.0	3.03	32828.22	243.589738	266.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:11:45 PM

Sample Name	J8273-FS(0)	**Injection Vial**	43
Sample ID	VC-PM553-DW01P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:33:25	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	107970.96	276.379941	761.5	false
d3-MeFOSAA	573.0 / 419.0	3.55	12199.44	251.878643	135.2	false
d5-EtFOSAA	589.0 / 419.0	3.71	18556.98	344.920886	169.6	false
13C5-PFHxA	318.0 / 273.0	1.83	59170.47	124.877916	109.1	false
13C4-PFHpA	367.0 / 322.0	2.23	74820.90	143.575003	330.9	false
13C8-PFOA	421.0 / 376.0	2.65	65061.91	104.595642	392.6	false
13C9-PFNA	472.0 / 427.0	3.04	80760.84	132.223059	356.5	false
13C6-PFDA	519.0 / 474.0	3.39	93150.19	243.285344	607.5	false
13C7-PFUnA	570.0 / 525.0	3.71	100344.29	263.265057	492.5	false
13C2-PFTeDA	715.0 / 670.0	4.46	74636.43	253.048610	1256.4	false
13C3-PFBS	302.0 / 99.0	1.51	20922.54	191.289885	195.8	false
13C3-PFHxS	402.0 / 99.0	2.26	20874.51	231.010703	164.7	false
13C8-PFOS	507.0 / 99.0	3.04	21523.35	237.148381	122.2	false

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Summary Quant Report

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Sample Name	J8273-FS-D(5)	**Injection Vial**	44
Sample ID	VC-PM553-DW01P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:44:17	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	112117.87	283.438147	1182.2	false
d3-MeFOSAA	573.0 / 419.0	3.55	16675.47	262.051900	224.7	false
d5-EtFOSAA	589.0 / 419.0	3.71	20781.97	294.006299	184.6	false
13C5-PFHxA	318.0 / 273.0	1.84	82154.33	293.497453	363.7	false
13C4-PFHpA	367.0 / 322.0	2.24	97152.82	315.576462	652.2	false
13C8-PFOA	421.0 / 376.0	2.65	101356.28	275.823166	1213.1	false
13C9-PFNA	472.0 / 427.0	3.04	106577.69	295.369722	685.8	false
13C6-PFDA	519.0 / 474.0	3.39	113452.52	292.637657	1022.1	false
13C7-PFUnA	570.0 / 525.0	3.71	115257.68	298.644369	701.7	false
13C2-PFTeDA	715.0 / 670.0	4.46	84206.22	281.955889	1725.4	false
13C3-PFBS	302.0 / 99.0	1.52	38383.60	267.104440	383.4	false
13C3-PFHxS	402.0 / 99.0	2.27	30875.30	260.066775	348.3	false
13C8-PFOS	507.0 / 99.0	3.03	33887.17	284.186437	291.5	false

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Summary Quant Report

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Sample Name	J8274-FS(0)	**Injection Vial**	45
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:55:09	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	83592.65	263.666852	631.6	false
d3-MeFOSAA	573.0 / 419.0	3.55	9772.03	213.425959	123.1	false
d5-EtFOSAA	589.0 / 419.0	3.71	15122.08	297.327070	151.2	false
13C5-PFHxA	318.0 / 273.0	1.82	35885.53	33.604971	95.2	false
13C4-PFHpA	367.0 / 322.0	2.23	49575.10	42.210752	277.5	false
13C8-PFOA	421.0 / 376.0	2.65	25650.57	18.297312	240.9	false
13C9-PFNA	472.0 / 427.0	3.04	65700.24	47.728401	319.5	false
13C6-PFDA	519.0 / 474.0	3.39	76931.22	247.584054	486.2	false
13C7-PFUnA	570.0 / 525.0	3.71	76849.67	248.445120	516.5	false
13C2-PFTeDA	715.0 / 670.0	4.46	57454.22	240.028558	1265.5	false
13C3-PFBS	302.0 / 99.0	1.51	19591.48	189.476595	177.1	false
13C3-PFHxS	402.0 / 99.0	2.26	16476.05	192.876733	178.9	false
13C8-PFOS	507.0 / 99.0	3.03	20539.55	239.393302	141.0	false

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Summary Quant Report

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Sample Name	J8274-FS-D(9)	**Injection Vial**	46
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:06:02	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	123500.29	278.046623	965.1	false
d3-MeFOSAA	573.0 / 419.0	3.55	19147.52	263.036362	210.6	false
d5-EtFOSAA	589.0 / 419.0	3.71	20653.32	255.419345	176.5	false
13C5-PFHxA	318.0 / 273.0	1.83	90996.12	260.977603	377.4	false
13C4-PFHpA	367.0 / 322.0	2.24	98319.86	256.387545	558.2	false
13C8-PFOA	421.0 / 376.0	2.65	100281.24	219.081745	958.4	false
13C9-PFNA	472.0 / 427.0	3.04	117074.37	260.476149	776.7	false
13C6-PFDA	519.0 / 474.0	3.39	130361.60	299.455283	1057.6	false
13C7-PFUnA	570.0 / 525.0	3.71	127671.56	294.608198	514.0	false
13C2-PFTeDA	715.0 / 670.0	4.46	91511.99	272.885983	1609.4	false
13C3-PFBS	302.0 / 99.0	1.51	46250.74	281.350719	495.0	false
13C3-PFHxS	402.0 / 99.0	2.26	31134.88	229.252874	393.4	false
13C8-PFOS	507.0 / 99.0	3.04	35362.80	259.243951	318.6	false

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Summary Quant Report

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Sample Name	J8275-FS(0)	**Injection Vial**	48
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:27:47	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	102361.65	275.623869	774.1	false
d3-MeFOSAA	573.0 / 419.0	3.55	15580.23	333.923777	139.0	false
d5-EtFOSAA	589.0 / 419.0	3.71	17773.12	342.924060	154.0	false
13C5-PFHxA	318.0 / 273.0	1.83	41881.55	57.785039	114.8	false
13C4-PFHpA	367.0 / 322.0	2.23	54799.50	68.745561	244.4	false
13C8-PFOA	421.0 / 376.0	2.65	46313.43	48.674983	355.0	false
13C9-PFNA	472.0 / 427.0	3.03	79174.46	84.742950	482.7	false
13C6-PFDA	519.0 / 474.0	3.39	98104.10	269.525185	585.4	false
13C7-PFUnA	570.0 / 525.0	3.71	99003.45	273.231568	658.2	false
13C2-PFTeDA	715.0 / 670.0	4.46	70829.96	252.609772	1077.8	false
13C3-PFBS	302.0 / 99.0	1.51	18930.04	179.659944	159.1	false
13C3-PFHxS	402.0 / 99.0	2.26	19478.22	223.762492	176.3	false
13C8-PFOS	507.0 / 99.0	3.03	21282.75	243.422167	137.0	false

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Summary Quant Report

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Printed: 05/10/2018 5:12:10 PM

Sample Name	J8275-FS-D(7)	**Injection Vial**	49
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:38:40	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	109948.21	279.323249	850.1	false
d3-MeFOSAA	573.0 / 419.0	3.55	15708.50	236.982432	202.1	false
d5-EtFOSAA	589.0 / 419.0	3.71	20454.97	277.805473	161.5	false
13C5-PFHxA	318.0 / 273.0	1.84	73208.66	240.016938	443.8	false
13C4-PFHpA	367.0 / 322.0	2.23	84652.03	252.343502	568.6	false
13C8-PFOA	421.0 / 376.0	2.65	90227.91	225.333884	1047.8	false
13C9-PFNA	472.0 / 427.0	3.03	108312.50	275.475985	1065.0	false
13C6-PFDA	519.0 / 474.0	3.39	114564.85	296.963388	1145.0	false
13C7-PFUnA	570.0 / 525.0	3.71	115629.70	301.085123	792.5	false
13C2-PFTeDA	715.0 / 670.0	4.46	80478.15	270.801129	1181.0	false
13C3-PFBS	302.0 / 99.0	1.52	37060.19	247.579703	405.0	false
13C3-PFHxS	402.0 / 99.0	2.26	28502.83	230.480261	344.9	false
13C8-PFOS	507.0 / 99.0	3.03	33346.98	268.470596	289.9	false

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Summary Quant Report

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Sample Name	J8275-FS-D(9)	**Injection Vial**	50
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:49:33	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	132536.25	274.537632	977.3	false
d3-MeFOSAA	573.0 / 419.0	3.55	20892.71	262.832628	259.1	false
d5-EtFOSAA	589.0 / 419.0	3.71	25191.23	285.295274	207.9	false
13C5-PFHxA	318.0 / 273.0	1.84	95684.62	280.399198	546.9	false
13C4-PFHpA	367.0 / 322.0	2.24	110701.64	294.960593	708.1	false
13C8-PFOA	421.0 / 376.0	2.65	121108.09	270.342278	108055.6	false
13C9-PFNA	472.0 / 427.0	3.04	133773.73	304.110384	1072.9	false
13C6-PFDA	519.0 / 474.0	3.39	139826.65	295.521988	1426.4	false
13C7-PFUnA	570.0 / 525.0	3.71	143067.69	303.745460	761.6	false
13C2-PFTeDA	715.0 / 670.0	4.46	101672.17	278.947744	1136.4	false
13C3-PFBS	302.0 / 99.0	1.51	46629.75	259.760919	578.8	false
13C3-PFHxS	402.0 / 99.0	2.26	34982.25	235.883029	459.5	false
13C8-PFOS	507.0 / 99.0	3.03	40032.48	268.754608	243.9	false

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Summary Quant Report

Created with Analyst Reporter
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Sample Name	J8274-FS-D(11)	**Injection Vial**	53
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T15:43:57	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.06	97234.73	292.049588	819.6	false
d3-MeFOSAA	573.0 / 419.0	3.62	9123.44	141.352994	138.6	false
d5-EtFOSAA	589.0 / 419.0	3.78	9854.17	137.444407	133.2	false
13C5-PFHxA	318.0 / 273.0	1.87	80765.84	292.017384	412.1	false
13C4-PFHpA	367.0 / 322.0	2.28	91119.54	299.548958	466.0	false
13C8-PFOA	421.0 / 376.0	2.70	82189.07	226.360795	1103.9	false
13C9-PFNA	472.0 / 427.0	3.10	95404.28	267.592917	689.9	false
13C6-PFDA	519.0 / 474.0	3.45	95912.55	293.929553	760.1	false
13C7-PFUnA	570.0 / 525.0	3.77	92841.18	285.809606	614.1	false
13C2-PFTeDA	715.0 / 670.0	4.53	83133.16	330.721953	2064.5	false
13C3-PFBS	302.0 / 99.0	1.54	39091.03	268.194353	440.4	false
13C3-PFHxS	402.0 / 99.0	2.30	29394.28	244.103307	247.7	false
13C8-PFOS	507.0 / 99.0	3.09	30460.70	251.851823	236.0	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:17:46 PM

Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:44:37	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
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	4212.63	4.099058	23.2	false
PFHxS_2	399.0 / 99.0	2.45	1559.70	< 0	14.2	false
PFOA_1	413.0 / 369.0	2.67	8215.39	26.403056	17.4	false
PFOA_2	413.0 / 169.0	2.67	363.18	39.932965	14.0	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:17:50 PM

Sample Name	J8260-FS-D(11)	**Injection Vial**	13
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T13:44:17	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
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	2.35	1412143.43	3207.178727	269.7	false
PFHxS_2	399.0 / 99.0	2.35	427854.63	3462.104806	490.4	false
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	2.73	6893.85	316.649059	66.6	true

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:17:54 PM

Sample Name	J8261-FS-D(11)	**Injection Vial**	14
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T13:55:43	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.87	309165.36	1041.080072	39.1	false
PFHxA_2	313.0 / 119.0	1.88	19461.88	864.588083	28.9	false
PFHpA_1	363.0 / 319.0	2.29	39756.78	123.313852	28.8	false
PFHpA_2	363.0 / 169.0	2.27	1223.19	127.954034	22.6	false
PFHxS_1	399.0 / 80.0	2.31	1339902.58	3731.039984	399.7	false
PFHxS_2	399.0 / 99.0	2.31	403224.14	4005.345093	651.1	false
PFOA_1	413.0 / 369.0	2.69	126650.40	303.080654	133.0	false
PFOA_2	413.0 / 169.0	2.68	7122.85	288.443340	96.9	true

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:17:58 PM

Sample Name	J8274-FS-D(13)	**Injection Vial**	15
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:06:36	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.87	1281632.32	3609.148421	77.7	false
PFHxA_2	313.0 / 119.0	1.87	92000.88	3449.381524	65.4	false
PFHpA_1	363.0 / 319.0	2.28	386154.11	1129.667963	116.9	false
PFHpA_2	363.0 / 169.0	2.28	8334.05	1134.938015	131.0	false
PFHxS_1	399.0 / 80.0	2.30	686585.88	1507.384367	351.8	false
PFHxS_2	399.0 / 99.0	2.30	192699.54	1488.599552	661.0	false
PFOA_1	413.0 / 369.0	2.69	2799715.99	5543.982454	688.0	false
PFOA_2	413.0 / 169.0	2.68	154223.06	4820.391954	510.4	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:18:02 PM

Sample Name	J8275-FS-D(11)	**Injection Vial**	16
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:17:29	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.86	1335810.20	3710.163160	80.6	false
PFHxA_2	313.0 / 119.0	1.86	97968.15	3623.422571	71.8	false
PFHpA_1	363.0 / 319.0	2.27	316242.22	941.329380	101.8	false
PFHpA_2	363.0 / 169.0	2.27	7703.26	1066.320677	118.7	false
PFHxS_1	399.0 / 80.0	2.30	603928.39	1234.168562	348.2	false
PFHxS_2	399.0 / 99.0	2.30	166577.77	1191.252031	656.5	false
PFOA_1	413.0 / 369.0	2.68	1089360.58	2175.950074	421.6	false
PFOA_2	413.0 / 169.0	2.66	98732.75	3117.127670	316.0	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:18:06 PM

Sample Name	J8259-FS-D(5)	**Injection Vial**	19
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T15:35:51	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFHxA_1	313.0 / 269.0	1.89	1355535.46	4258.642143	48.7	false
PFHxA_2	313.0 / 119.0	1.90	142963.23	5990.674284	52.9	false
PFHpA_1	363.0 / 319.0	2.31	1031605.97	3128.959510	88.3	false
PFHpA_2	363.0 / 169.0	2.30	29367.53	4339.046401	92.4	false
PFHxS_1	399.0 / 80.0	2.34	2383952.54	6037.020978	326.0	false
PFHxS_2	399.0 / 99.0	2.34	686809.69	6221.745117	767.6	false
PFOA_1	413.0 / 369.0	2.73	14078962.49	39168.764129	1253.0	false
PFOA_2	413.0 / 169.0	2.72	720942.35	31544.212221	578.4	true

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:04:52 PM

Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:44:37	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.84	64119.13	225.371052	520.4	false
13C4-PFHpA	367.0 / 322.0	2.25	72671.62	229.487130	568.5	false
13C8-PFOA	421.0 / 376.0	2.66	93052.42	231.504449	1231.4	false
13C3-PFHxS	402.0 / 99.0	2.27	25755.33	233.428270	299.9	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:17:06 PM

Sample Name	J8260-FS-D(11)	**Injection Vial**	13
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T13:44:17	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.90	80242.26	371.999202	629.3	true
13C4-PFHpA	367.0 / 322.0	2.32	97320.69	405.347045	691.3	false
13C8-PFOA	421.0 / 376.0	2.74	88063.73	288.972859	3755.1	false
13C3-PFHxS	402.0 / 99.0	2.34	29814.37	288.849009	262.1	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:17:10 PM

Sample Name	J8261-FS-D(11)	**Injection Vial**	14
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T13:55:43	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.86	69727.84	316.485319	557.4	false
13C4-PFHpA	367.0 / 322.0	2.28	78691.24	320.890381	747.0	false
13C8-PFOA	421.0 / 376.0	2.69	100746.01	323.665455	4907.7	false
13C3-PFHxS	402.0 / 99.0	2.30	24602.70	262.544044	334.7	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:17:13 PM

Sample Name	J8274-FS-D(13)	**Injection Vial**	15
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:06:36	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.86	83887.23	316.252061	674.2	false
13C4-PFHpA	367.0 / 322.0	2.27	96703.30	327.538042	754.0	false
13C8-PFOA	421.0 / 376.0	2.68	119658.41	319.302139	3851.1	false
13C3-PFHxS	402.0 / 99.0	2.29	30796.89	279.268294	489.0	false

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Summary Quant Report

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Sample Name	J8275-FS-D(11)	**Injection Vial**	16
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:17:29	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.85	85058.58	290.246344	543.1	false
13C4-PFHpA	367.0 / 322.0	2.26	94671.54	290.235843	598.7	false
13C8-PFOA	421.0 / 376.0	2.68	118807.10	286.953924	1276.5	false
13C3-PFHxS	402.0 / 99.0	2.29	32643.76	257.964449	397.4	false

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Summary Quant Report

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Sample Name	J8259-FS-D(5)	**Injection Vial**	19
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T15:35:51	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C5-PFHxA	318.0 / 273.0	1.89	75221.24	301.196333	388.3	false
13C4-PFHpA	367.0 / 322.0	2.30	94446.91	339.765967	496.0	false
13C8-PFOA	421.0 / 376.0	2.72	85096.46	241.180282	911.5	false
13C3-PFHxS	402.0 / 99.0	2.32	28232.96	259.568239	257.9	false

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Summary Ion Ratio Report

Created with Analyst Reporter
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Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:40:04	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	0.310	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.075	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.022	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.360	0.288	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	N/A	PFOA	N/A	0.064	
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.230	0.314	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.130	0.178	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.043	
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.150	0.157	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.090	0.068	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.56	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.56	NMeFOSAA	0.810	0.569	ü
NEtFOSAA_1	584.0 / 419.0	3.72	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.080	0.066	ü

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Summary Ion Ratio Report

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Sample Name	CR847PB-FS(0)	**Injection Vial**	19
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T22:50:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.075	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.022	ü
PFHxS_1	399.0 / 80.0	N/A	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	PFHxS	N/A	0.288	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.070	0.064	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.314	ü
PFOS_1	499.0 / 80.0	3.02	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.100	0.178	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.043	
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	
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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	

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Summary Ion Ratio Report

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Sample Name	CR848LCS-FS(0)	**Injection Vial**	20
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:01:28	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	0.288	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.060	0.064	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.310	0.314	ü
PFOS_1	499.0 / 80.0	3.05	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.170	0.178	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.040	0.043	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.050	0.054	ü
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.160	0.157	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.070	0.068	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.56	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.56	NMeFOSAA	0.530	0.569	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.060	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8246-FS(0)	**Injection Vial**	21
Sample ID	VC-AQ-FB01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:12:20	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.075	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.022	ü
PFHxS_1	399.0 / 80.0	N/A	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	PFHxS	N/A	0.288	ü
PFOA_1	413.0 / 369.0	2.66	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	0.210	0.314	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.150	0.178	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.060	0.043	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.130	0.157	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.080	0.068	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8247-FS(0)	**Injection Vial**	22
Sample ID	VC-AQ-EB01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:23:13	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.075	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.022	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.270	0.288	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.060	0.064	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.420	0.314	ü
PFOS_1	499.0 / 80.0	3.05	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.180	0.178	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.050	0.043	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.130	0.157	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.060	0.068	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8276-FS(0)	**Injection Vial**	23
Sample ID	VC-SO-FB02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:34:06	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.075	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.022	ü
PFHxS_1	399.0 / 80.0	N/A	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	PFHxS	N/A	0.288	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.060	0.064	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.380	0.314	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	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.070	0.043	
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	PFUnA	0.080	0.054	ü
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.180	0.157	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.070	0.068	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8277-FS(0)	**Injection Vial**	24
Sample ID	VC-SO-EB02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:44:58	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.52	PFBS	0.350	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.075	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.030	0.022	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.330	0.288	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.060	0.064	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.440	0.314	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	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.020	0.043	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.080	0.054	ü
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.140	0.157	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.070	0.068	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.46	PFTeDA	0.050	0.047	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Printed: 05/10/2018 5:19:21 PM

Sample Name	J8259-FS(0)	**Injection Vial**	25
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:55:49	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.52	PFBS			
PFBS_2	298.9 / 99.0	1.52	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.83	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.080	0.075	ü
PFHpA_1	363.0 / 319.0	2.24	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	PFHpA	0.030	0.022	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.350	0.288	ü
PFOA_1	413.0 / 369.0	2.60	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.120	0.064	
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.314	ü
PFOS_1	499.0 / 80.0	2.96	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.150	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.043	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	
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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8259-FS-D(3)	**Injection Vial**	26
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:06:43	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.060	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.22	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.270	0.288	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.070	0.064	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.314	ü
PFOS_1	499.0 / 80.0	2.97	PFOS			
PFOS_2	499.0 / 99.0	3.03	PFOS	0.150	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.043	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	
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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8259-FS-D(7)	**Injection Vial**	27
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:17:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.320	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.23	PFHpA	0.030	0.022	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.270	0.288	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.050	0.064	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.314	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	3.41	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.043	
PFUnA_1	563.0 / 519.0	3.76	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8260-FS(0)	**Injection Vial**	30
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:01:07	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.52	PFBS	0.340	0.292	ü
PFHxA_1	313.0 / 269.0	1.83	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.110	0.075	ü
PFHpA_1	363.0 / 319.0	2.23	PFHpA			
PFHpA_2	363.0 / 169.0	2.19	PFHpA	0.030	0.022	ü
PFHxS_1	399.0 / 80.0	2.32	PFHxS			
PFHxS_2	399.0 / 99.0	2.26	PFHxS	1.600	0.288	
PFOA_1	413.0 / 369.0	2.64	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.040	0.064	ü
PFNA_1	463.0 / 419.0	3.04	PFNA			
PFNA_2	463.0 / 219.0	3.03	PFNA	0.260	0.314	ü
PFOS_1	499.0 / 80.0	2.97	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.270	0.178	
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.040	0.043	ü
PFUnA_1	563.0 / 519.0	3.71	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8260-FS-D(3)	**Injection Vial**	31
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:11:59	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	PFHpA	0.030	0.022	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.460	0.288	
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.040	0.064	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.210	0.314	ü
PFOS_1	499.0 / 80.0	2.98	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.140	0.178	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.043	
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	3.62	PFUnA	N/A	0.054	
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8260-FS-D(9)	**Injection Vial**	32
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:22:52	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.290	0.288	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.050	0.064	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.230	0.314	ü
PFOS_1	499.0 / 80.0	2.98	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.150	0.178	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.040	0.043	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8261-FS(0)	**Injection Vial**	33
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:33:45	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.52	PFBS	0.340	0.292	ü
PFHxA_1	313.0 / 269.0	1.83	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.110	0.075	ü
PFHpA_1	363.0 / 319.0	2.24	PFHpA			
PFHpA_2	363.0 / 169.0	2.19	PFHpA	0.030	0.022	ü
PFHxS_1	399.0 / 80.0	2.32	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	1.580	0.288	
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.040	0.064	ü
PFNA_1	463.0 / 419.0	3.04	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.250	0.314	ü
PFOS_1	499.0 / 80.0	2.97	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.300	0.178	
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.043	
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8261-FS-D(3)	**Injection Vial**	34
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:44:38	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.24	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	PFHpA	0.030	0.022	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.430	0.288	
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.050	0.064	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.230	0.314	ü
PFOS_1	499.0 / 80.0	2.98	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.150	0.178	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.043	
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	
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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8261-FS-D(9)	**Injection Vial**	35
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:55:30	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	PFHpA	0.030	0.022	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.290	0.288	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.61	PFOA	0.090	0.064	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.460	0.314	ü
PFOS_1	499.0 / 80.0	2.99	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.150	0.178	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.043	
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	
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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8262-FS(0)	**Injection Vial**	36
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:06:22	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.52	PFBS	0.520	0.292	
PFHxA_1	313.0 / 269.0	1.82	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.090	0.075	ü
PFHpA_1	363.0 / 319.0	2.22	PFHpA			
PFHpA_2	363.0 / 169.0	2.17	PFHpA	0.030	0.022	
PFHxS_1	399.0 / 80.0	2.31	PFHxS			
PFHxS_2	399.0 / 99.0	2.25	PFHxS	1.920	0.288	
PFOA_1	413.0 / 369.0	2.63	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.040	0.064	ü
PFNA_1	463.0 / 419.0	3.04	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.330	0.314	ü
PFOS_1	499.0 / 80.0	2.96	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.280	0.178	
PFDA_1	513.0 / 469.0	3.39	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.043	
PFUnA_1	563.0 / 519.0	3.71	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	
PFDoA_1	613.0 / 569.0	4.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	
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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8262-FS-D(7)	**Injection Vial**	37
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:17:15	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	0.310	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.060	0.075	ü
PFHpA_1	363.0 / 319.0	2.24	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	PFHpA	0.030	0.022	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.310	0.288	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.55	PFOA	0.060	0.064	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.240	0.314	ü
PFOS_1	499.0 / 80.0	2.97	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.150	0.178	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.043	
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	ü
PFDoA_1	613.0 / 569.0	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	
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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8262-FS-D(9)	**Injection Vial**	38
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:28:08	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.310	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.060	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.20	PFHpA	0.030	0.022	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.350	0.288	ü
PFOA_1	413.0 / 369.0	2.64	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.040	0.064	ü
PFNA_1	463.0 / 419.0	3.04	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.180	0.314	ü
PFOS_1	499.0 / 80.0	2.97	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.150	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.043	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8272-FS(0)	**Injection Vial**	41
Sample ID	VC-PM553-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:11:39	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.280	0.288	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.070	0.064	ü
PFNA_1	463.0 / 419.0	3.01	PFNA			
PFNA_2	463.0 / 219.0	2.93	PFNA	0.420	0.314	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.160	0.178	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.043	
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	
PFDoA_1	613.0 / 569.0	4.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.00	PFDoA	0.120	0.157	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8272-FS-D(5)	**Injection Vial**	42
Sample ID	VC-PM553-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:22:32	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.280	0.288	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.050	0.064	ü
PFNA_1	463.0 / 419.0	3.02	PFNA			
PFNA_2	463.0 / 219.0	2.91	PFNA	0.170	0.314	ü
PFOS_1	499.0 / 80.0	3.03	PFOS			
PFOS_2	499.0 / 99.0	3.04	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	0.043	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	ü
PFDoA_1	613.0 / 569.0	4.00	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8273-FS(0)	**Injection Vial**	43
Sample ID	VC-PM553-DW01P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:33:25	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.52	PFBS			
PFBS_2	298.9 / 99.0	1.52	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.280	0.288	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.070	0.064	ü
PFNA_1	463.0 / 419.0	3.02	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.180	0.314	ü
PFOS_1	499.0 / 80.0	2.98	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.140	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.043	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8273-FS-D(5)	**Injection Vial**	44
Sample ID	VC-PM553-DW01P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:44:17	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	0.288	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.61	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	0.314	ü
PFOS_1	499.0 / 80.0	2.98	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.140	0.178	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.043	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8274-FS(0)	**Injection Vial**	45
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:55:09	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.52	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.200	0.075	
PFHpA_1	363.0 / 319.0	2.24	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	PFHpA	0.030	0.022	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.430	0.288	ü
PFOA_1	413.0 / 369.0	2.61	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.100	0.064	
PFNA_1	463.0 / 419.0	3.03	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.270	0.314	ü
PFOS_1	499.0 / 80.0	2.92	PFOS			
PFOS_2	499.0 / 99.0	3.02	PFOS	0.120	0.178	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.043	
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.130	0.157	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8274-FS-D(9)	**Injection Vial**	46
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:06:02	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.280	0.288	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.060	0.064	ü
PFNA_1	463.0 / 419.0	3.00	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.180	0.314	ü
PFOS_1	499.0 / 80.0	2.93	PFOS			
PFOS_2	499.0 / 99.0	3.01	PFOS	0.120	0.178	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.043	
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8275-FS(0)	**Injection Vial**	48
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:27:47	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.270	0.075	
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	PFHpA	0.030	0.022	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.460	0.288	
PFOA_1	413.0 / 369.0	2.63	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.110	0.064	
PFNA_1	463.0 / 419.0	3.04	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.270	0.314	ü
PFOS_1	499.0 / 80.0	2.94	PFOS			
PFOS_2	499.0 / 99.0	3.02	PFOS	0.140	0.178	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.040	0.043	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8275-FS-D(7)	**Injection Vial**	49
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:38:40	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.280	0.288	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.63	PFOA	0.090	0.064	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.390	0.314	ü
PFOS_1	499.0 / 80.0	2.94	PFOS			
PFOS_2	499.0 / 99.0	3.03	PFOS	0.130	0.178	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.060	0.043	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	
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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8275-FS-D(9)	**Injection Vial**	50
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:49:33	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.270	0.288	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.63	PFOA	0.080	0.064	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.400	0.314	ü
PFOS_1	499.0 / 80.0	2.94	PFOS			
PFOS_2	499.0 / 99.0	3.03	PFOS	0.130	0.178	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.050	0.043	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.054	
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.157	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.068	
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	0.569	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.066	ü

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Summary Ion Ratio Report

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Sample Name	J8274-FS-D(11)	**Injection Vial**	53
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T15:43:57	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.56	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.88	PFHxA			
PFHxA_2	313.0 / 119.0	1.88	PFHxA	0.070	0.075	ü
PFHpA_1	363.0 / 319.0	2.29	PFHpA			
PFHpA_2	363.0 / 169.0	2.29	PFHpA	0.020	0.022	ü
PFHxS_1	399.0 / 80.0	2.32	PFHxS			
PFHxS_2	399.0 / 99.0	2.32	PFHxS	0.270	0.288	ü
PFOA_1	413.0 / 369.0	2.71	PFOA			
PFOA_2	413.0 / 169.0	2.70	PFOA	0.050	0.064	ü
PFNA_1	463.0 / 419.0	3.11	PFNA			
PFNA_2	463.0 / 219.0	3.11	PFNA	0.240	0.314	ü
PFOS_1	499.0 / 80.0	3.00	PFOS			
PFOS_2	499.0 / 99.0	3.11	PFOS	0.120	0.178	ü
PFDA_1	513.0 / 469.0	3.47	PFDA			
PFDA_2	513.0 / 219.0	3.46	PFDA	0.060	0.043	ü
PFUnA_1	563.0 / 519.0	3.79	PFUnA			
PFUnA_2	563.0 / 269.0	3.53	PFUnA	3.210	0.054	
PFDoA_1	613.0 / 569.0	4.07	PFDoA			
PFDoA_2	613.0 / 319.0	3.59	PFDoA	0.520	0.157	
PFTrDA_1	663.0 / 619.0	4.32	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.29	PFTrDA	0.120	0.068	
PFTeDA_1	713.0 / 669.0	4.53	PFTeDA			
PFTeDA_2	713.0 / 169.0	3.96	PFTeDA	0.040	0.047	ü
NMeFOSAA_1	570.0 / 419.0	3.65	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.63	NMeFOSAA	1.060	0.569	
NEtFOSAA_1	584.0 / 419.0	3.72	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.27	NEtFOSAA	0.200	0.066	

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Summary Ion Ratio Report

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Printed: 05/10/2018 5:21:59 PM

Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:44:37	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.024	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.45	PFHxS	0.370	0.301	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.040	0.061	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 5:22:04 PM

Sample Name	J8260-FS-D(11)	**Injection Vial**	13
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T13:44:17	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.024	ü
PFHxS_1	399.0 / 80.0	2.35	PFHxS			
PFHxS_2	399.0 / 99.0	2.35	PFHxS	0.300	0.301	ü
PFOA_1	413.0 / 369.0	N/A	PFOA			
PFOA_2	413.0 / 169.0	2.73	PFOA	N/A	0.061	

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 5:22:08 PM

Sample Name	J8261-FS-D(11)	**Injection Vial**	14
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T13:55:43	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.88	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.29	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.030	0.024	ü
PFHxS_1	399.0 / 80.0	2.31	PFHxS			
PFHxS_2	399.0 / 99.0	2.31	PFHxS	0.300	0.301	ü
PFOA_1	413.0 / 369.0	2.69	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.060	0.061	ü

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Summary Ion Ratio Report

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Printed: 05/10/2018 5:22:12 PM

Sample Name	J8274-FS-D(13)	**Injection Vial**	15
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:06:36	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.28	PFHpA			
PFHpA_2	363.0 / 169.0	2.28	PFHpA	0.020	0.024	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.280	0.301	ü
PFOA_1	413.0 / 369.0	2.69	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.060	0.061	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 5:22:16 PM

Sample Name	J8275-FS-D(11)	**Injection Vial**	16
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:17:29	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.020	0.024	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.280	0.301	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.090	0.061	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 05/10/2018 5:22:20 PM

Sample Name	J8259-FS-D(5)	**Injection Vial**	19
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T15:35:51	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFHxA_1	313.0 / 269.0	1.89	PFHxA			
PFHxA_2	313.0 / 119.0	1.90	PFHxA	0.110	0.077	ü
PFHpA_1	363.0 / 319.0	2.31	PFHpA			
PFHpA_2	363.0 / 169.0	2.30	PFHpA	0.030	0.024	ü
PFHxS_1	399.0 / 80.0	2.34	PFHxS			
PFHxS_2	399.0 / 99.0	2.34	PFHxS	0.290	0.301	ü
PFOA_1	413.0 / 369.0	2.73	PFOA			
PFOA_2	413.0 / 169.0	2.72	PFOA	0.050	0.061	ü

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Summary Internal Standard Report

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Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:40:04	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	31169.08	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	31169.08	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	73197.71	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	73197.71	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	80987.01	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	80987.01	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	27672.70	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	27672.70	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	100995.54	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	100995.54	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	98771.97	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	98771.97	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	30180.83	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	30180.83	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	104976.95	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	104976.95	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	99774.68	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	99774.68	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	99815.86	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	99815.86	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	74663.45	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	74663.45	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	74663.45	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	74663.45	250.00
NMeFOSAA_1	570.0 / 419.0	3.56	d3-MeFOSAA	573.0 / 419.0	15028.61	250.00
NMeFOSAA_2	570.0 / 512.0	3.56	d3-MeFOSAA	573.0 / 419.0	15028.61	250.00
NEtFOSAA_1	584.0 / 419.0	3.72	d5-EtFOSAA	589.0 / 419.0	19324.88	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	19324.88	250.00

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Summary Internal Standard Report

Sample Name	CR847PB-FS(0)	**Injection Vial**	19
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T22:50:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	37115.93	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	37115.93	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	86555.16	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	86555.16	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	101300.77	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	101300.77	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	30524.57	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	30524.57	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	119490.89	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	119490.89	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	110643.46	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	110643.46	250.00
PFOS_1	499.0 / 80.0	3.02	13C8-PFOS	507.0 / 99.0	32916.43	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	32916.43	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	123970.85	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	123970.85	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	116734.15	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	116734.15	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	111756.18	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	111756.18	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	84329.02	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	84329.02	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	84329.02	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	84329.02	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	17869.08	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	17869.08	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	20225.63	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20225.63	250.00

Sample Name	CR848LCS-FS(0)	**Injection Vial**	20
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:01:28	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	32331.54	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	32331.54	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	78281.10	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	78281.10	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	85051.50	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	85051.50	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	28601.33	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	28601.33	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	94444.45	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	94444.45	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	95556.50	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	95556.50	250.00
PFOS_1	499.0 / 80.0	3.05	13C8-PFOS	507.0 / 99.0	27964.65	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	27964.65	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	103232.11	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	103232.11	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	103118.11	250.00
PFUnA_2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	103118.11	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	104296.19	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	104296.19	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	79775.15	250.00
PFTrDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	79775.15	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	79775.15	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	79775.15	250.00
NMeFOSAA_1	570.0 / 419.0	3.56	d3-MeFOSAA	573.0 / 419.0	14965.98	250.00
NMeFOSAA_2	570.0 / 512.0	3.56	d3-MeFOSAA	573.0 / 419.0	14965.98	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	16997.26	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	16997.26	250.00

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Summary Internal Standard Report

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Sample Name	J8246-FS(0)	**Injection Vial**	21
Sample ID	VC-AQ-FB01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:12:20	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	34491.97	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	34491.97	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	78682.42	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	78682.42	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	89005.93	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	89005.93	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	29844.82	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	29844.82	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	113604.85	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	113604.85	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	102767.80	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	102767.80	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	31884.36	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	31884.36	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	111357.34	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	111357.34	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	126611.24	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	126611.24	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	113506.10	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	113506.10	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	79180.09	250.00
PFTrDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	79180.09	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	79180.09	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	79180.09	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	15771.49	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	15771.49	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20145.06	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20145.06	250.00

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Summary Internal Standard Report

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Sample Name	J8247-FS(0)	**Injection Vial**	22
Sample ID	VC-AQ-EB01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:23:13	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	43525.86	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	43525.86	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	80394.75	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	80394.75	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	96553.26	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	96553.26	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	33702.06	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	33702.06	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	118118.41	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	118118.41	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	114300.84	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	114300.84	250.00
PFOS_1	499.0 / 80.0	3.05	13C8-PFOS	507.0 / 99.0	34455.53	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	34455.53	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	142004.61	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	142004.61	250.00
PFUnA_1	563.0 / 519.0	3.72	13C7-PFUnA	570.0 / 525.0	136161.06	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	136161.06	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	134584.23	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	134584.23	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	105595.95	250.00
PFTrDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	105595.95	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	105595.95	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	105595.95	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	20587.48	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	20587.48	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	21319.81	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	21319.81	250.00

Sample Name	J8276-FS(0)	**Injection Vial**	23
Sample ID	VC-SO-FB02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:34:06	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	27586.29	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	27586.29	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	61652.79	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	61652.79	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	69658.85	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	69658.85	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	22257.33	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	22257.33	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	84144.58	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	84144.58	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	78690.00	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	78690.00	250.00
PFOS_1	499.0 / 80.0	N/A	13C8-PFOS	507.0 / 99.0	23725.45	239.25
PFOS_2	499.0 / 99.0	N/A	13C8-PFOS	507.0 / 99.0	23725.45	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	91071.12	250.00
PFDA_2	513.0 / 219.0	3.40	13C6-PFDA	519.0 / 474.0	91071.12	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	86163.72	250.00
PFUnA_2	563.0 / 269.0	3.72	13C7-PFUnA	570.0 / 525.0	86163.72	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	83266.29	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	83266.29	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	61871.91	250.00
PFTrDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	61871.91	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	61871.91	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	61871.91	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	13378.27	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	13378.27	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	13472.62	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	13472.62	250.00

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Summary Internal Standard Report

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Sample Name	J8277-FS(0)	**Injection Vial**	24
Sample ID	VC-SO-EB02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:44:58	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	37313.67	232.25
PFBS_2	298.9 / 99.0	1.52	13C3-PFBS	302.0 / 99.0	37313.67	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	82609.46	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	82609.46	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	88793.39	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	88793.39	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	29221.94	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	29221.94	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	110294.15	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	110294.15	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	100996.24	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	100996.24	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	31755.30	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	31755.30	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	108867.63	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	108867.63	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	111371.59	250.00
PFUnA_2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	111371.59	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	103817.65	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	103817.65	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	89553.94	250.00
PFTrDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	89553.94	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	89553.94	250.00
PFTeDA_2	713.0 / 169.0	4.46	13C2-PFTeDA	715.0 / 670.0	89553.94	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	17669.23	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	17669.23	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20326.00	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20326.00	250.00

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Summary Internal Standard Report

Sample Name	J8259-FS(0)	**Injection Vial**	25
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:55:49	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	1.52	13C3-PFBS	302.0 / 99.0	17126.81	232.25
PFBS_2	298.9 / 99.0	1.52	13C3-PFBS	302.0 / 99.0	17126.81	232.25
PFHxA_1	313.0 / 269.0	1.83	13C5-PFHxA	318.0 / 273.0	44559.03	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	44559.03	250.00
PFHpA_1	363.0 / 319.0	2.24	13C4-PFHpA	367.0 / 322.0	60625.81	250.00
PFHpA_2	363.0 / 169.0	2.21	13C4-PFHpA	367.0 / 322.0	60625.81	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	21453.52	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	21453.52	236.50
PFOA_1	413.0 / 369.0	2.60	13C8-PFOA	421.0 / 376.0	33993.46	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	33993.46	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	75896.25	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	75896.25	250.00
PFOS_1	499.0 / 80.0	2.96	13C8-PFOS	507.0 / 99.0	23229.19	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	23229.19	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	96140.14	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	96140.14	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	98132.05	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	98132.05	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	104187.87	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	104187.87	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	72383.77	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	72383.77	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	72383.77	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	72383.77	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	14068.50	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	14068.50	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	15463.26	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	15463.26	250.00

Sample Name	J8259-FS-D(3)	**Injection Vial**	26
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:06:43	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	40158.39	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	40158.39	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	99103.32	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	99103.32	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	117371.20	250.00
PFHpA_2	363.0 / 169.0	2.22	13C4-PFHpA	367.0 / 322.0	117371.20	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	31636.07	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	31636.07	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	92793.69	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	92793.69	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	107711.03	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	107711.03	250.00
PFOS_1	499.0 / 80.0	2.97	13C8-PFOS	507.0 / 99.0	29455.01	239.25
PFOS_2	499.0 / 99.0	3.03	13C8-PFOS	507.0 / 99.0	29455.01	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	125290.87	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	125290.87	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	123702.22	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	123702.22	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	128799.29	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	128799.29	250.00
PFTrDA_1	663.0 / 619.0	4.24	13C2-PFTeDA	715.0 / 670.0	89908.46	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89908.46	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	89908.46	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89908.46	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16749.41	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16749.41	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20825.49	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20825.49	250.00

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Summary Internal Standard Report

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Sample Name	J8259-FS-D(7)	**Injection Vial**	27
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:17:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	46266.04	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	46266.04	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	102003.76	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	102003.76	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	103456.39	250.00
PFHpA_2	363.0 / 169.0	2.23	13C4-PFHpA	367.0 / 322.0	103456.39	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	35007.34	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	35007.34	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	131731.96	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	131731.96	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	124395.73	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	124395.73	250.00
PFOS_1	499.0 / 80.0	N/A	13C8-PFOS	507.0 / 99.0	40161.96	239.25
PFOS_2	499.0 / 99.0	N/A	13C8-PFOS	507.0 / 99.0	40161.96	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	145076.47	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	145076.47	250.00
PFUnA_1	563.0 / 519.0	3.76	13C7-PFUnA	570.0 / 525.0	128871.45	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	128871.45	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	136302.49	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	136302.49	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	97477.98	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	97477.98	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	97477.98	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	97477.98	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	22926.40	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	22926.40	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	24151.78	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	24151.78	250.00

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Summary Internal Standard Report

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Sample Name	J8260-FS(0)	**Injection Vial**	30
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:01:07	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	19319.04	232.25
PFBS_2	298.9 / 99.0	1.52	13C3-PFBS	302.0 / 99.0	19319.04	232.25
PFHxA_1	313.0 / 269.0	1.83	13C5-PFHxA	318.0 / 273.0	41540.01	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	41540.01	250.00
PFHpA_1	363.0 / 319.0	2.23	13C4-PFHpA	367.0 / 322.0	43051.54	250.00
PFHpA_2	363.0 / 169.0	2.19	13C4-PFHpA	367.0 / 322.0	43051.54	250.00
PFHxS_1	399.0 / 80.0	2.32	13C3-PFHxS	402.0 / 99.0	17040.44	236.50
PFHxS_2	399.0 / 99.0	2.26	13C3-PFHxS	402.0 / 99.0	17040.44	236.50
PFOA_1	413.0 / 369.0	2.64	13C8-PFOA	421.0 / 376.0	41083.53	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	41083.53	250.00
PFNA_1	463.0 / 419.0	3.04	13C9-PFNA	472.0 / 427.0	54158.98	250.00
PFNA_2	463.0 / 219.0	3.03	13C9-PFNA	472.0 / 427.0	54158.98	250.00
PFOS_1	499.0 / 80.0	2.97	13C8-PFOS	507.0 / 99.0	17458.37	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	17458.37	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	93771.95	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	93771.95	250.00
PFUnA_1	563.0 / 519.0	3.71	13C7-PFUnA	570.0 / 525.0	97250.07	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	97250.07	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	107719.14	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	107719.14	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	81500.68	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	81500.68	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	81500.68	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	81500.68	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	13911.19	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	13911.19	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	16597.02	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	16597.02	250.00

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Summary Internal Standard Report

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Sample Name	J8260-FS-D(3)	**Injection Vial**	31
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:11:59	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	48500.65	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	48500.65	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	115702.83	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	115702.83	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	109259.71	250.00
PFHpA_2	363.0 / 169.0	2.21	13C4-PFHpA	367.0 / 322.0	109259.71	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	33259.16	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	33259.16	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	102424.95	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	102424.95	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	116519.01	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	116519.01	250.00
PFOS_1	499.0 / 80.0	2.98	13C8-PFOS	507.0 / 99.0	32027.09	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	32027.09	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	142994.08	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	142994.08	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	151129.92	250.00
PFUnA_2	563.0 / 269.0	3.62	13C7-PFUnA	570.0 / 525.0	151129.92	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	152961.14	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	152961.14	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	107640.70	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	107640.70	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	107640.70	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	107640.70	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	23702.16	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	23702.16	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	24900.69	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	24900.69	250.00

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Summary Internal Standard Report

Sample Name	J8260-FS-D(9)	**Injection Vial**	32
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:22:52	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	47021.78	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	47021.78	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	95596.01	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	95596.01	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	108538.64	250.00
PFHpA_2	363.0 / 169.0	2.21	13C4-PFHpA	367.0 / 322.0	108538.64	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	32925.05	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	32925.05	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	117239.86	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	117239.86	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	129556.99	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	129556.99	250.00
PFOS_1	499.0 / 80.0	2.98	13C8-PFOS	507.0 / 99.0	42562.68	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	42562.68	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	140906.88	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	140906.88	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	132880.25	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	132880.25	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	129423.62	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	129423.62	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	93399.62	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	93399.62	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	93399.62	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	93399.62	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	21242.57	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	21242.57	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	22675.65	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	22675.65	250.00

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Summary Internal Standard Report

Sample Name	J8261-FS(0)	**Injection Vial**	33
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:33:45	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	19427.84	232.25
PFBS_2	298.9 / 99.0	1.52	13C3-PFBS	302.0 / 99.0	19427.84	232.25
PFHxA_1	313.0 / 269.0	1.83	13C5-PFHxA	318.0 / 273.0	41498.07	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	41498.07	250.00
PFHpA_1	363.0 / 319.0	2.24	13C4-PFHpA	367.0 / 322.0	43903.68	250.00
PFHpA_2	363.0 / 169.0	2.19	13C4-PFHpA	367.0 / 322.0	43903.68	250.00
PFHxS_1	399.0 / 80.0	2.32	13C3-PFHxS	402.0 / 99.0	15691.76	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	15691.76	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	41705.11	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	41705.11	250.00
PFNA_1	463.0 / 419.0	3.04	13C9-PFNA	472.0 / 427.0	55217.28	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	55217.28	250.00
PFOS_1	499.0 / 80.0	2.97	13C8-PFOS	507.0 / 99.0	18005.57	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	18005.57	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	84531.73	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	84531.73	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	100389.71	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	100389.71	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	108616.43	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	108616.43	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	75946.67	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	75946.67	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	75946.67	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	75946.67	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	15511.24	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	15511.24	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	16697.54	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	16697.54	250.00

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Summary Internal Standard Report

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Sample Name	J8261-FS-D(3)	**Injection Vial**	34
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:44:38	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	42490.84	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	42490.84	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	98334.75	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	98334.75	250.00
PFHpA_1	363.0 / 319.0	2.24	13C4-PFHpA	367.0 / 322.0	92717.47	250.00
PFHpA_2	363.0 / 169.0	2.21	13C4-PFHpA	367.0 / 322.0	92717.47	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	28768.08	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	28768.08	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	89184.61	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	89184.61	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	103524.02	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	103524.02	250.00
PFOS_1	499.0 / 80.0	2.98	13C8-PFOS	507.0 / 99.0	30341.01	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	30341.01	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	121514.14	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	121514.14	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	126254.72	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	126254.72	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	116692.10	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	116692.10	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	88459.64	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	88459.64	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	88459.64	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	88459.64	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16850.44	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16850.44	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20210.28	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20210.28	250.00

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Summary Internal Standard Report

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Sample Name	J8261-FS-D(9)	**Injection Vial**	35
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:55:30	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	51167.54	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	51167.54	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	98103.41	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	98103.41	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	109138.64	250.00
PFHpA_2	363.0 / 169.0	2.21	13C4-PFHpA	367.0 / 322.0	109138.64	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	33661.64	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	33661.64	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	120210.57	250.00
PFOA_2	413.0 / 169.0	2.61	13C8-PFOA	421.0 / 376.0	120210.57	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	122757.76	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	122757.76	250.00
PFOS_1	499.0 / 80.0	2.99	13C8-PFOS	507.0 / 99.0	37437.17	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	37437.17	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	134451.76	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	134451.76	250.00
PFUnA_1	563.0 / 519.0	3.72	13C7-PFUnA	570.0 / 525.0	140503.78	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	140503.78	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	130028.11	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	130028.11	250.00
PFTrDA_1	663.0 / 619.0	4.24	13C2-PFTeDA	715.0 / 670.0	95632.94	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	95632.94	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	95632.94	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	95632.94	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	20133.30	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	20133.30	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	21890.65	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	21890.65	250.00

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Summary Internal Standard Report

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Sample Name	J8262-FS(0)	**Injection Vial**	36
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:06:22	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	13979.11	232.25
PFBS_2	298.9 / 99.0	1.52	13C3-PFBS	302.0 / 99.0	13979.11	232.25
PFHxA_1	313.0 / 269.0	1.82	13C5-PFHxA	318.0 / 273.0	23659.74	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	23659.74	250.00
PFHpA_1	363.0 / 319.0	2.22	13C4-PFHpA	367.0 / 322.0	31697.53	250.00
PFHpA_2	363.0 / 169.0	2.17	13C4-PFHpA	367.0 / 322.0	31697.53	250.00
PFHxS_1	399.0 / 80.0	2.31	13C3-PFHxS	402.0 / 99.0	13901.40	236.50
PFHxS_2	399.0 / 99.0	2.25	13C3-PFHxS	402.0 / 99.0	13901.40	236.50
PFOA_1	413.0 / 369.0	2.63	13C8-PFOA	421.0 / 376.0	39615.21	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	39615.21	250.00
PFNA_1	463.0 / 419.0	3.04	13C9-PFNA	472.0 / 427.0	44432.66	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	44432.66	250.00
PFOS_1	499.0 / 80.0	2.96	13C8-PFOS	507.0 / 99.0	12324.87	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	12324.87	239.25
PFDA_1	513.0 / 469.0	3.39	13C6-PFDA	519.0 / 474.0	77736.15	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	77736.15	250.00
PFUnA_1	563.0 / 519.0	3.71	13C7-PFUnA	570.0 / 525.0	82547.48	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	82547.48	250.00
PFDoA_1	613.0 / 569.0	4.00	13C2-PFDoA	615.0 / 570.0	89217.72	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	89217.72	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	61730.58	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	61730.58	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	61730.58	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	61730.58	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	10975.11	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	10975.11	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	14235.97	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	14235.97	250.00

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Summary Internal Standard Report

Sample Name	J8262-FS-D(7)	**Injection Vial**	37
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:17:15	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	47365.60	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	47365.60	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	96446.45	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	96446.45	250.00
PFHpA_1	363.0 / 319.0	2.24	13C4-PFHpA	367.0 / 322.0	105125.91	250.00
PFHpA_2	363.0 / 169.0	2.21	13C4-PFHpA	367.0 / 322.0	105125.91	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	34042.30	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	34042.30	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	130274.72	250.00
PFOA_2	413.0 / 169.0	2.55	13C8-PFOA	421.0 / 376.0	130274.72	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	130801.93	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	130801.93	250.00
PFOS_1	499.0 / 80.0	2.97	13C8-PFOS	507.0 / 99.0	42177.38	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	42177.38	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	135281.66	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	135281.66	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	134139.40	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	134139.40	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	135647.15	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	135647.15	250.00
PFTrDA_1	663.0 / 619.0	4.24	13C2-PFTeDA	715.0 / 670.0	96944.95	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	96944.95	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	96944.95	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	96944.95	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	18876.66	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	18876.66	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	22491.42	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	22491.42	250.00

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Summary Internal Standard Report

Sample Name	J8262-FS-D(9)	**Injection Vial**	38
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:28:08	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	36172.92	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	36172.92	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	74734.60	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	74734.60	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	77854.37	250.00
PFHpA_2	363.0 / 169.0	2.20	13C4-PFHpA	367.0 / 322.0	77854.37	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	24395.62	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	24395.62	236.50
PFOA_1	413.0 / 369.0	2.64	13C8-PFOA	421.0 / 376.0	82818.53	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	82818.53	250.00
PFNA_1	463.0 / 419.0	3.04	13C9-PFNA	472.0 / 427.0	88564.43	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	88564.43	250.00
PFOS_1	499.0 / 80.0	2.97	13C8-PFOS	507.0 / 99.0	27289.63	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	27289.63	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	98491.97	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	98491.97	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	100365.54	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	100365.54	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	101972.68	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	101972.68	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	71274.17	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	71274.17	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	71274.17	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	71274.17	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	14883.56	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	14883.56	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18786.99	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18786.99	250.00

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Summary Internal Standard Report

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Sample Name	J8272-FS(0)	**Injection Vial**	41
Sample ID	VC-PM553-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:11:39	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	17841.79	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	17841.79	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	49416.28	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	49416.28	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	58510.19	250.00
PFHpA_2	363.0 / 169.0	2.24	13C4-PFHpA	367.0 / 322.0	58510.19	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	17507.63	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	17507.63	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	48717.57	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	48717.57	250.00
PFNA_1	463.0 / 419.0	3.01	13C9-PFNA	472.0 / 427.0	68101.44	250.00
PFNA_2	463.0 / 219.0	2.93	13C9-PFNA	472.0 / 427.0	68101.44	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	17904.87	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	17904.87	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	73957.84	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	73957.84	250.00
PFUnA_1	563.0 / 519.0	3.72	13C7-PFUnA	570.0 / 525.0	82490.40	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	82490.40	250.00
PFDoA_1	613.0 / 569.0	4.00	13C2-PFDoA	615.0 / 570.0	85014.30	250.00
PFDoA_2	613.0 / 319.0	4.00	13C2-PFDoA	615.0 / 570.0	85014.30	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	57338.53	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	57338.53	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	57338.53	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	57338.53	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	10469.98	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	10469.98	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	14909.06	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	14909.06	250.00

Sample Name	J8272-FS-D(5)	**Injection Vial**	42
Sample ID	VC-PM553-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:22:32	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	42172.62	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	42172.62	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	92079.92	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	92079.92	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	102128.23	250.00
PFHpA_2	363.0 / 169.0	2.24	13C4-PFHpA	367.0 / 322.0	102128.23	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	28017.36	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	28017.36	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	109088.95	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	109088.95	250.00
PFNA_1	463.0 / 419.0	3.02	13C9-PFNA	472.0 / 427.0	108643.70	250.00
PFNA_2	463.0 / 219.0	2.91	13C9-PFNA	472.0 / 427.0	108643.70	250.00
PFOS_1	499.0 / 80.0	3.03	13C8-PFOS	507.0 / 99.0	33043.15	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	33043.15	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	115541.13	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	115541.13	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	117575.07	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	117575.07	250.00
PFDoA_1	613.0 / 569.0	4.00	13C2-PFDoA	615.0 / 570.0	116519.13	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	116519.13	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	84442.01	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	84442.01	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	84442.01	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	84442.01	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16633.74	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16633.74	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	22284.86	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	22284.86	250.00

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Summary Internal Standard Report

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Sample Name	J8273-FS(0)	**Injection Vial**	43
Sample ID	VC-PM553-DW01P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:33:25	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	1.52	13C3-PFBS	302.0 / 99.0	20922.54	232.25
PFBS_2	298.9 / 99.0	1.52	13C3-PFBS	302.0 / 99.0	20922.54	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	59170.47	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	59170.47	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	74820.90	250.00
PFHpA_2	363.0 / 169.0	2.24	13C4-PFHpA	367.0 / 322.0	74820.90	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	21194.06	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	21194.06	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	65061.91	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	65061.91	250.00
PFNA_1	463.0 / 419.0	3.02	13C9-PFNA	472.0 / 427.0	80760.84	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	80760.84	250.00
PFOS_1	499.0 / 80.0	2.98	13C8-PFOS	507.0 / 99.0	21795.52	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	21795.52	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	93150.19	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	93150.19	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	100344.29	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	100344.29	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	107970.96	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	107970.96	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	74636.43	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	74636.43	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	74636.43	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	74636.43	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	11990.09	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	11990.09	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18572.66	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18572.66	250.00

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Summary Internal Standard Report

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Sample Name	J8273-FS-D(5)	**Injection Vial**	44
Sample ID	VC-PM553-DW01P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:44:17	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	38383.60	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	38383.60	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	82154.33	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	82154.33	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	97152.82	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	97152.82	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	30546.05	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	30546.05	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	101356.28	250.00
PFOA_2	413.0 / 169.0	2.61	13C8-PFOA	421.0 / 376.0	101356.28	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	106577.69	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	106577.69	250.00
PFOS_1	499.0 / 80.0	2.98	13C8-PFOS	507.0 / 99.0	34287.06	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	34287.06	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	113452.52	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	113452.52	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	115257.68	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	115257.68	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	112117.87	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	112117.87	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	84206.22	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	84206.22	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	84206.22	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	84206.22	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16451.97	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16451.97	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20827.92	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20827.92	250.00

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Summary Internal Standard Report

Sample Name	J8274-FS(0)	**Injection Vial**	45
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:55:09	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	19591.48	232.25
PFBS_2	298.9 / 99.0	1.52	13C3-PFBS	302.0 / 99.0	19591.48	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	35885.53	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	35885.53	250.00
PFHpA_1	363.0 / 319.0	2.24	13C4-PFHpA	367.0 / 322.0	49575.10	250.00
PFHpA_2	363.0 / 169.0	2.24	13C4-PFHpA	367.0 / 322.0	49575.10	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	15856.38	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	15856.38	236.50
PFOA_1	413.0 / 369.0	2.61	13C8-PFOA	421.0 / 376.0	25650.57	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	25650.57	250.00
PFNA_1	463.0 / 419.0	3.03	13C9-PFNA	472.0 / 427.0	65700.24	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	65700.24	250.00
PFOS_1	499.0 / 80.0	2.92	13C8-PFOS	507.0 / 99.0	20145.33	239.25
PFOS_2	499.0 / 99.0	3.02	13C8-PFOS	507.0 / 99.0	20145.33	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	76931.22	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	76931.22	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	76849.67	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	76849.67	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	83592.65	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	83592.65	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	57454.22	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	57454.22	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	57454.22	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	57454.22	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	9846.53	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	9846.53	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	15059.72	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	15059.72	250.00

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Summary Internal Standard Report

Sample Name	J8274-FS-D(9)	**Injection Vial**	46
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:06:02	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	46250.74	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	46250.74	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	90996.12	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	90996.12	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	98319.86	250.00
PFHpA_2	363.0 / 169.0	2.24	13C4-PFHpA	367.0 / 322.0	98319.86	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	30887.90	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	30887.90	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	100281.24	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	100281.24	250.00
PFNA_1	463.0 / 419.0	3.00	13C9-PFNA	472.0 / 427.0	117074.37	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	117074.37	250.00
PFOS_1	499.0 / 80.0	2.93	13C8-PFOS	507.0 / 99.0	36152.67	239.25
PFOS_2	499.0 / 99.0	3.01	13C8-PFOS	507.0 / 99.0	36152.67	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	130361.60	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	130361.60	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	127671.56	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	127671.56	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	123500.29	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	123500.29	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	91511.99	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	91511.99	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	91511.99	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	91511.99	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	19075.89	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	19075.89	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20073.15	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20073.15	250.00

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Summary Internal Standard Report

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Sample Name	J8275-FS(0)	**Injection Vial**	48
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:27:47	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	18930.04	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	18930.04	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	41881.55	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	41881.55	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	54799.50	250.00
PFHpA_2	363.0 / 169.0	2.24	13C4-PFHpA	367.0 / 322.0	54799.50	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	19208.73	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	19208.73	236.50
PFOA_1	413.0 / 369.0	2.63	13C8-PFOA	421.0 / 376.0	46313.43	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	46313.43	250.00
PFNA_1	463.0 / 419.0	3.04	13C9-PFNA	472.0 / 427.0	79174.46	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	79174.46	250.00
PFOS_1	499.0 / 80.0	2.94	13C8-PFOS	507.0 / 99.0	21691.05	239.25
PFOS_2	499.0 / 99.0	3.02	13C8-PFOS	507.0 / 99.0	21691.05	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	98104.10	250.00
PFDA_2	513.0 / 219.0	3.40	13C6-PFDA	519.0 / 474.0	98104.10	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	99003.45	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	99003.45	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	102361.65	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	102361.65	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	70829.96	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	70829.96	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	70829.96	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	70829.96	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	15425.53	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	15425.53	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17582.11	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17582.11	250.00

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Summary Internal Standard Report

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Sample Name	J8275-FS-D(7)	**Injection Vial**	49
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:38:40	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	37060.19	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	37060.19	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	73208.66	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	73208.66	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	84652.03	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	84652.03	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	28104.65	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	28104.65	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	90227.91	250.00
PFOA_2	413.0 / 169.0	2.63	13C8-PFOA	421.0 / 376.0	90227.91	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	108312.50	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	108312.50	250.00
PFOS_1	499.0 / 80.0	2.94	13C8-PFOS	507.0 / 99.0	34071.54	239.25
PFOS_2	499.0 / 99.0	3.03	13C8-PFOS	507.0 / 99.0	34071.54	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	114564.85	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	114564.85	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	115629.70	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	115629.70	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	109948.21	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	109948.21	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	80478.15	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	80478.15	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	80478.15	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	80478.15	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	15622.78	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	15622.78	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20196.36	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20196.36	250.00

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Summary Internal Standard Report

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Sample Name	J8275-FS-D(9)	**Injection Vial**	50
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:49:33	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	46629.75	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	46629.75	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	95684.62	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	95684.62	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	110701.64	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	110701.64	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	34306.38	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	34306.38	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	121108.09	250.00
PFOA_2	413.0 / 169.0	2.63	13C8-PFOA	421.0 / 376.0	121108.09	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	133773.73	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	133773.73	250.00
PFOS_1	499.0 / 80.0	2.94	13C8-PFOS	507.0 / 99.0	40296.34	239.25
PFOS_2	499.0 / 99.0	3.03	13C8-PFOS	507.0 / 99.0	40296.34	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	139826.65	250.00
PFDA_2	513.0 / 219.0	3.40	13C6-PFDA	519.0 / 474.0	139826.65	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	143067.69	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	143067.69	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	132536.25	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	132536.25	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	101672.17	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	101672.17	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	101672.17	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	101672.17	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	21112.34	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	21112.34	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	24451.41	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	24451.41	250.00

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Summary Internal Standard Report

Sample Name	J8274-FS-D(11)	**Injection Vial**	53
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T15:43:57	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.56	13C3-PFBS	302.0 / 99.0	39091.03	232.25
PFBS_2	298.9 / 99.0	1.56	13C3-PFBS	302.0 / 99.0	39091.03	232.25
PFHxA_1	313.0 / 269.0	1.88	13C5-PFHxA	318.0 / 273.0	80765.84	250.00
PFHxA_2	313.0 / 119.0	1.88	13C5-PFHxA	318.0 / 273.0	80765.84	250.00
PFHpA_1	363.0 / 319.0	2.29	13C4-PFHpA	367.0 / 322.0	91119.54	250.00
PFHpA_2	363.0 / 169.0	2.29	13C4-PFHpA	367.0 / 322.0	91119.54	250.00
PFHxS_1	399.0 / 80.0	2.32	13C3-PFHxS	402.0 / 99.0	28977.11	236.50
PFHxS_2	399.0 / 99.0	2.32	13C3-PFHxS	402.0 / 99.0	28977.11	236.50
PFOA_1	413.0 / 369.0	2.71	13C8-PFOA	421.0 / 376.0	82189.07	250.00
PFOA_2	413.0 / 169.0	2.70	13C8-PFOA	421.0 / 376.0	82189.07	250.00
PFNA_1	463.0 / 419.0	3.11	13C9-PFNA	472.0 / 427.0	95404.28	250.00
PFNA_2	463.0 / 219.0	3.11	13C9-PFNA	472.0 / 427.0	95404.28	250.00
PFOS_1	499.0 / 80.0	3.00	13C8-PFOS	507.0 / 99.0	30529.53	239.25
PFOS_2	499.0 / 99.0	3.11	13C8-PFOS	507.0 / 99.0	30529.53	239.25
PFDA_1	513.0 / 469.0	3.47	13C6-PFDA	519.0 / 474.0	95912.55	250.00
PFDA_2	513.0 / 219.0	3.46	13C6-PFDA	519.0 / 474.0	95912.55	250.00
PFUnA_1	563.0 / 519.0	3.79	13C7-PFUnA	570.0 / 525.0	92841.18	250.00
PFUnA_2	563.0 / 269.0	3.53	13C7-PFUnA	570.0 / 525.0	92841.18	250.00
PFDoA_1	613.0 / 569.0	4.07	13C2-PFDoA	615.0 / 570.0	97234.73	250.00
PFDoA_2	613.0 / 319.0	3.59	13C2-PFDoA	615.0 / 570.0	97234.73	250.00
PFTrDA_1	663.0 / 619.0	4.32	13C2-PFTeDA	715.0 / 670.0	83133.16	250.00
PFTrDA_2	663.0 / 169.0	4.29	13C2-PFTeDA	715.0 / 670.0	83133.16	250.00
PFTeDA_1	713.0 / 669.0	4.53	13C2-PFTeDA	715.0 / 670.0	83133.16	250.00
PFTeDA_2	713.0 / 169.0	3.96	13C2-PFTeDA	715.0 / 670.0	83133.16	250.00
NMeFOSAA_1	570.0 / 419.0	3.65	d3-MeFOSAA	573.0 / 419.0	9180.93	250.00
NMeFOSAA_2	570.0 / 512.0	3.63	d3-MeFOSAA	573.0 / 419.0	9180.93	250.00
NEtFOSAA_1	584.0 / 419.0	3.72	d5-EtFOSAA	589.0 / 419.0	9904.81	250.00
NEtFOSAA_2	584.0 / 483.0	3.27	d5-EtFOSAA	589.0 / 419.0	9904.81	250.00

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Summary Internal Standard Report

Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:40:04	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	109559.77	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	32387.71	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	32387.71	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	99751.17	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	99751.17	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	99751.17	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	99751.17	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	109559.77	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	109559.77	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	109559.77	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	32387.71	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	32387.71	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	32387.71	239.25

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Summary Internal Standard Report

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Sample Name	CR847PB-FS(0)	**Injection Vial**	19
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T22:50:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	129840.05	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	35443.48	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	35443.48	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	116732.00	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	116732.00	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	116732.00	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	116732.00	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	129840.05	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	129840.05	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	129840.05	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	35443.48	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	35443.48	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	35443.48	239.25

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Summary Internal Standard Report

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Sample Name	CR848LCS-FS(0)	**Injection Vial**	20
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:01:28	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	102610.02	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	26753.35	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	26753.35	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	95057.95	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	95057.95	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	95057.95	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	95057.95	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	102610.02	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	102610.02	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	102610.02	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	26753.35	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	26753.35	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	26753.35	239.25

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Summary Internal Standard Report

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Sample Name	J8246-FS(0)	**Injection Vial**	21
Sample ID	VC-AQ-FB01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:12:20	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	120348.37	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	33294.95	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	33294.95	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	107687.48	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	107687.48	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	107687.48	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	107687.48	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	120348.37	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	120348.37	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	120348.37	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	33294.95	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	33294.95	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	33294.95	239.25

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Summary Internal Standard Report

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Sample Name	J8247-FS(0)	**Injection Vial**	22
Sample ID	VC-AQ-EB01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:23:13	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	141052.92	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	36492.95	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	36492.95	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	111693.63	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	111693.63	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	111693.63	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	111693.63	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	141052.92	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	141052.92	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	141052.92	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	36492.95	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	36492.95	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	36492.95	239.25

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Summary Internal Standard Report

Sample Name	J8276-FS(0)	**Injection Vial**	23
Sample ID	VC-SO-FB02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:34:06	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	91233.56	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	25547.98	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	25547.98	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	78181.44	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	78181.44	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	78181.44	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	78181.44	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	91233.56	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	91233.56	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	91233.56	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	25547.98	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	25547.98	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	25547.98	239.25

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Summary Internal Standard Report

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Sample Name	J8277-FS(0)	**Injection Vial**	24
Sample ID	VC-SO-EB02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:44:58	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	121567.71	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	32173.74	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	32173.74	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	95864.44	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	95864.44	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	95864.44	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	95864.44	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	121567.71	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	121567.71	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	121567.71	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	32173.74	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	32173.74	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	32173.74	239.25

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Summary Internal Standard Report

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Sample Name	J8259-FS(0)	**Injection Vial**	25
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:55:49	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	82877.49	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	23220.42	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	23220.42	239.25
13C5-PFHxA	318.0 / 273.0	1.82	13C2-PFOA	415.0 / 370.0	413561.98	250.00
13C4-PFHpA	367.0 / 322.0	2.23	13C2-PFOA	415.0 / 370.0	413561.98	250.00
13C8-PFOA	421.0 / 376.0	2.64	13C2-PFOA	415.0 / 370.0	413561.98	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	413561.98	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	82877.49	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	82877.49	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	82877.49	250.00
13C3-PFBS	302.0 / 99.0	1.50	13C4-PFOS	503.0 / 99.0	23220.42	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	23220.42	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	23220.42	239.25

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Summary Internal Standard Report

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Sample Name	J8259-FS-D(3)	**Injection Vial**	26
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:06:43	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	111733.15	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	28130.90	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	28130.90	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	148020.64	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	148020.64	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	148020.64	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	148020.64	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	111733.15	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	111733.15	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	111733.15	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	28130.90	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	28130.90	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	28130.90	239.25

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Summary Internal Standard Report

Sample Name	J8259-FS-D(7)	**Injection Vial**	27
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:17:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	124145.46	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	36942.71	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	36942.71	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	109854.70	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	109854.70	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	109854.70	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	109854.70	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	124145.46	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	124145.46	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	124145.46	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	36942.71	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	36942.71	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	36942.71	239.25

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Summary Internal Standard Report

Sample Name	J8260-FS(0)	**Injection Vial**	30
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:01:07	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	91935.30	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	18012.63	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	18012.63	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	83692.79	250.00
13C4-PFHpA	367.0 / 322.0	2.23	13C2-PFOA	415.0 / 370.0	83692.79	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	83692.79	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	83692.79	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	91935.30	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	91935.30	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	91935.30	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	18012.63	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	18012.63	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	18012.63	239.25

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Sample Name	J8260-FS-D(3)	**Injection Vial**	31
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:11:59	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	120689.15	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	30559.07	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	30559.07	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	94510.79	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	94510.79	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	94510.79	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	94510.79	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	120689.15	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	120689.15	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	120689.15	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	30559.07	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	30559.07	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	30559.07	239.25

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Summary Internal Standard Report

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Sample Name	J8260-FS-D(9)	**Injection Vial**	32
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:22:52	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	120261.91	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	33376.30	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	33376.30	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	104746.99	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	104746.99	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	104746.99	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	104746.99	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	120261.91	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	120261.91	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	120261.91	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	33376.30	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	33376.30	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	33376.30	239.25

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Summary Internal Standard Report

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Sample Name	J8261-FS(0)	**Injection Vial**	33
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:33:45	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	93982.02	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	15260.61	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	15260.61	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	89211.13	250.00
13C4-PFHpA	367.0 / 322.0	2.23	13C2-PFOA	415.0 / 370.0	89211.13	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	89211.13	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	89211.13	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	93982.02	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	93982.02	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	93982.02	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	15260.61	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	15260.61	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	15260.61	239.25

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Summary Internal Standard Report

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Sample Name	J8261-FS-D(3)	**Injection Vial**	34
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:44:38	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	108639.27	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	23765.98	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	23765.98	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	83162.34	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	83162.34	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	83162.34	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	83162.34	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	108639.27	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	108639.27	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	108639.27	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	23765.98	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	23765.98	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	23765.98	239.25

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Summary Internal Standard Report

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Sample Name	J8261-FS-D(9)	**Injection Vial**	35
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:55:30	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	117362.19	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	30136.29	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	30136.29	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	102279.31	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	102279.31	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	102279.31	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	102279.31	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	117362.19	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	117362.19	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	117362.19	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	30136.29	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	30136.29	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	30136.29	239.25

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Summary Internal Standard Report

Sample Name	J8262-FS(0)	**Injection Vial**	36
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:06:22	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.98	13C2-PFDA	515.0 / 470.0	79220.84	250.00
d3-MeFOSAA	573.0 / 419.0	3.53	13C4-PFOS	503.0 / 99.0	14036.04	239.25
d5-EtFOSAA	589.0 / 419.0	3.69	13C4-PFOS	503.0 / 99.0	14036.04	239.25
13C5-PFHxA	318.0 / 273.0	1.82	13C2-PFOA	415.0 / 370.0	69470.03	250.00
13C4-PFHpA	367.0 / 322.0	2.22	13C2-PFOA	415.0 / 370.0	69470.03	250.00
13C8-PFOA	421.0 / 376.0	2.64	13C2-PFOA	415.0 / 370.0	69470.03	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	69470.03	250.00
13C6-PFDA	519.0 / 474.0	3.38	13C2-PFDA	515.0 / 470.0	79220.84	250.00
13C7-PFUnA	570.0 / 525.0	3.69	13C2-PFDA	515.0 / 470.0	79220.84	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	79220.84	250.00
13C3-PFBS	302.0 / 99.0	1.50	13C4-PFOS	503.0 / 99.0	14036.04	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	14036.04	239.25
13C8-PFOS	507.0 / 99.0	3.02	13C4-PFOS	503.0 / 99.0	14036.04	239.25

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Summary Internal Standard Report

Sample Name	J8262-FS-D(7)	**Injection Vial**	37
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:17:15	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	121270.19	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	33825.58	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	33825.58	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	111589.44	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	111589.44	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	111589.44	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	111589.44	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	121270.19	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	121270.19	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	121270.19	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	33825.58	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	33825.58	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	33825.58	239.25

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Summary Internal Standard Report

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Sample Name	J8262-FS-D(9)	**Injection Vial**	38
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:28:08	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	93189.93	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	26097.25	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	26097.25	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	76356.93	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	76356.93	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	76356.93	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	76356.93	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	93189.93	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	93189.93	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	93189.93	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	26097.25	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	26097.25	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	26097.25	239.25

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Summary Internal Standard Report

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Sample Name	J8272-FS(0)	**Injection Vial**	41
Sample ID	VC-PM553-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:11:39	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	79390.93	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	22011.31	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	22011.31	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	119319.79	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	119319.79	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	119319.79	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	119319.79	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	79390.93	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	79390.93	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	79390.93	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	22011.31	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	22011.31	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	22011.31	239.25

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Sample Name	J8272-FS-D(5)	**Injection Vial**	42
Sample ID	VC-PM553-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:22:32	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	111026.92	250.00
d3-MeFOSAA	573.0 / 419.0	3.54	13C4-PFOS	503.0 / 99.0	33530.14	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	33530.14	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	92236.67	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	92236.67	250.00
13C8-PFOA	421.0 / 376.0	2.64	13C2-PFOA	415.0 / 370.0	92236.67	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	92236.67	250.00
13C6-PFDA	519.0 / 474.0	3.38	13C2-PFDA	515.0 / 470.0	111026.92	250.00
13C7-PFUnA	570.0 / 525.0	3.70	13C2-PFDA	515.0 / 470.0	111026.92	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	111026.92	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	33530.14	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	33530.14	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	33530.14	239.25

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Summary Internal Standard Report

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Sample Name	J8273-FS(0)	**Injection Vial**	43
Sample ID	VC-PM553-DW01P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:33:25	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	100081.13	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	22580.66	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	22580.66	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	149381.36	250.00
13C4-PFHpA	367.0 / 322.0	2.23	13C2-PFOA	415.0 / 370.0	149381.36	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	149381.36	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	149381.36	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	100081.13	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	100081.13	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	100081.13	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	22580.66	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	22580.66	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	22580.66	239.25

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Summary Internal Standard Report

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Sample Name	J8273-FS-D(5)	**Injection Vial**	44
Sample ID	VC-PM553-DW01P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:44:17	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	101337.06	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	29667.36	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	29667.36	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	88247.65	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	88247.65	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	88247.65	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	88247.65	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	101337.06	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	101337.06	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	101337.06	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	29667.36	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	29667.36	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	29667.36	239.25

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Summary Internal Standard Report

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Sample Name	J8274-FS(0)	**Injection Vial**	45
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:55:09	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	81220.25	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	21346.46	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	21346.46	239.25
13C5-PFHxA	318.0 / 273.0	1.82	13C2-PFOA	415.0 / 370.0	336661.03	250.00
13C4-PFHpA	367.0 / 322.0	2.23	13C2-PFOA	415.0 / 370.0	336661.03	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	336661.03	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	336661.03	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	81220.25	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	81220.25	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	81220.25	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	21346.46	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	21346.46	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	21346.46	239.25

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Summary Internal Standard Report

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Sample Name	J8274-FS-D(9)	**Injection Vial**	46
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:06:02	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	113789.47	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	33937.90	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	33937.90	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	109925.05	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	109925.05	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	109925.05	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	109925.05	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	113789.47	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	113789.47	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	113789.47	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	33937.90	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	33937.90	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	33937.90	239.25

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Summary Internal Standard Report

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Sample Name	J8275-FS(0)	**Injection Vial**	48
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:27:47	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	95141.98	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	21752.77	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	21752.77	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	228499.01	250.00
13C4-PFHpA	367.0 / 322.0	2.23	13C2-PFOA	415.0 / 370.0	228499.01	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	228499.01	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	228499.01	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	95141.98	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	95141.98	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	95141.98	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	21752.77	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	21752.77	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	21752.77	239.25

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Summary Internal Standard Report

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Sample Name	J8275-FS-D(7)	**Injection Vial**	49
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:38:40	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	100840.00	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	30903.44	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	30903.44	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	96160.70	250.00
13C4-PFHpA	367.0 / 322.0	2.23	13C2-PFOA	415.0 / 370.0	96160.70	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	96160.70	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	96160.70	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	100840.00	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	100840.00	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	100840.00	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	30903.44	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	30903.44	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	30903.44	239.25

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Summary Internal Standard Report

Sample Name	J8275-FS-D(9)	**Injection Vial**	50
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:49:33	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.00	13C2-PFDA	515.0 / 470.0	123675.74	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	37059.85	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	37059.85	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	107582.69	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	107582.69	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	107582.69	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	107582.69	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	123675.74	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	123675.74	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	123675.74	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	37059.85	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	37059.85	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	37059.85	239.25

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Summary Internal Standard Report

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Sample Name	J8274-FS-D(11)	**Injection Vial**	53
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T15:43:57	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	4.06	13C2-PFDA	515.0 / 470.0	85293.62	250.00
d3-MeFOSAA	573.0 / 419.0	3.62	13C4-PFOS	503.0 / 99.0	30091.36	239.25
d5-EtFOSAA	589.0 / 419.0	3.78	13C4-PFOS	503.0 / 99.0	30091.36	239.25
13C5-PFHxA	318.0 / 273.0	1.87	13C2-PFOA	415.0 / 370.0	87195.90	250.00
13C4-PFHpA	367.0 / 322.0	2.28	13C2-PFOA	415.0 / 370.0	87195.90	250.00
13C8-PFOA	421.0 / 376.0	2.70	13C2-PFOA	415.0 / 370.0	87195.90	250.00
13C9-PFNA	472.0 / 427.0	3.10	13C2-PFOA	415.0 / 370.0	87195.90	250.00
13C6-PFDA	519.0 / 474.0	3.45	13C2-PFDA	515.0 / 470.0	85293.62	250.00
13C7-PFUnA	570.0 / 525.0	3.77	13C2-PFDA	515.0 / 470.0	85293.62	250.00
13C2-PFTeDA	715.0 / 670.0	4.53	13C2-PFDA	515.0 / 470.0	85293.62	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	30091.36	239.25
13C3-PFHxS	402.0 / 99.0	2.30	13C4-PFOS	503.0 / 99.0	30091.36	239.25
13C8-PFOS	507.0 / 99.0	3.09	13C4-PFOS	503.0 / 99.0	30091.36	239.25

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Summary Internal Standard Report

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Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:44:37	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	64119.13	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	64119.13	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	72671.62	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	72671.62	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	25520.71	236.50
PFHxS_2	399.0 / 99.0	2.45	13C3-PFHxS	402.0 / 99.0	25520.71	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	93052.42	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	93052.42	250.00

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Summary Internal Standard Report

Sample Name	J8260-FS-D(11)	**Injection Vial**	13
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T13:44:17	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	82619.23	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	82619.23	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	97320.69	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	97320.69	250.00
PFHxS_1	399.0 / 80.0	2.35	13C3-PFHxS	402.0 / 99.0	29723.75	236.50
PFHxS_2	399.0 / 99.0	2.35	13C3-PFHxS	402.0 / 99.0	29723.75	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	88063.73	250.00
PFOA_2	413.0 / 169.0	2.73	13C8-PFOA	421.0 / 376.0	88063.73	250.00

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Summary Internal Standard Report

Sample Name	J8261-FS-D(11)	**Injection Vial**	14
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T13:55:43	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	69727.84	250.00
PFHxA_2	313.0 / 119.0	1.88	13C5-PFHxA	318.0 / 273.0	69727.84	250.00
PFHpA_1	363.0 / 319.0	2.29	13C4-PFHpA	367.0 / 322.0	78691.24	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	78691.24	250.00
PFHxS_1	399.0 / 80.0	2.31	13C3-PFHxS	402.0 / 99.0	24250.76	236.50
PFHxS_2	399.0 / 99.0	2.31	13C3-PFHxS	402.0 / 99.0	24250.76	236.50
PFOA_1	413.0 / 369.0	2.69	13C8-PFOA	421.0 / 376.0	100746.01	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	100746.01	250.00

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Summary Internal Standard Report

Sample Name	J8274-FS-D(13)	**Injection Vial**	15
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:06:36	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	83887.23	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	83887.23	250.00
PFHpA_1	363.0 / 319.0	2.28	13C4-PFHpA	367.0 / 322.0	96703.30	250.00
PFHpA_2	363.0 / 169.0	2.28	13C4-PFHpA	367.0 / 322.0	96703.30	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	30672.07	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	30672.07	236.50
PFOA_1	413.0 / 369.0	2.69	13C8-PFOA	421.0 / 376.0	119658.41	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	119658.41	250.00

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Summary Internal Standard Report

Sample Name	J8275-FS-D(11)	**Injection Vial**	16
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:17:29	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	85058.58	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	85058.58	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	94671.54	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	94671.54	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	32918.10	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	32918.10	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	118807.10	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	118807.10	250.00

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Summary Internal Standard Report

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Sample Name	J8259-FS-D(5)	**Injection Vial**	19
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T15:35:51	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFHxA_1	313.0 / 269.0	1.89	13C5-PFHxA	318.0 / 273.0	75221.24	250.00
PFHxA_2	313.0 / 119.0	1.90	13C5-PFHxA	318.0 / 273.0	75221.24	250.00
PFHpA_1	363.0 / 319.0	2.31	13C4-PFHpA	367.0 / 322.0	94446.91	250.00
PFHpA_2	363.0 / 169.0	2.30	13C4-PFHpA	367.0 / 322.0	94446.91	250.00
PFHxS_1	399.0 / 80.0	2.34	13C3-PFHxS	402.0 / 99.0	26685.22	236.50
PFHxS_2	399.0 / 99.0	2.34	13C3-PFHxS	402.0 / 99.0	26685.22	236.50
PFOA_1	413.0 / 369.0	2.73	13C8-PFOA	421.0 / 376.0	85096.46	250.00
PFOA_2	413.0 / 169.0	2.72	13C8-PFOA	421.0 / 376.0	85096.46	250.00

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Summary Internal Standard Report

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Printed: 05/10/2018 5:09:04 PM

Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:44:37	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	96909.97	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	96909.97	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	96909.97	250.00
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	31052.09	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 05/10/2018 5:28:37 PM

Sample Name	J8260-FS-D(11)	**Injection Vial**	13
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T13:44:17	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.90	13C2-PFOA	415.0 / 370.0	73475.09	250.00
13C4-PFHpA	367.0 / 322.0	2.32	13C2-PFOA	415.0 / 370.0	73475.09	250.00
13C8-PFOA	421.0 / 376.0	2.74	13C2-PFOA	415.0 / 370.0	73475.09	250.00
13C3-PFHxS	402.0 / 99.0	2.34	13C4-PFOS	503.0 / 99.0	29049.04	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
Printed: 05/10/2018 5:28:41 PM

Sample Name	J8261-FS-D(11)	**Injection Vial**	14
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T13:55:43	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	75046.71	250.00
13C4-PFHpA	367.0 / 322.0	2.28	13C2-PFOA	415.0 / 370.0	75046.71	250.00
13C8-PFOA	421.0 / 376.0	2.69	13C2-PFOA	415.0 / 370.0	75046.71	250.00
13C3-PFHxS	402.0 / 99.0	2.30	13C4-PFOS	503.0 / 99.0	26372.90	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
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Sample Name	J8274-FS-D(13)	**Injection Vial**	15
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:06:36	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	90352.78	250.00
13C4-PFHpA	367.0 / 322.0	2.27	13C2-PFOA	415.0 / 370.0	90352.78	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	90352.78	250.00
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	31035.76	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
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Sample Name	J8275-FS-D(11)	**Injection Vial**	16
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:17:29	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	99822.94	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	99822.94	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	99822.94	250.00
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	35613.73	239.25

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Summary Internal Standard Report

Created with Analyst Reporter
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Sample Name	J8259-FS-D(5)	**Injection Vial**	19
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T15:35:51	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C5-PFHxA	318.0 / 273.0	1.89	13C2-PFOA	415.0 / 370.0	85068.71	250.00
13C4-PFHpA	367.0 / 322.0	2.30	13C2-PFOA	415.0 / 370.0	85068.71	250.00
13C8-PFOA	421.0 / 376.0	2.72	13C2-PFOA	415.0 / 370.0	85068.71	250.00
13C3-PFHxS	402.0 / 99.0	2.32	13C4-PFOS	503.0 / 99.0	30611.31	239.25

Chromatograms

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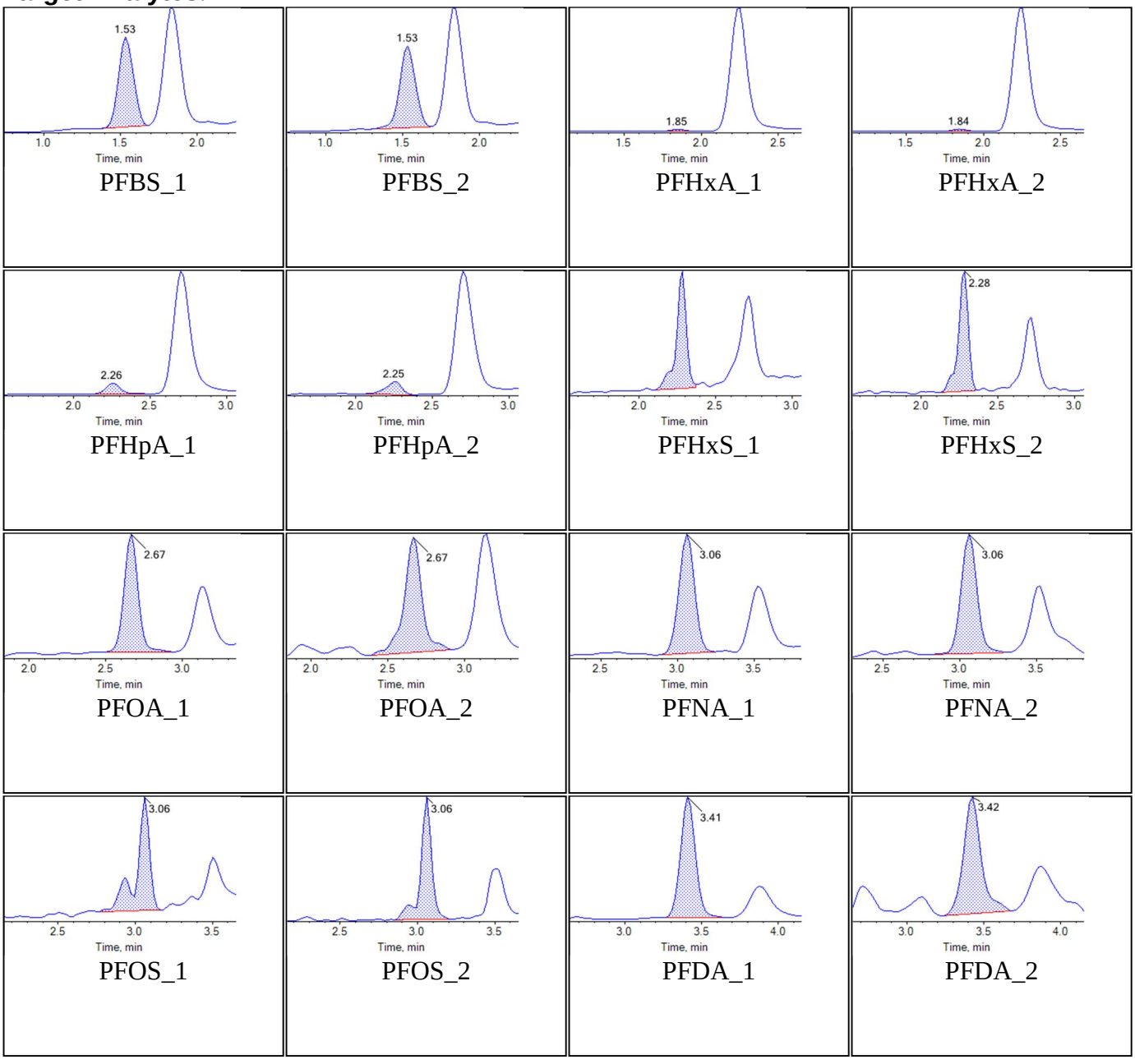
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Sample Name	KB73	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:23:54	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

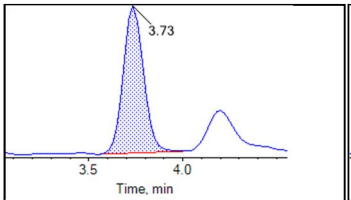
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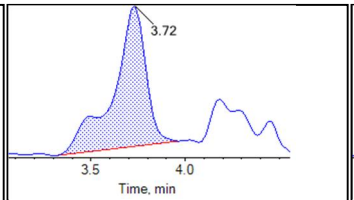
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Chromatogram Report

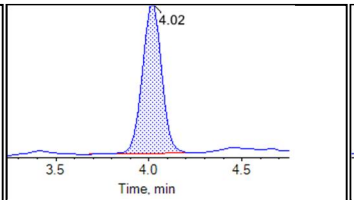
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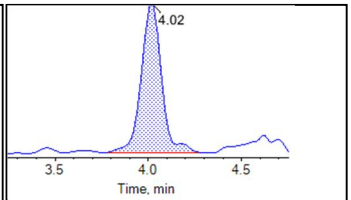
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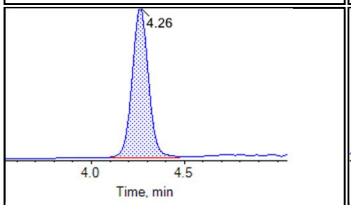
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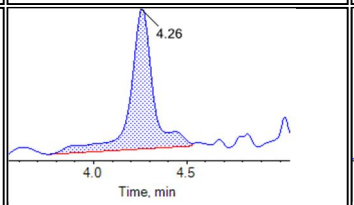
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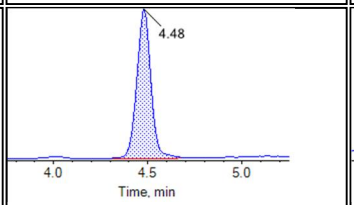
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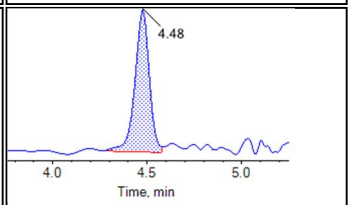
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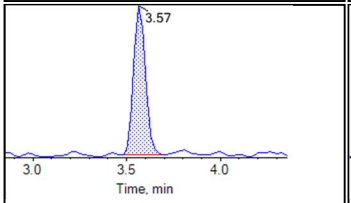
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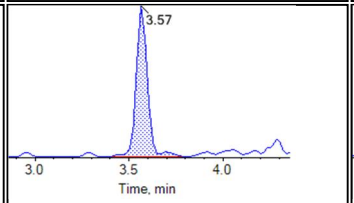
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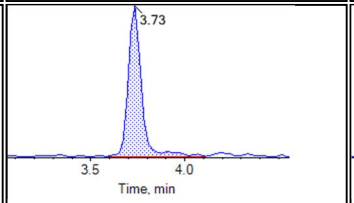
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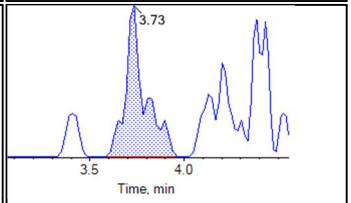
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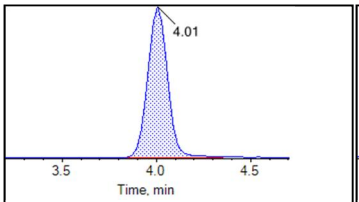


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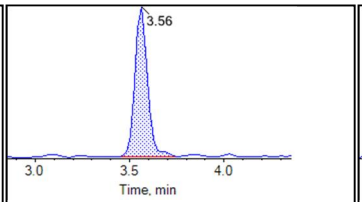


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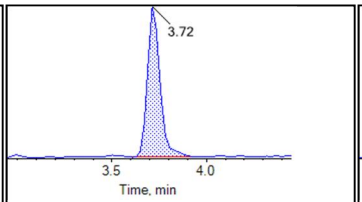
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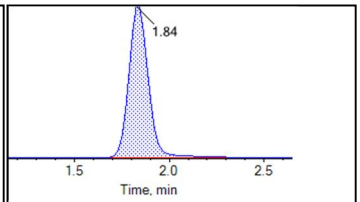
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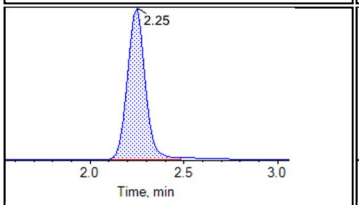
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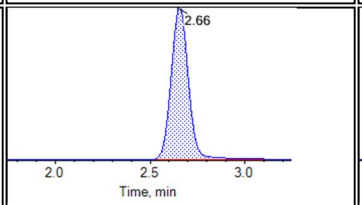
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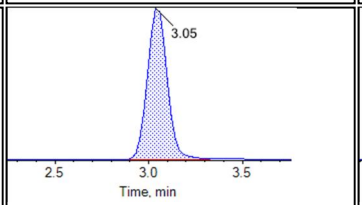
13C5-PFHxA



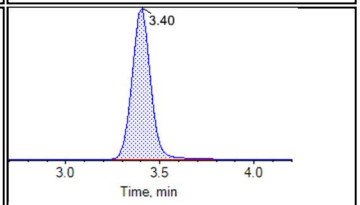
13C4-PFHpA



13C8-PFOA



13C9-PFNA

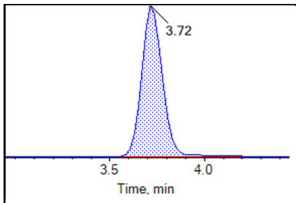


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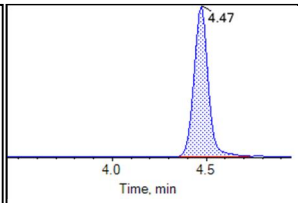
BATTELLE

Chromatogram Report

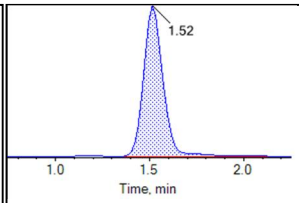
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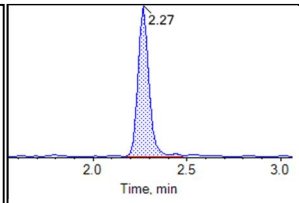
13C7-PFUnA



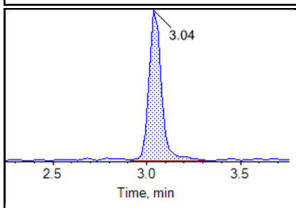
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

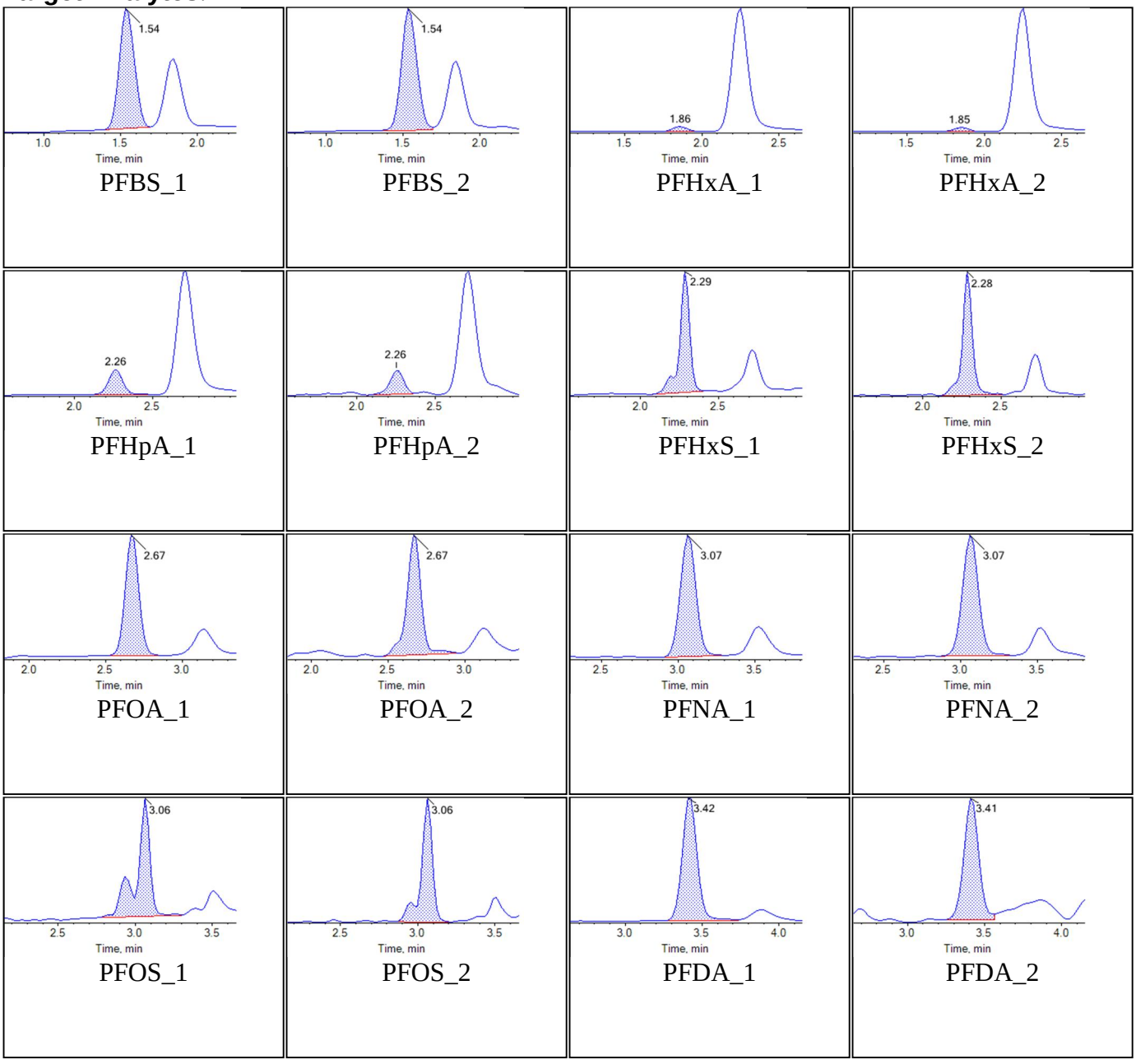
Chromatogram Report

Created with Analyst Reporter
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Sample Name	KB74	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:34:48	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

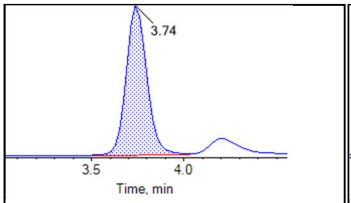
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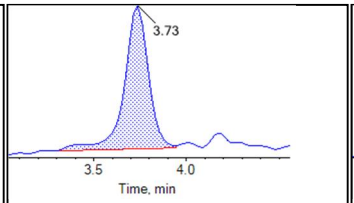
BATTELLE

Chromatogram Report

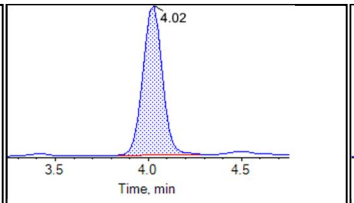
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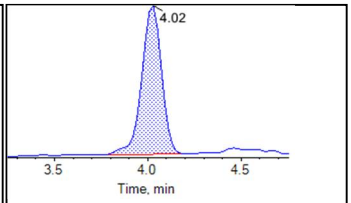
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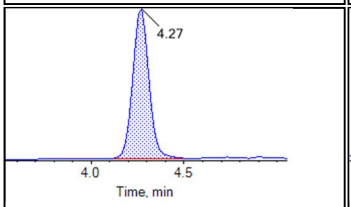
PFUnA_2



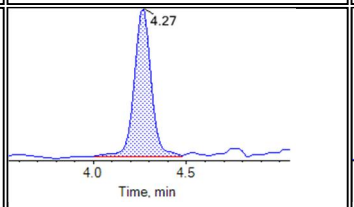
PFDoA_1



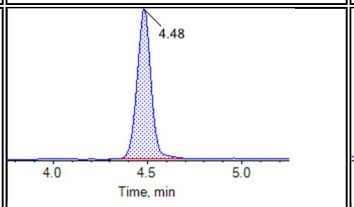
PFDoA_2



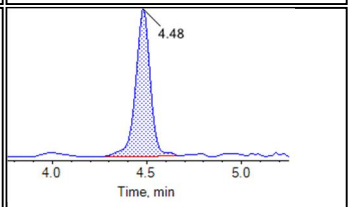
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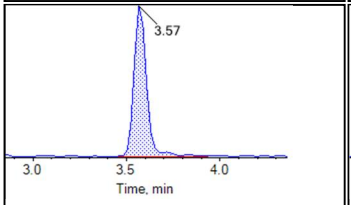
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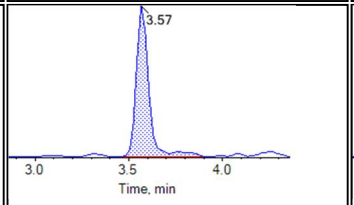
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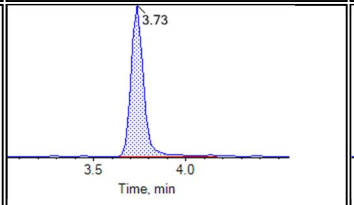
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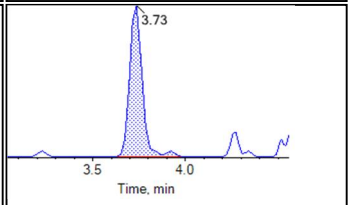
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NMeFOSAA_2

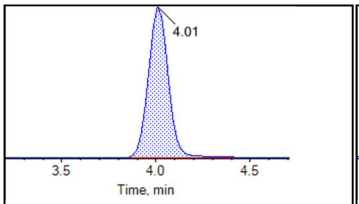


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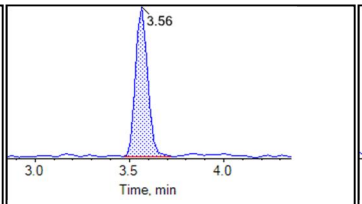


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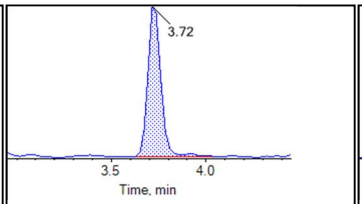
Internal Standards:



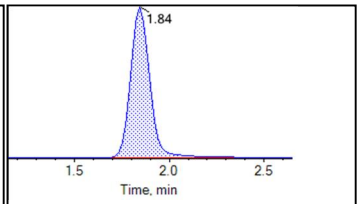
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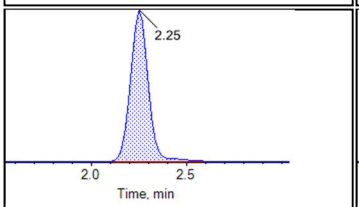
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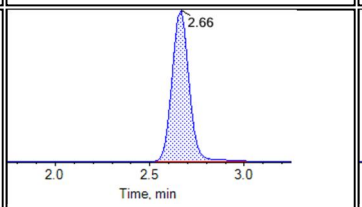
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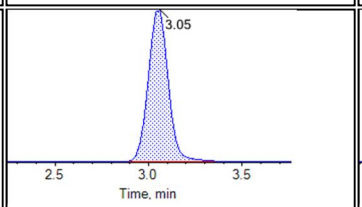
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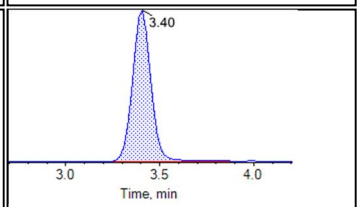
13C4-PFHpA



13C8-PFOA



13C9-PFNA

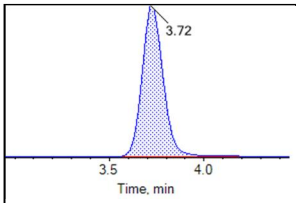


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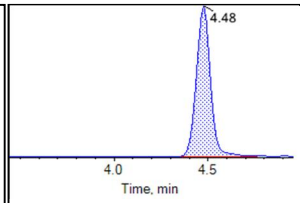
BATTELLE

Chromatogram Report

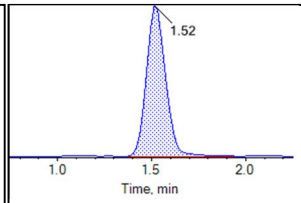
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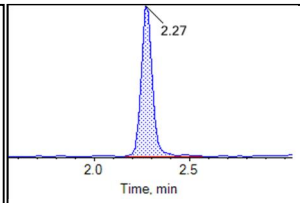
13C7-PFUnA



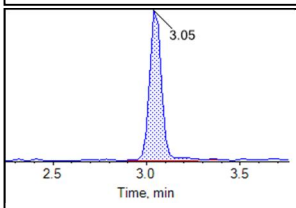
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

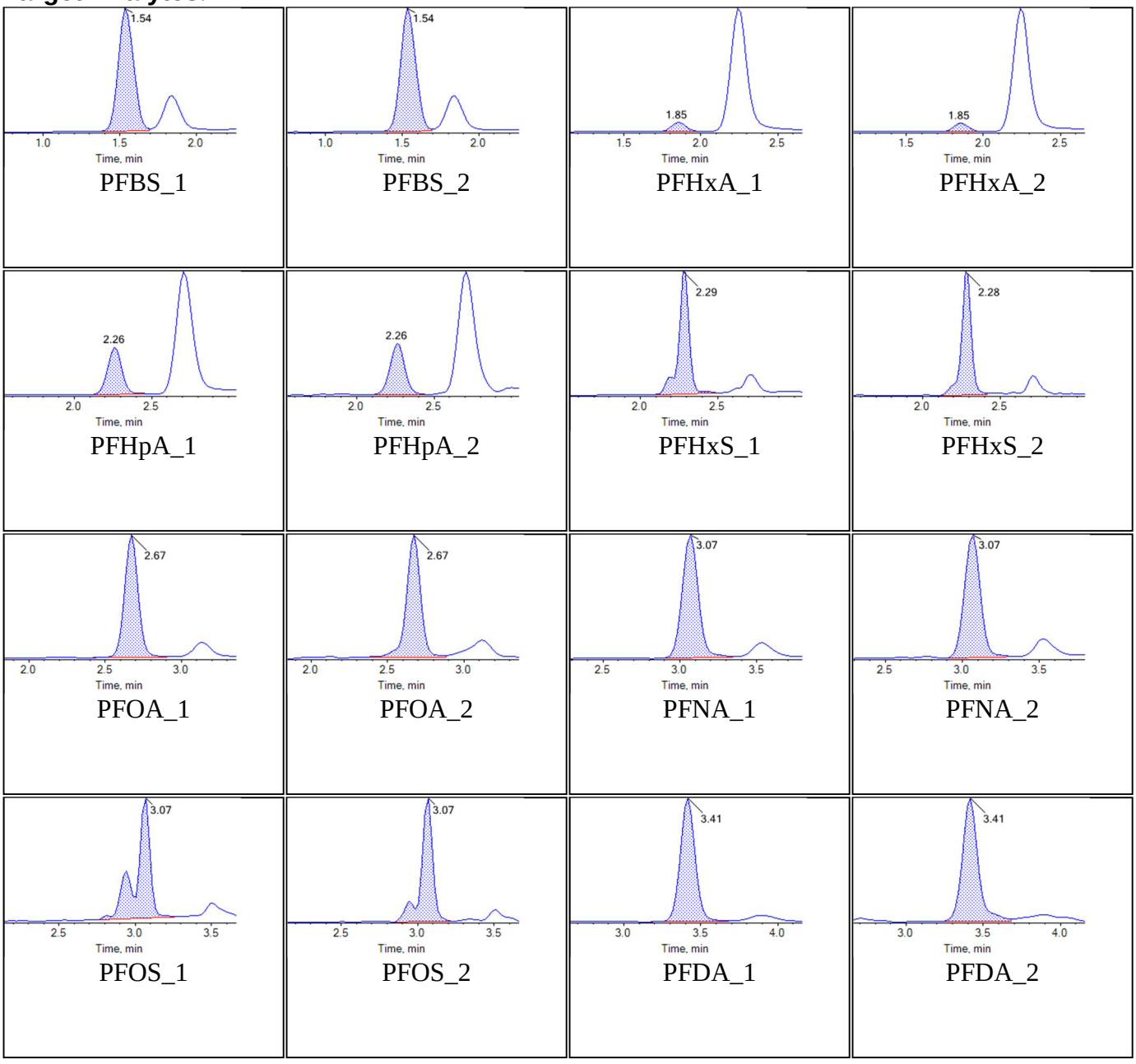
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:34:29 PM

Sample Name	KB75	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:45:42	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

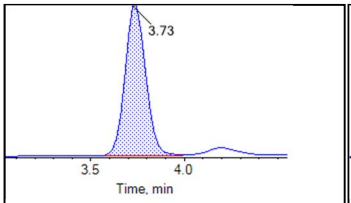
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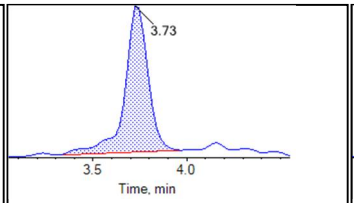
BATTELLE

Chromatogram Report

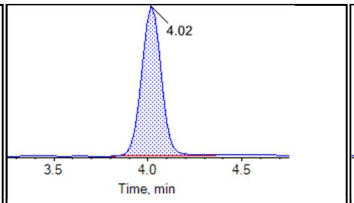
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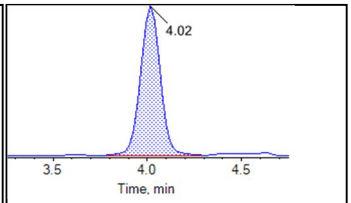
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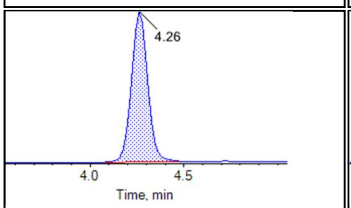
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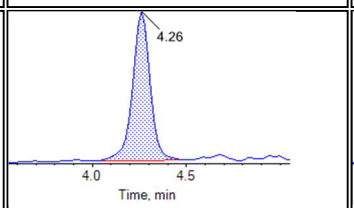
PFDoA_1



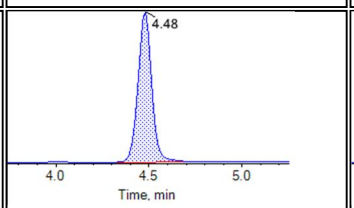
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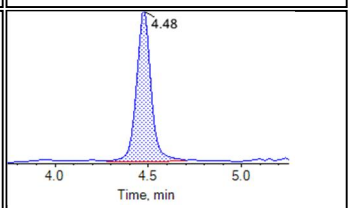
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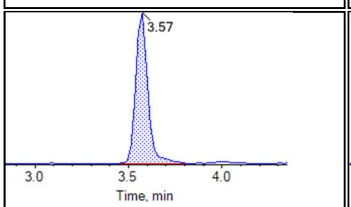
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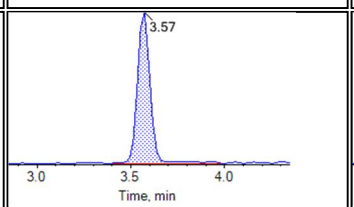
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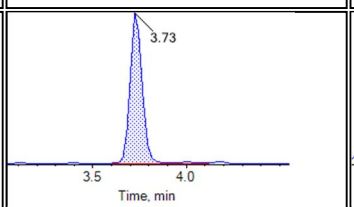
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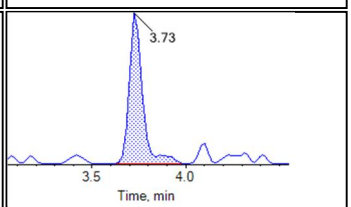
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NMeFOSAA_2

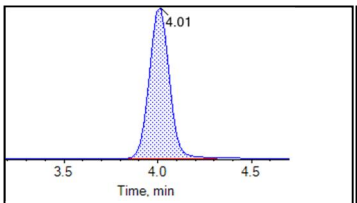


NEtFOSAA_1

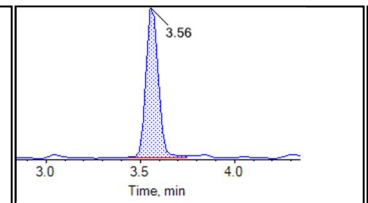


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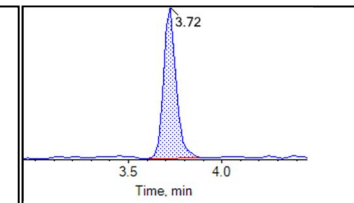
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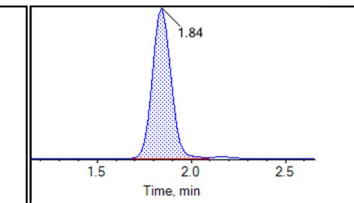
13C2-PFDoA



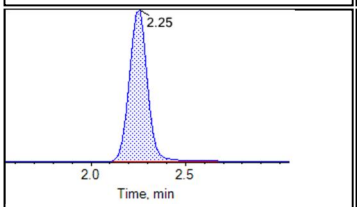
d3-MeFOSAA



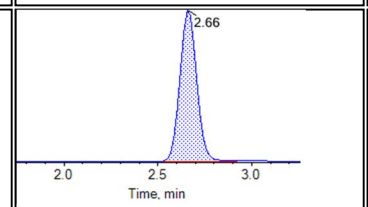
d5-EtFOSAA



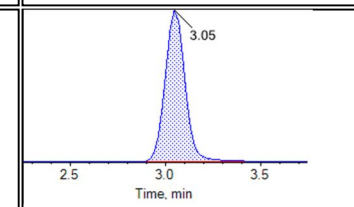
13C5-PFHxA



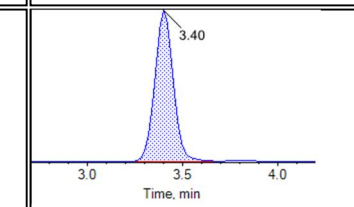
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13C8-PFOA



13C9-PFNA

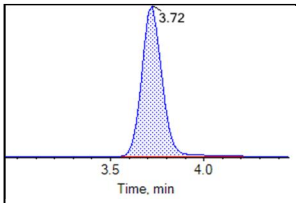


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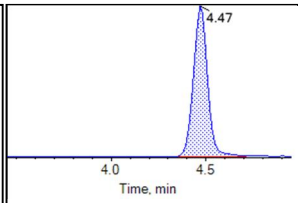
BATTELLE

Chromatogram Report

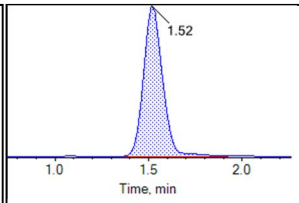
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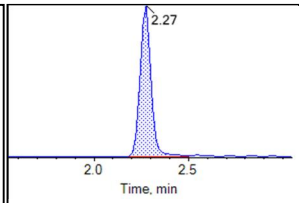
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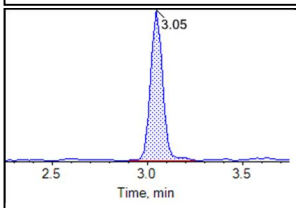
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

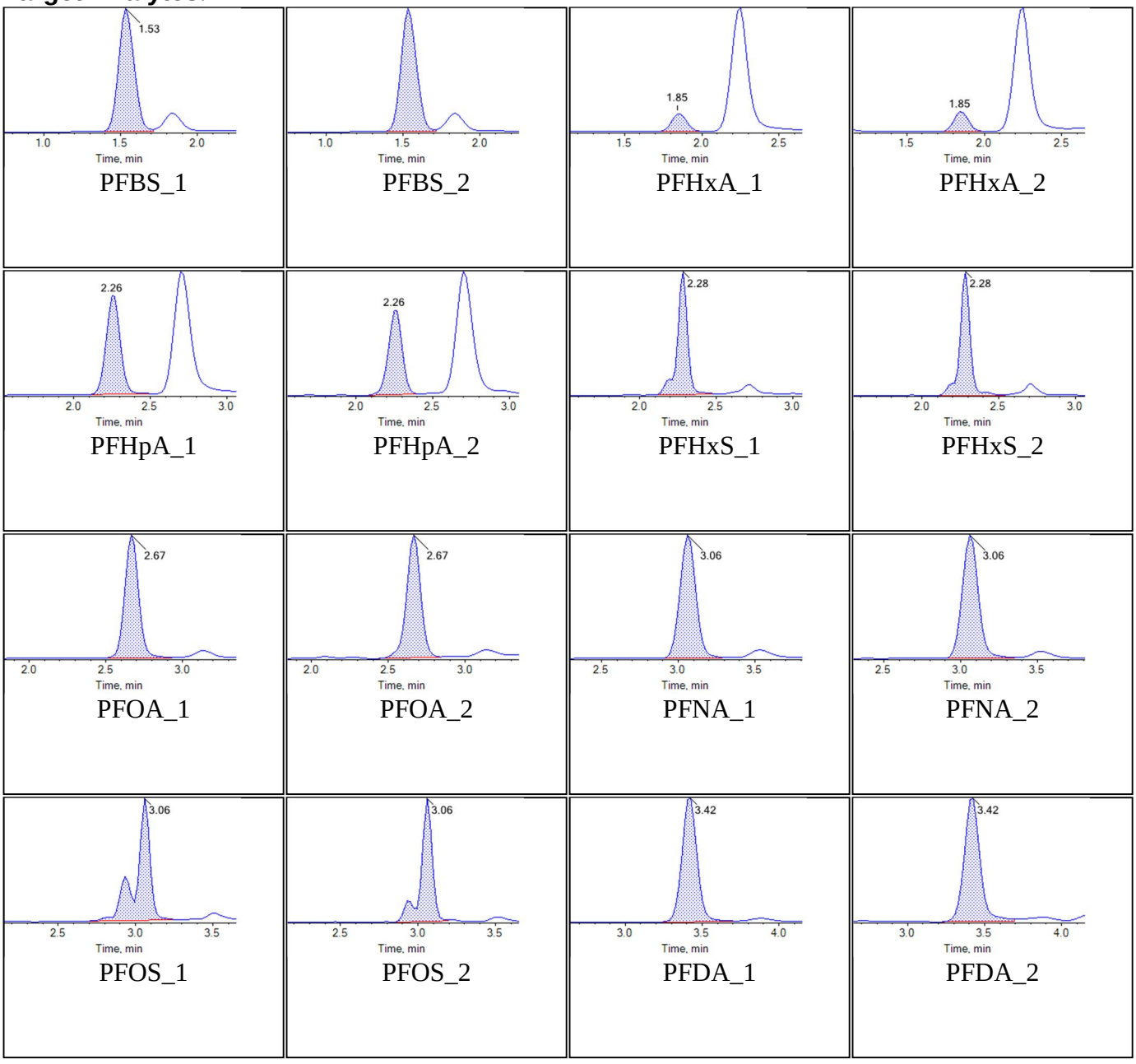
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:34:33 PM

Sample Name	KB76	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:56:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

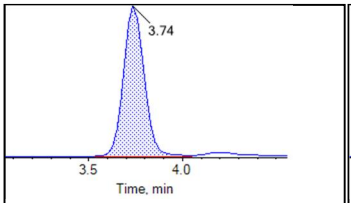
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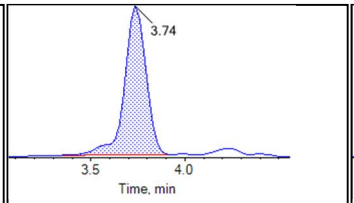
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Chromatogram Report

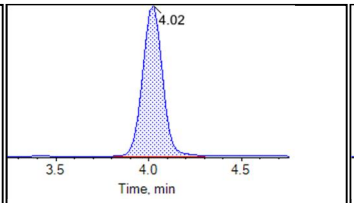
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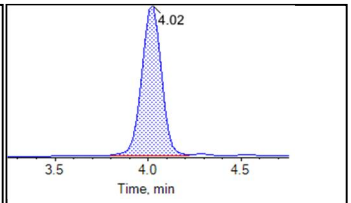
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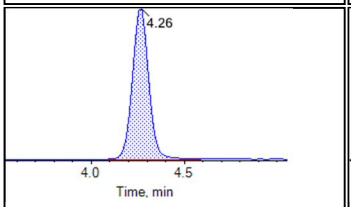
PFUnA_2



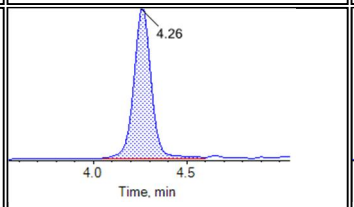
PFDoA_1



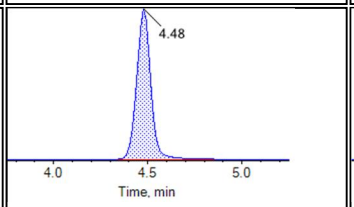
PFDoA_2



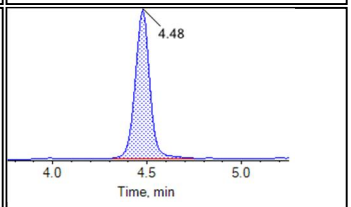
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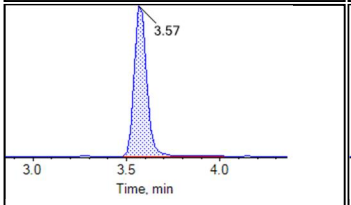
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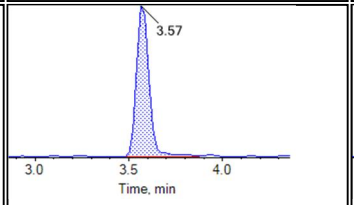
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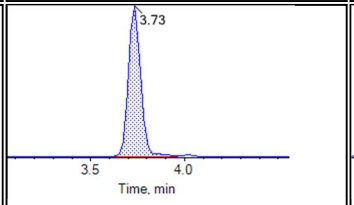
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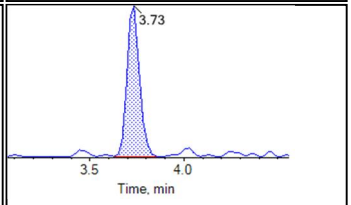
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NMeFOSAA_2

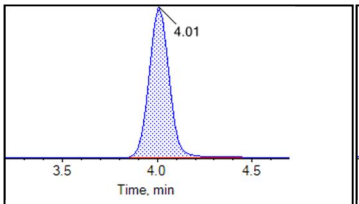


NEtFOSAA_1

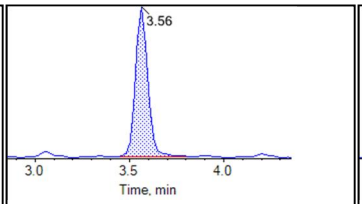


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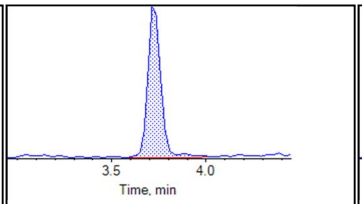
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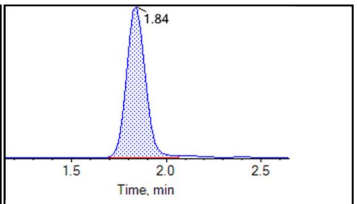
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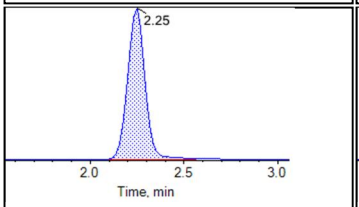
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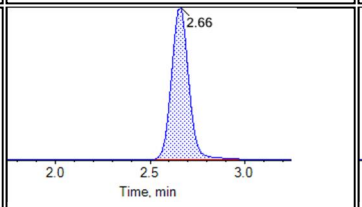
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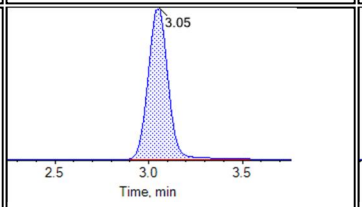
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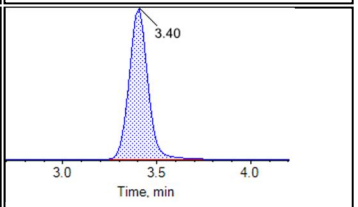
13C4-PFHpA



13C8-PFOA



13C9-PFNA

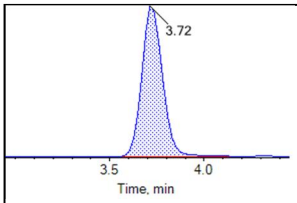


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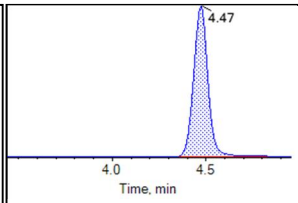
BATTELLE

Chromatogram Report

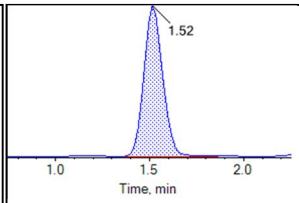
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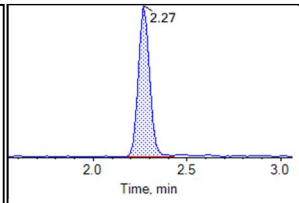
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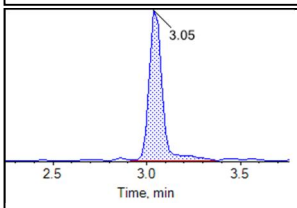
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

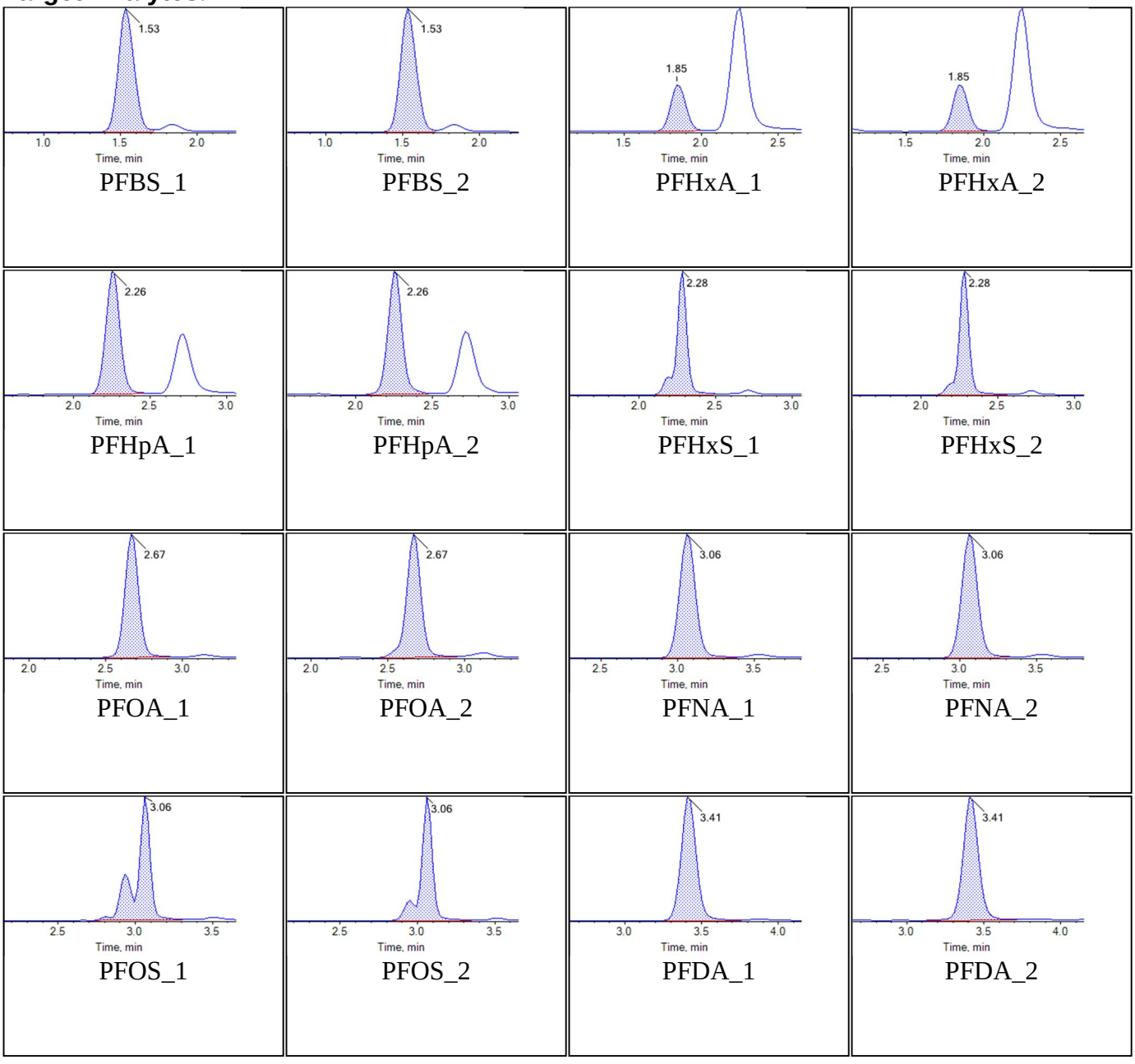
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:34:38 PM

Sample Name	KB77	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:07:29	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

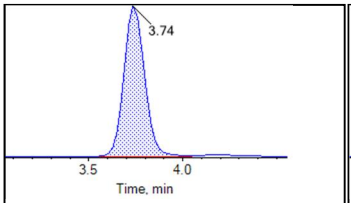
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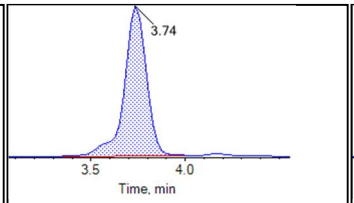
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Chromatogram Report

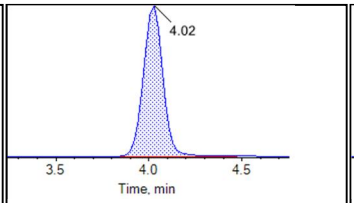
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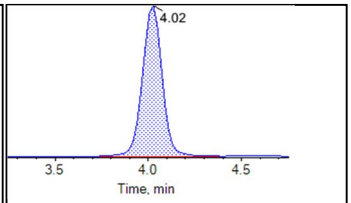
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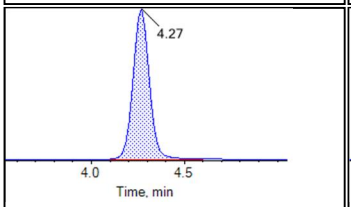
PFUnA_2



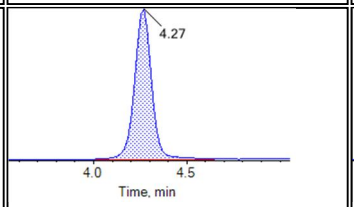
PFDoA_1



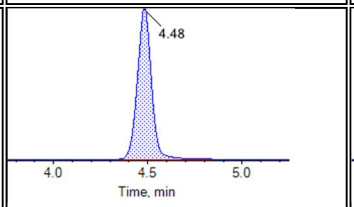
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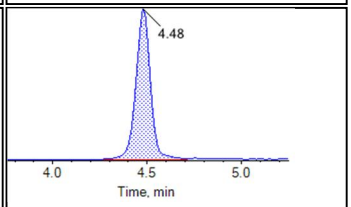
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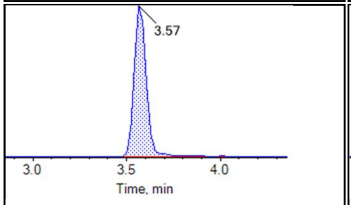
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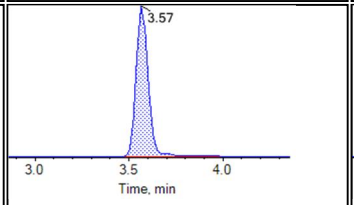
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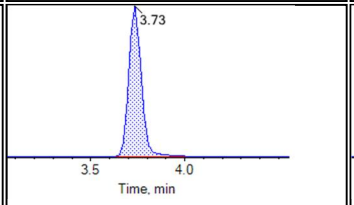
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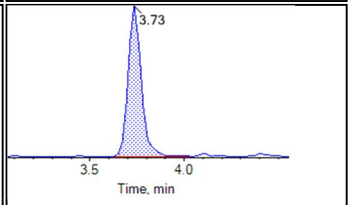
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NMeFOSAA_2

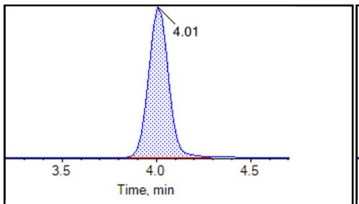


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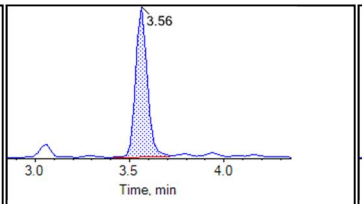


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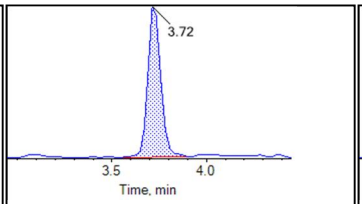
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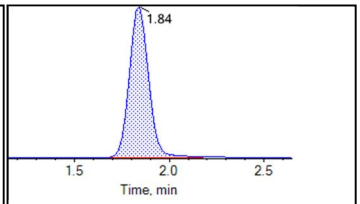
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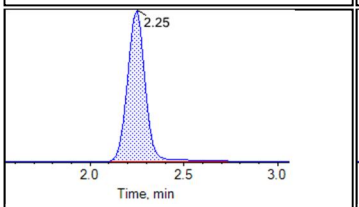
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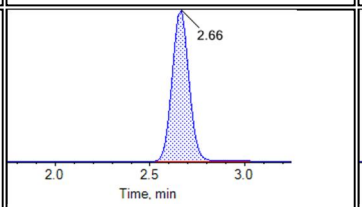
d5-EtFOSAA



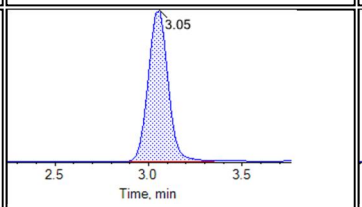
13C5-PFHxA



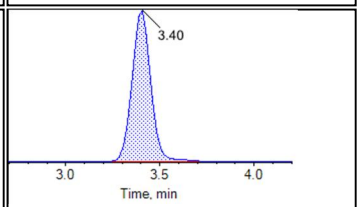
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13C8-PFOA



13C9-PFNA

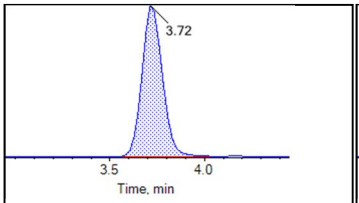


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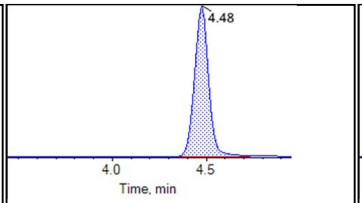
BATTELLE

Chromatogram Report

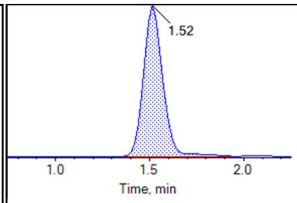
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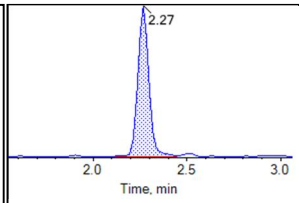
13C7-PFUnA



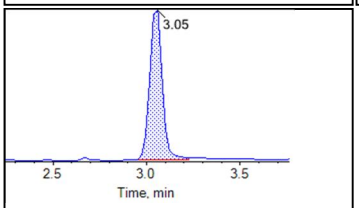
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

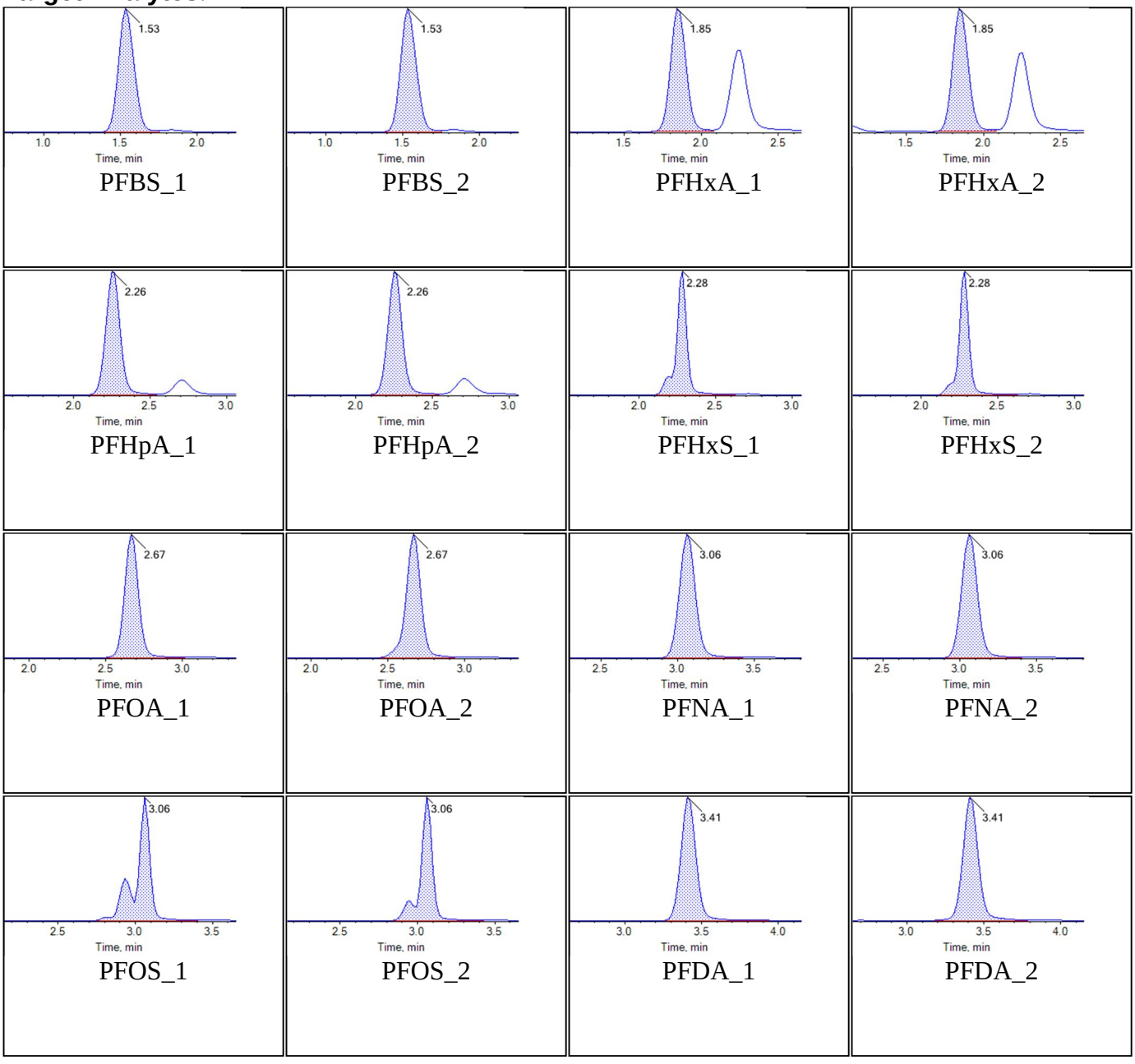
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:34:42 PM

Sample Name	KB78	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:18:21	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

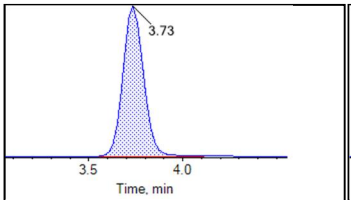
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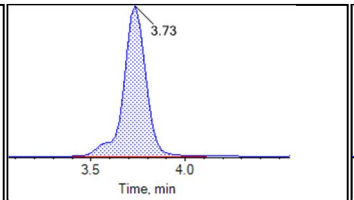
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Chromatogram Report

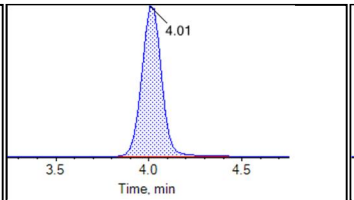
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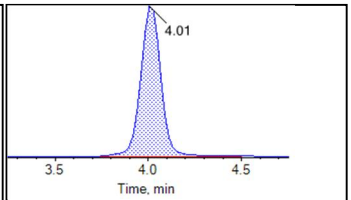
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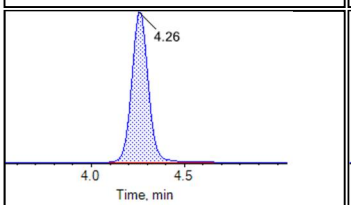
PFUnA_2



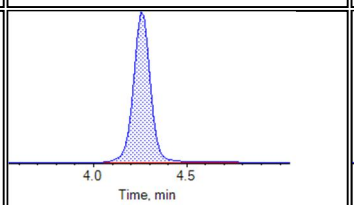
PFDoA_1



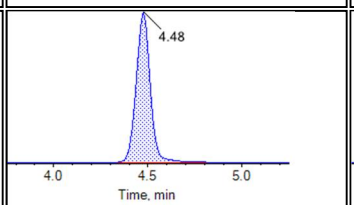
PFDoA_2



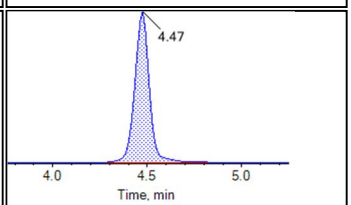
PFTrDA_1



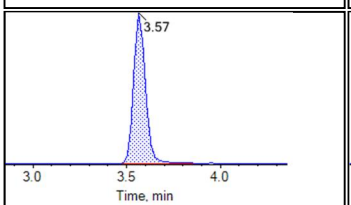
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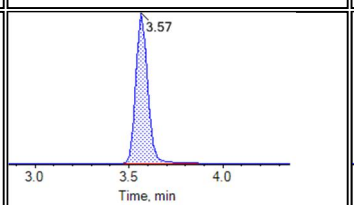
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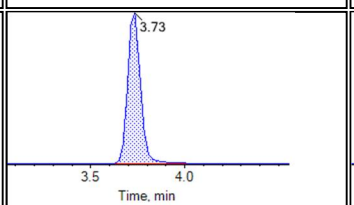
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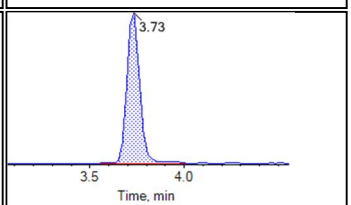
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NMeFOSAA_2

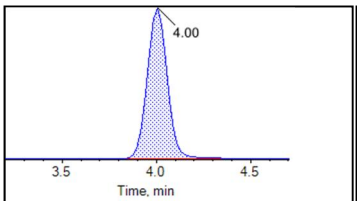


NEtFOSAA_1

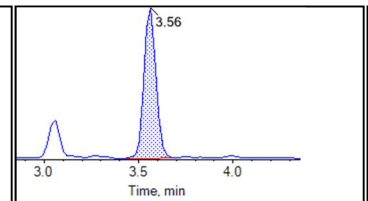


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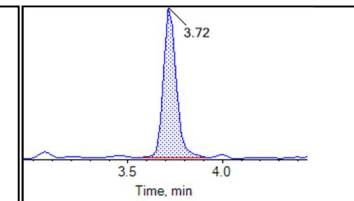
Internal Standards:



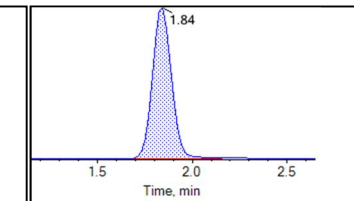
13C2-PFDoA



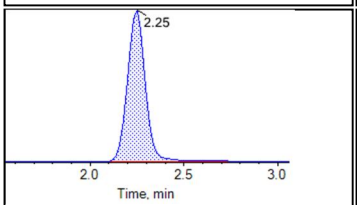
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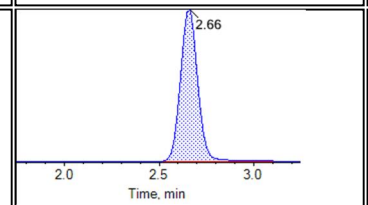
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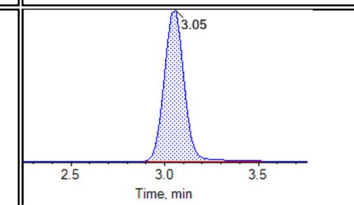
13C5-PFHxA



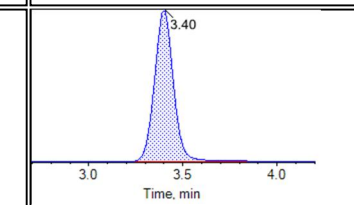
13C4-PFHpA



13C8-PFOA



13C9-PFNA

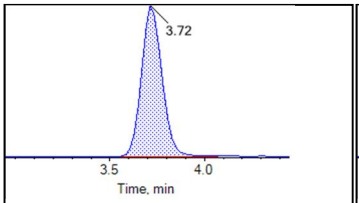


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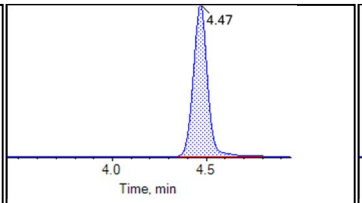
BATTELLE

Chromatogram Report

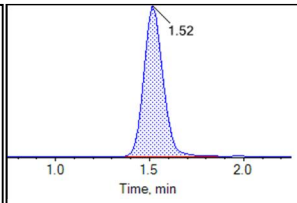
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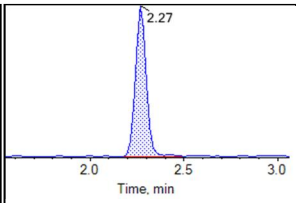
13C7-PFUnA



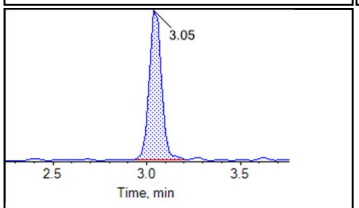
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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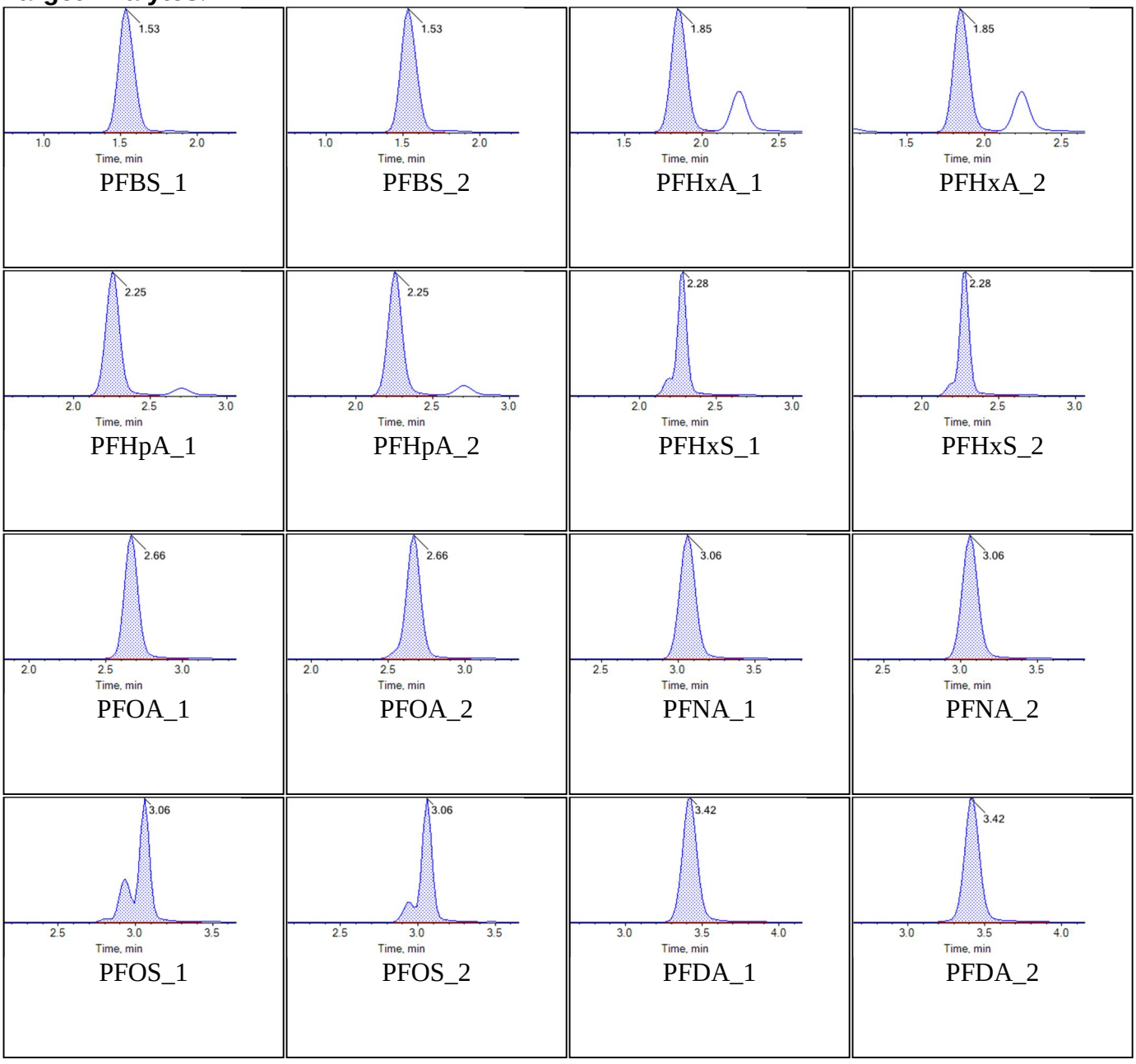
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:34:47 PM

Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:29:13	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

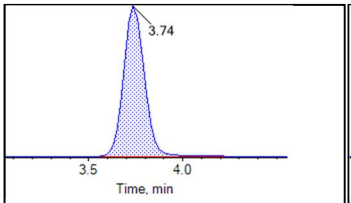
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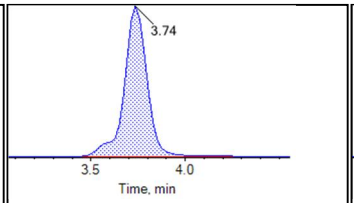
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Chromatogram Report

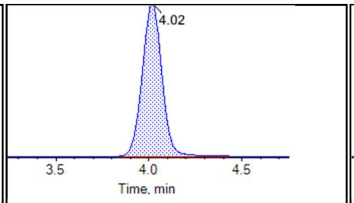
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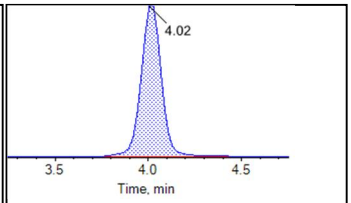
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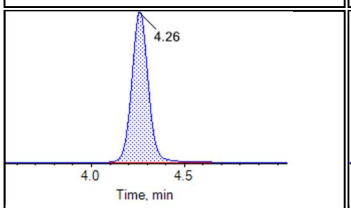
PFUnA_2



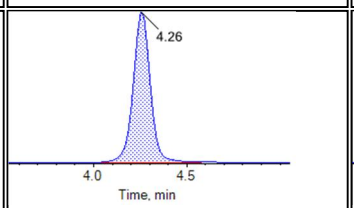
PFDoA_1



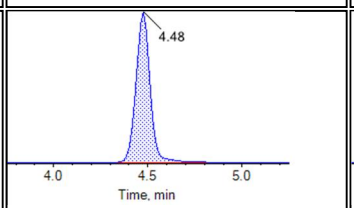
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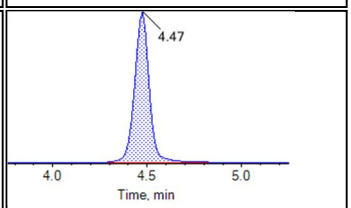
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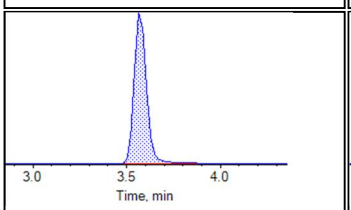
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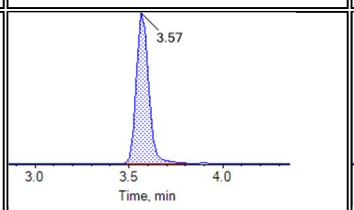
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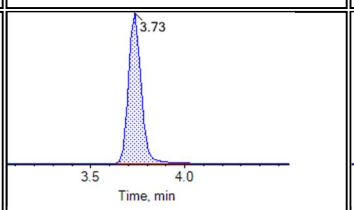
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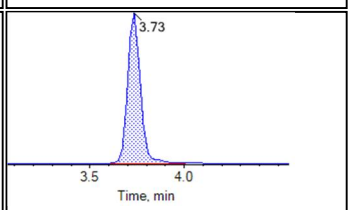
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NMeFOSAA_2

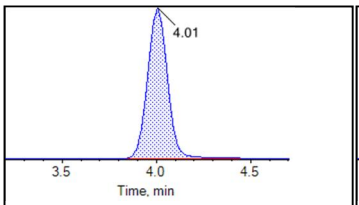


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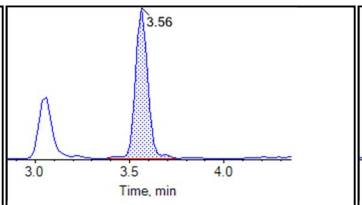


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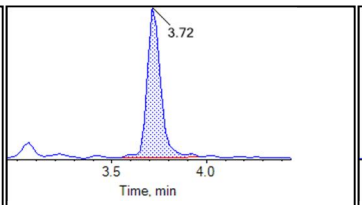
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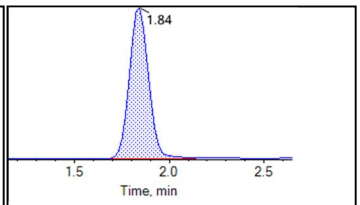
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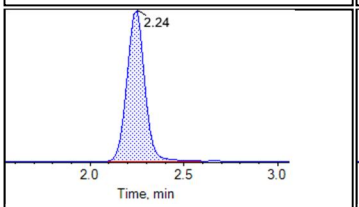
d3-MeFOSAA



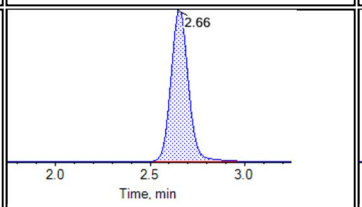
d5-EtFOSAA



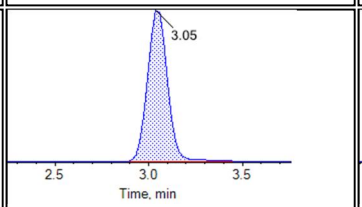
13C5-PFHxA



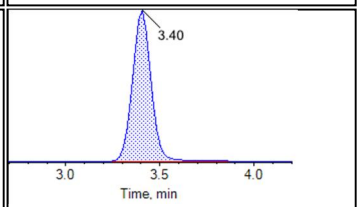
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13C8-PFOA



13C9-PFNA

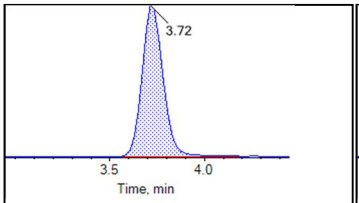


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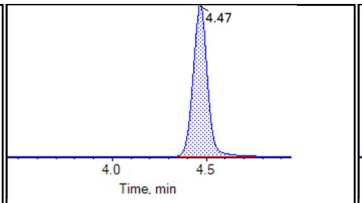
BATTELLE

Chromatogram Report

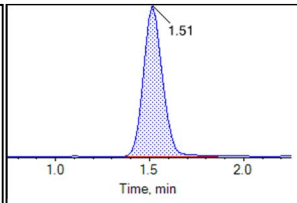
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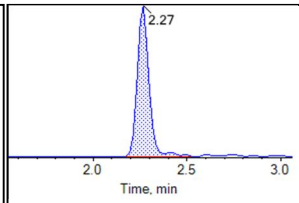
13C7-PFUnA



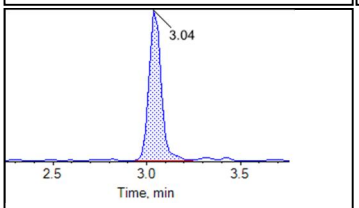
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

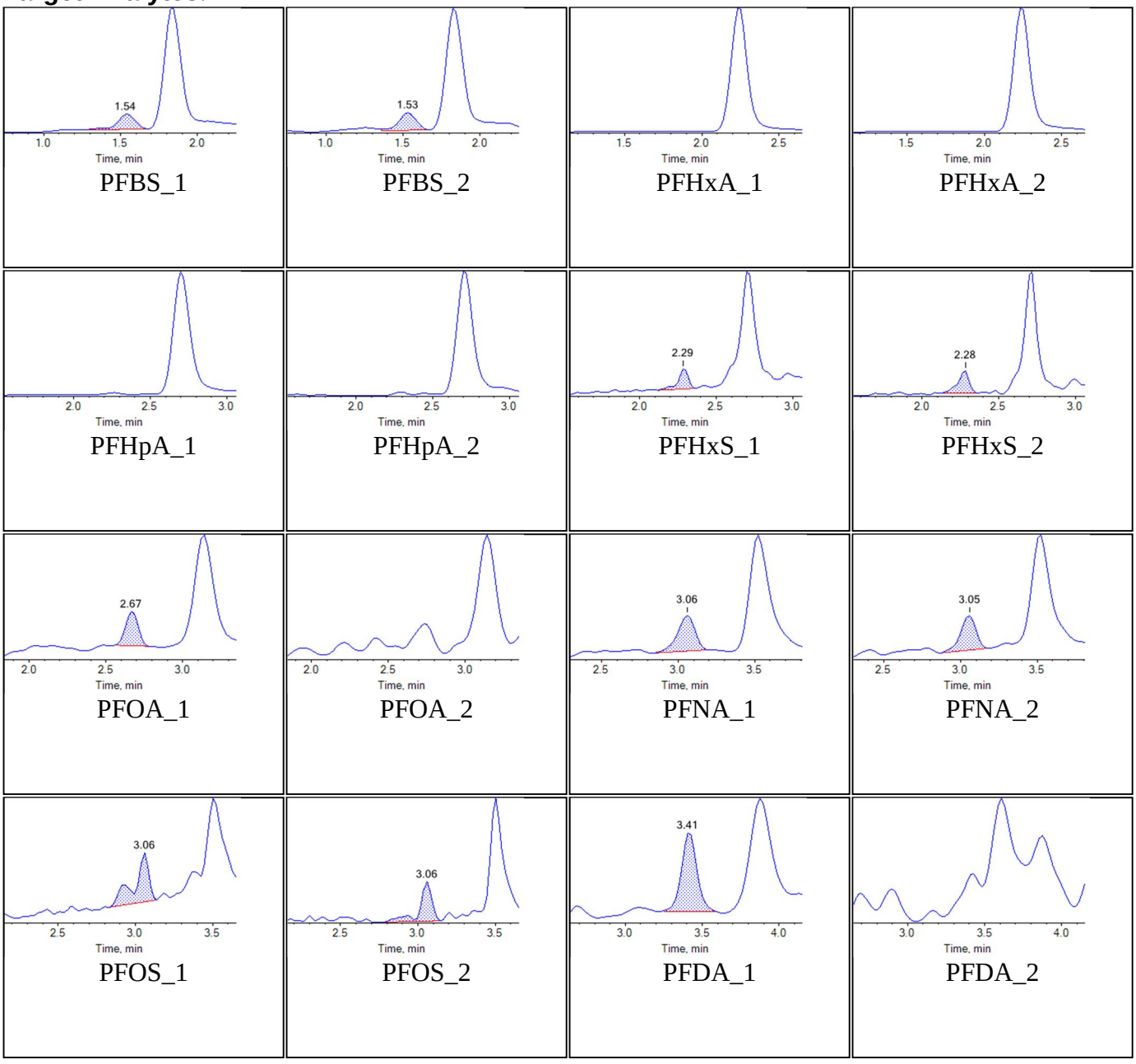
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:34:52 PM

Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:40:04	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

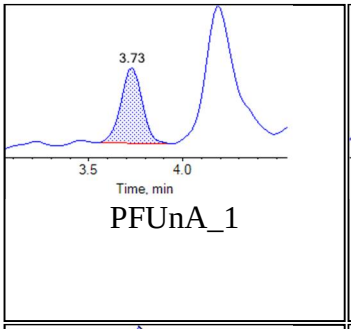
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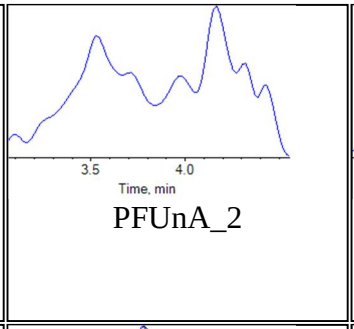
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Chromatogram Report

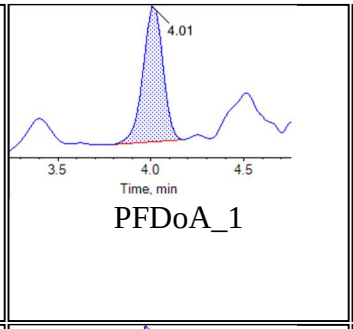
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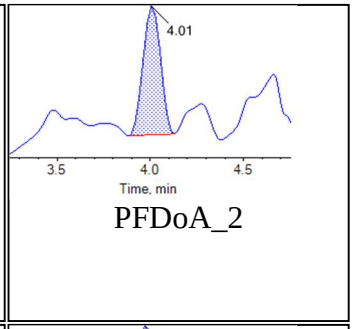
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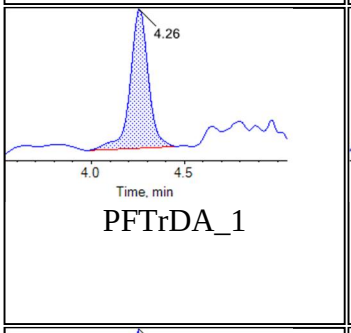
PFUnA_2



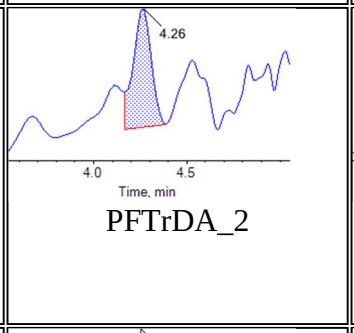
PFDoA_1



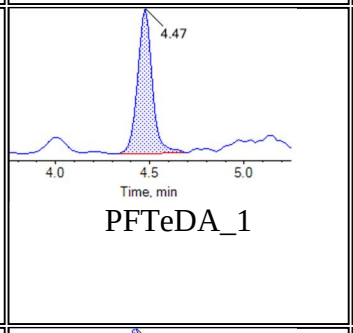
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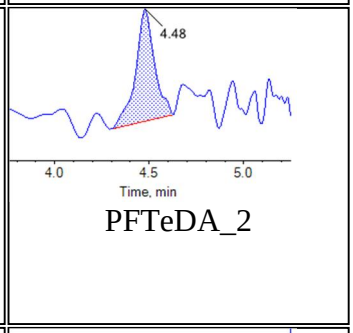
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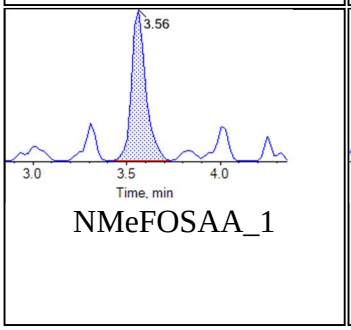
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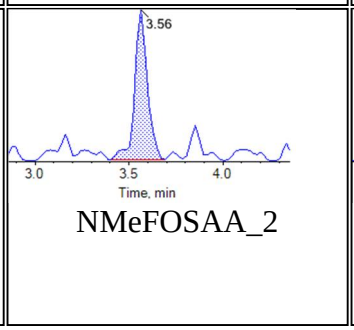
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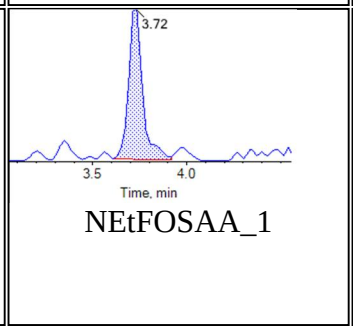
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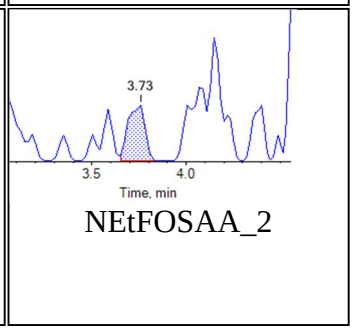
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NMeFOSAA_2

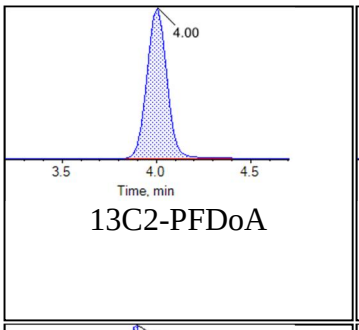


NEtFOSAA_1

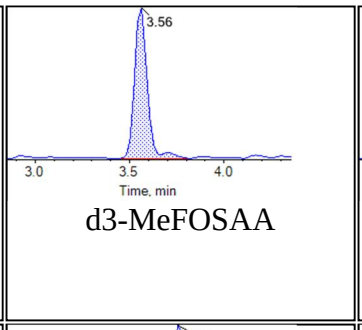


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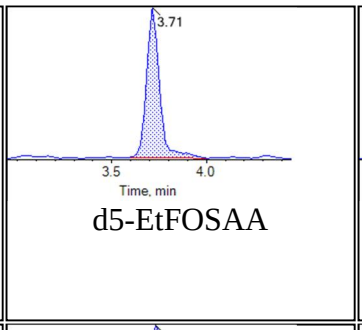
Internal Standards:



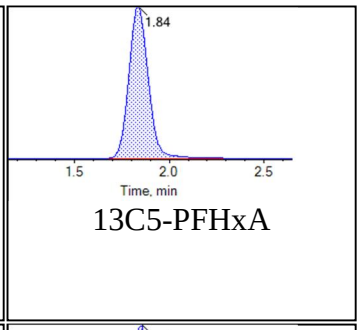
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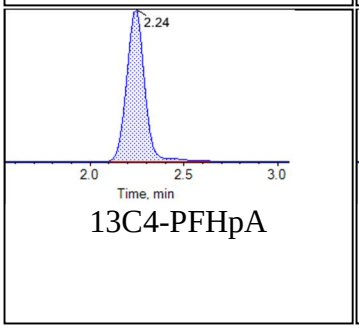
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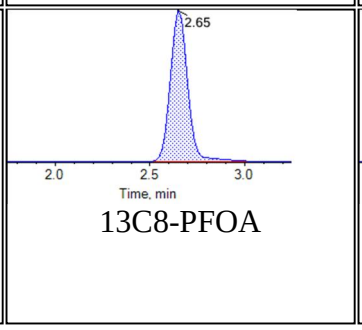
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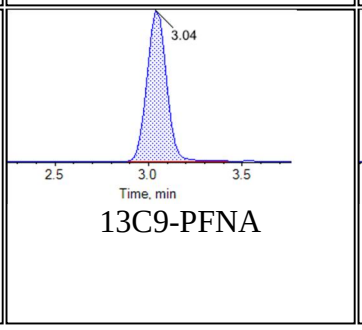
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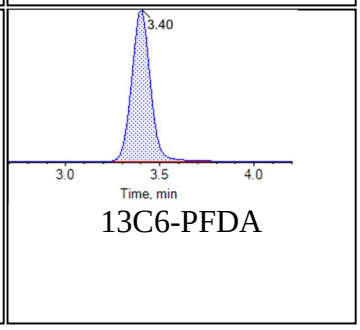
13C4-PFHpA



13C8-PFOA



13C9-PFNA

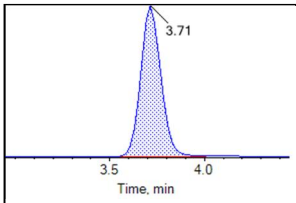


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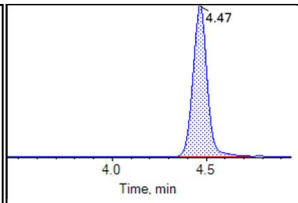
BATTELLE

Chromatogram Report

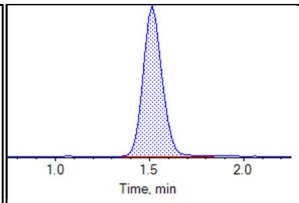
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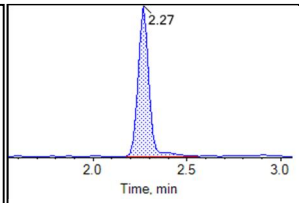
13C7-PFUnA



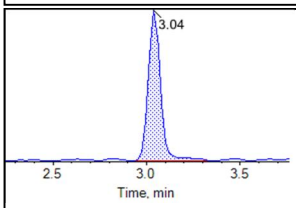
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

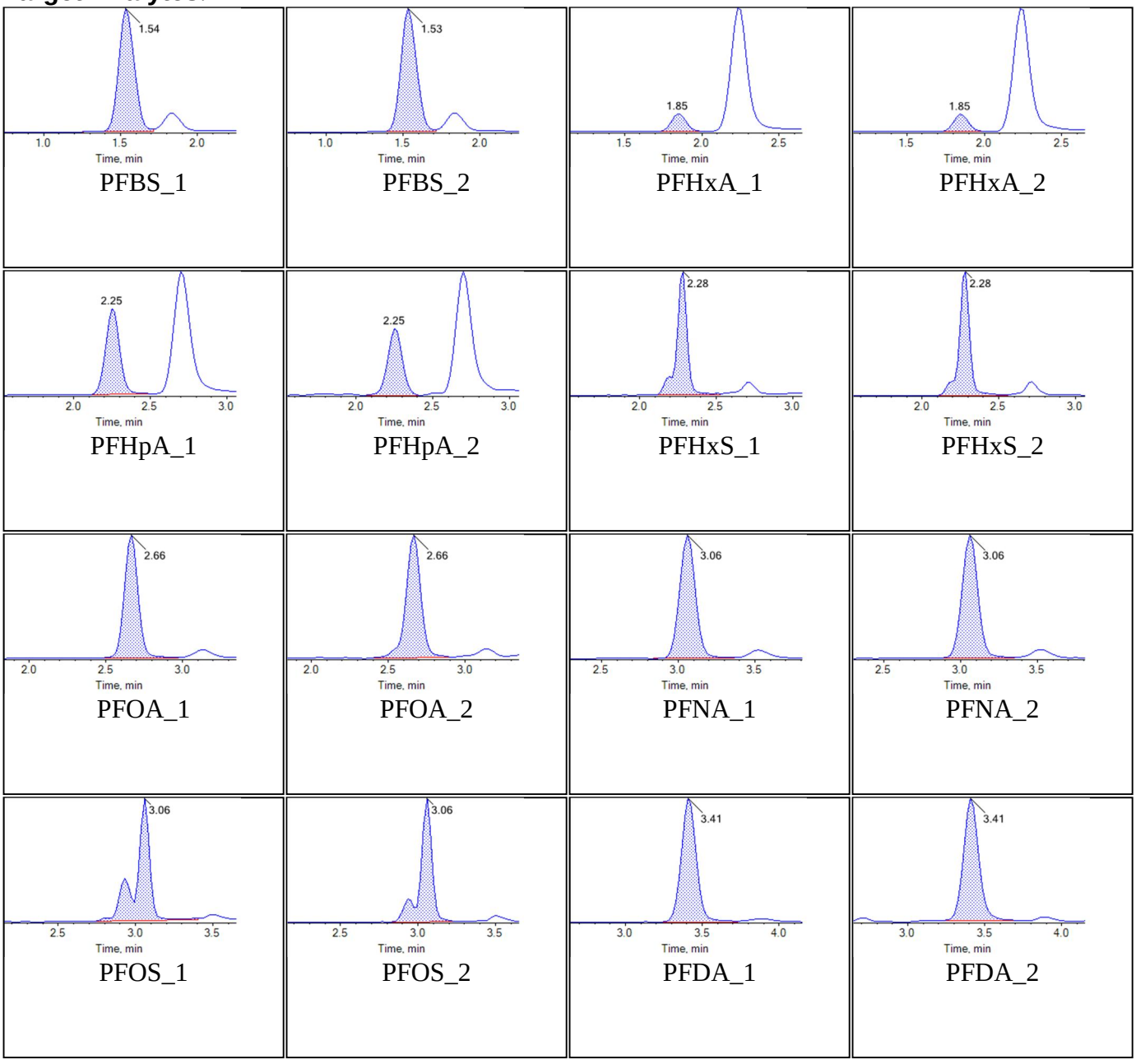
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:34:58 PM

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:50:56	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

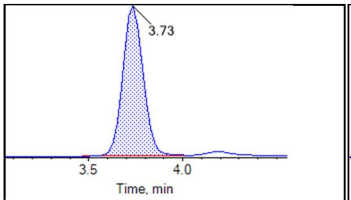
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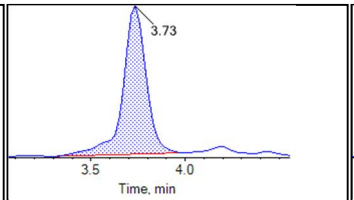
BATTELLE

Chromatogram Report

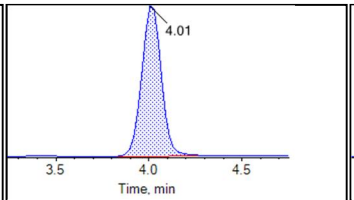
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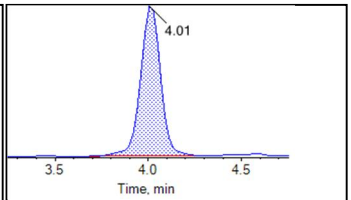
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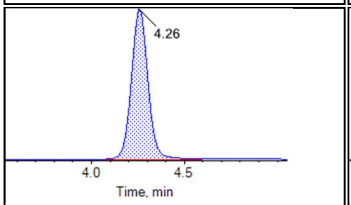
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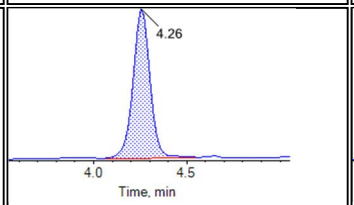
PFDoA_1



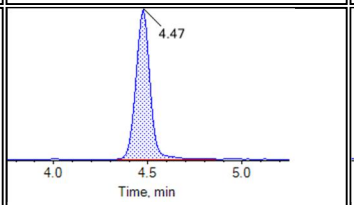
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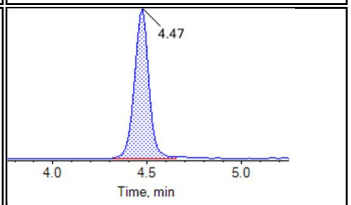
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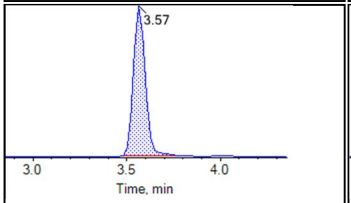
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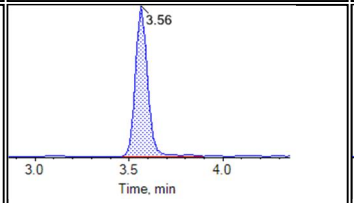
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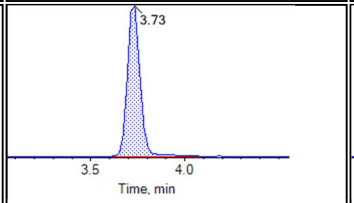
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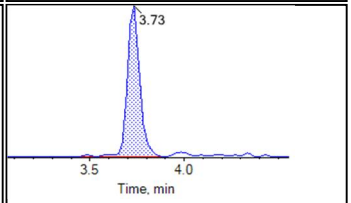
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NMeFOSAA_2

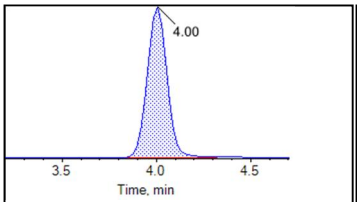


NEtFOSAA_1

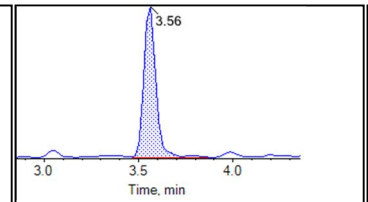


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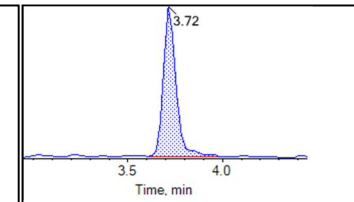
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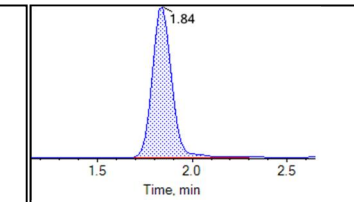
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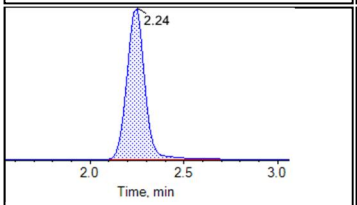
d3-MeFOSAA



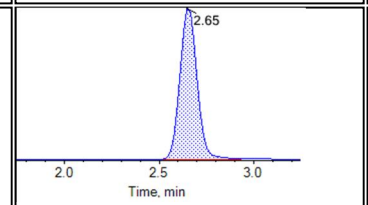
d5-EtFOSAA



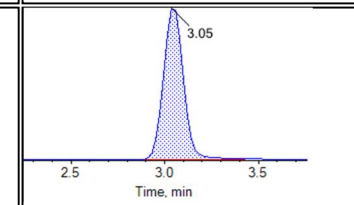
13C5-PFHxA



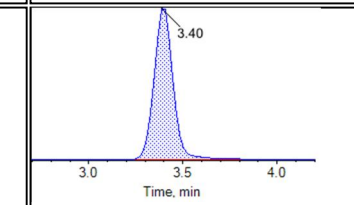
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13C8-PFOA



13C9-PFNA

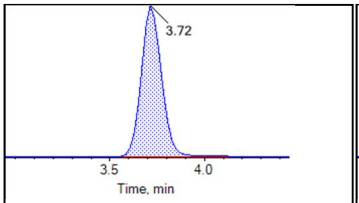


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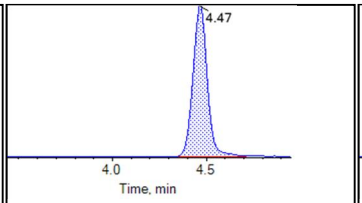
BATTELLE

Chromatogram Report

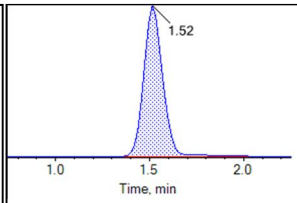
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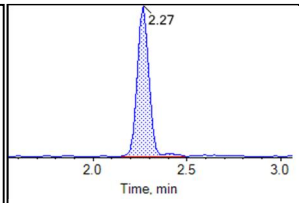
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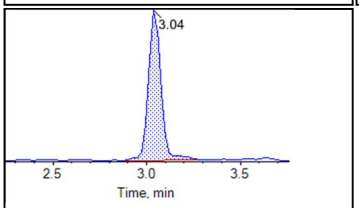
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

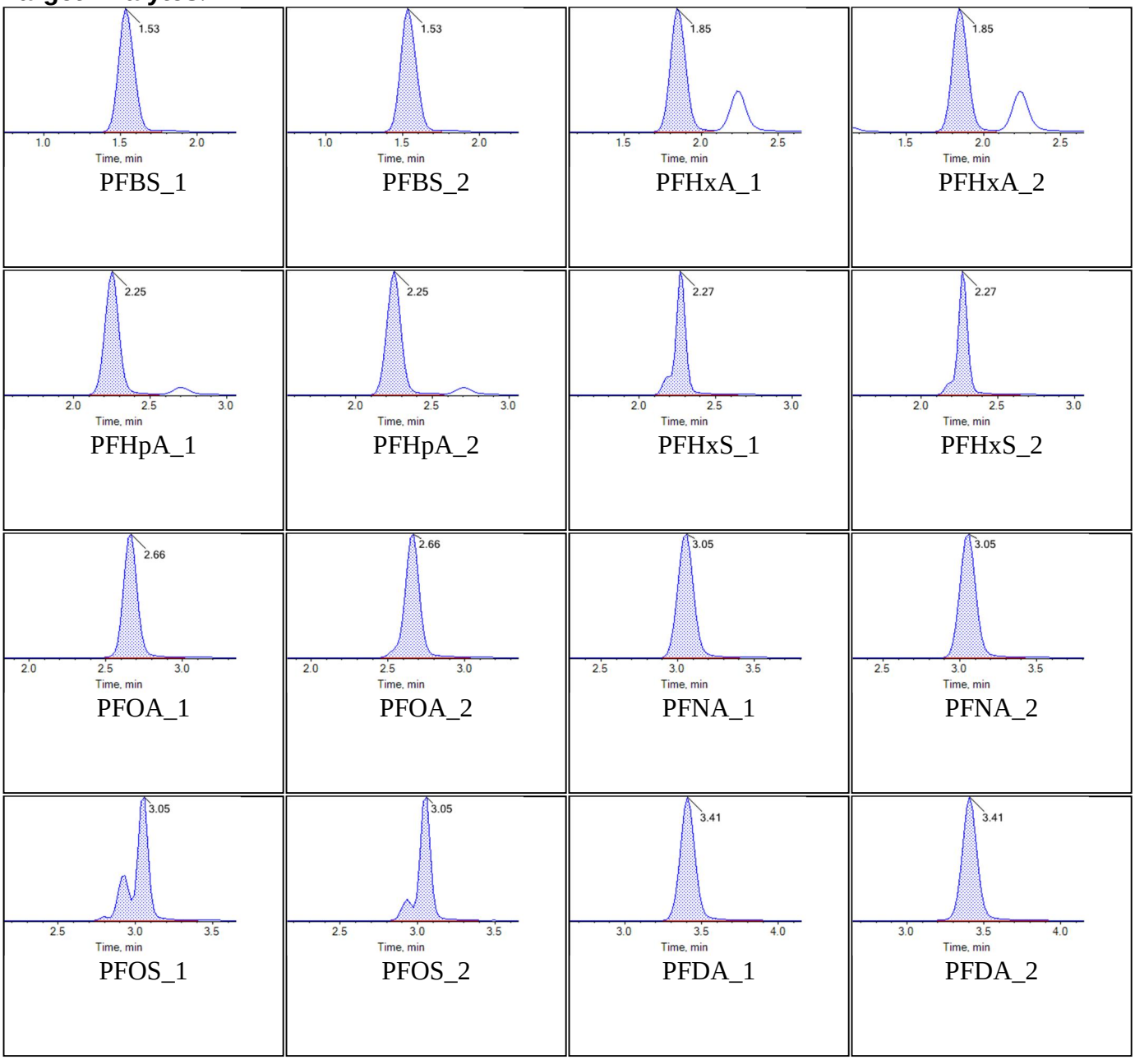
Chromatogram Report

Created with Analyst Reporter
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Sample Name	KB79 CCV	**Injection Vial**	8
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T22:28:49	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

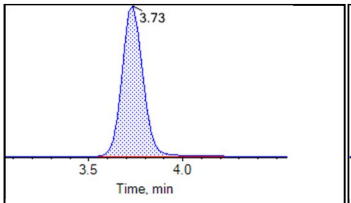
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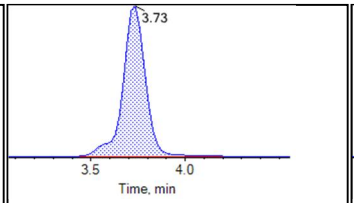
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Chromatogram Report

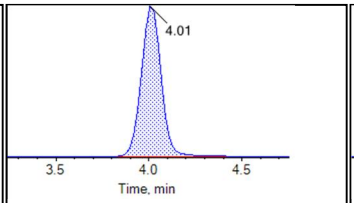
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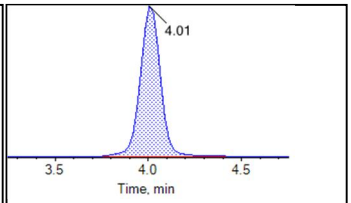
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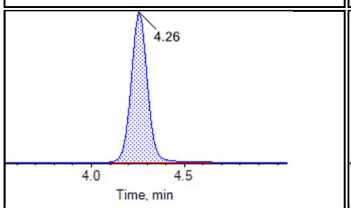
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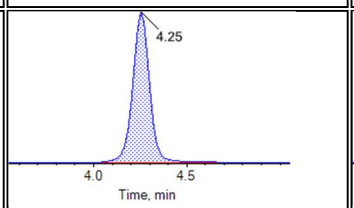
PFDoA_1



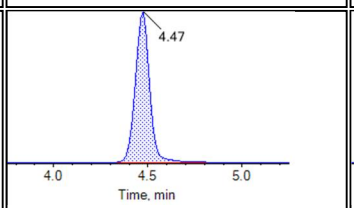
PFDoA_2



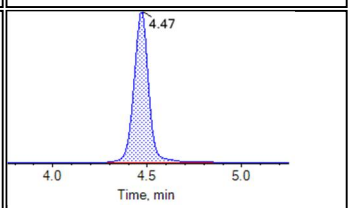
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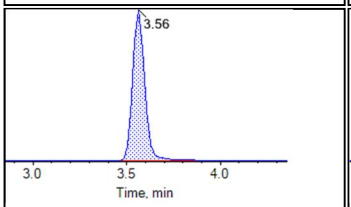
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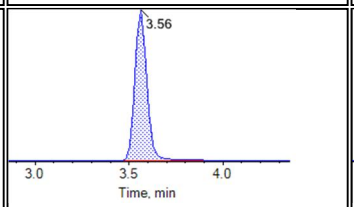
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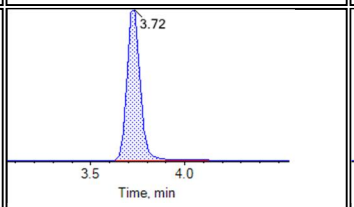
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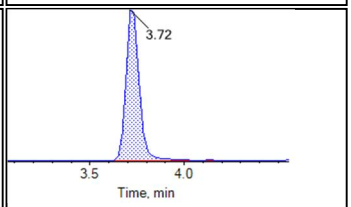
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NMeFOSAA_2

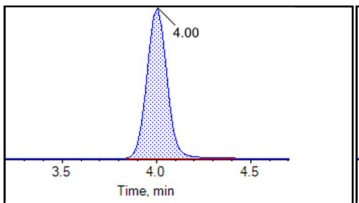


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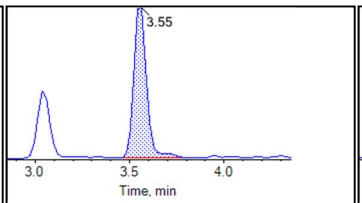


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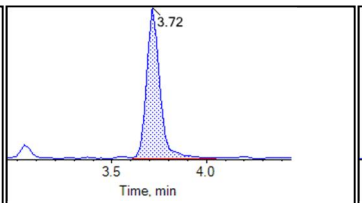
Internal Standards:



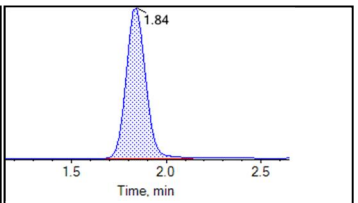
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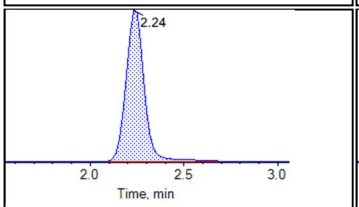
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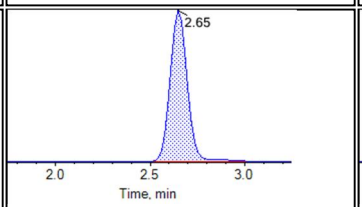
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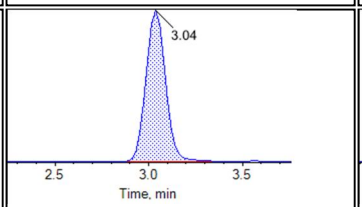
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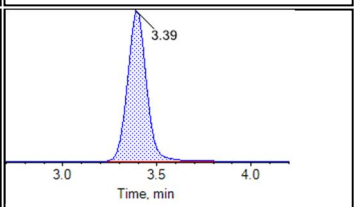
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13C8-PFOA



13C9-PFNA

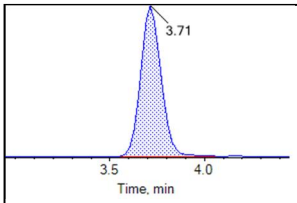


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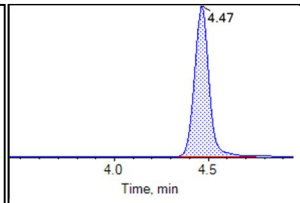
BATTELLE

Chromatogram Report

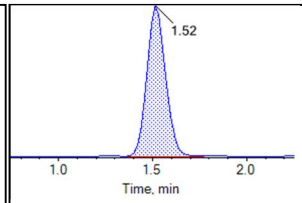
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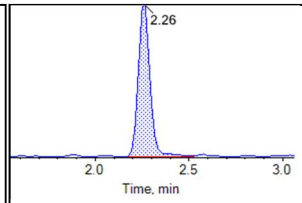
13C7-PFUnA



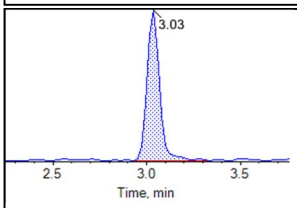
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

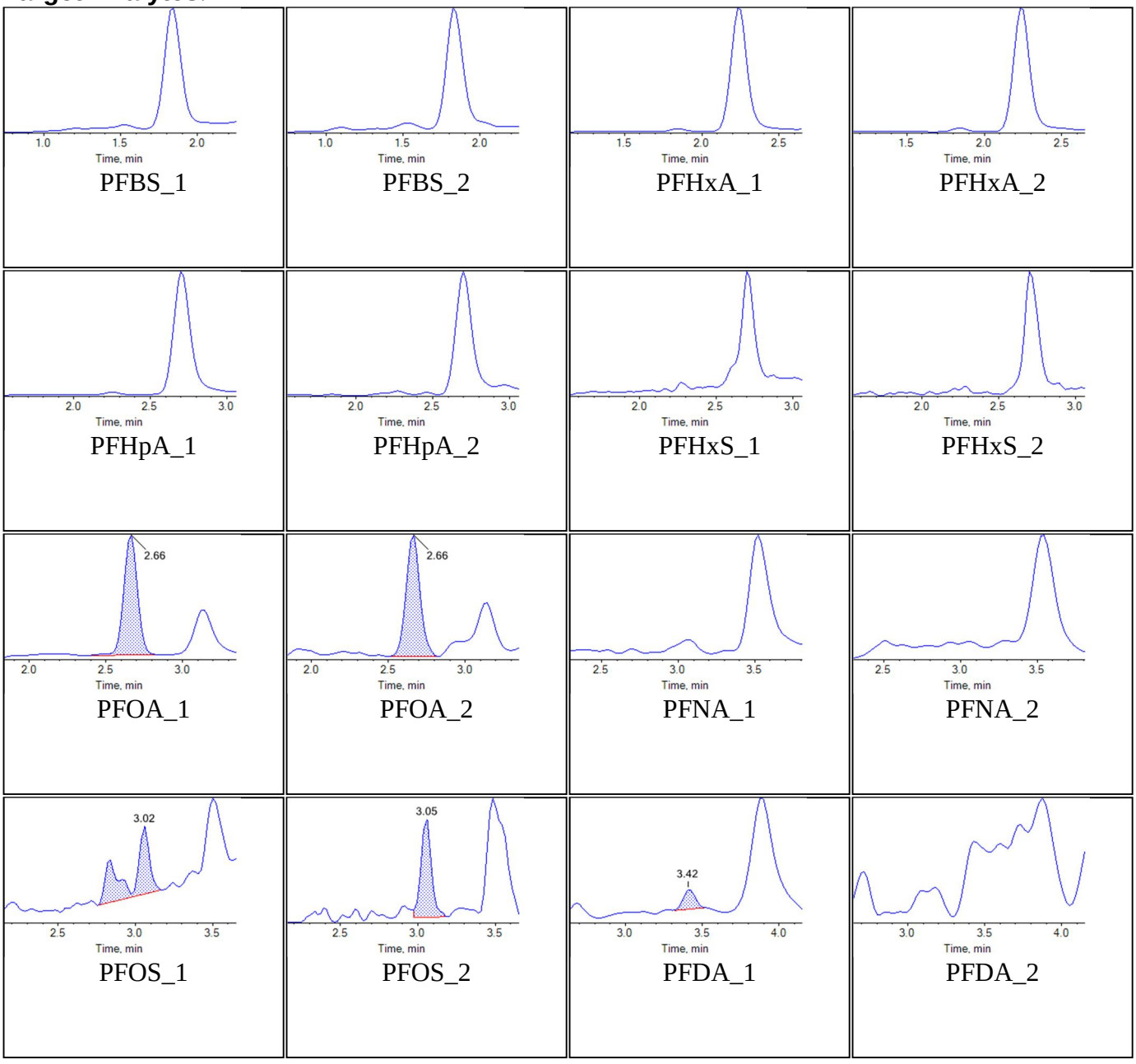
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:35:19 PM

Sample Name	CR847PB-FS(0)	**Injection Vial**	19
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T22:50:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

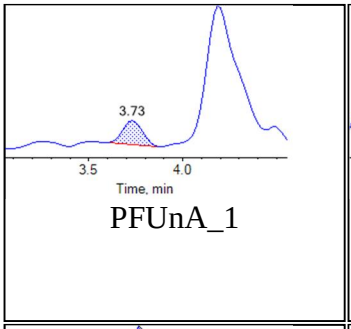
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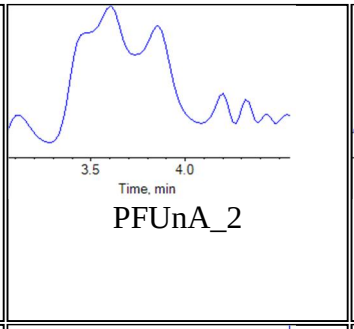
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Chromatogram Report

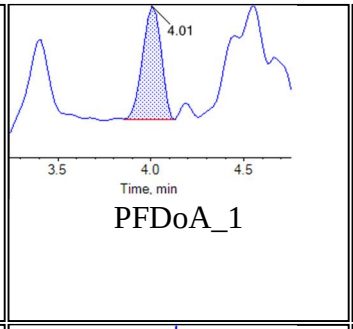
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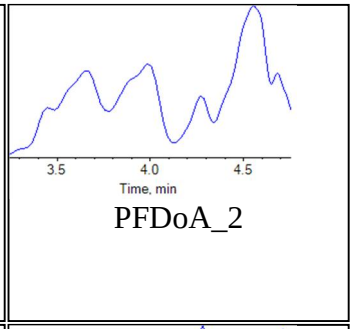
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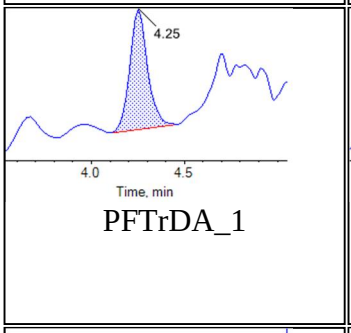
PFUnA_2



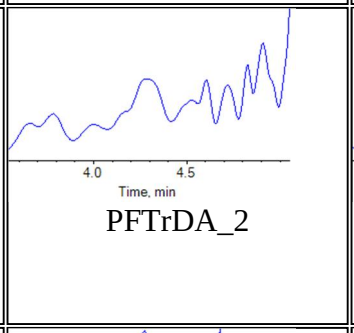
PFDoA_1



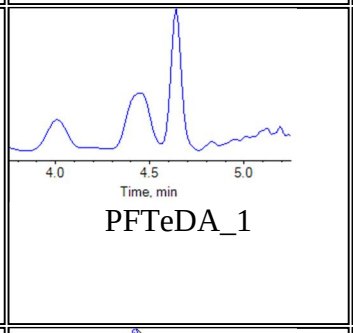
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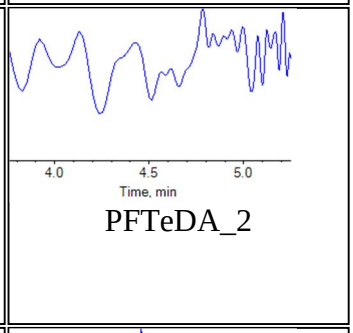
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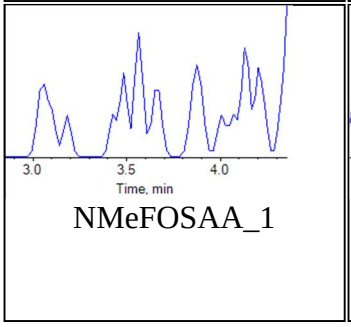
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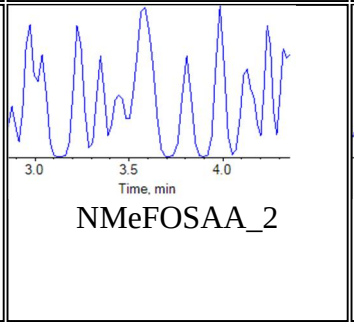
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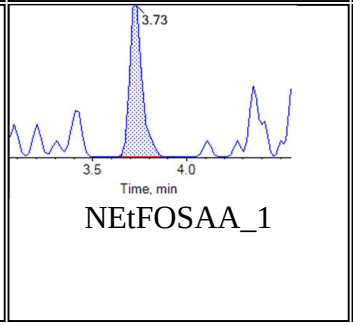
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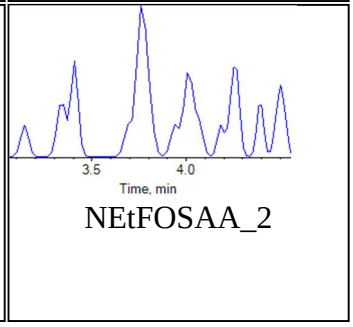
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NMeFOSAA_2

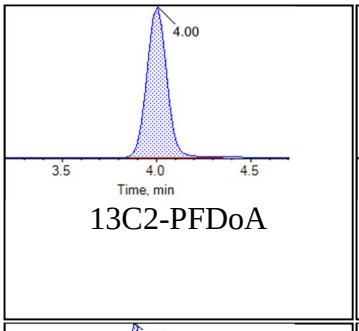


NEtFOSAA_1

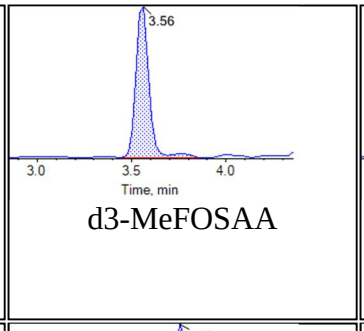


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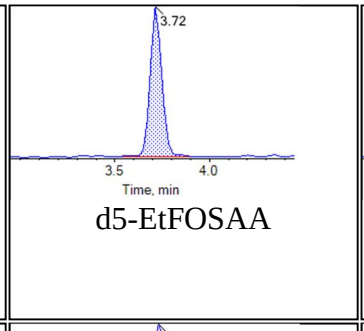
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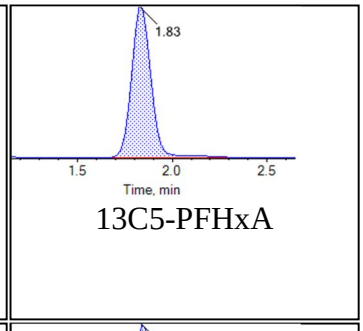
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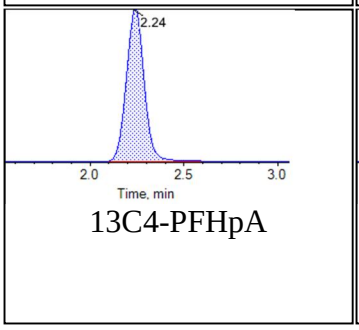
d3-MeFOSAA



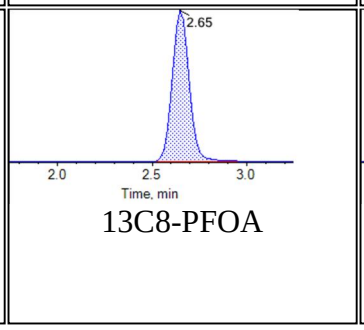
d5-EtFOSAA



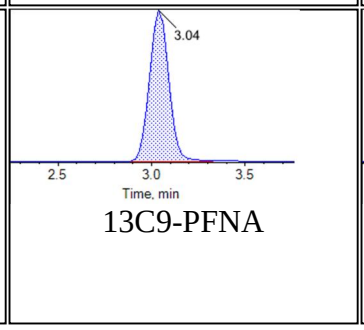
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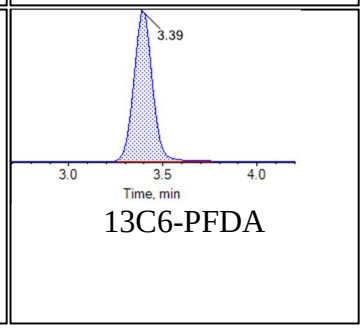
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13C8-PFOA



13C9-PFNA

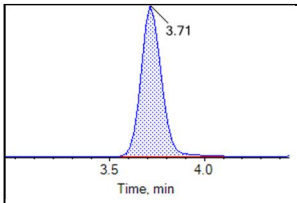


13C6-PFDA

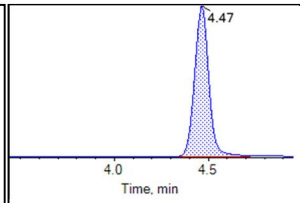
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Chromatogram Report

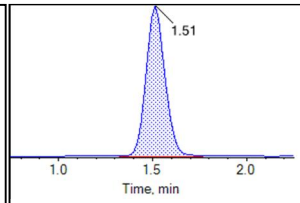
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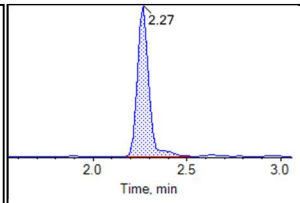
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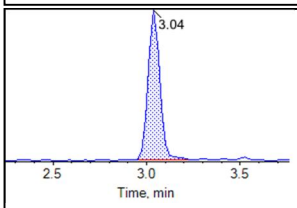
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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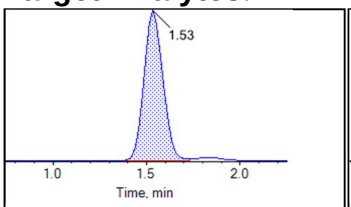
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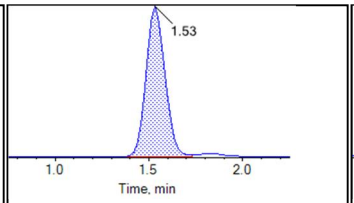
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Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:01:28	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

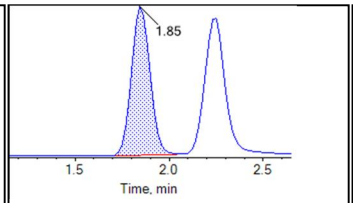
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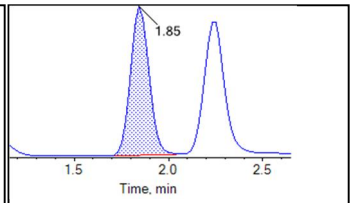
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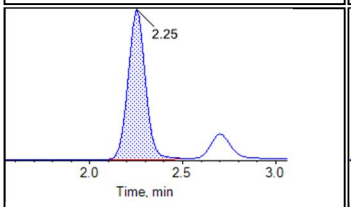
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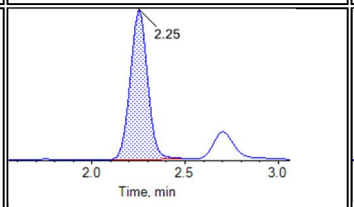
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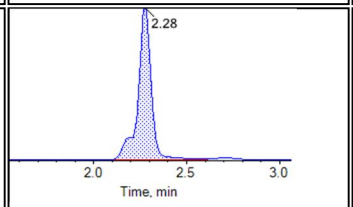
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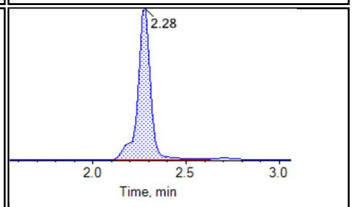
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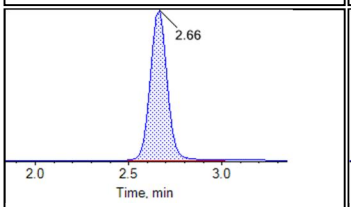
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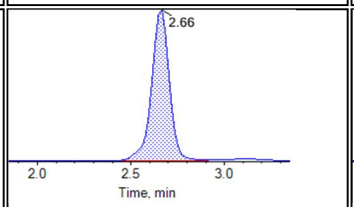
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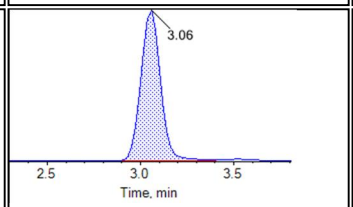
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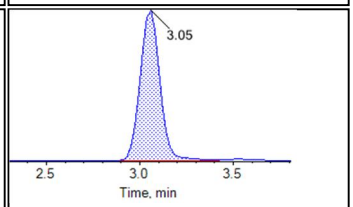
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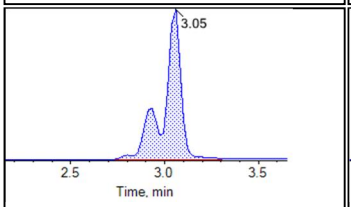
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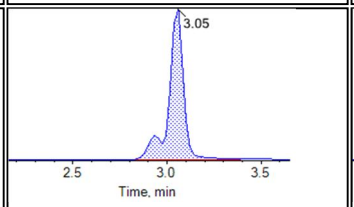
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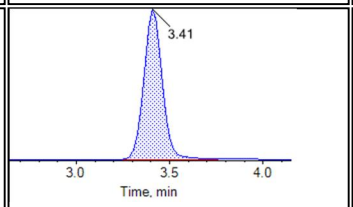
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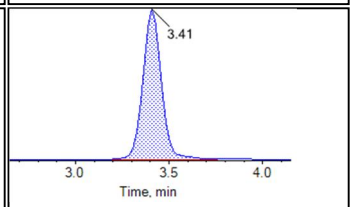
PFOS_1



PFOS_2



PFDA_1

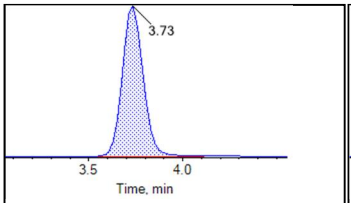


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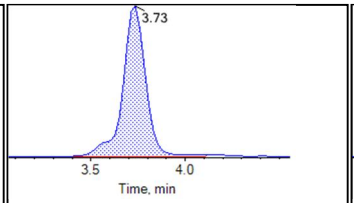
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Chromatogram Report

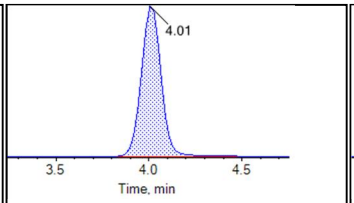
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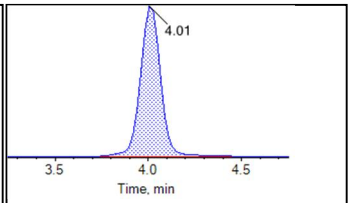
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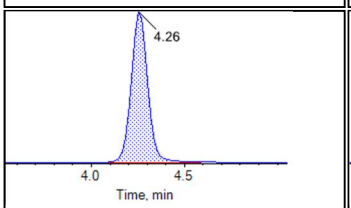
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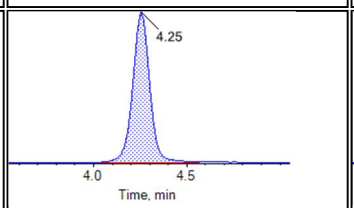
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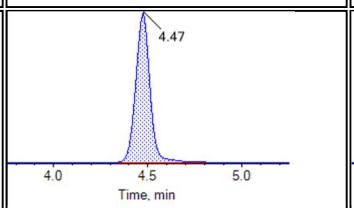
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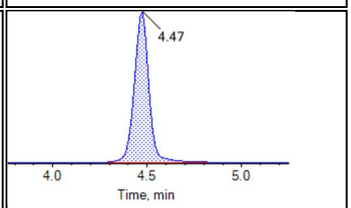
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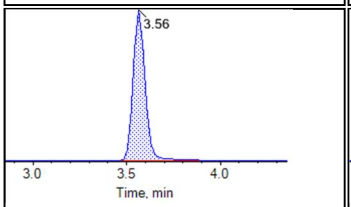
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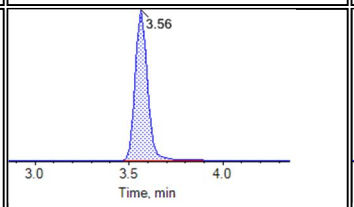
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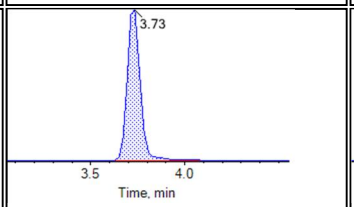
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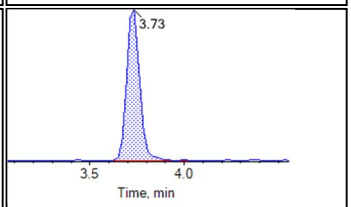
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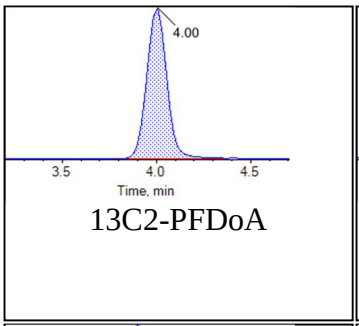


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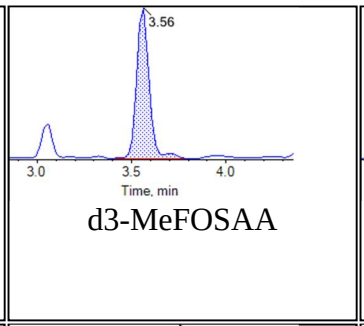


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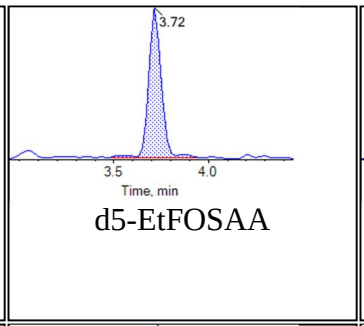
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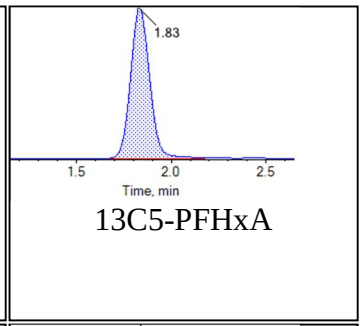
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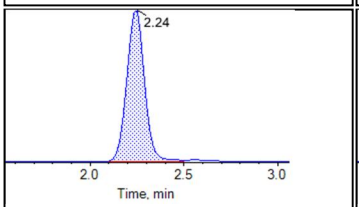
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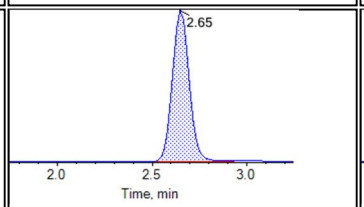
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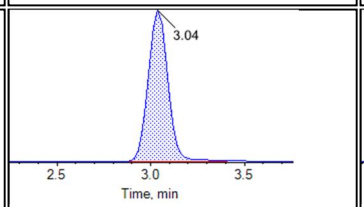
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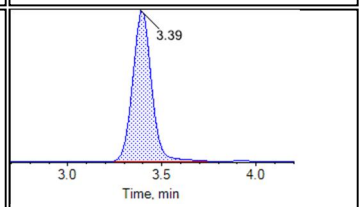
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13C8-PFOA



13C9-PFNA

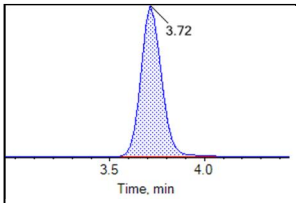


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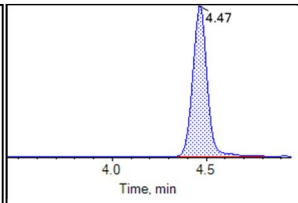
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Chromatogram Report

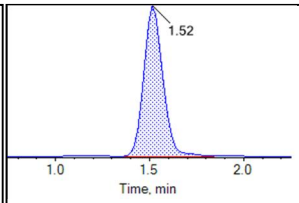
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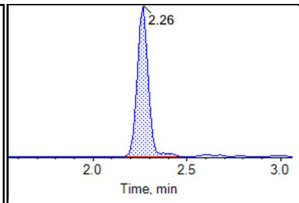
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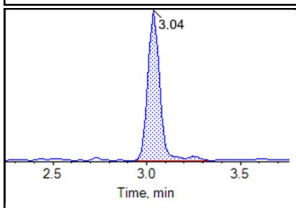
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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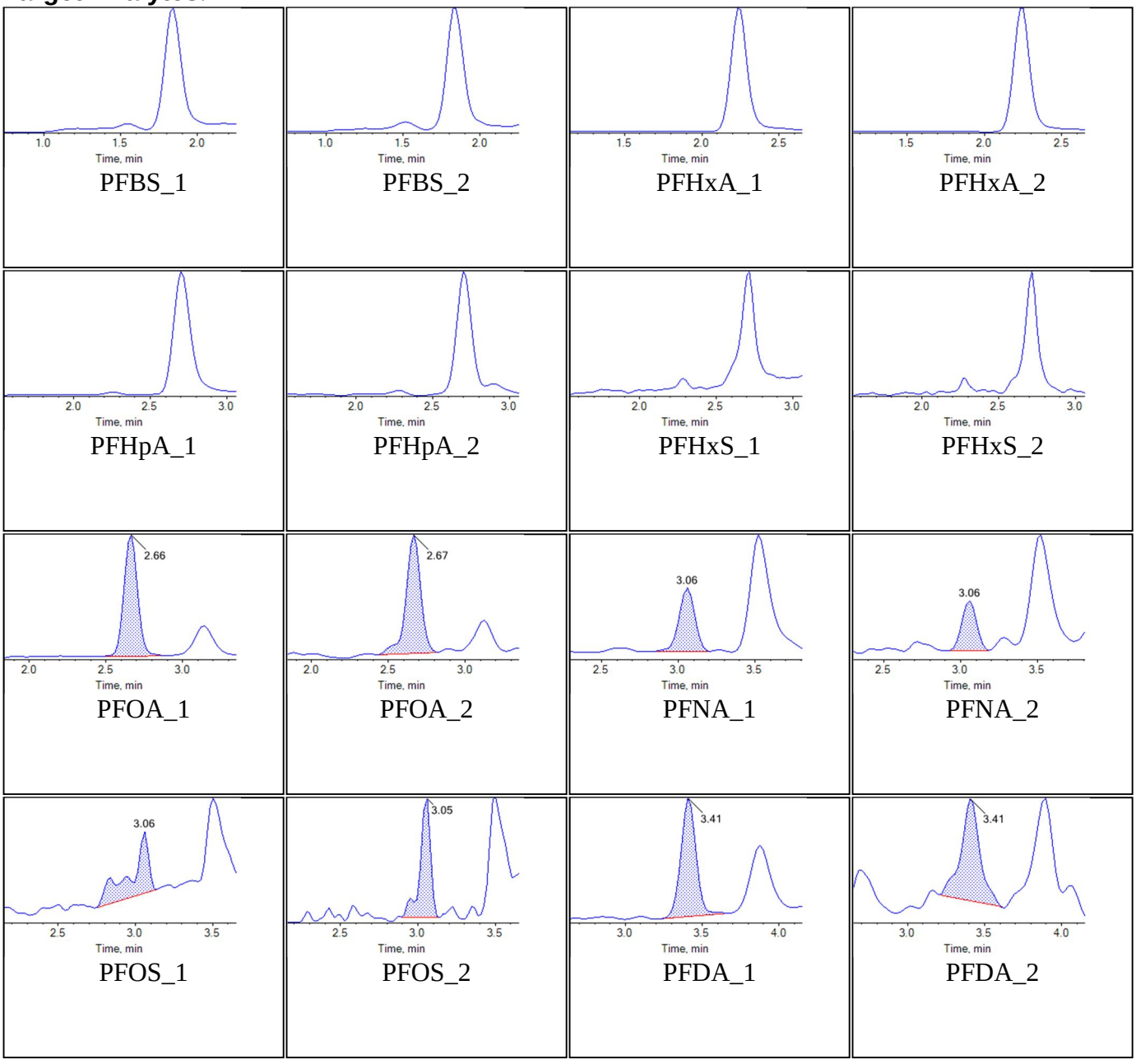
Chromatogram Report

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Printed: 05/10/2018 5:35:29 PM

Sample Name	J8246-FS(0)	**Injection Vial**	21
Sample ID	VC-AQ-FB01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:12:20	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

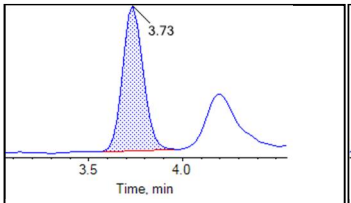
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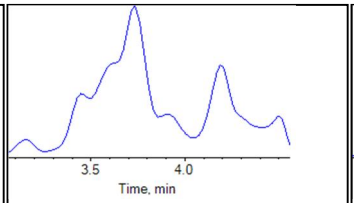
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Chromatogram Report

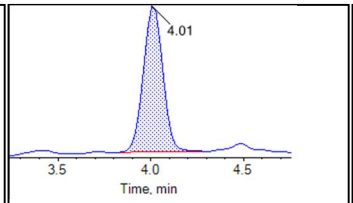
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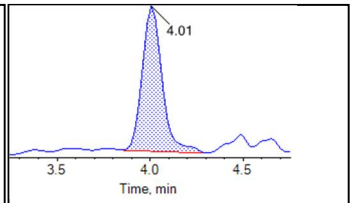
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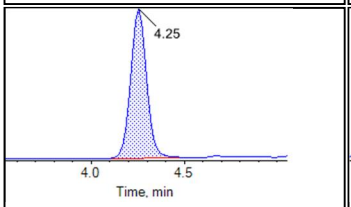
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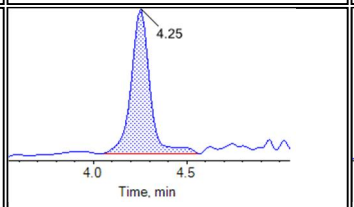
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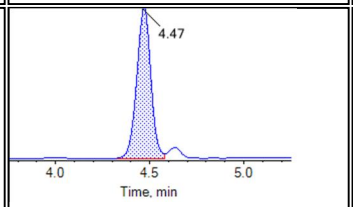
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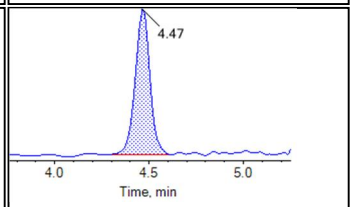
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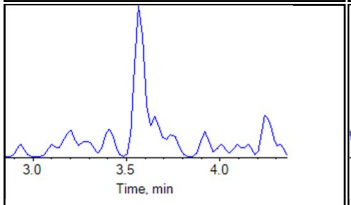
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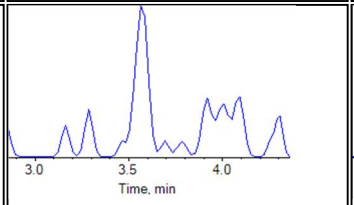
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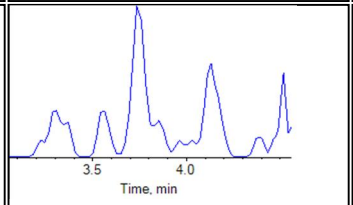
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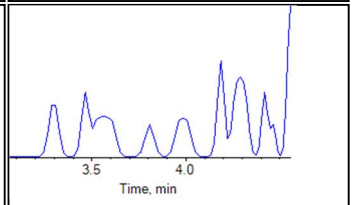
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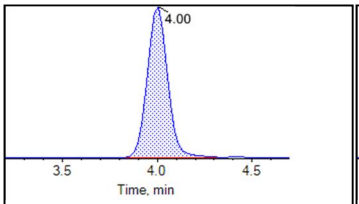


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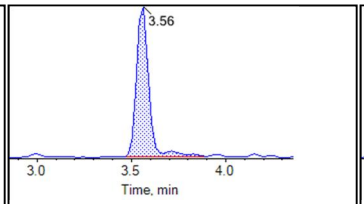


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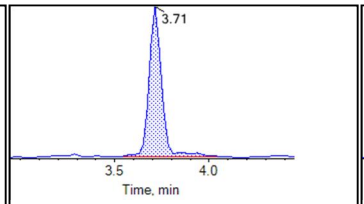
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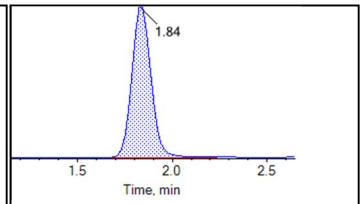
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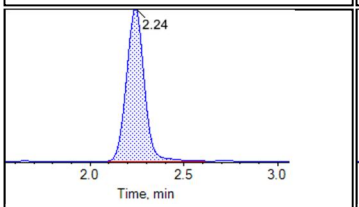
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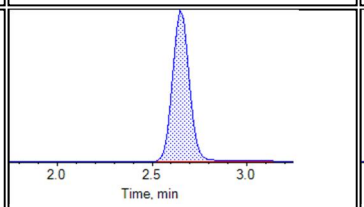
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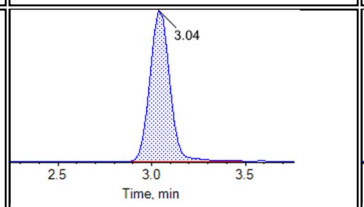
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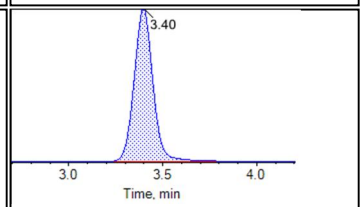
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13C8-PFOA



13C9-PFNA

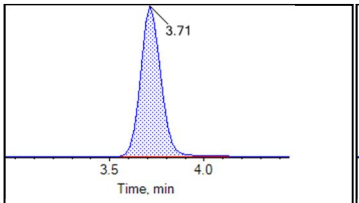


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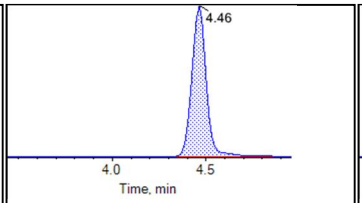
BATTELLE

Chromatogram Report

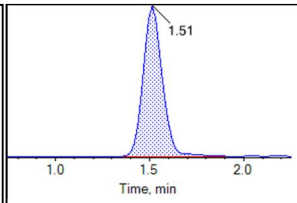
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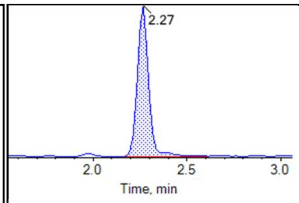
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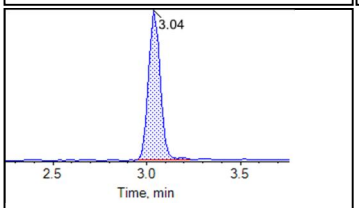
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13C3-PFBS



13C3-PFHxS



13C8-PFOS

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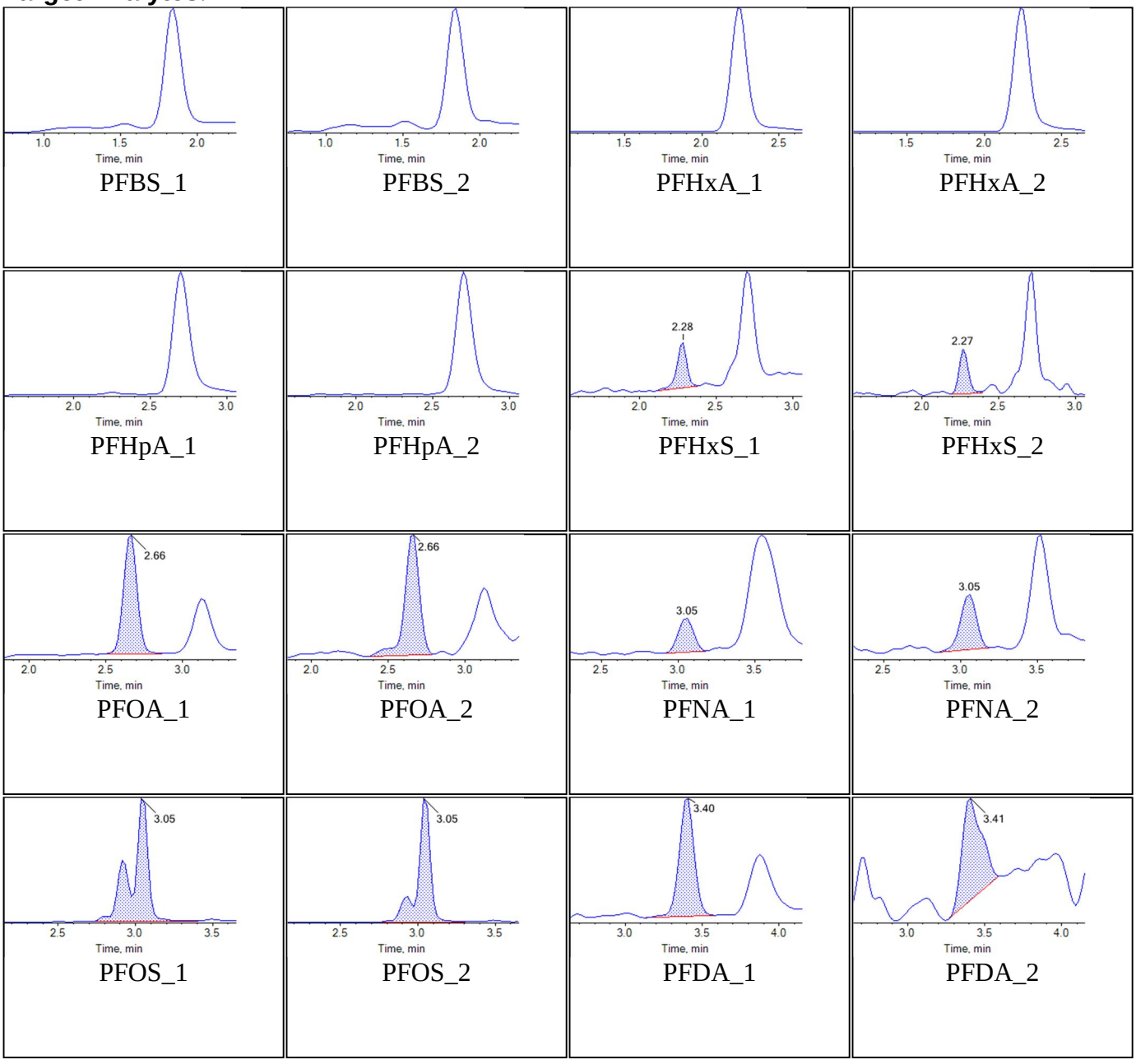
Chromatogram Report

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Sample Name	J8247-FS(0)	**Injection Vial**	22
Sample ID	VC-AQ-EB01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:23:13	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

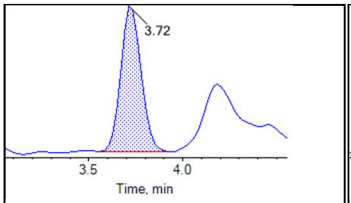
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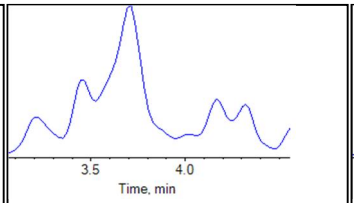
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Chromatogram Report

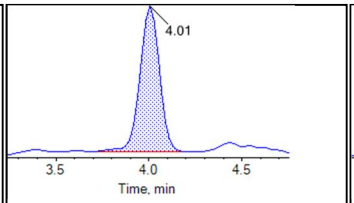
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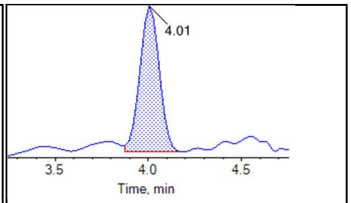
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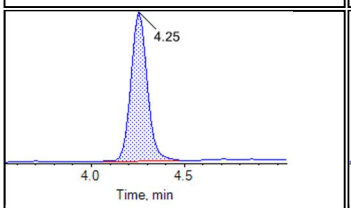
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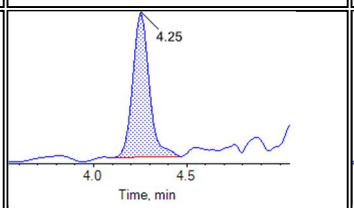
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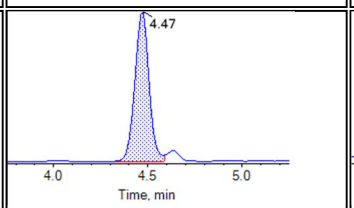
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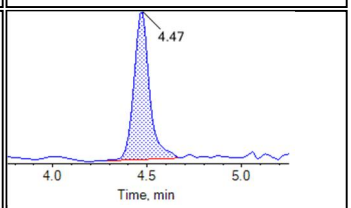
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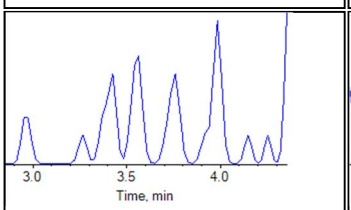
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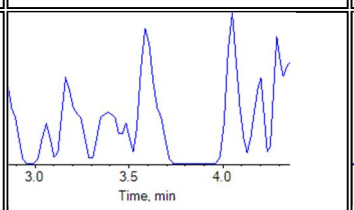
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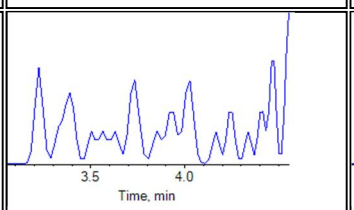
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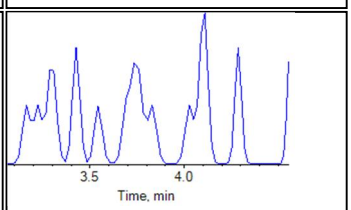
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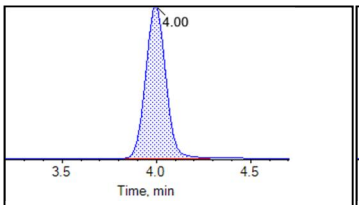


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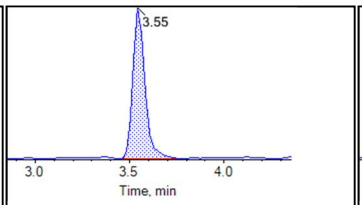


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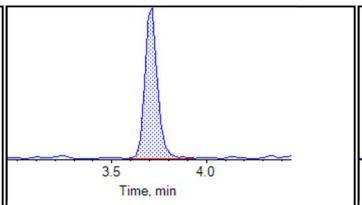
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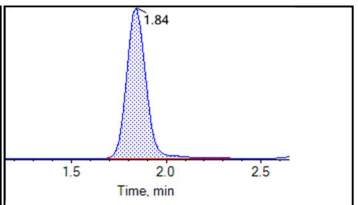
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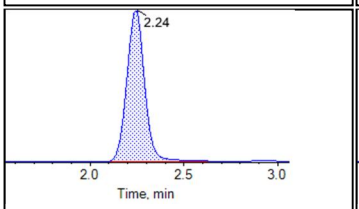
d3-MeFOSAA



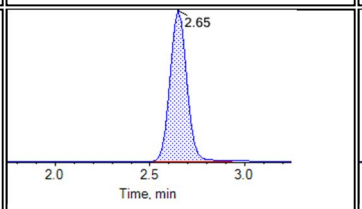
d5-EtFOSAA



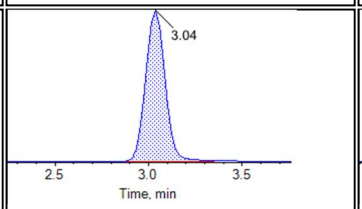
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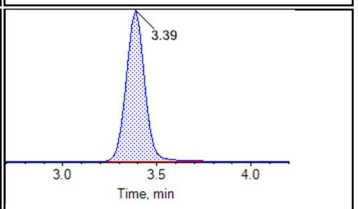
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13C8-PFOA



13C9-PFNA

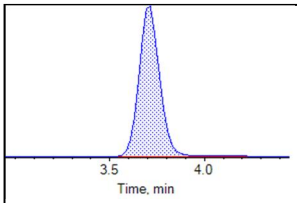


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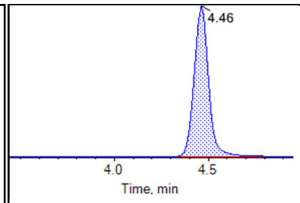
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Chromatogram Report

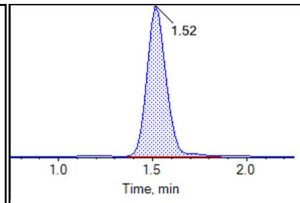
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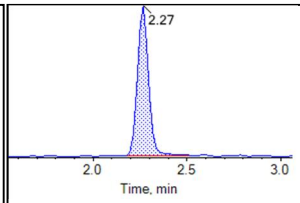
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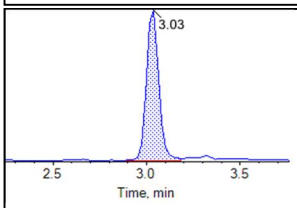
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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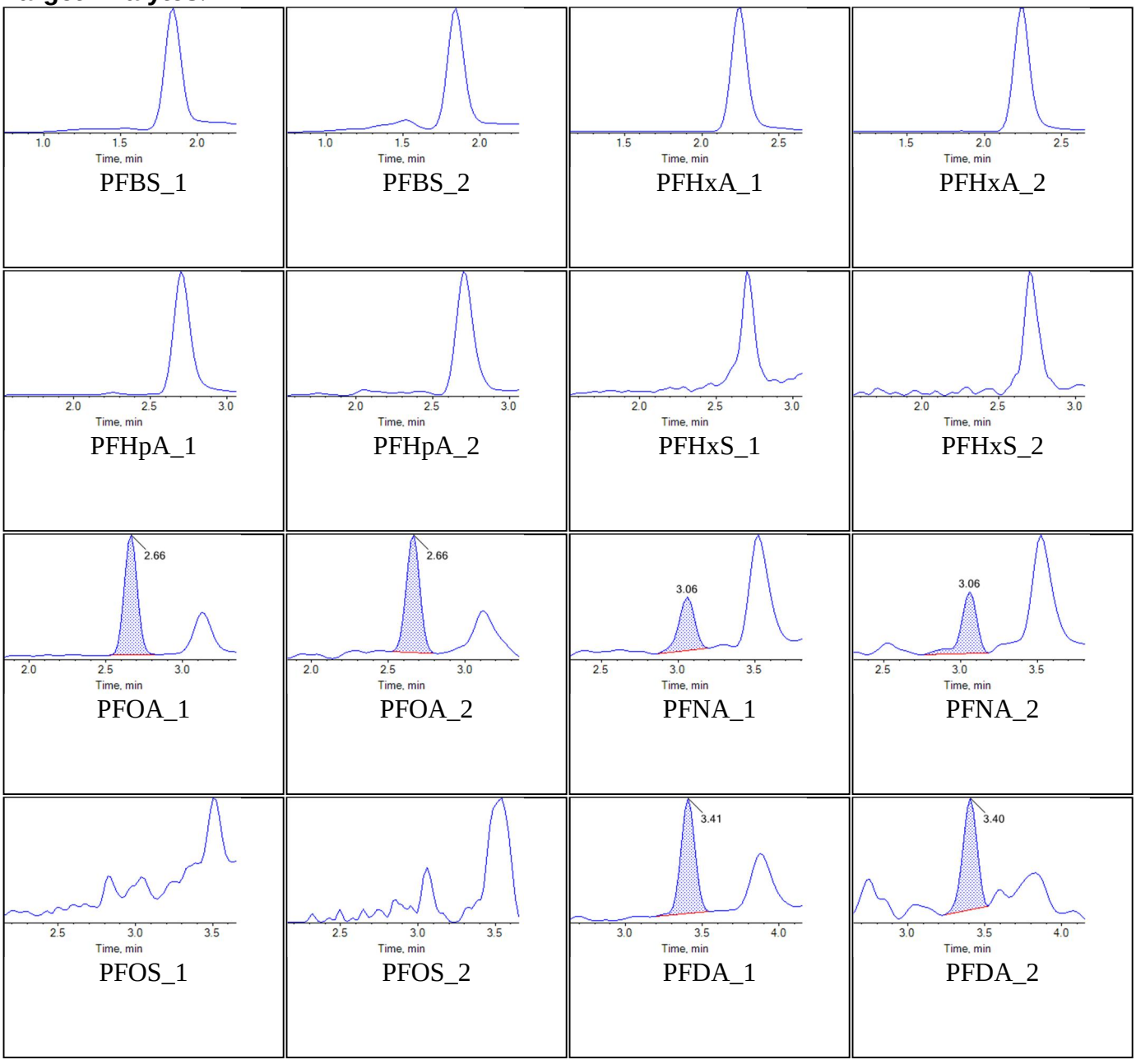
Chromatogram Report

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Printed: 05/10/2018 5:35:39 PM

Sample Name	J8276-FS(0)	**Injection Vial**	23
Sample ID	VC-SO-FB02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:34:06	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

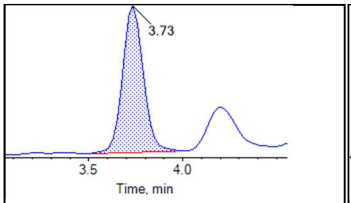
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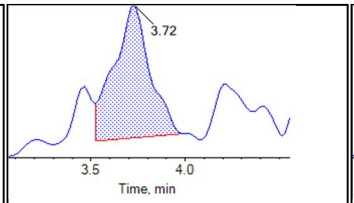
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Chromatogram Report

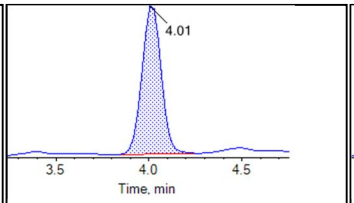
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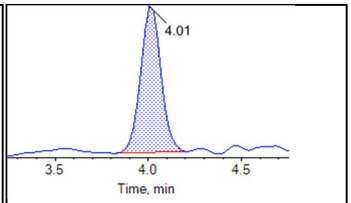
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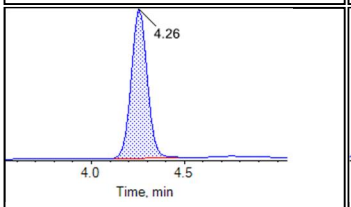
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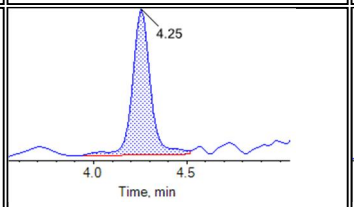
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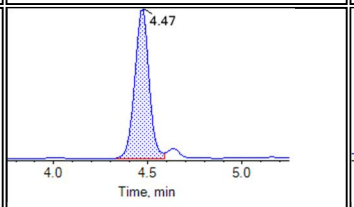
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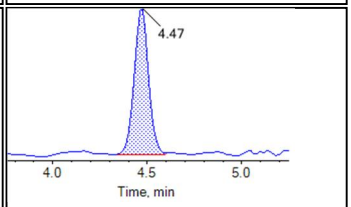
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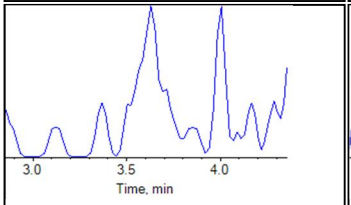
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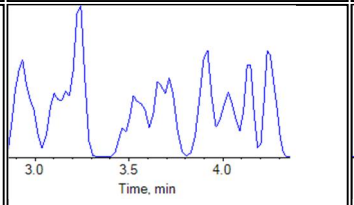
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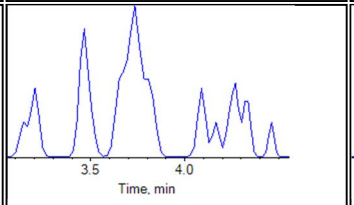
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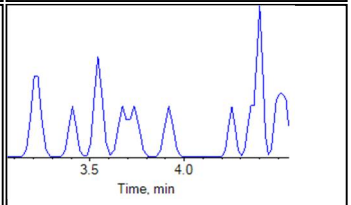
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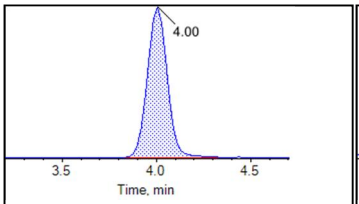


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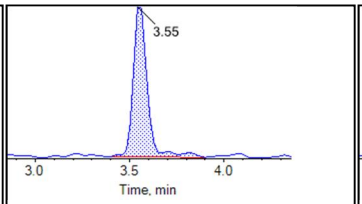


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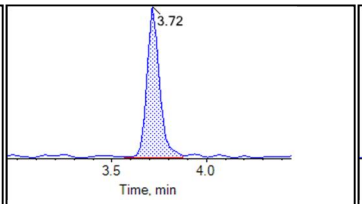
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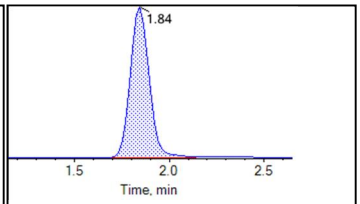
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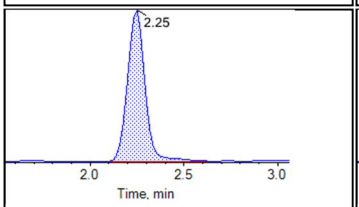
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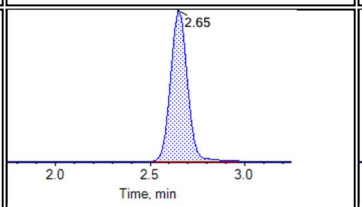
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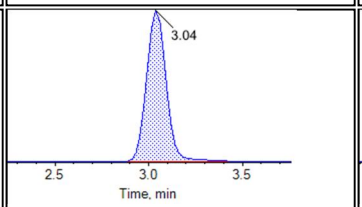
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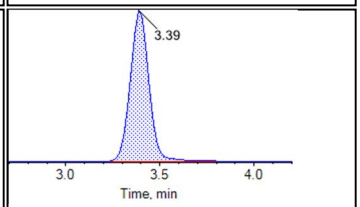
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13C8-PFOA



13C9-PFNA

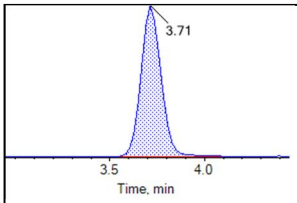


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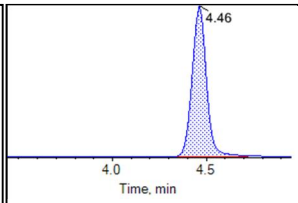
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Chromatogram Report

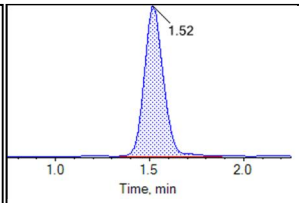
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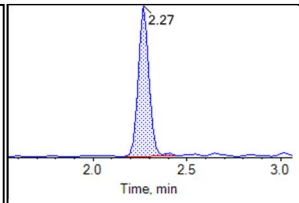
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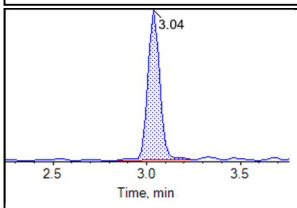
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13C3-PFBS



13C3-PFHxS



13C8-PFOS

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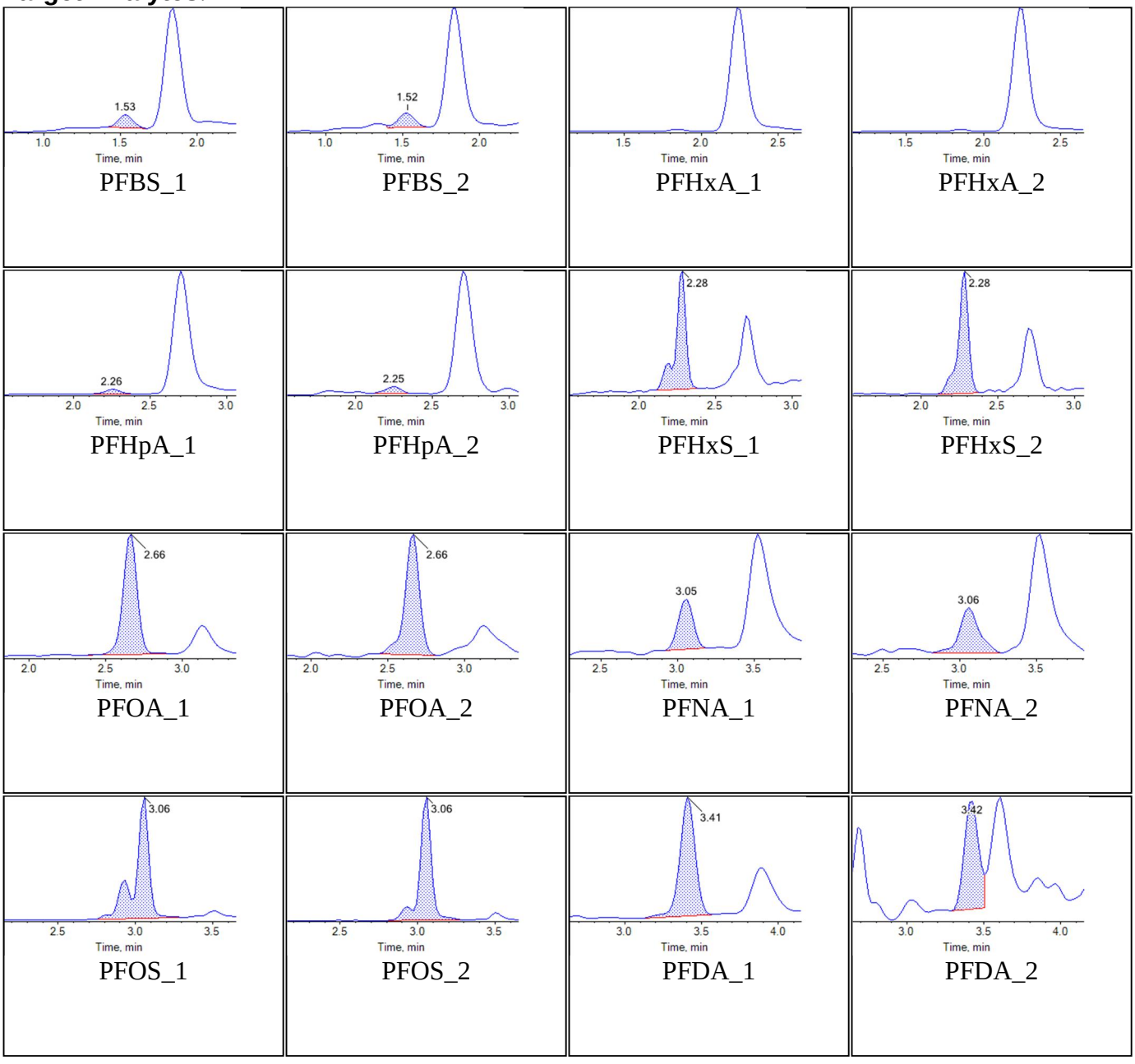
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:35:44 PM

Sample Name	J8277-FS(0)	**Injection Vial**	24
Sample ID	VC-SO-EB02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:44:58	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

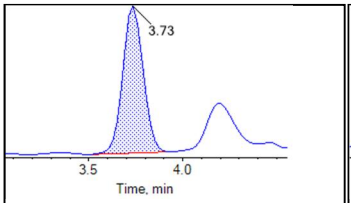
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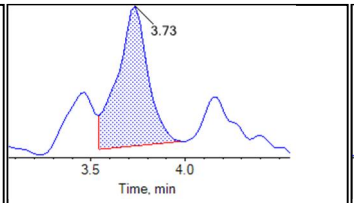
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Chromatogram Report

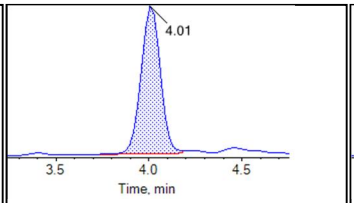
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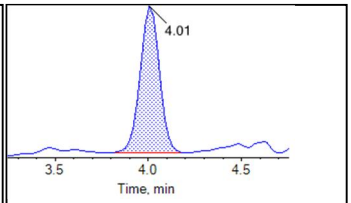
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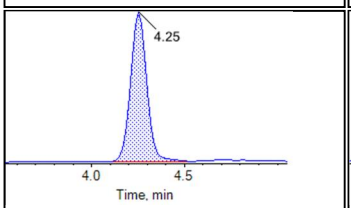
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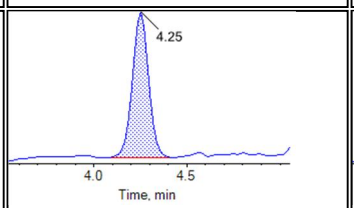
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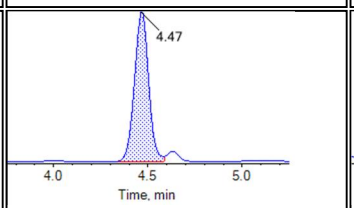
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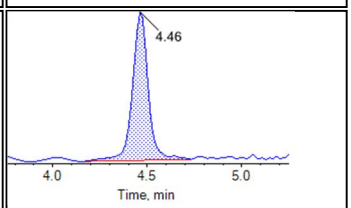
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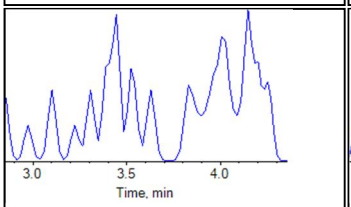
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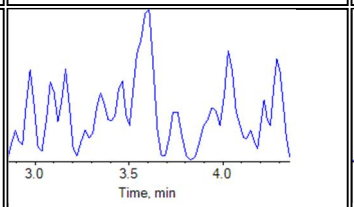
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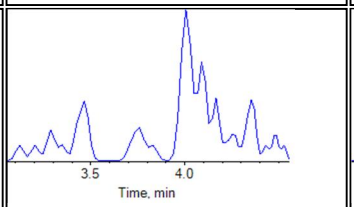
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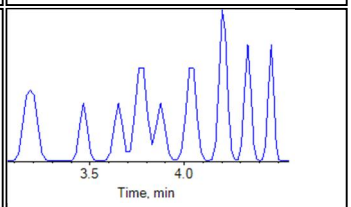
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NMeFOSAA_2

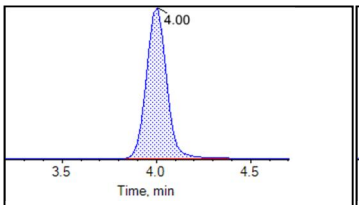


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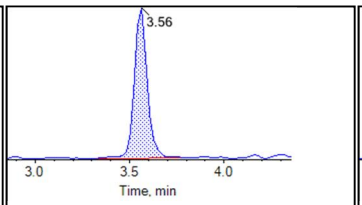


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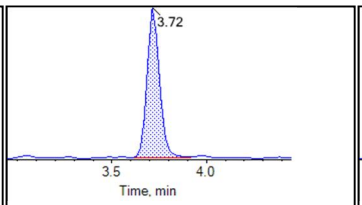
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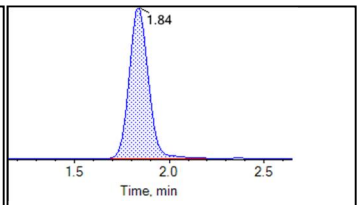
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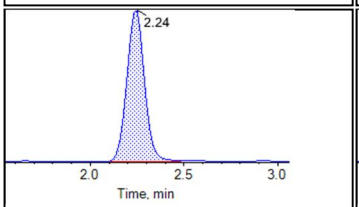
d3-MeFOSAA



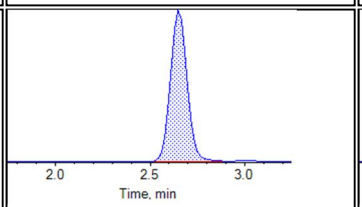
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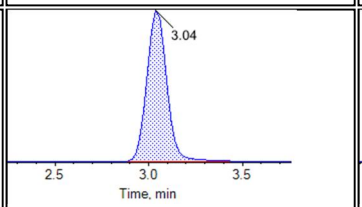
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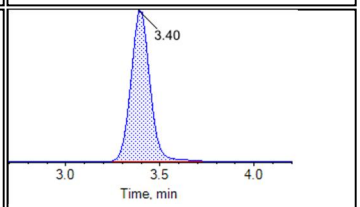
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13C8-PFOA



13C9-PFNA

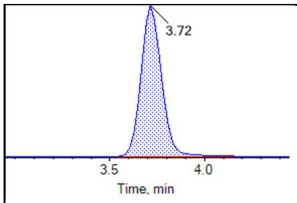


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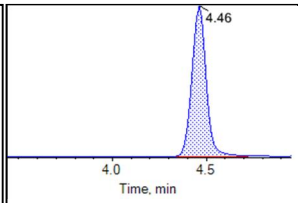
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Chromatogram Report

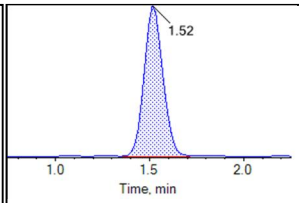
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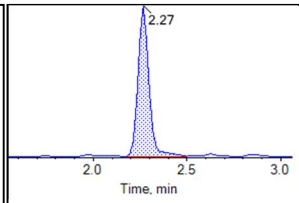
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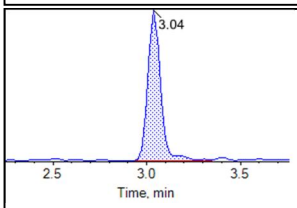
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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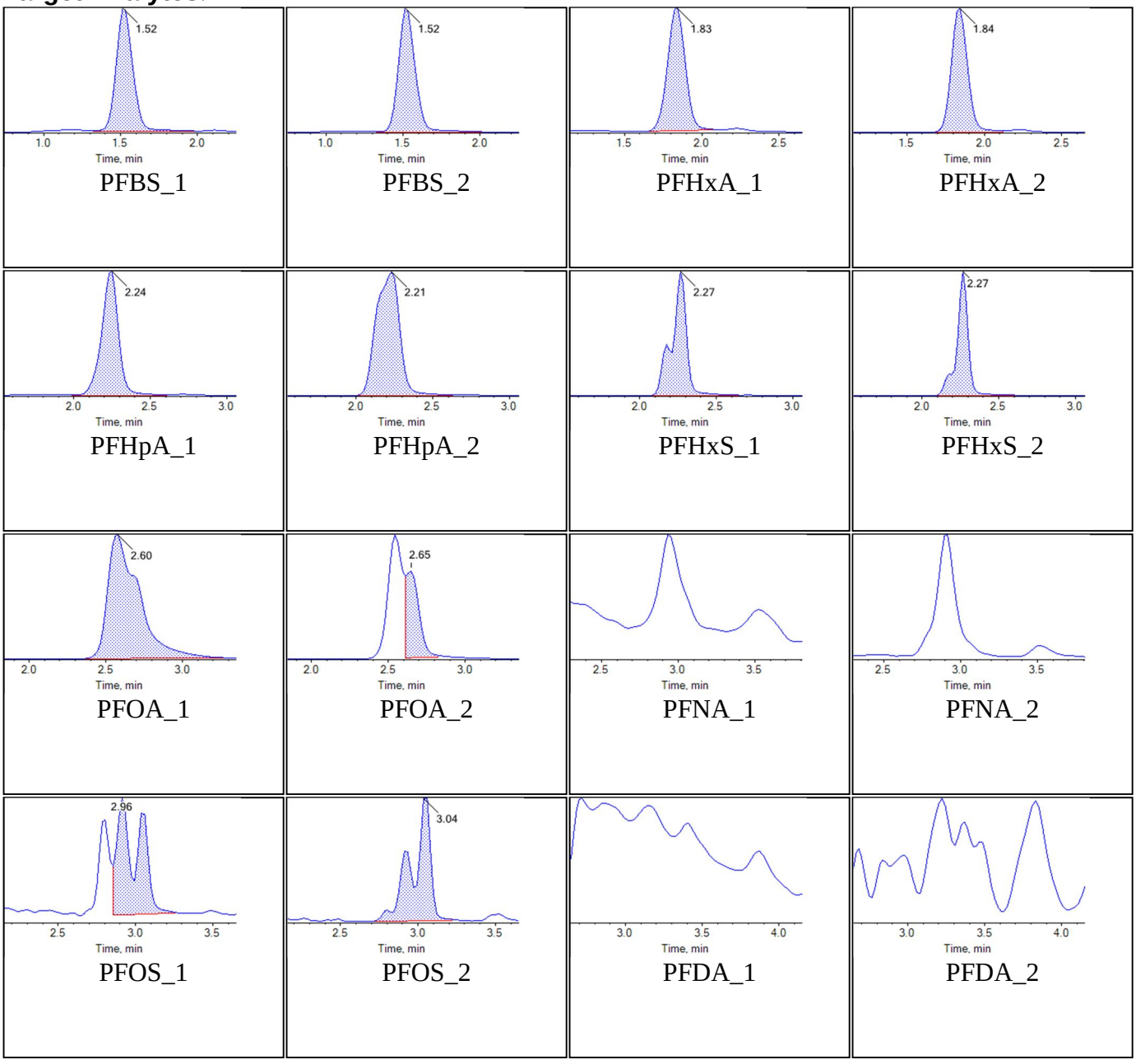
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:35:49 PM

Sample Name	J8259-FS(0)	**Injection Vial**	25
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:55:49	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

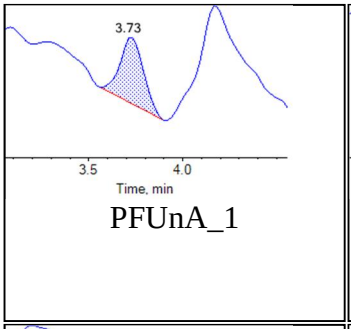
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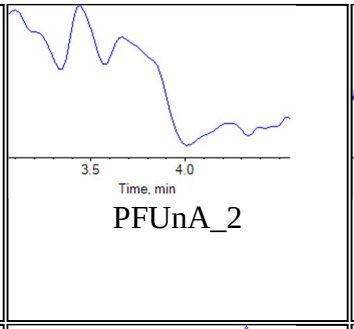
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Chromatogram Report

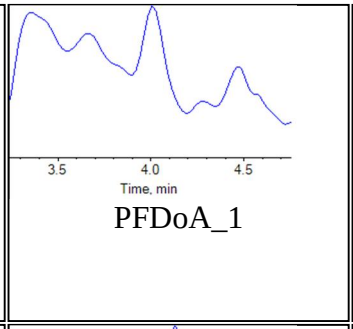
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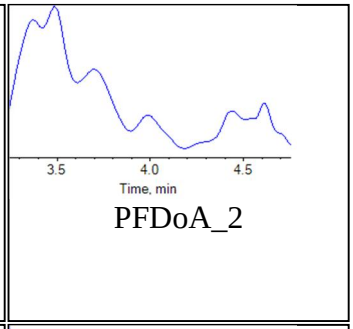
PFUnA_1



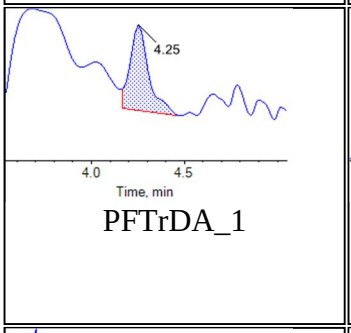
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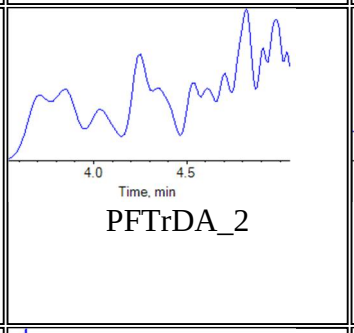
PFDoA_1



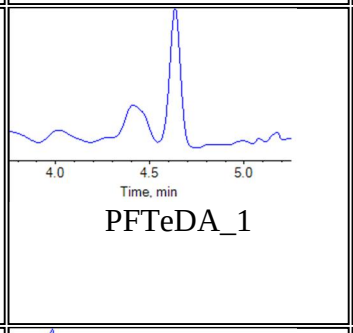
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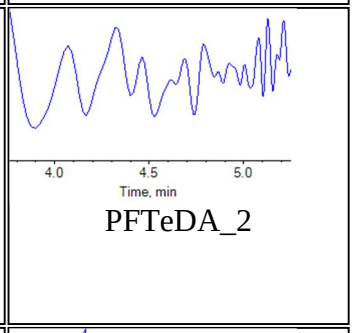
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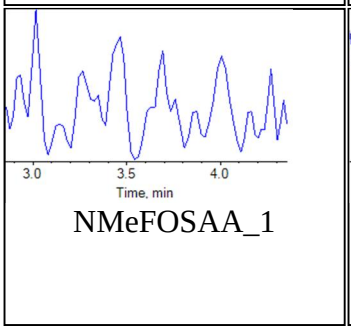
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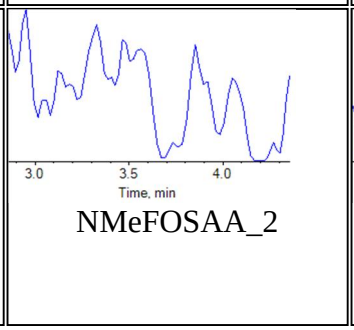
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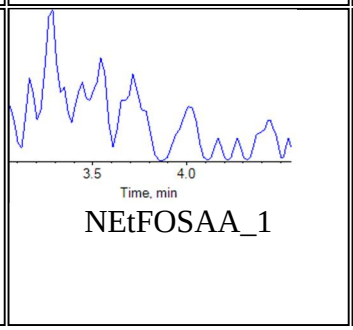
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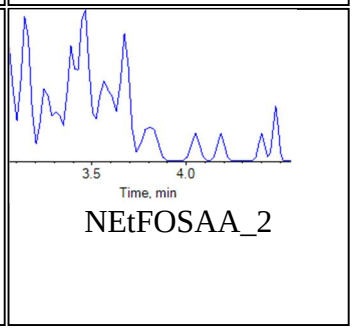
NMeFOSAA_1



NMeFOSAA_2

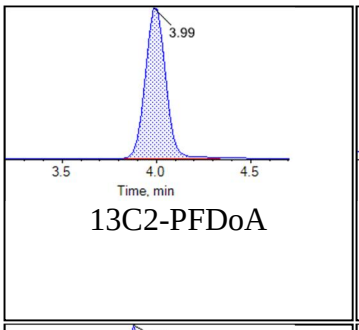


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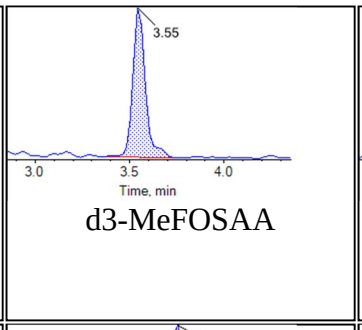


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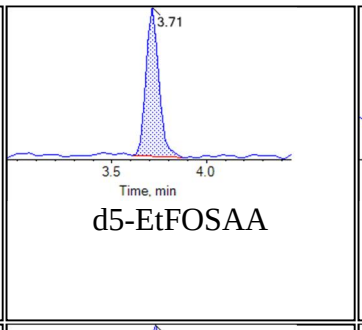
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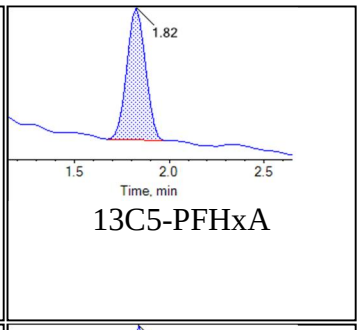
13C2-PFDoA



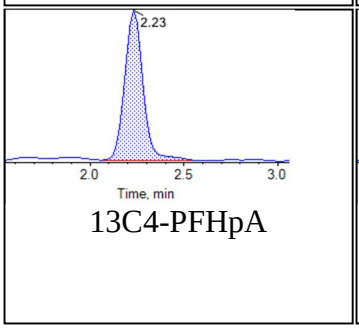
d3-MeFOSAA



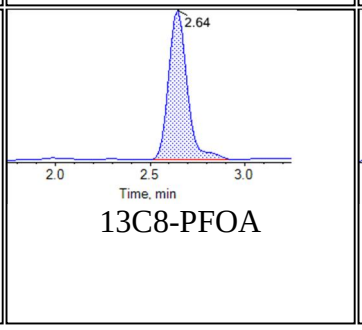
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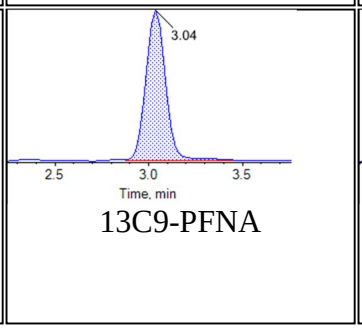
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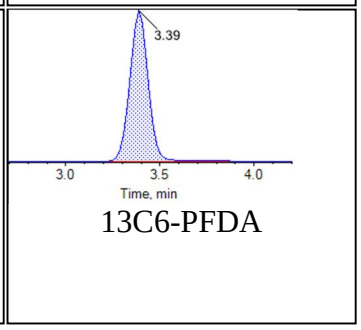
13C4-PFHpA



13C8-PFOA



13C9-PFNA

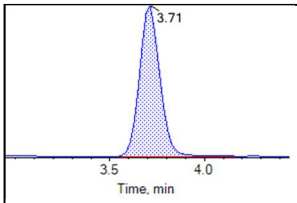


13C6-PFDA

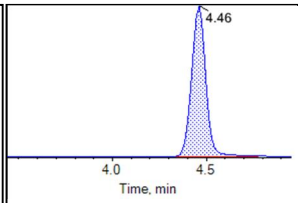
BATTELLE

Chromatogram Report

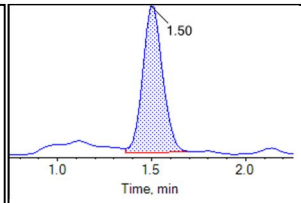
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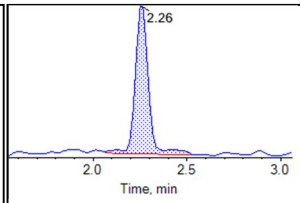
13C7-PFUnA



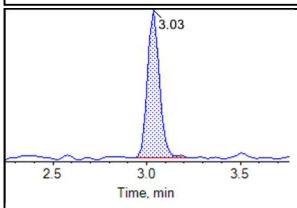
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

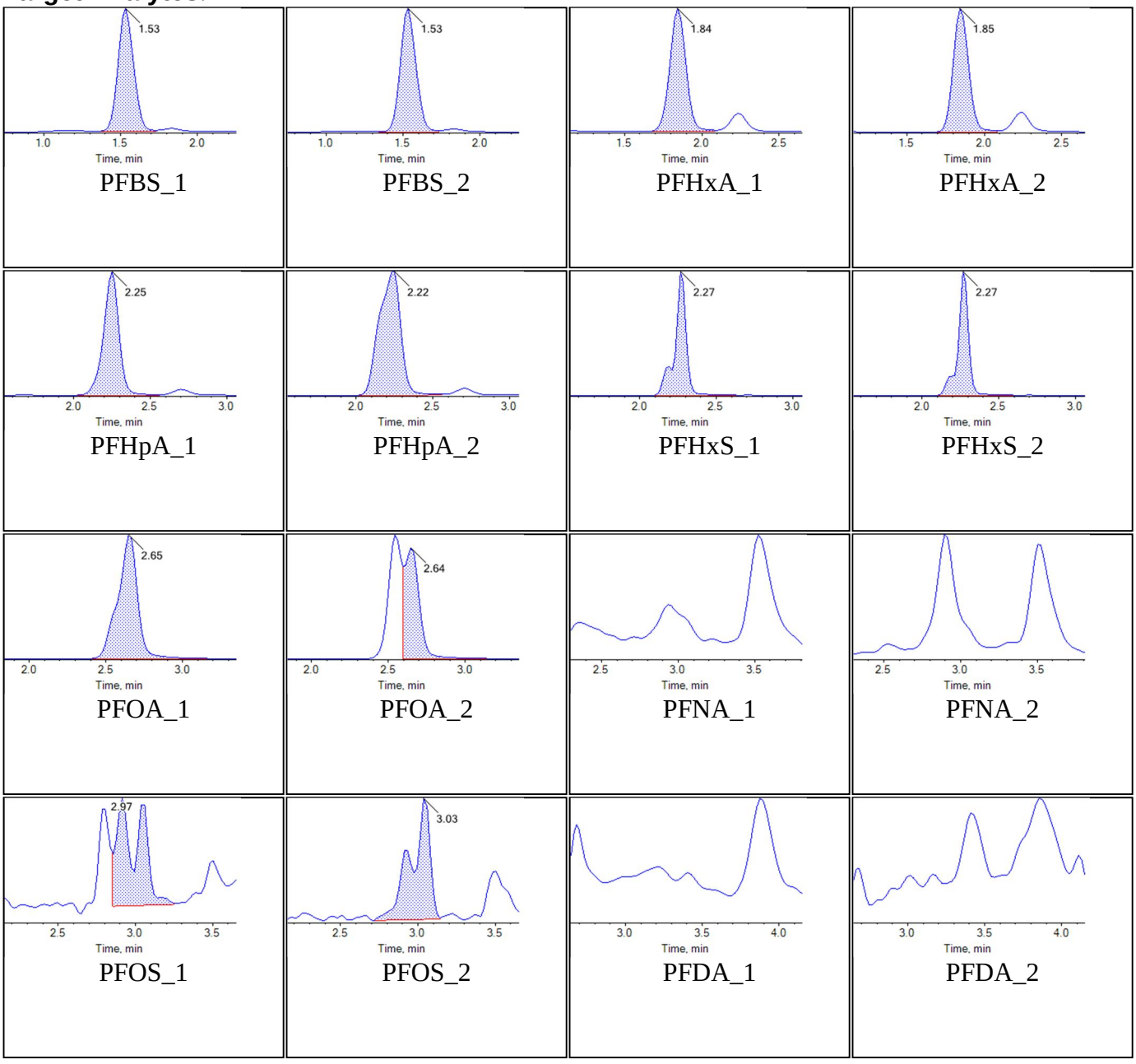
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:35:55 PM

Sample Name	J8259-FS-D(3)	**Injection Vial**	26
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:06:43	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

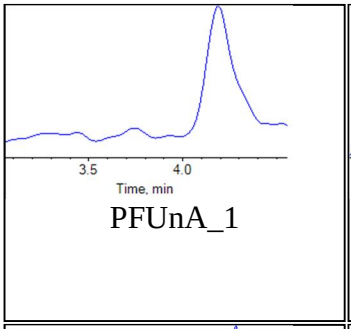
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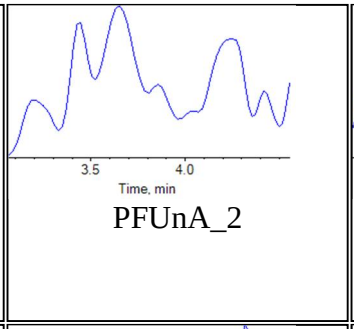
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Chromatogram Report

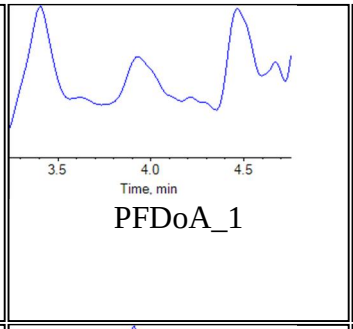
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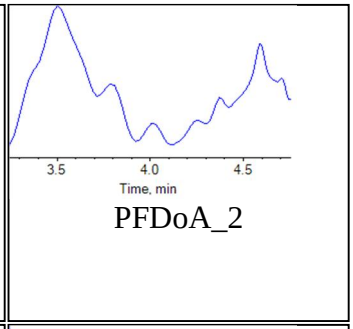
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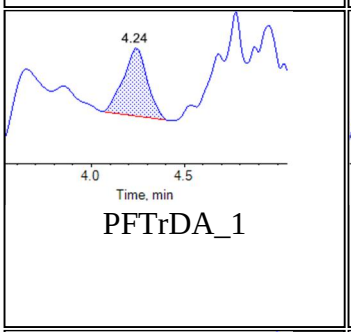
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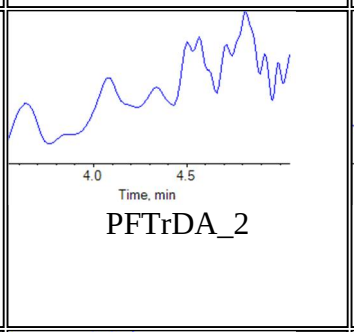
PFDoA_1



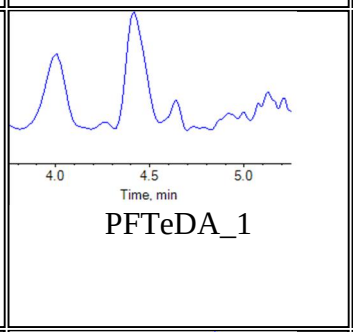
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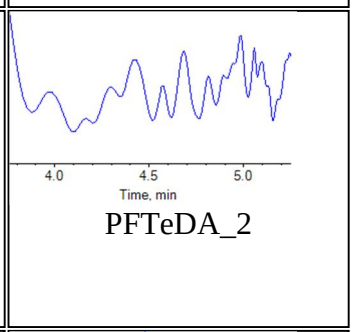
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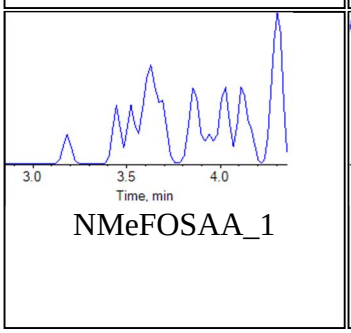
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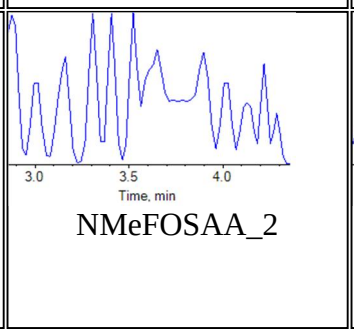
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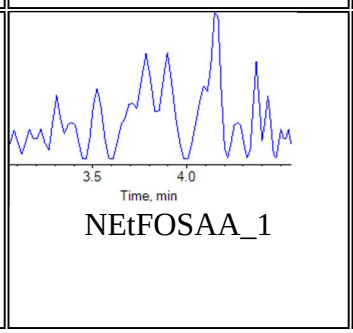
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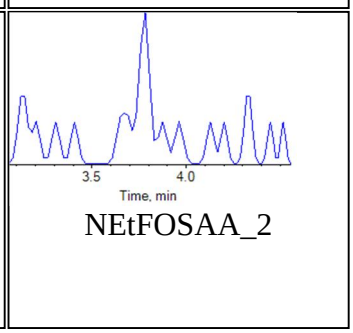
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NMeFOSAA_2

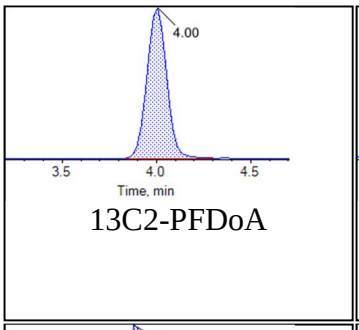


NEtFOSAA_1

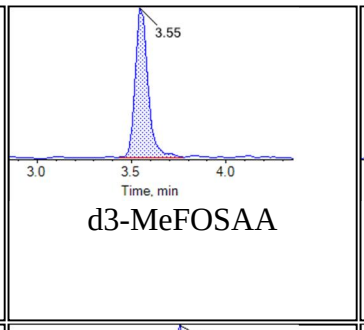


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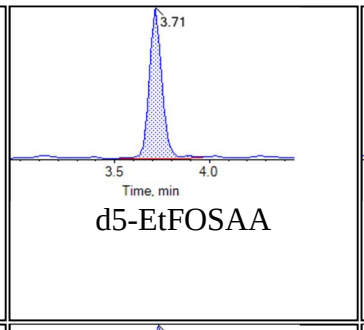
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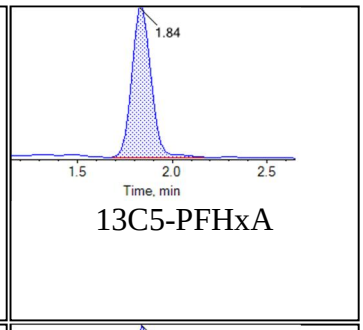
13C2-PFDoA



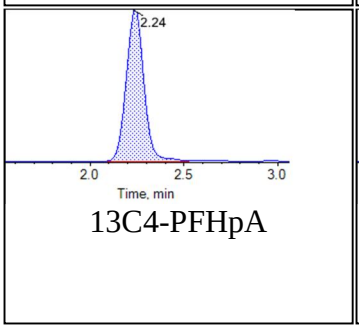
d3-MeFOSAA



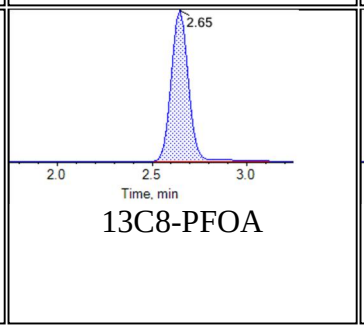
d5-EtFOSAA



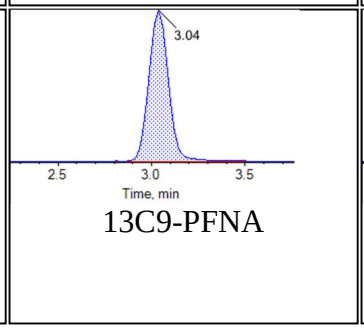
13C5-PFHxA



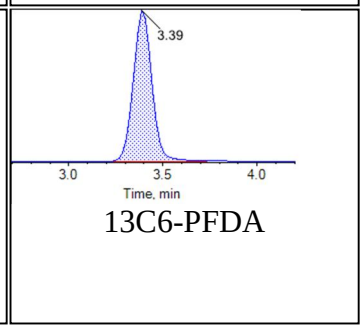
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13C8-PFOA



13C9-PFNA

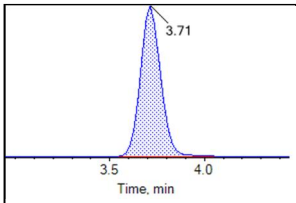


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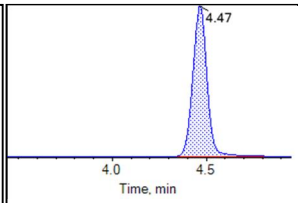
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Chromatogram Report

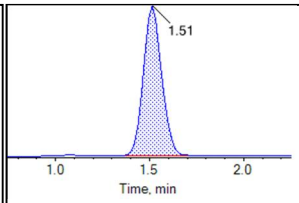
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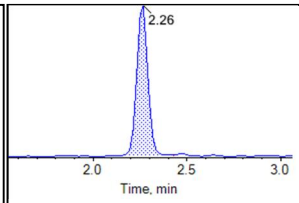
13C7-PFUnA



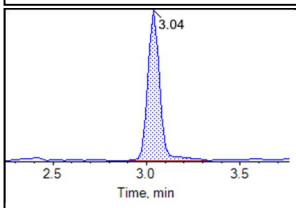
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

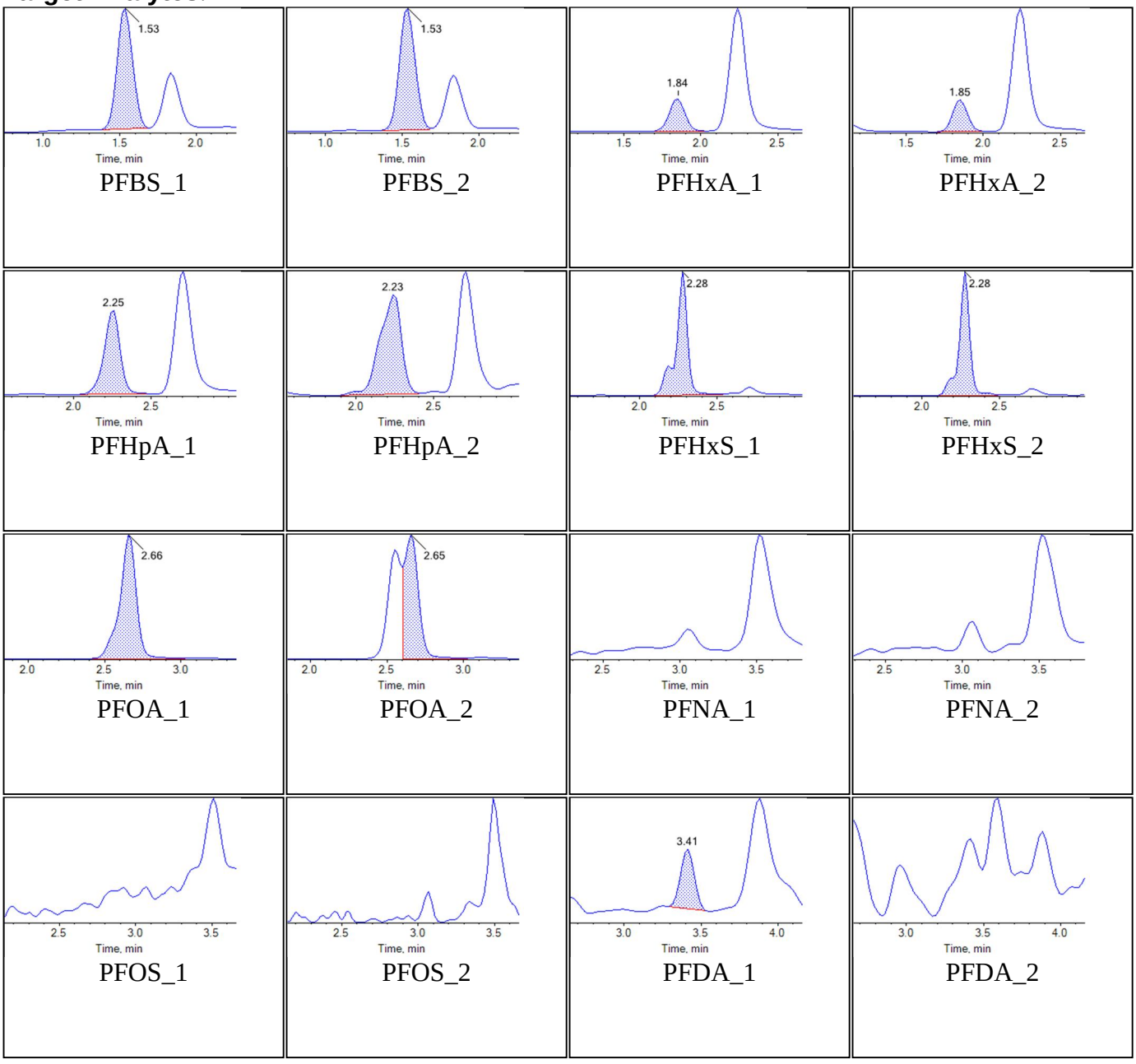
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:36:00 PM

Sample Name	J8259-FS-D(7)	**Injection Vial**	27
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:17:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

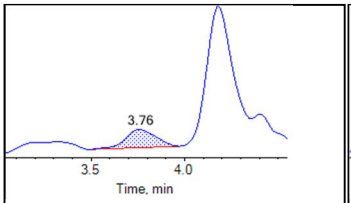
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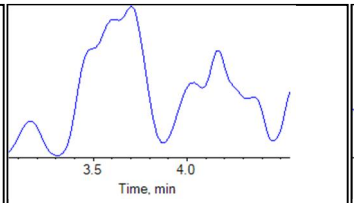
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Chromatogram Report

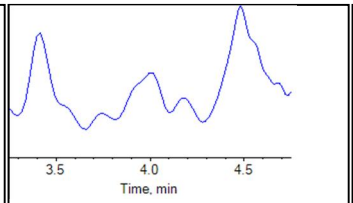
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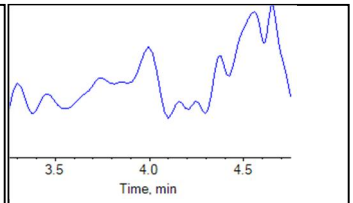
PFUnA_1



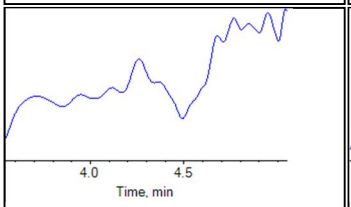
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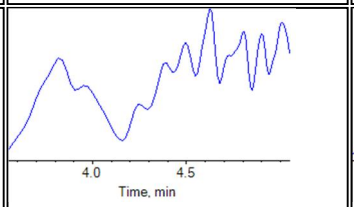
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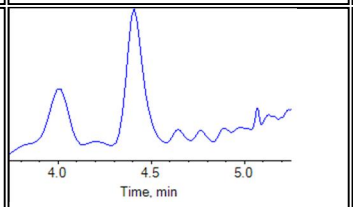
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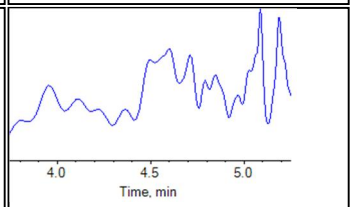
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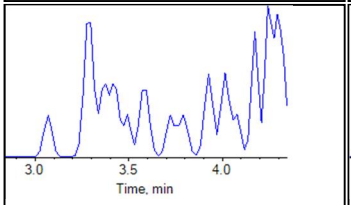
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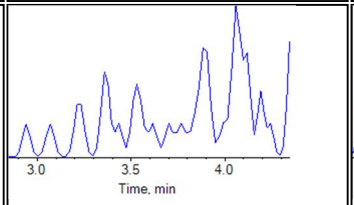
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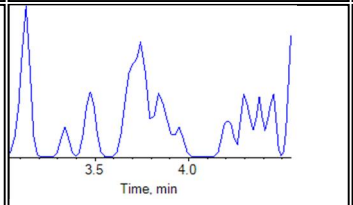
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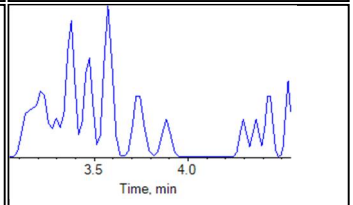
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NMeFOSAA_2

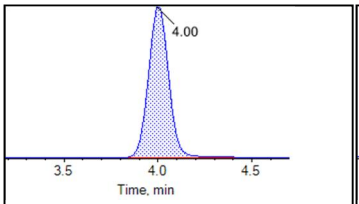


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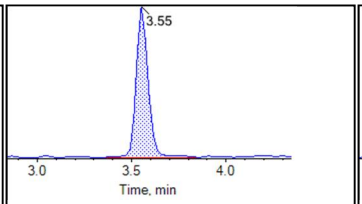


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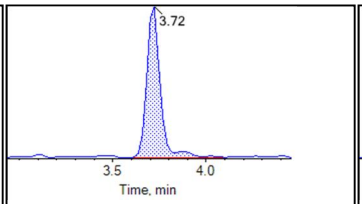
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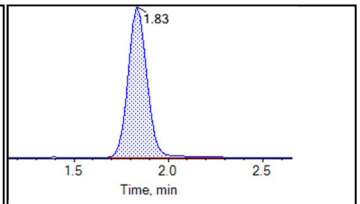
13C2-PFDoA



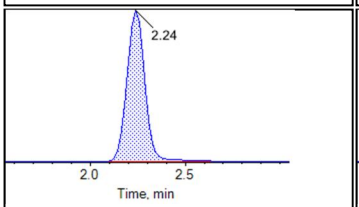
d3-MeFOSAA



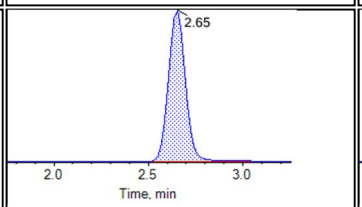
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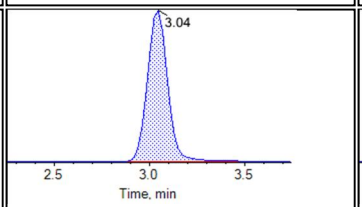
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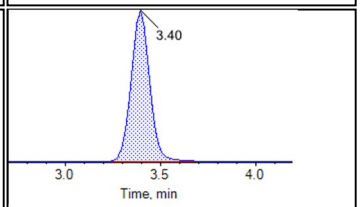
13C4-PFHpA



13C8-PFOA



13C9-PFNA

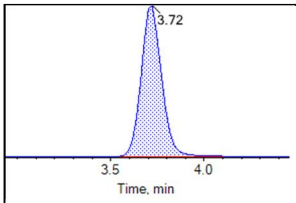


13C6-PFDA

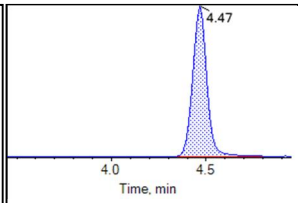
BATTELLE

Chromatogram Report

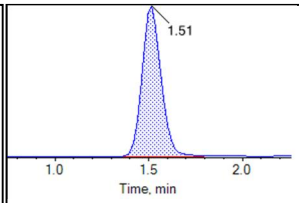
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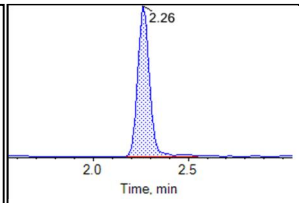
13C7-PFUnA



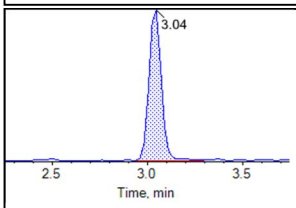
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

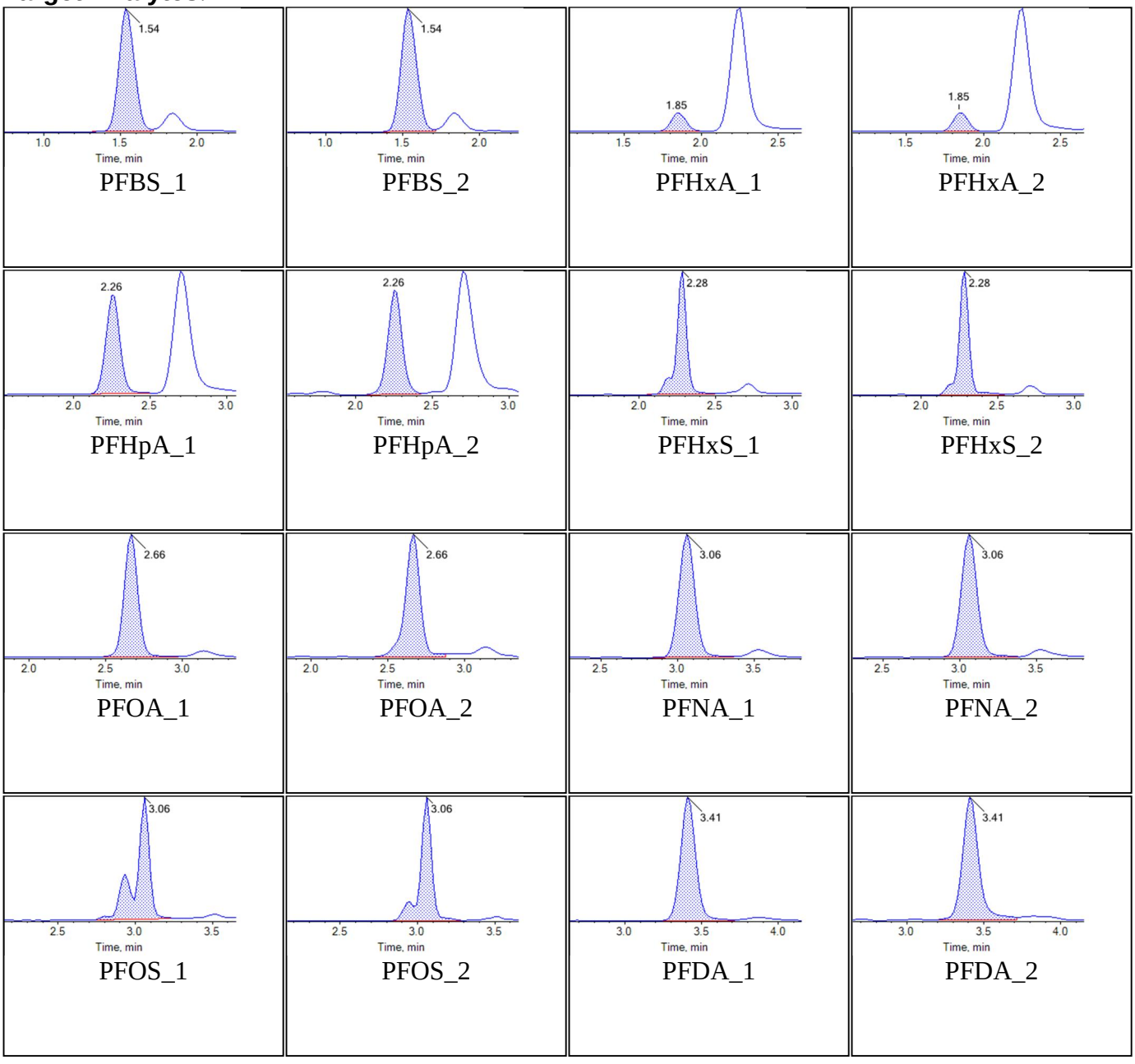
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:36:10 PM

Sample Name	KB76 CCV	**Injection Vial**	29
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:39:21	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

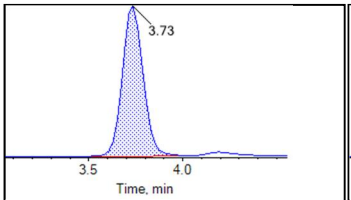
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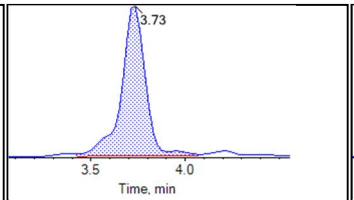
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Chromatogram Report

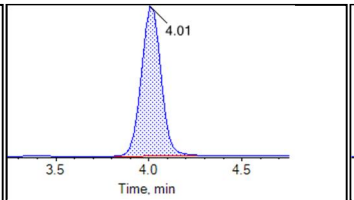
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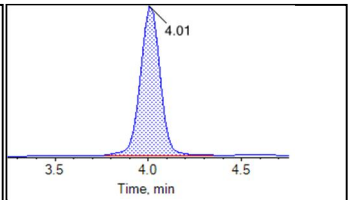
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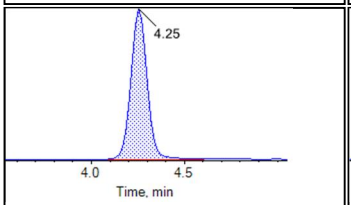
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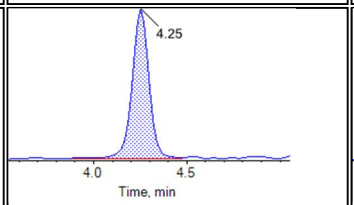
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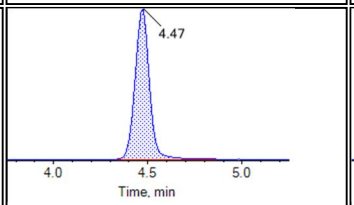
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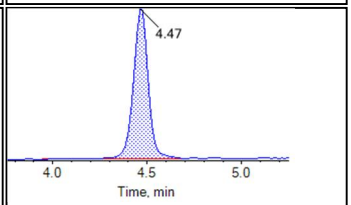
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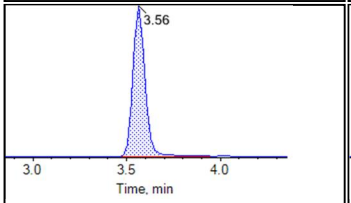
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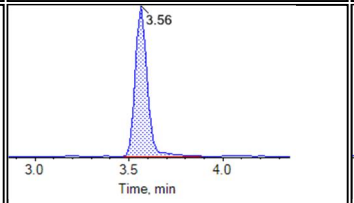
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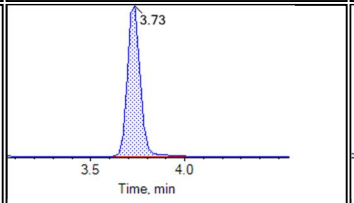
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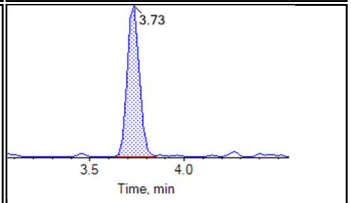
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NMeFOSAA_2

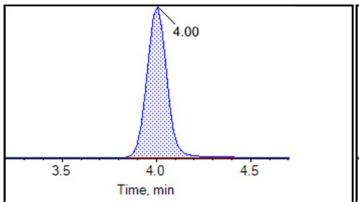


NEtFOSAA_1

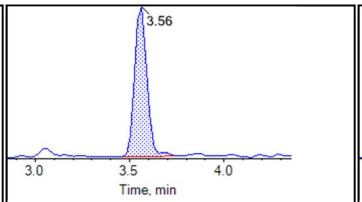


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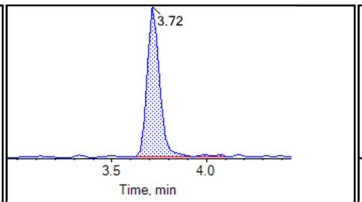
Internal Standards:



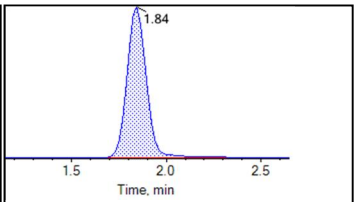
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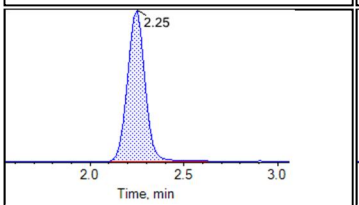
d3-MeFOSAA



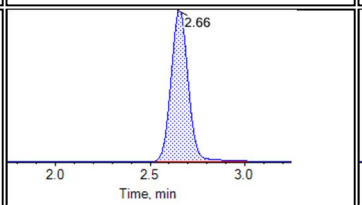
d5-EtFOSAA



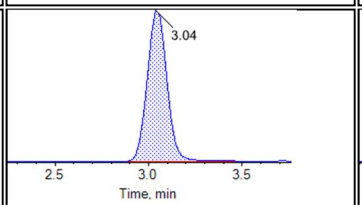
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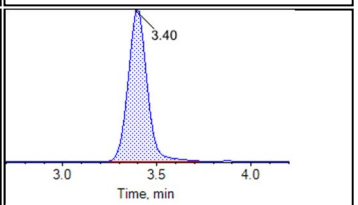
13C4-PFHpA



13C8-PFOA



13C9-PFNA

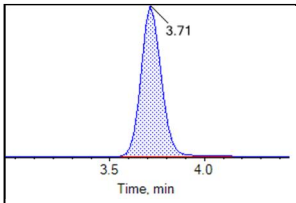


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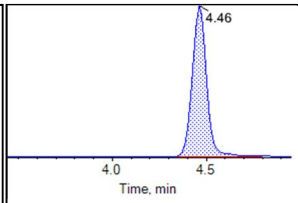
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Chromatogram Report

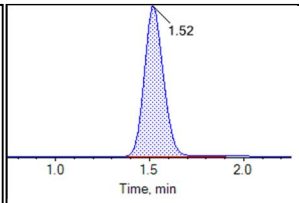
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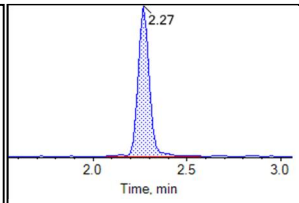
13C7-PFUnA



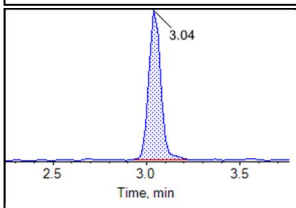
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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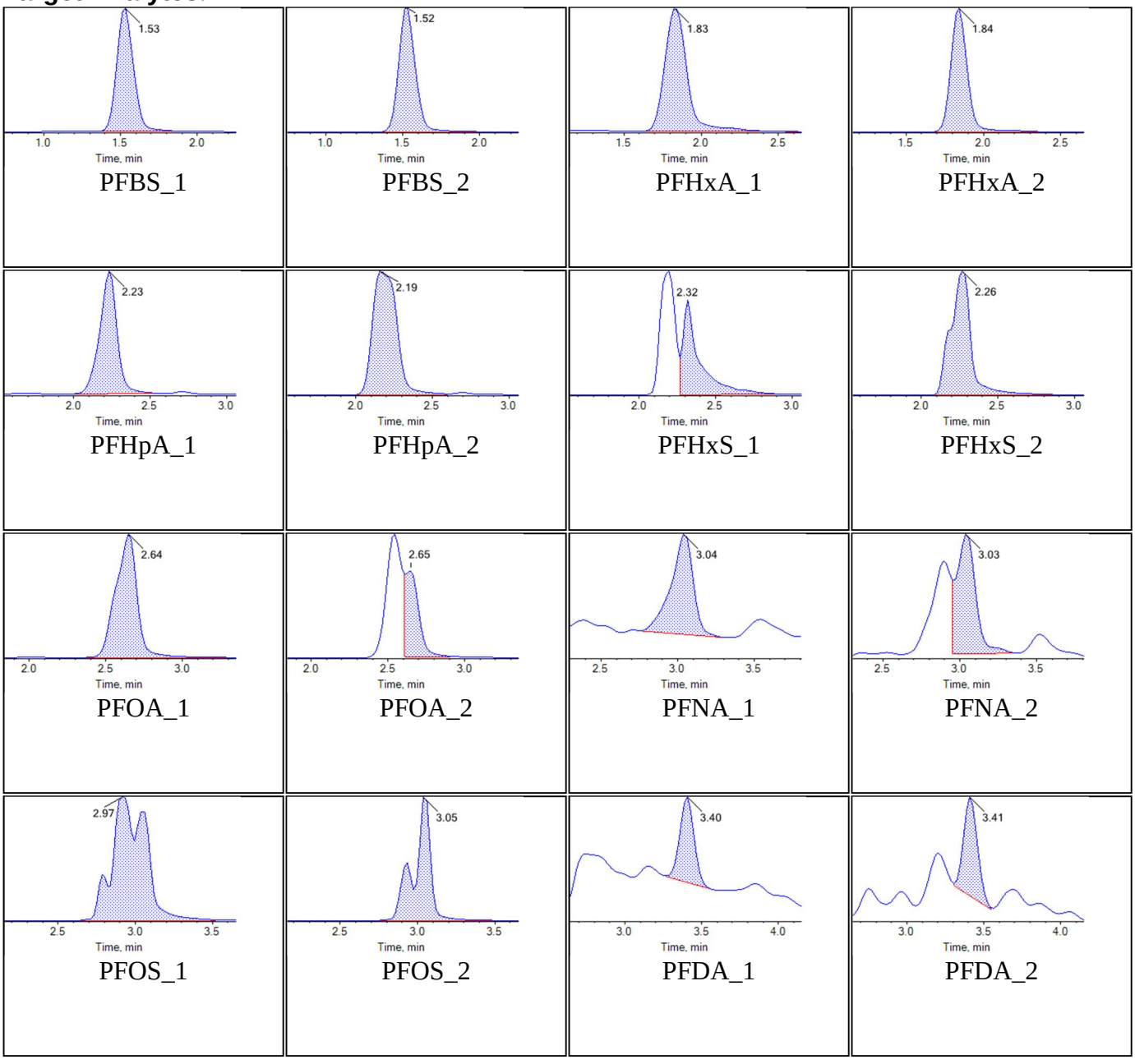
Chromatogram Report

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Printed: 05/10/2018 5:36:20 PM

Sample Name	J8260-FS(0)	**Injection Vial**	30
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:01:07	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

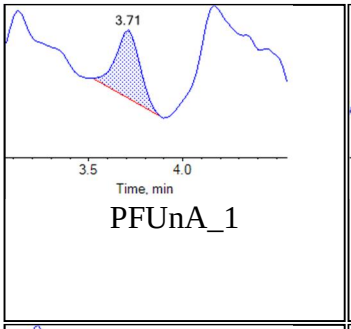
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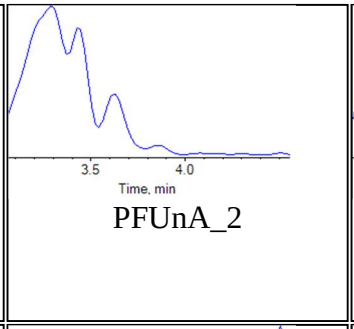
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Chromatogram Report

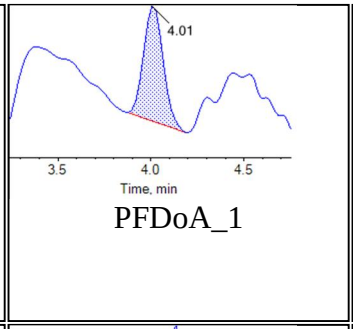
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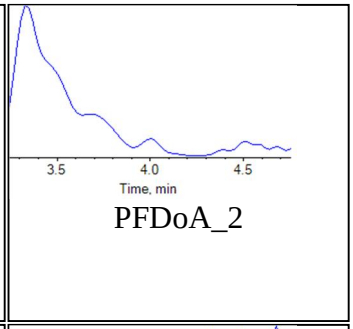
PFUnA_1



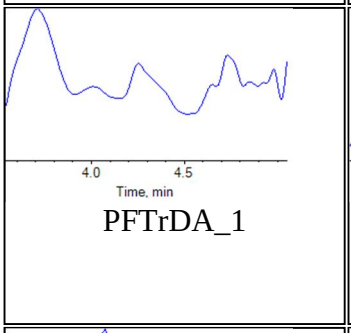
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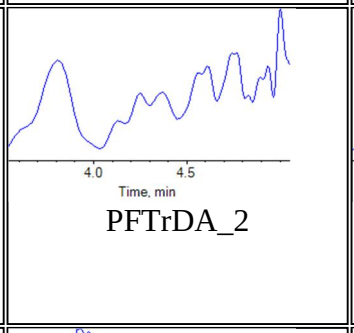
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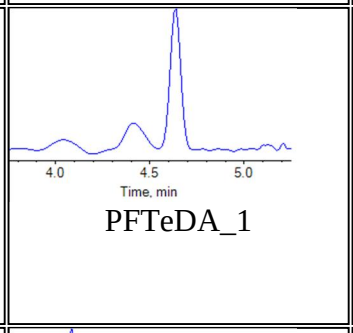
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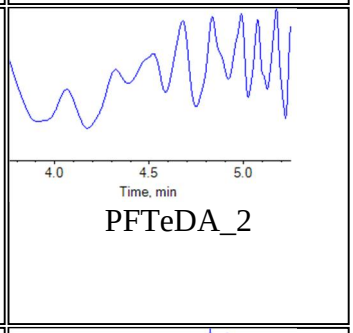
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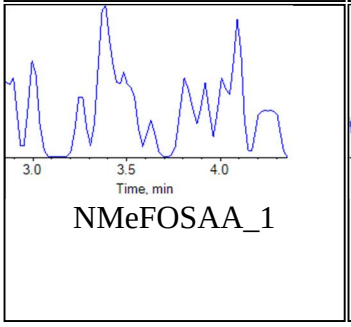
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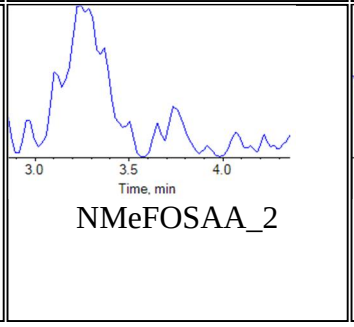
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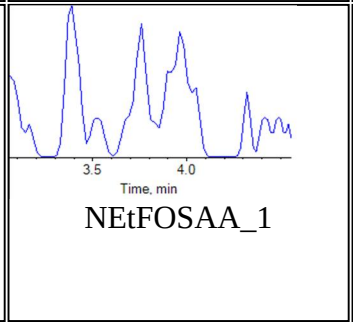
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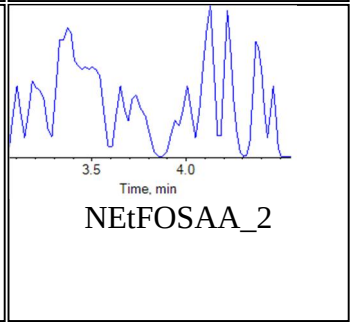
NMeFOSAA_1



NMeFOSAA_2

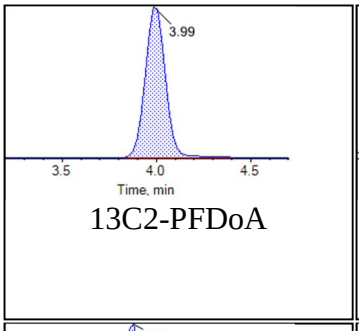


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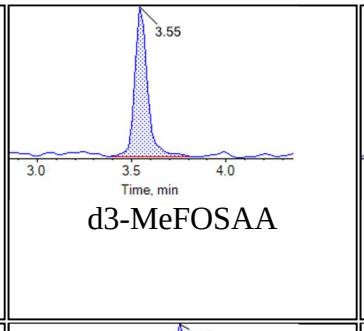


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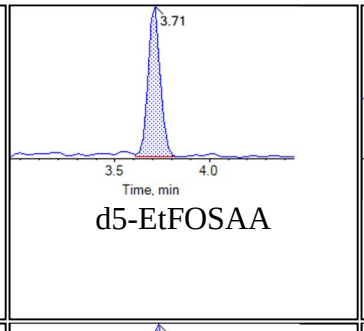
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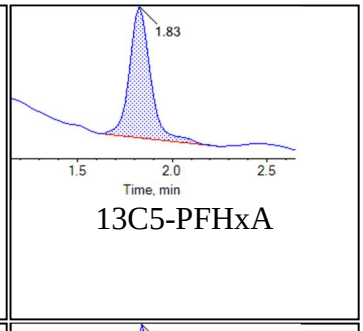
13C2-PFDoA



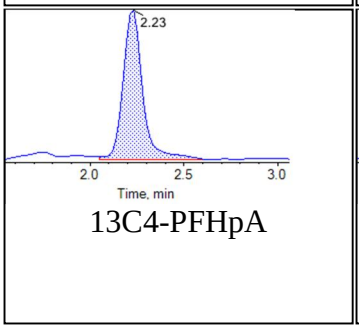
d3-MeFOSAA



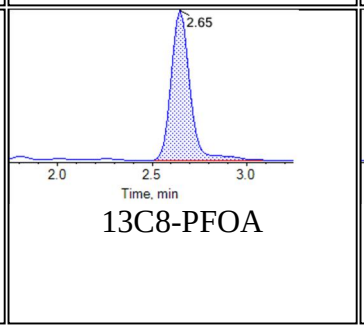
d5-EtFOSAA



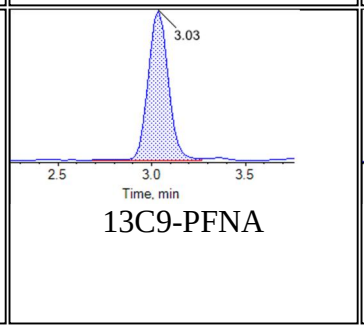
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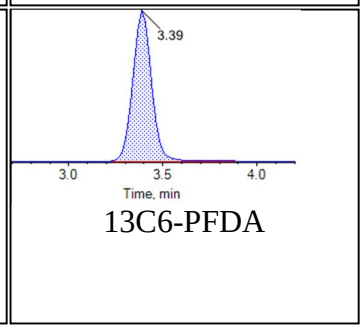
13C4-PFHpA



13C8-PFOA



13C9-PFNA

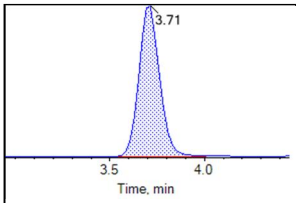


13C6-PFDA

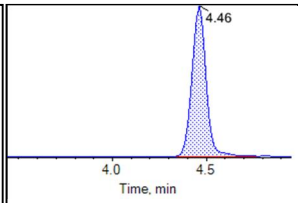
BATTELLE

Chromatogram Report

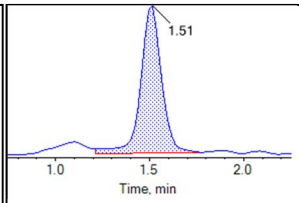
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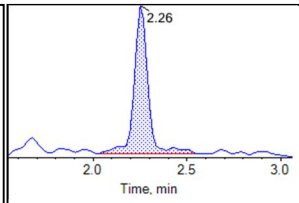
13C7-PFUnA



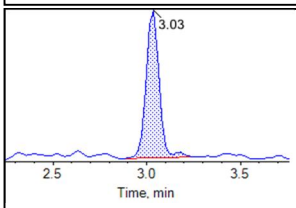
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

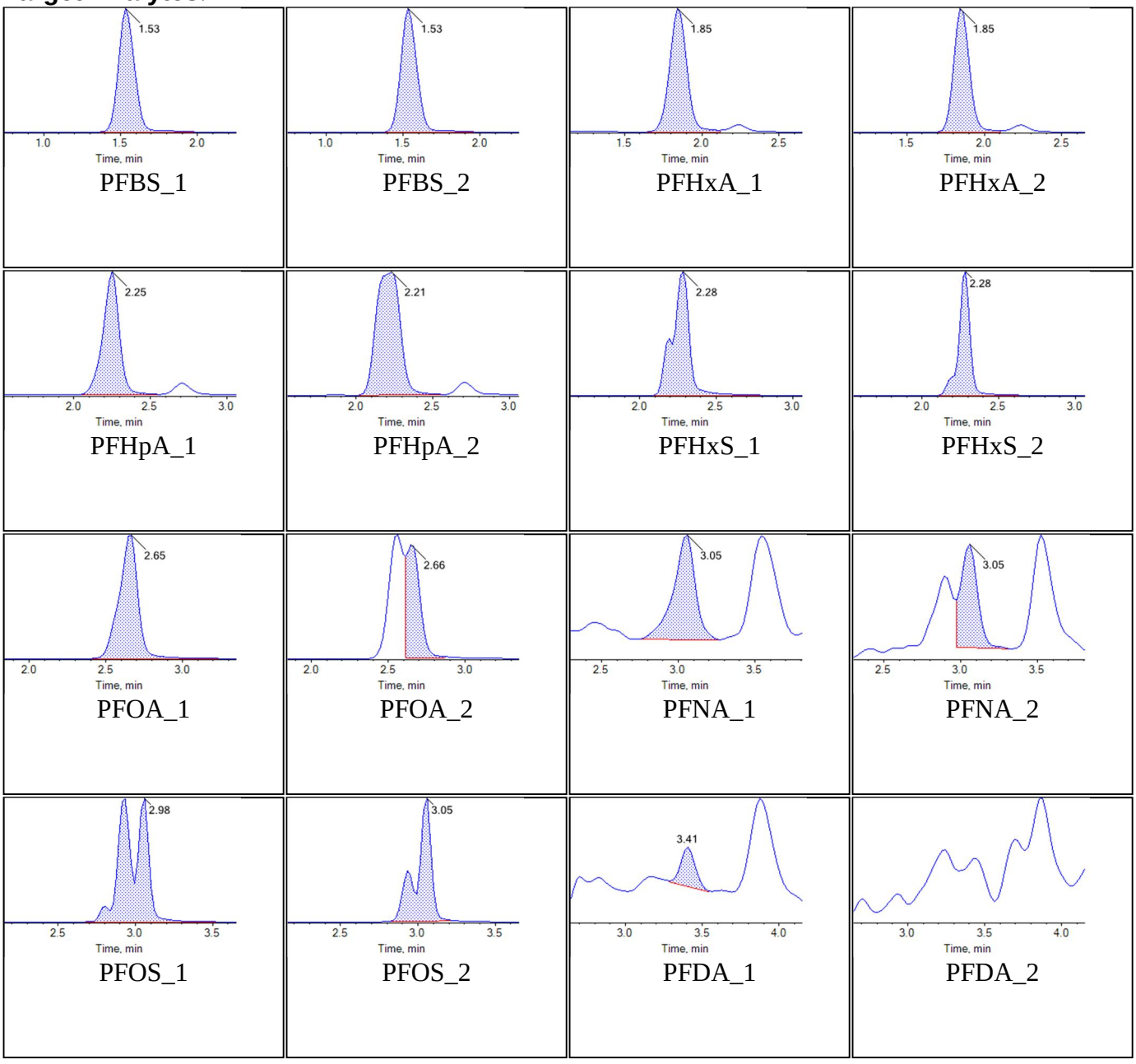
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:36:25 PM

Sample Name	J8260-FS-D(3)	**Injection Vial**	31
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:11:59	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

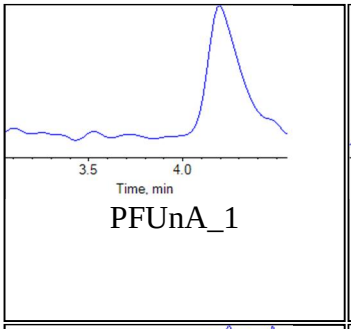
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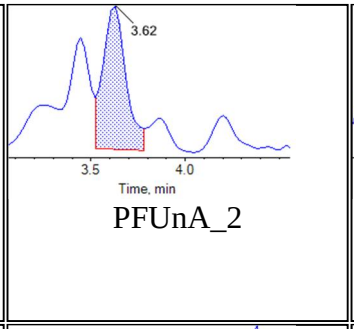
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Chromatogram Report

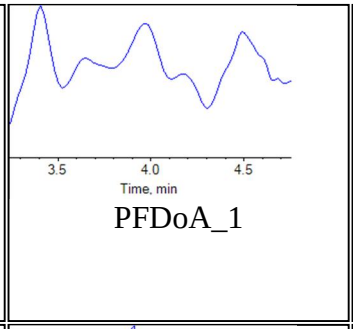
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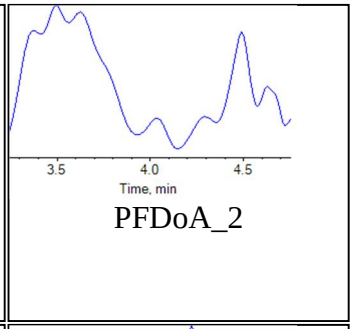
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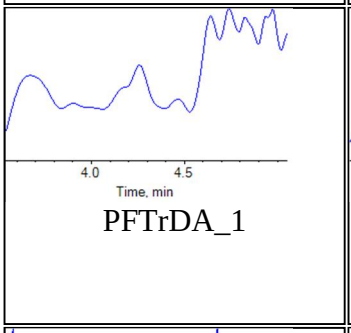
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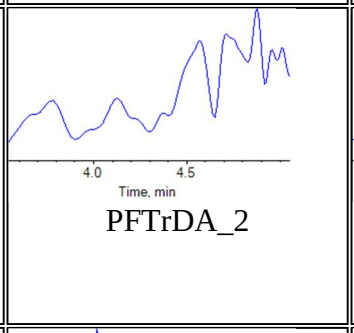
PFDoA_1



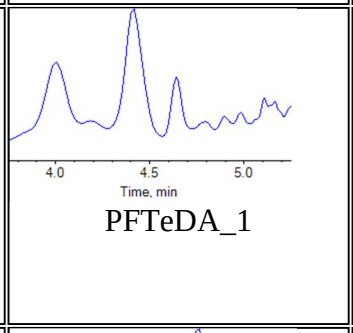
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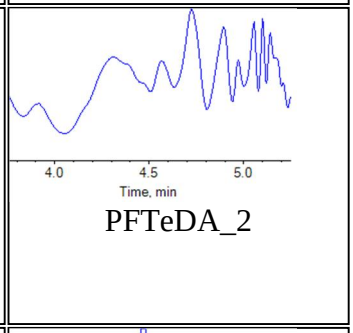
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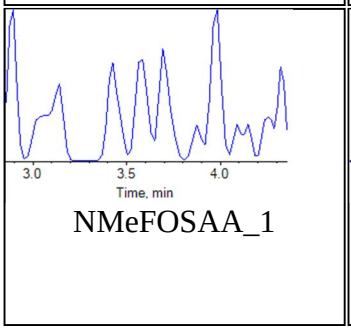
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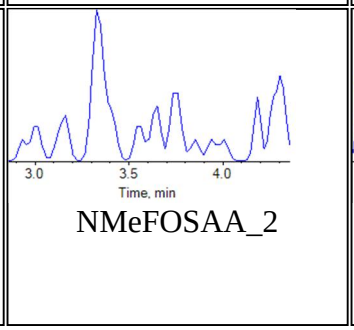
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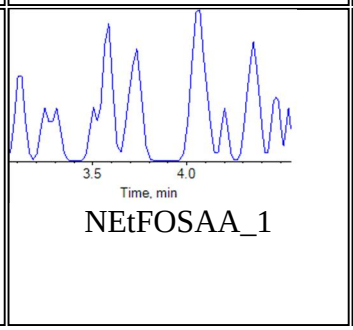
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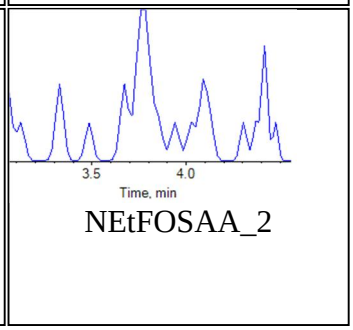
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NMeFOSAA_2

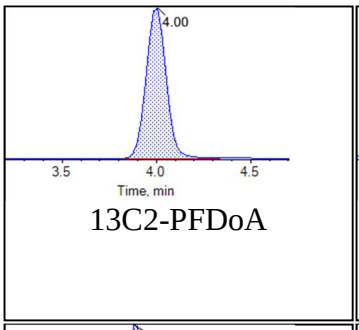


NEtFOSAA_1

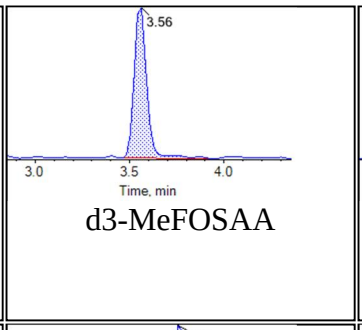


NEtFOSAA_2

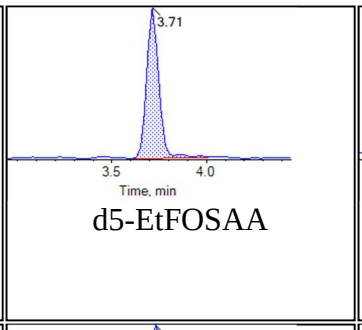
Internal Standards:



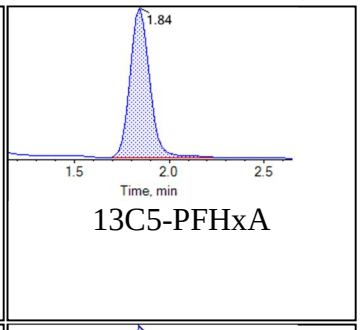
13C2-PFDoA



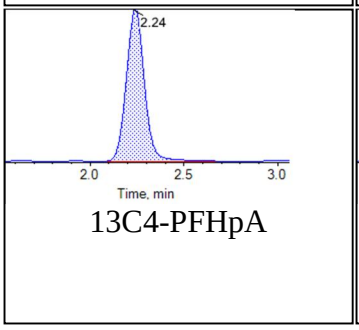
d3-MeFOSAA



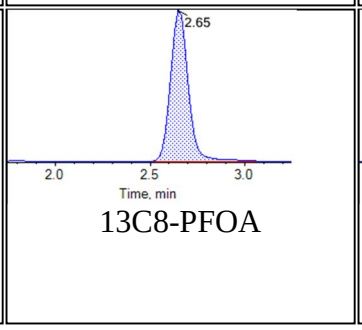
d5-EtFOSAA



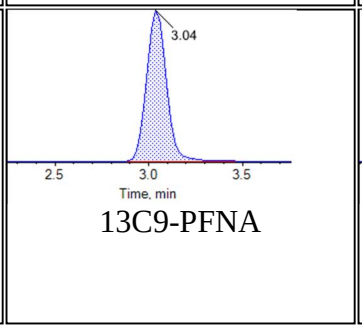
13C5-PFHxA



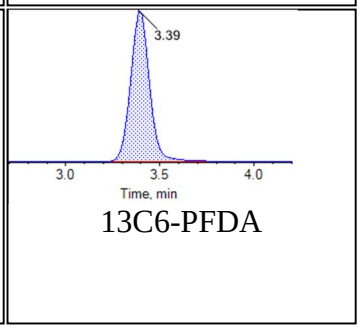
13C4-PFHpA



13C8-PFOA



13C9-PFNA

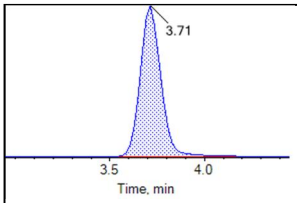


13C6-PFDA

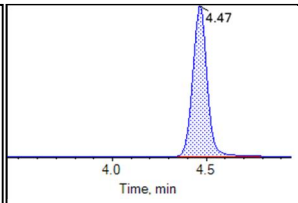
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Chromatogram Report

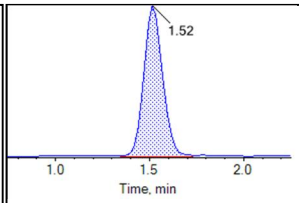
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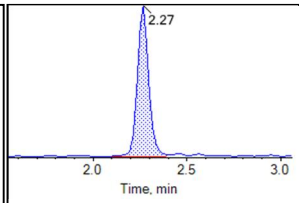
13C7-PFUnA



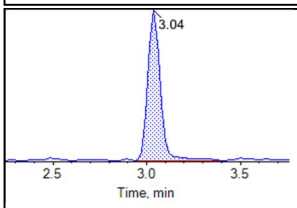
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

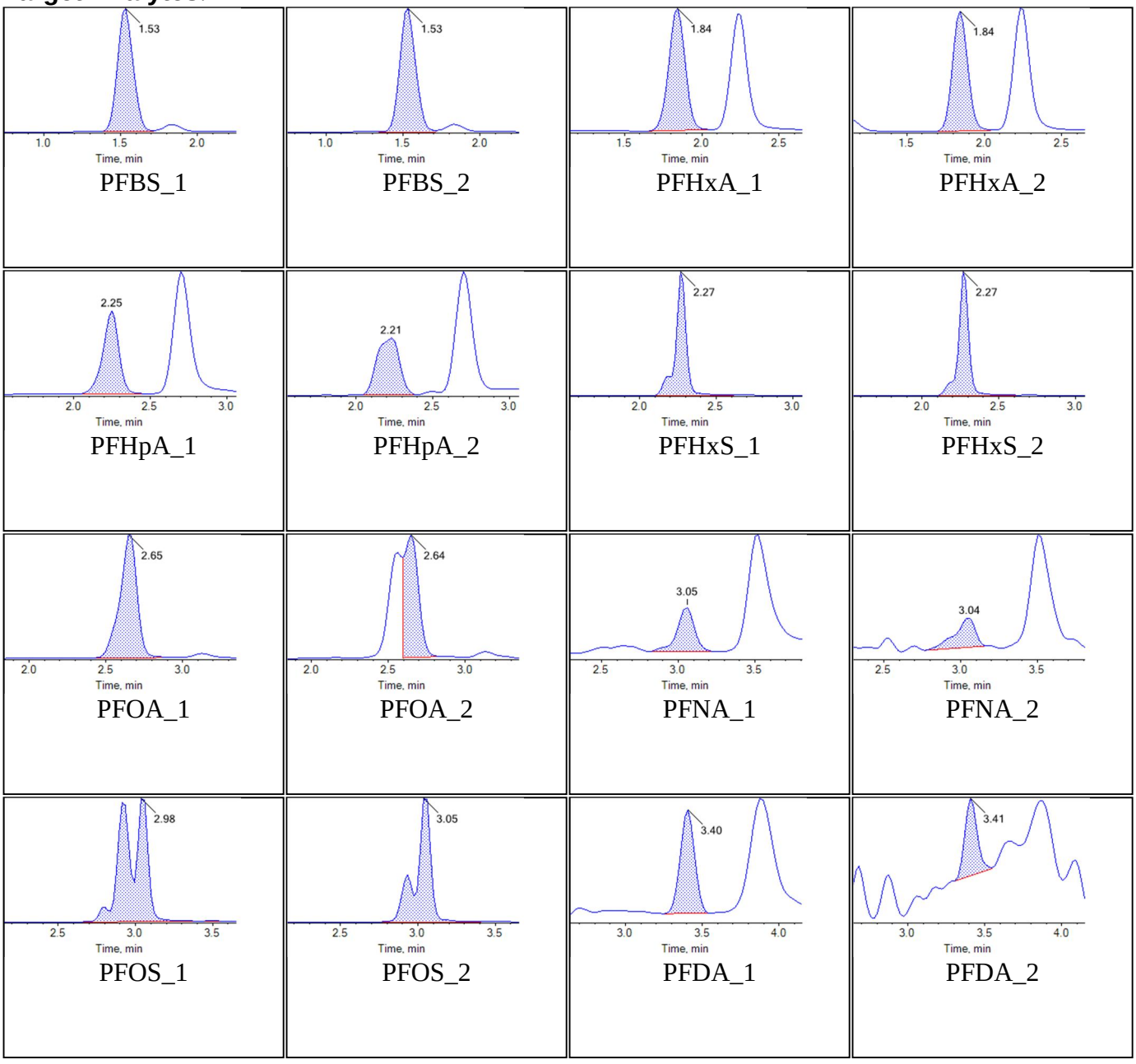
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:36:30 PM

Sample Name	J8260-FS-D(9)	**Injection Vial**	32
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:22:52	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

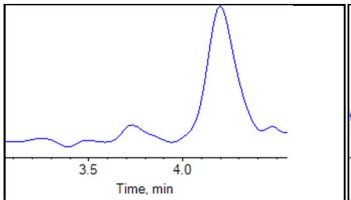
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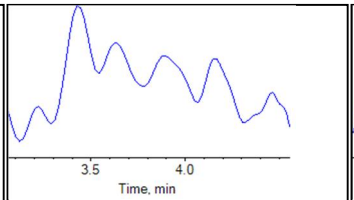
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Chromatogram Report

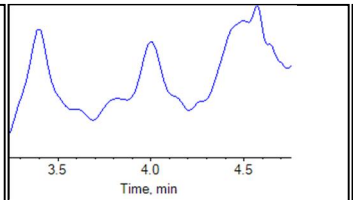
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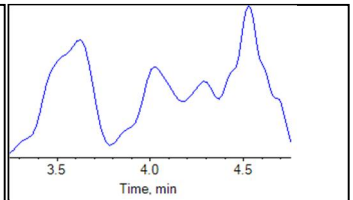
PFUnA_1



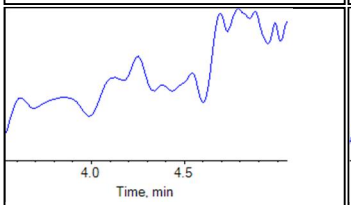
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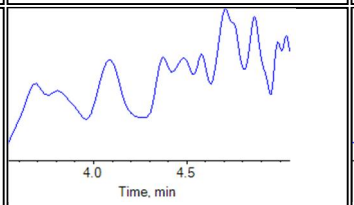
PFDoA_1



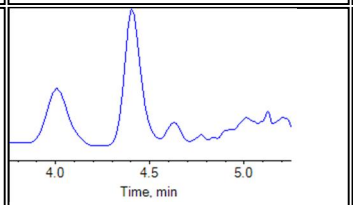
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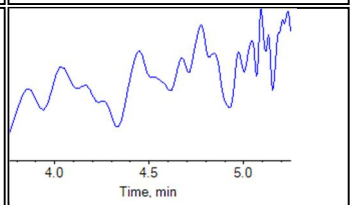
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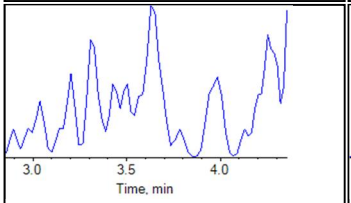
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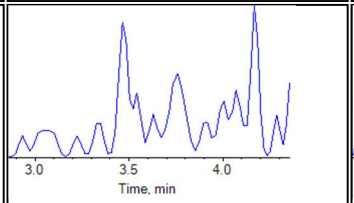
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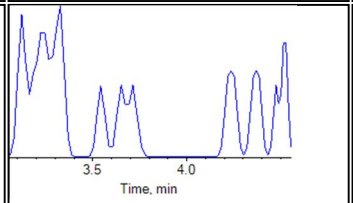
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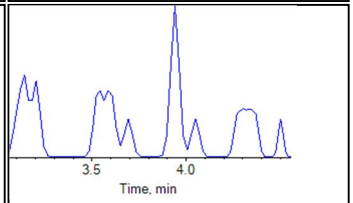
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NMeFOSAA_2

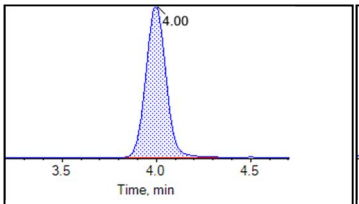


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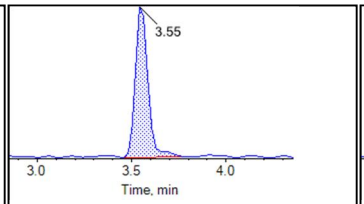


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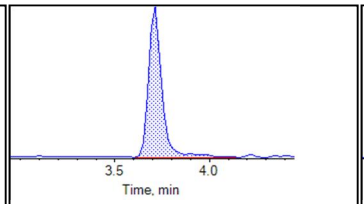
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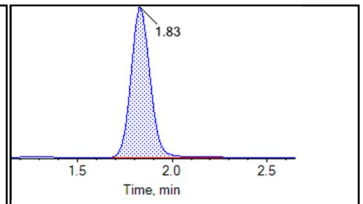
13C2-PFDoA



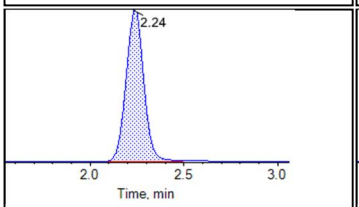
d3-MeFOSAA



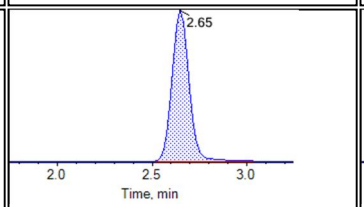
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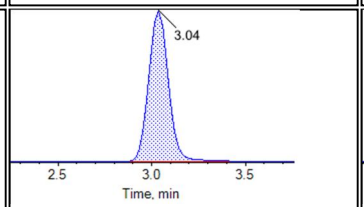
13C5-PFHxA



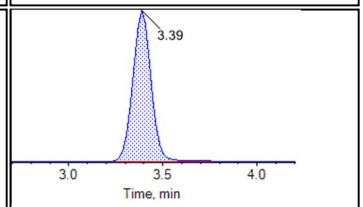
13C4-PFHpA



13C8-PFOA



13C9-PFNA

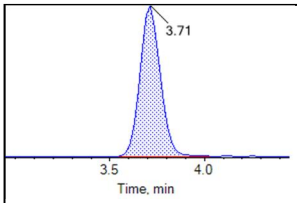


13C6-PFDA

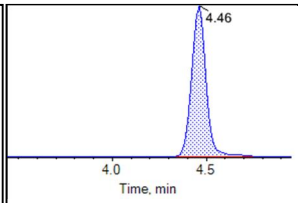
BATTELLE

Chromatogram Report

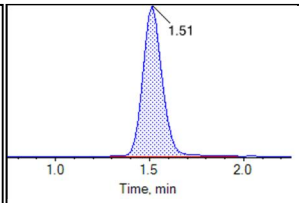
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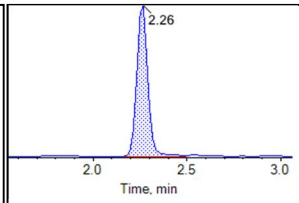
13C7-PFUnA



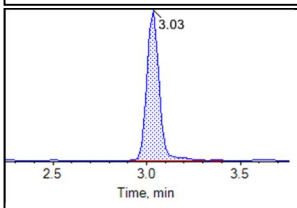
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

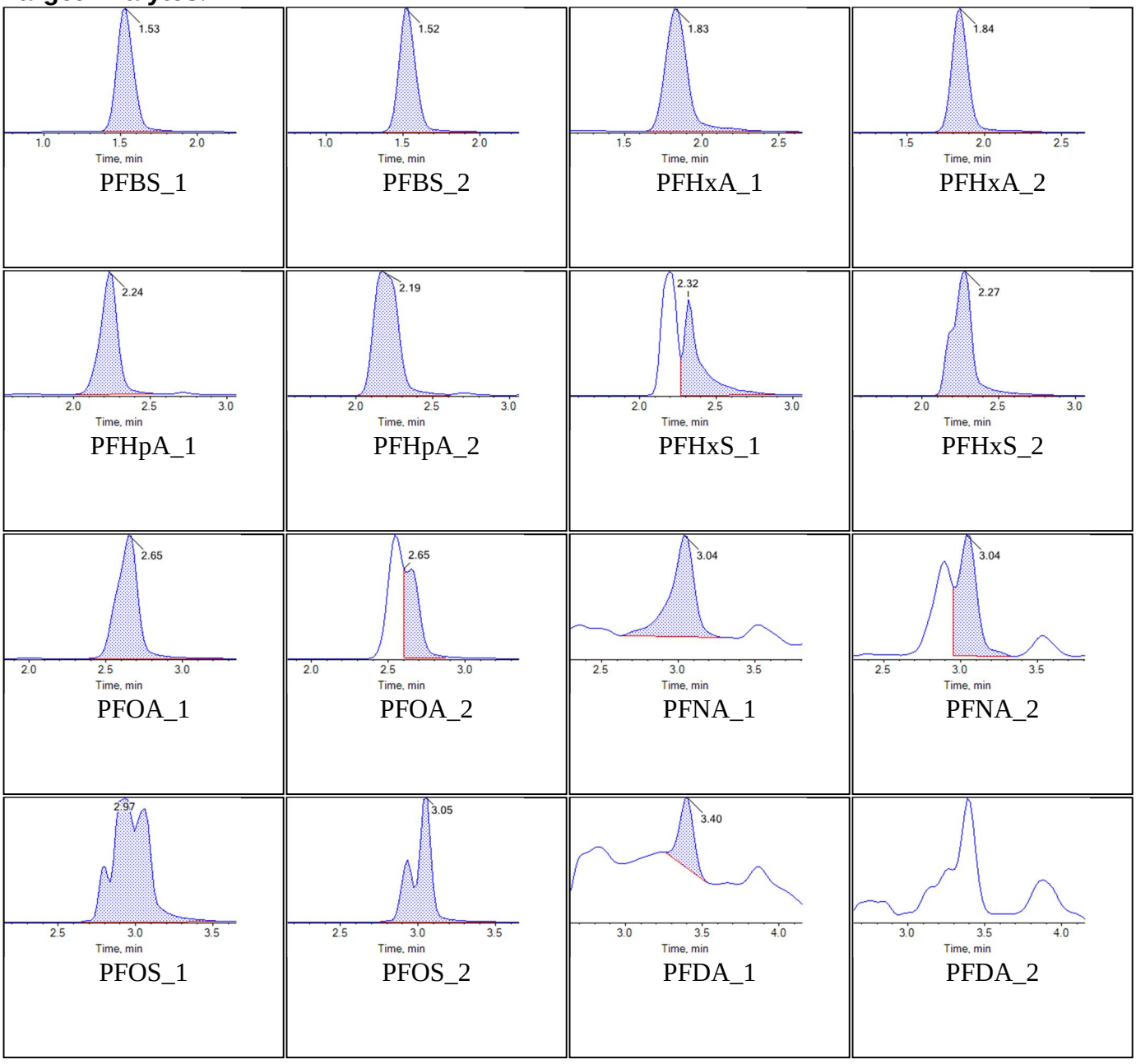
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:36:34 PM

Sample Name	J8261-FS(0)	**Injection Vial**	33
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:33:45	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

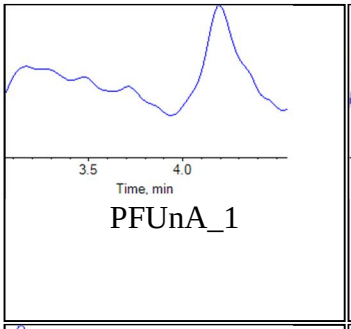
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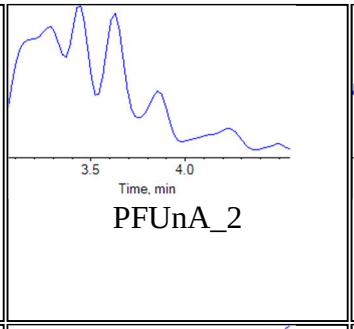
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Chromatogram Report

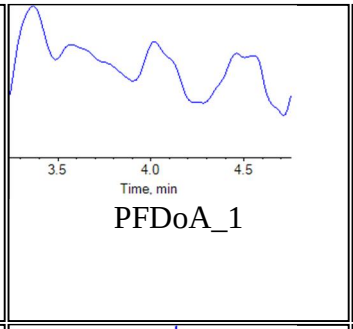
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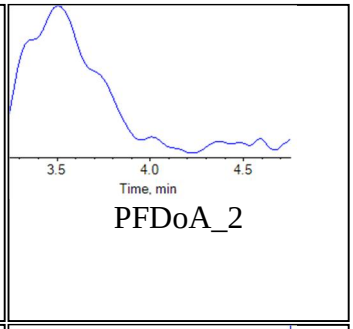
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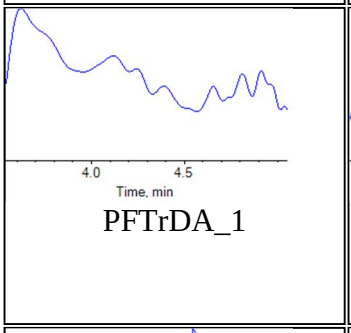
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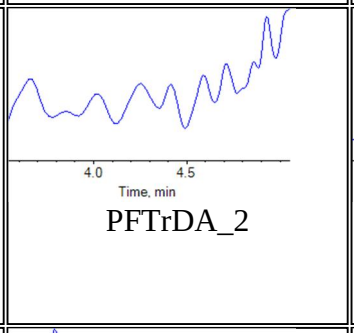
PFDoA_1



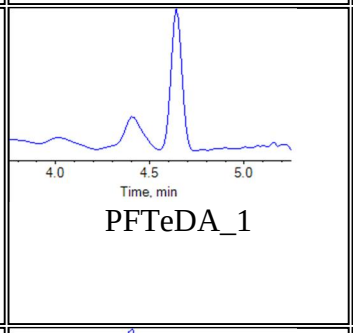
PFDoA_2



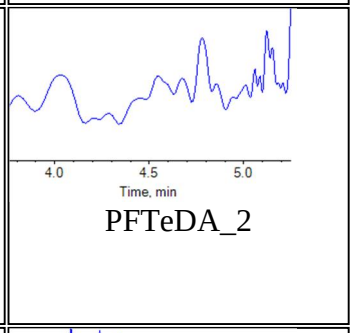
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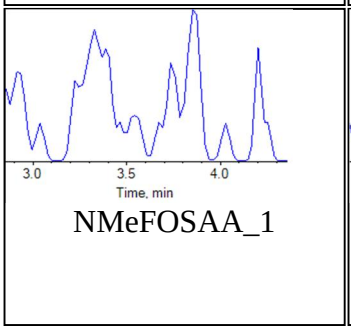
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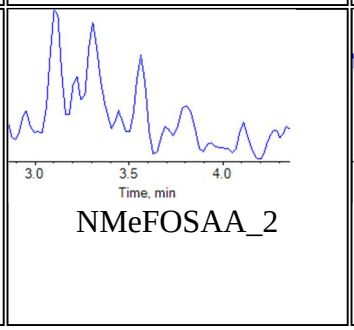
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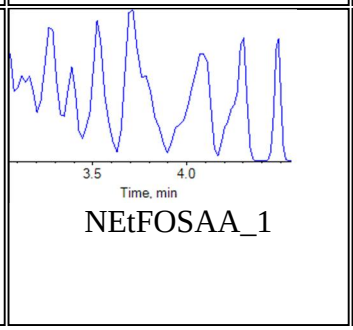
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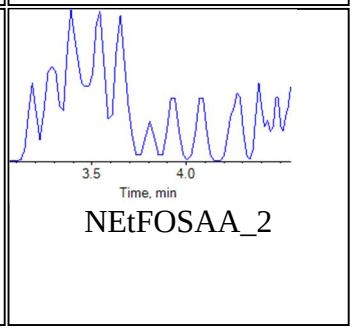
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NMeFOSAA_2

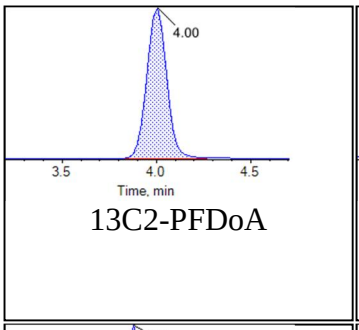


NEtFOSAA_1

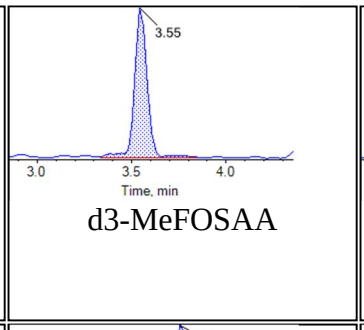


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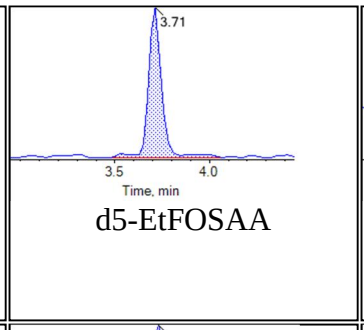
Internal Standards:



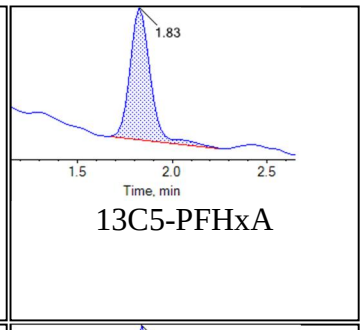
13C2-PFDoA



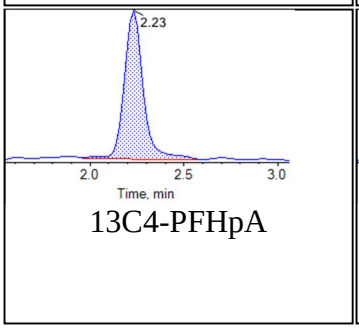
d3-MeFOSAA



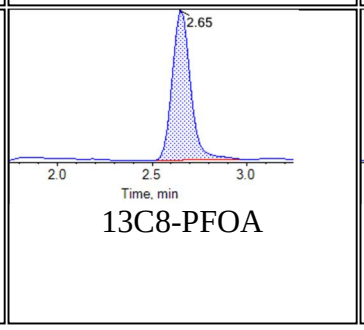
d5-EtFOSAA



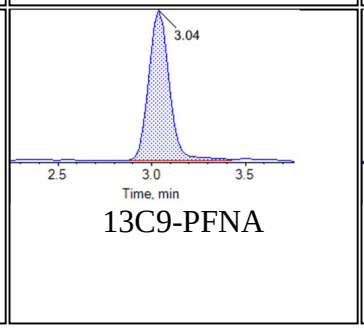
13C5-PFHxA



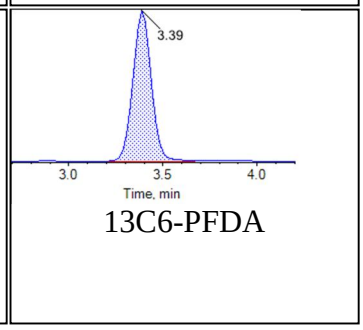
13C4-PFHpA



13C8-PFOA



13C9-PFNA

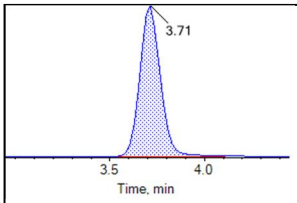


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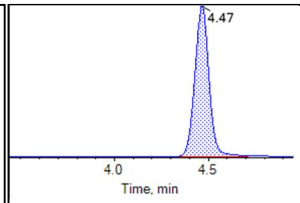
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Chromatogram Report

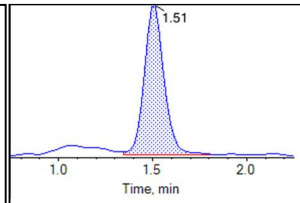
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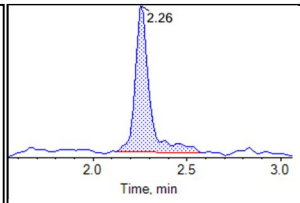
13C7-PFUnA



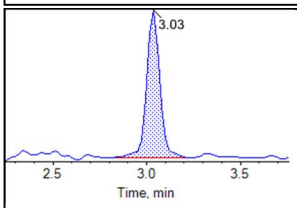
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

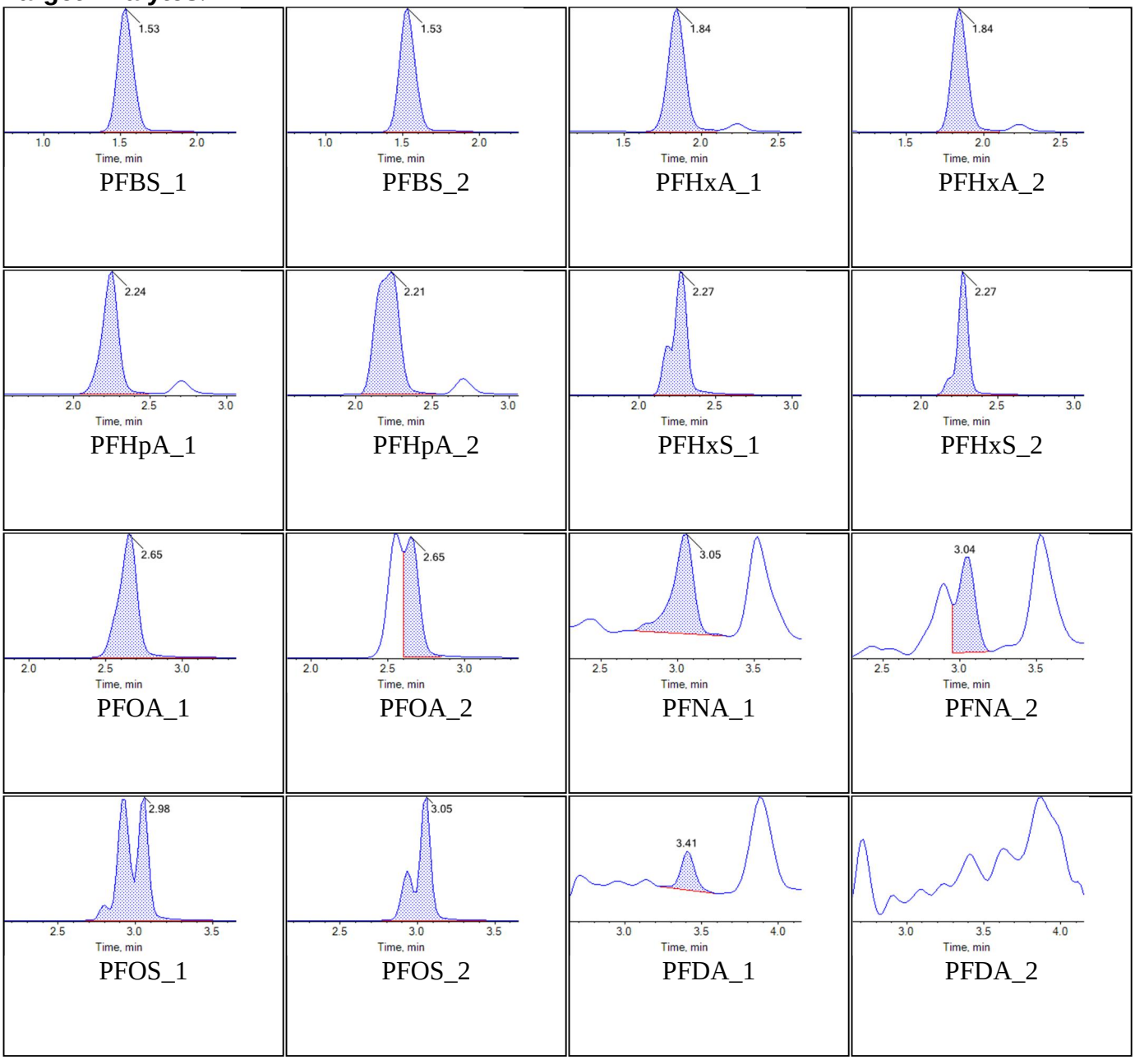
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:36:39 PM

Sample Name	J8261-FS-D(3)	**Injection Vial**	34
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:44:38	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

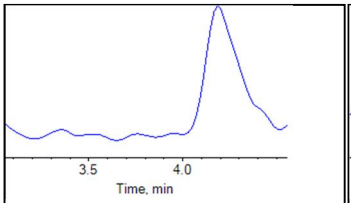
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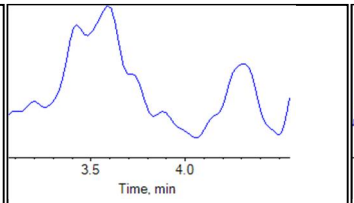
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Chromatogram Report

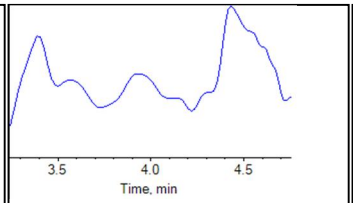
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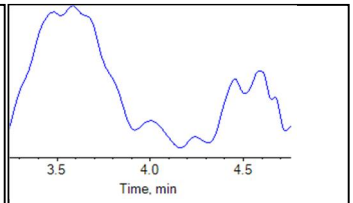
PFUnA_1



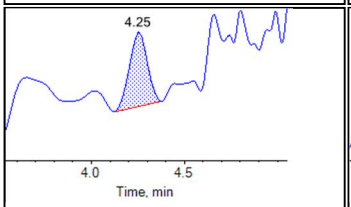
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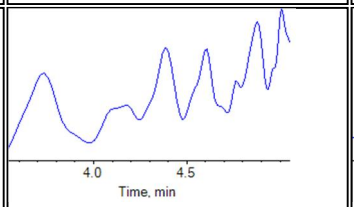
PFDoA_1



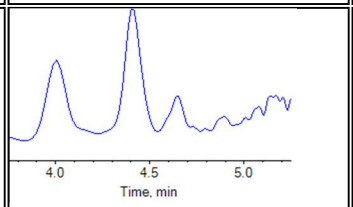
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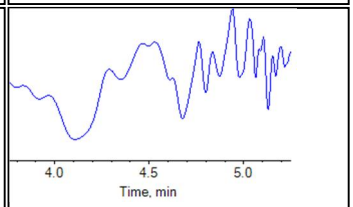
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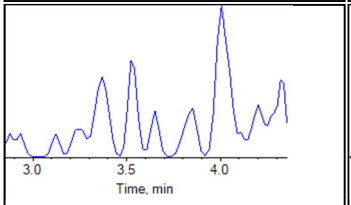
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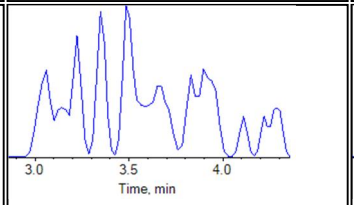
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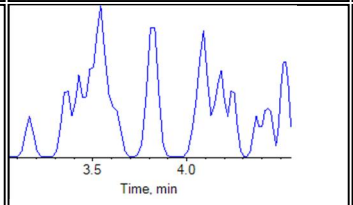
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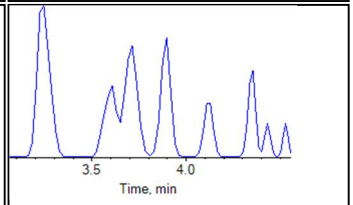
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NMeFOSAA_2

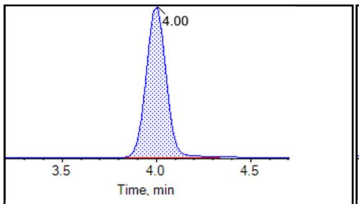


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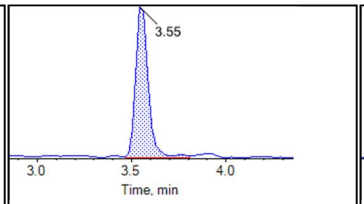


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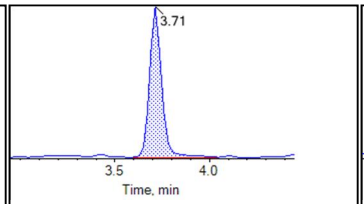
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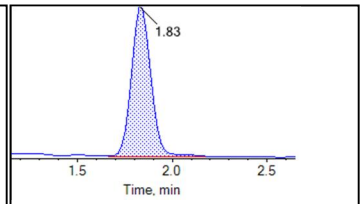
13C2-PFDoA



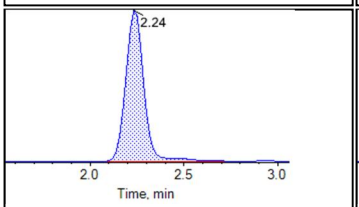
d3-MeFOSAA



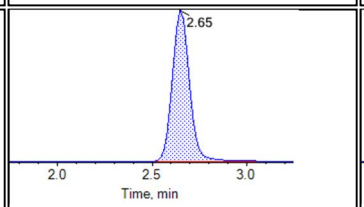
d5-EtFOSAA



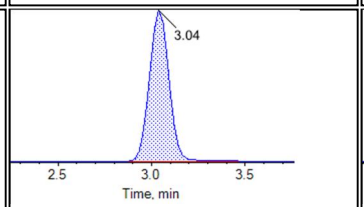
13C5-PFHxA



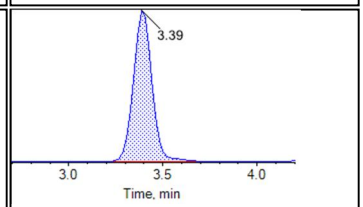
13C4-PFHpA



13C8-PFOA



13C9-PFNA

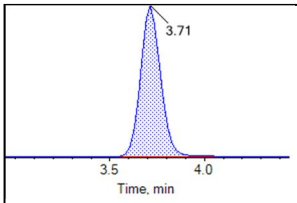


13C6-PFDA

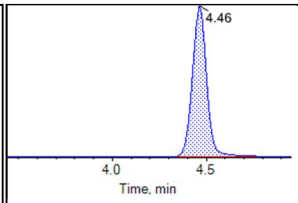
BATTELLE

Chromatogram Report

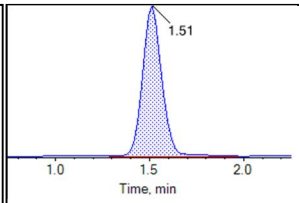
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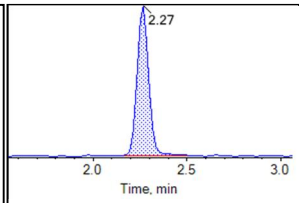
13C7-PFUnA



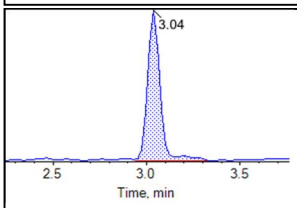
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

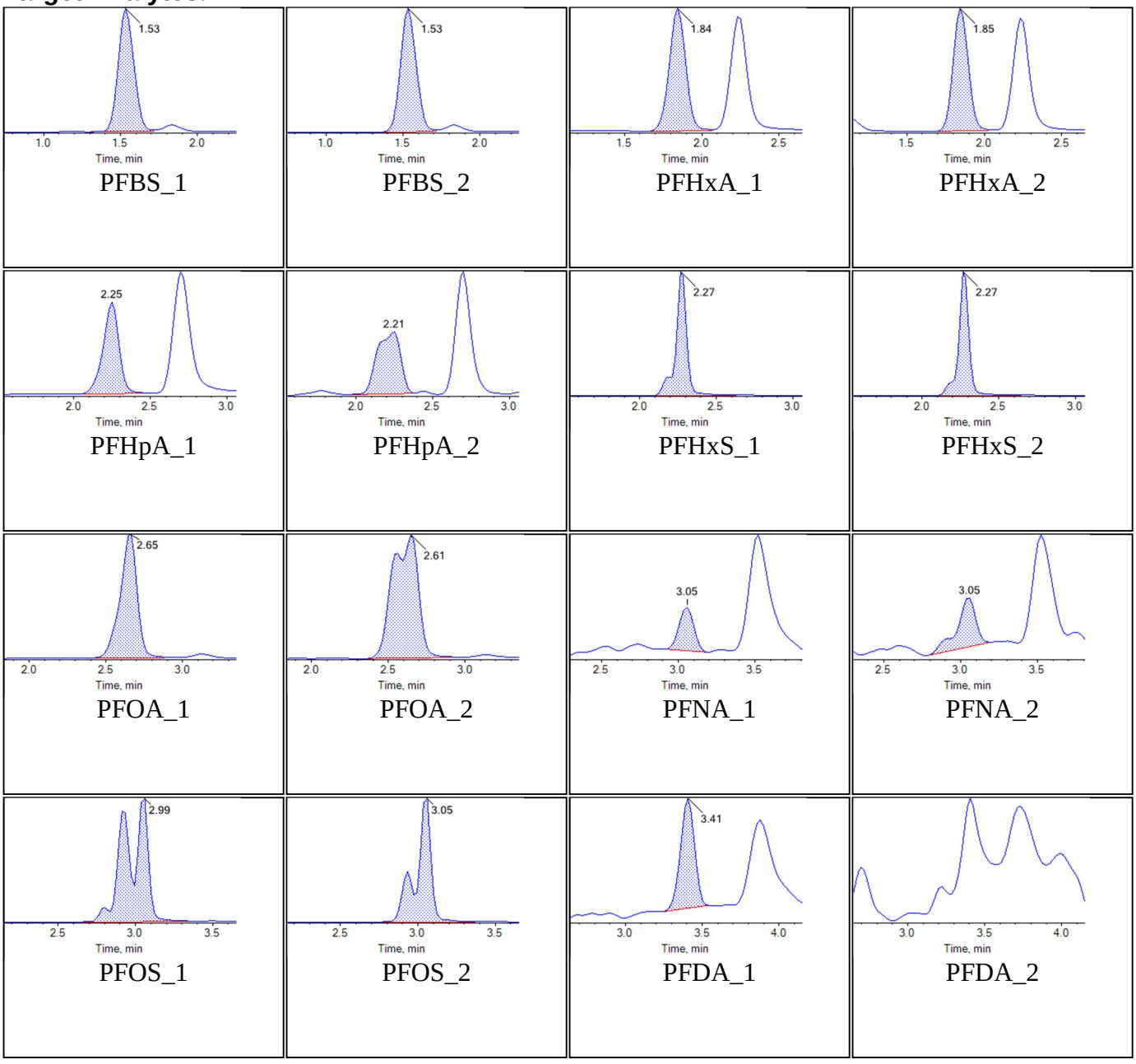
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:36:43 PM

Sample Name	J8261-FS-D(9)	**Injection Vial**	35
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:55:30	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

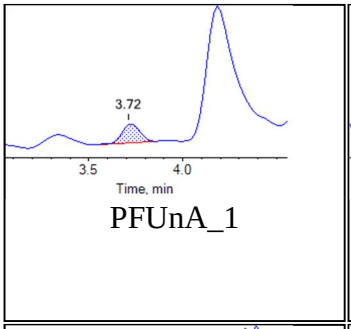
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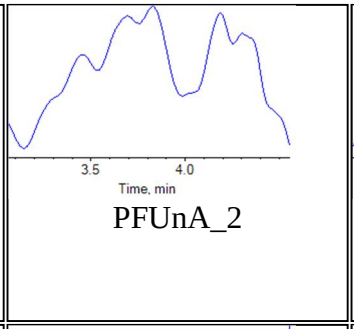
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Chromatogram Report

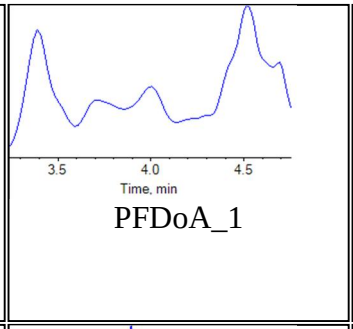
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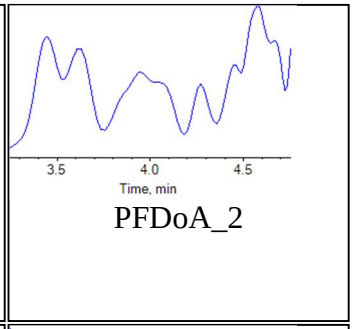
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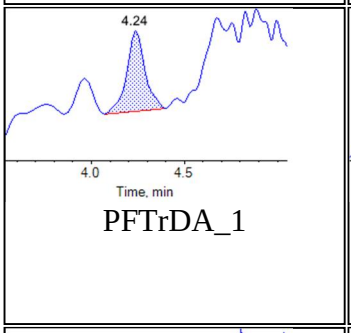
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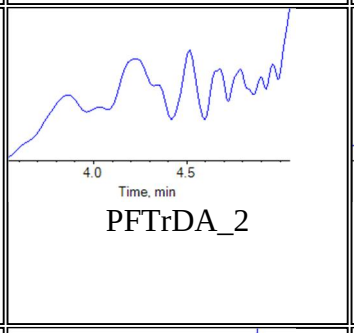
PFDoA_1



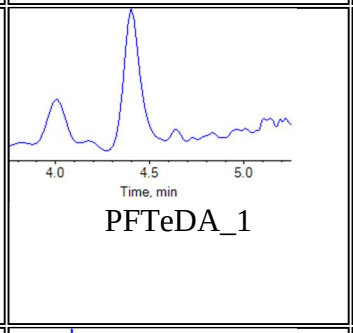
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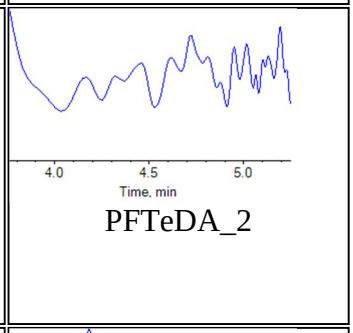
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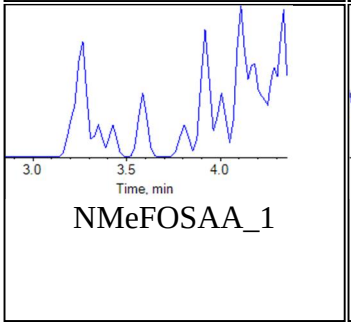
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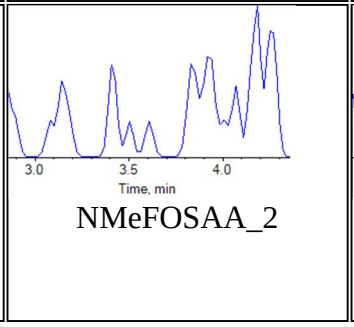
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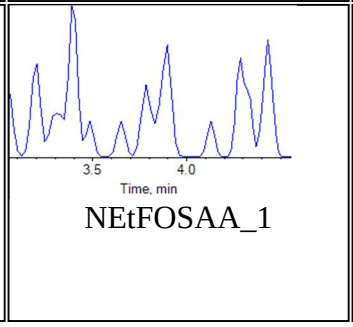
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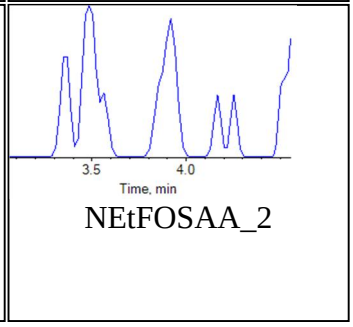
NMeFOSAA_1



NMeFOSAA_2

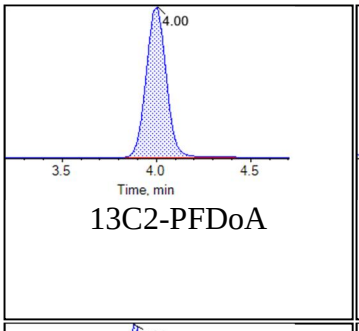


NEtFOSAA_1

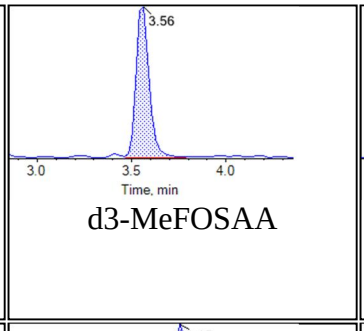


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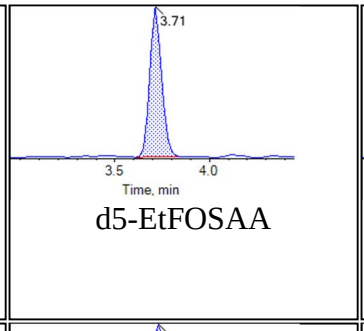
Internal Standards:



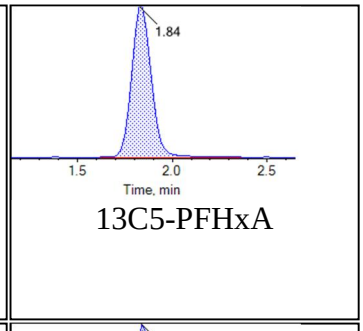
13C2-PFDoA



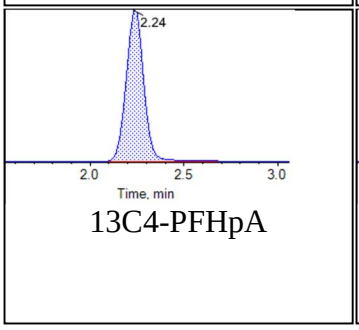
d3-MeFOSAA



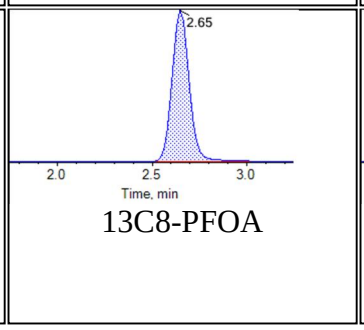
d5-EtFOSAA



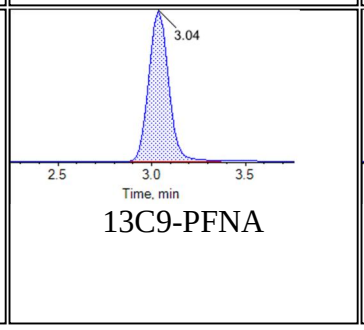
13C5-PFHxA



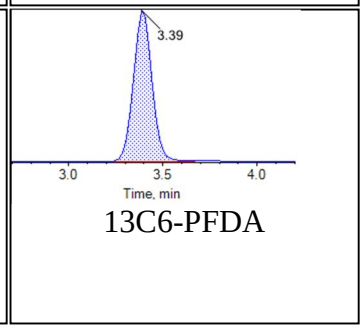
13C4-PFHpA



13C8-PFOA



13C9-PFNA

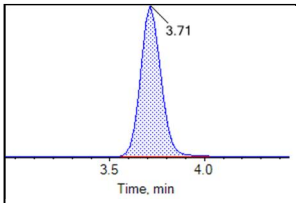


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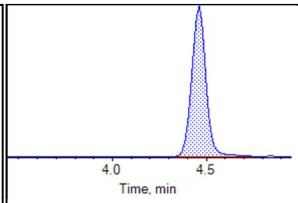
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Chromatogram Report

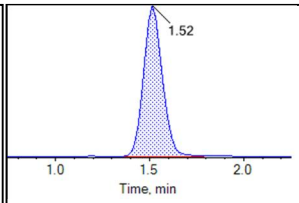
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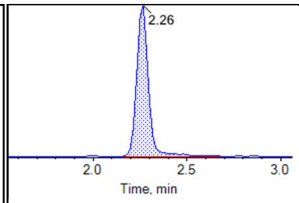
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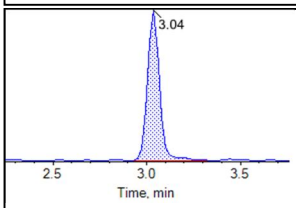
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

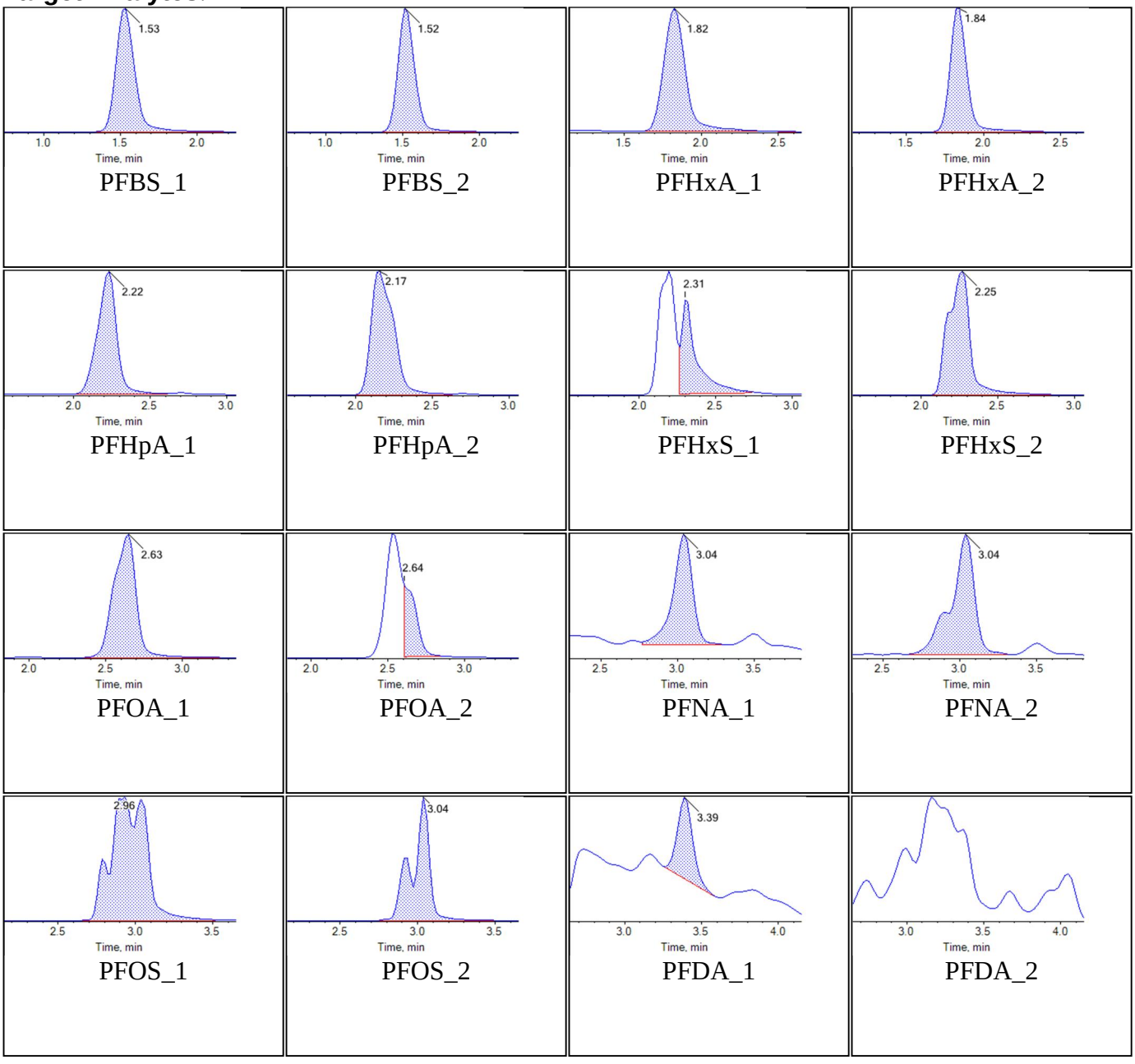
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:36:48 PM

Sample Name	J8262-FS(0)	**Injection Vial**	36
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:06:22	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

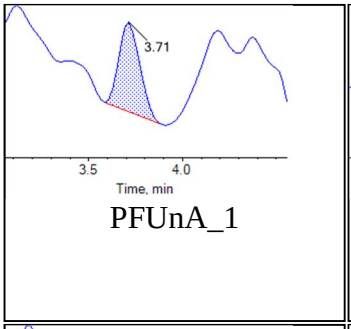
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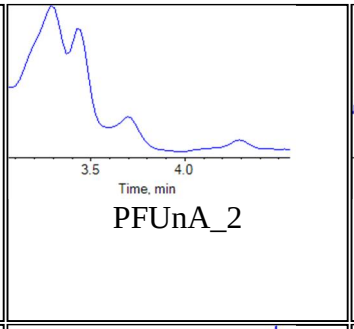
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Chromatogram Report

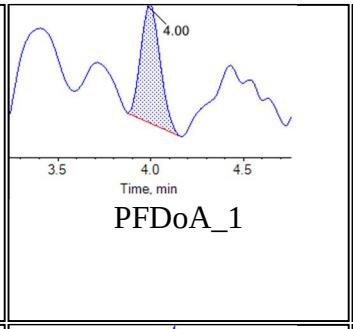
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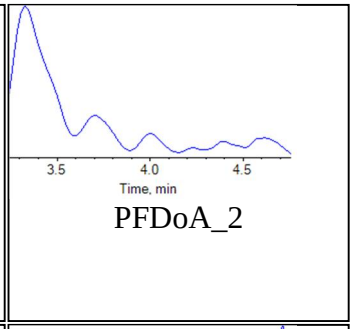
PFUnA_1



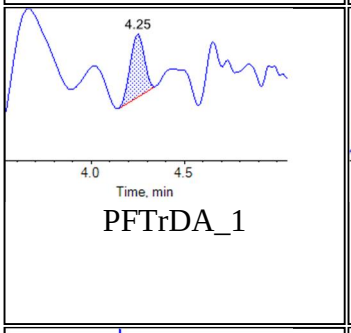
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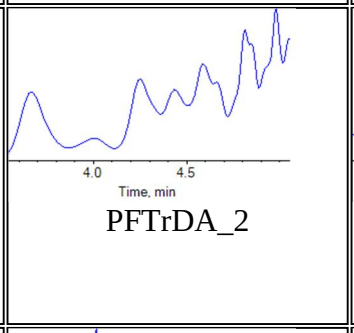
PFDoA_1



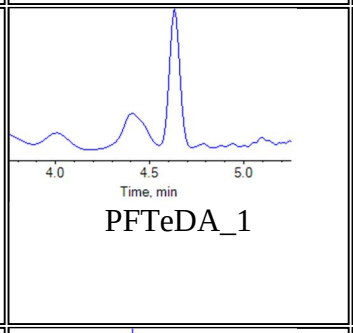
PFDoA_2



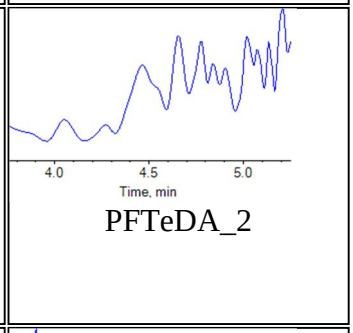
PFTrDA_1



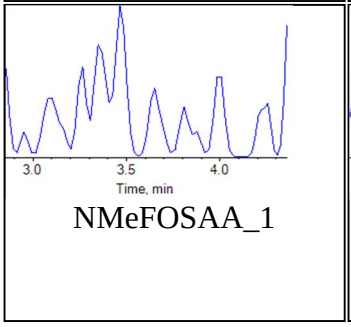
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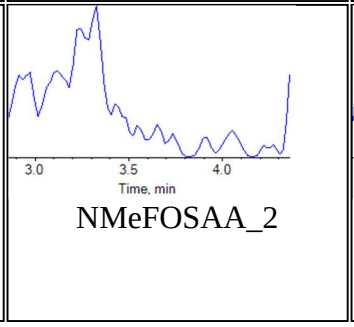
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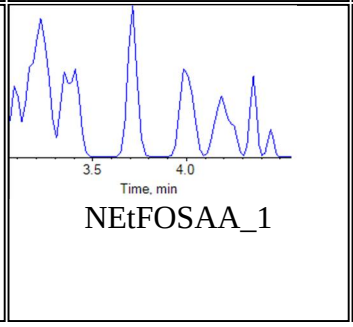
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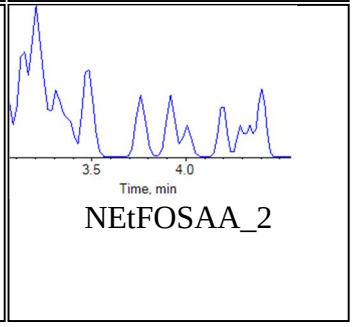
NMeFOSAA_1



NMeFOSAA_2

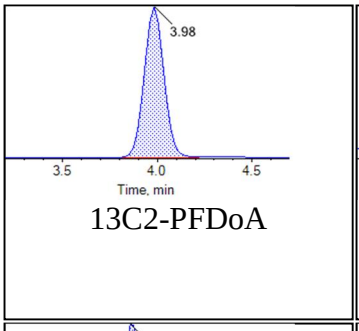


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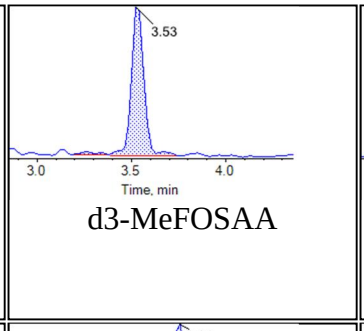


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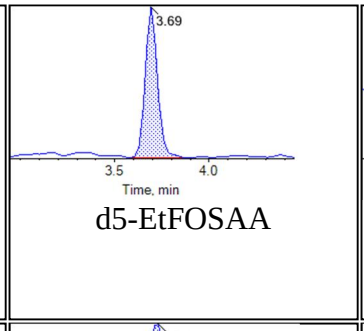
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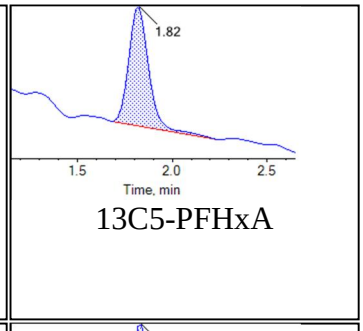
13C2-PFDoA



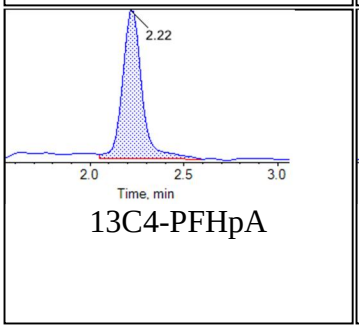
d3-MeFOSAA



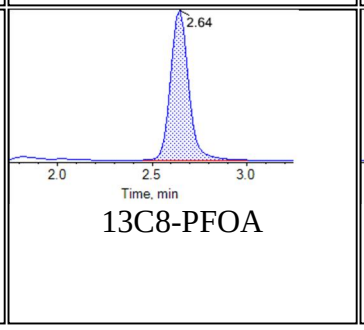
d5-EtFOSAA



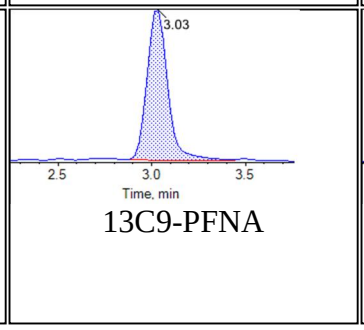
13C5-PFHxA



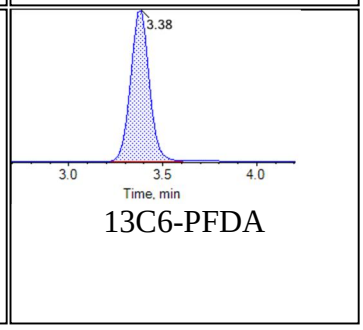
13C4-PFHpA



13C8-PFOA



13C9-PFNA

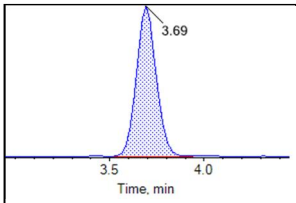


13C6-PFDA

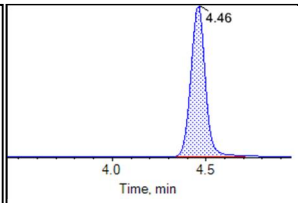
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Chromatogram Report

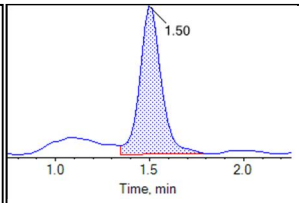
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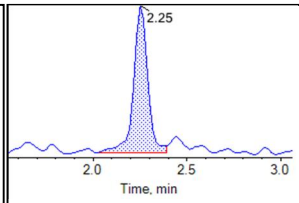
13C7-PFUnA



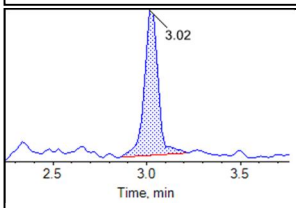
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

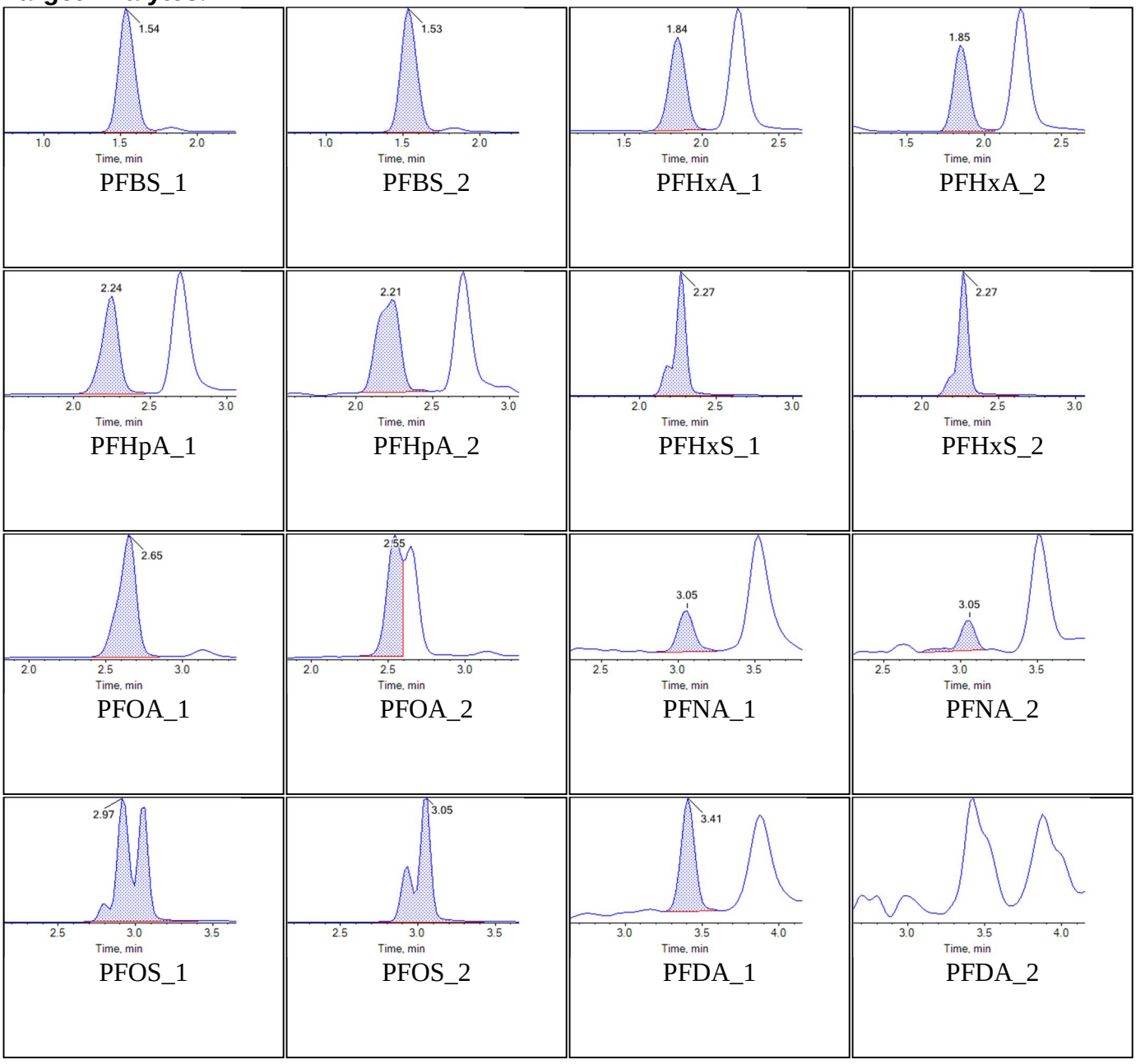
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:36:53 PM

Sample Name	J8262-FS-D(7)	**Injection Vial**	37
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:17:15	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

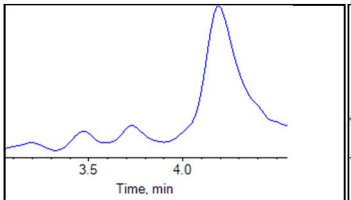
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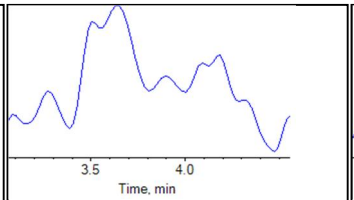
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Chromatogram Report

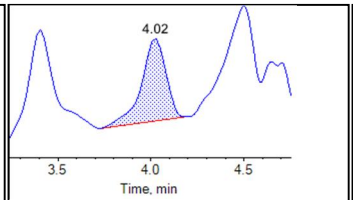
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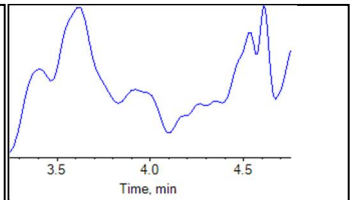
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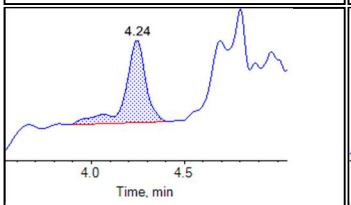
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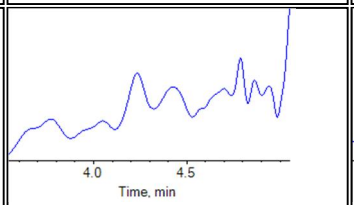
PFDoA_1



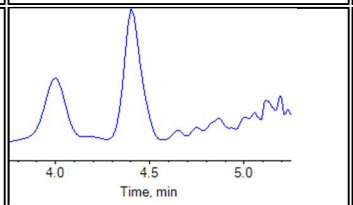
PFDoA_2



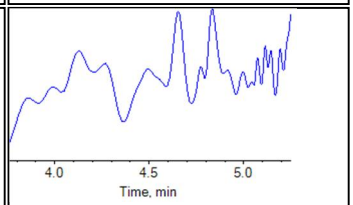
PFTrDA_1



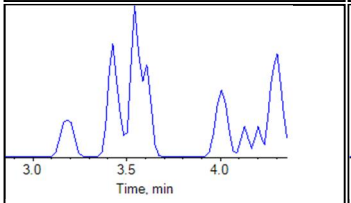
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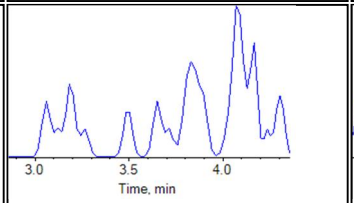
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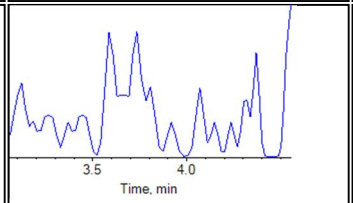
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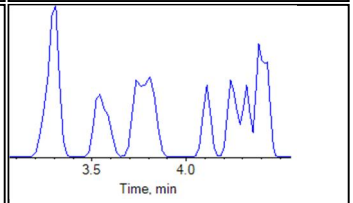
NMeFOSAA_1



NMeFOSAA_2

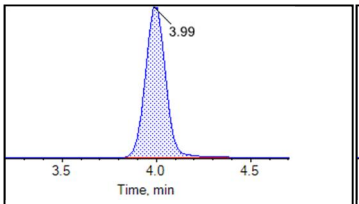


NEtFOSAA_1

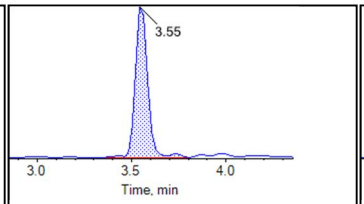


NEtFOSAA_2

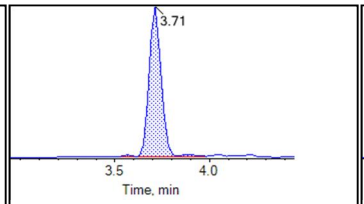
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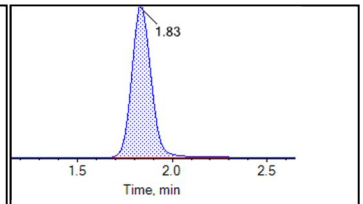
13C2-PFDoA



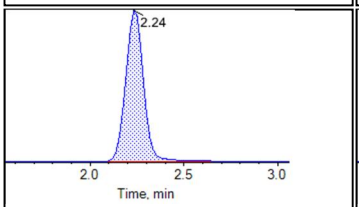
d3-MeFOSAA



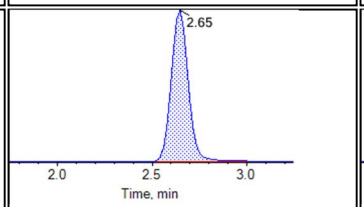
d5-EtFOSAA



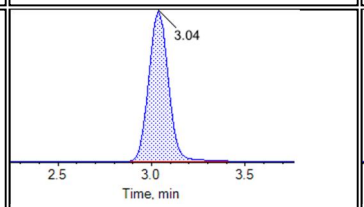
13C5-PFHxA



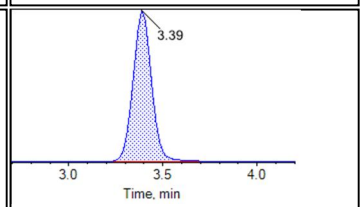
13C4-PFHpA



13C8-PFOA



13C9-PFNA

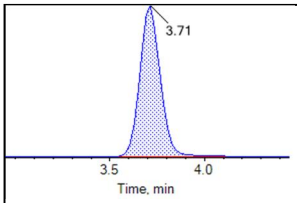


13C6-PFDA

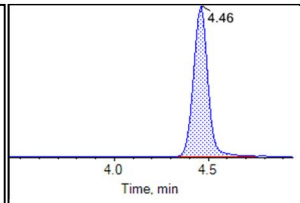
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Chromatogram Report

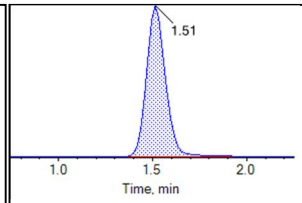
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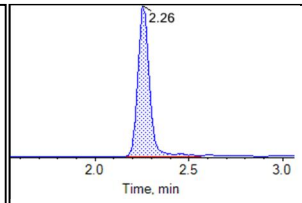
13C7-PFUnA



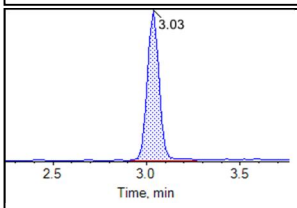
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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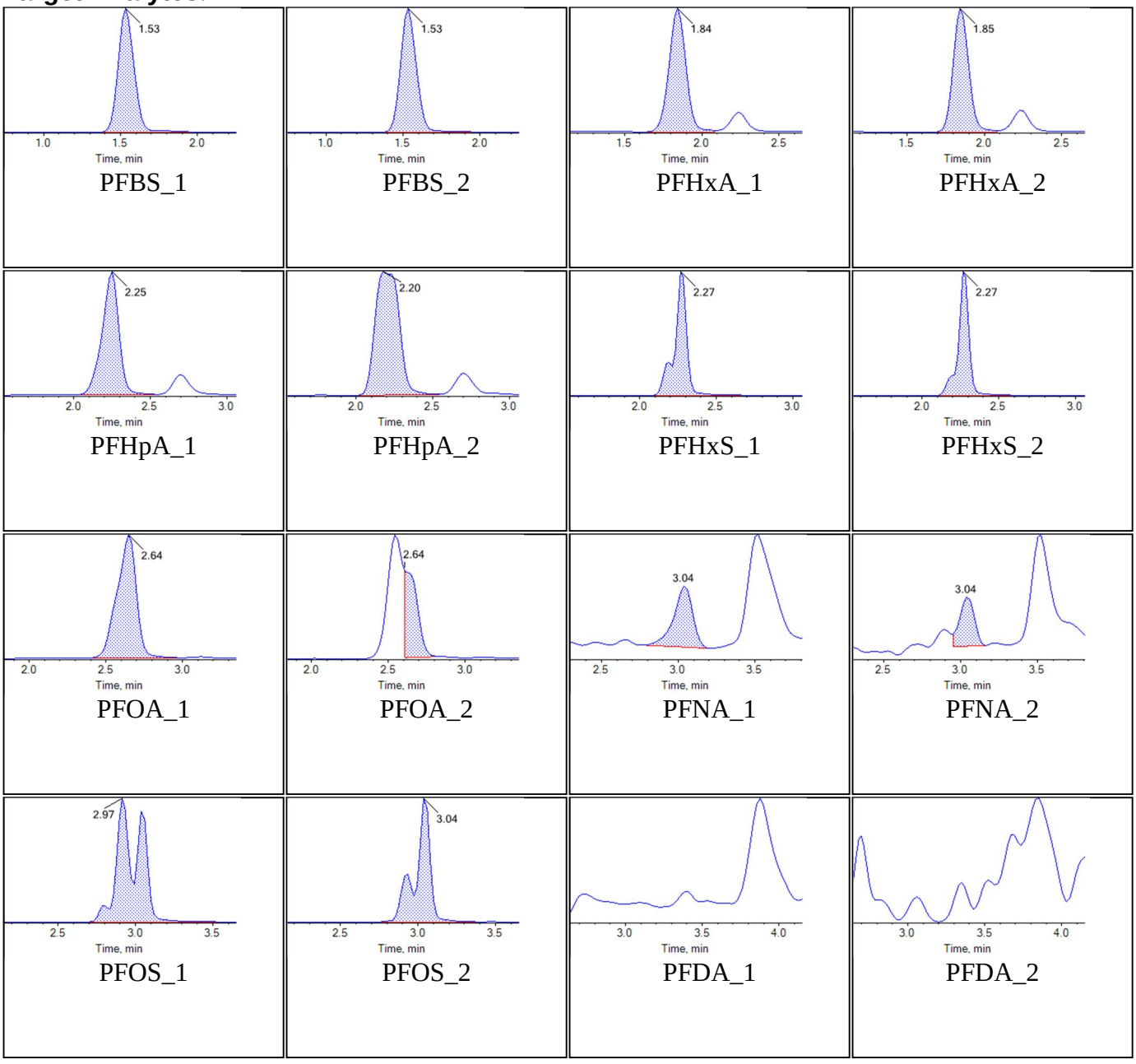
Chromatogram Report

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Printed: 05/10/2018 5:36:57 PM

Sample Name	J8262-FS-D(9)	**Injection Vial**	38
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:28:08	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

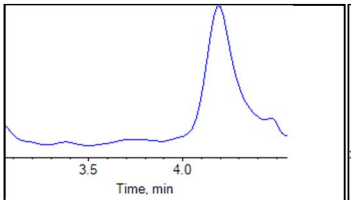
Target Analytes:



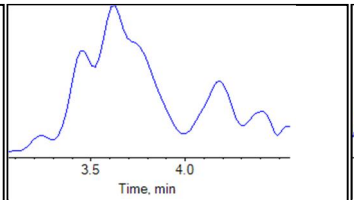
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Chromatogram Report

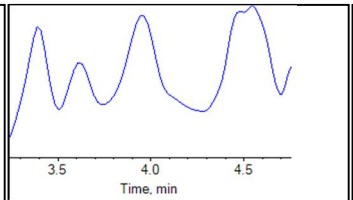
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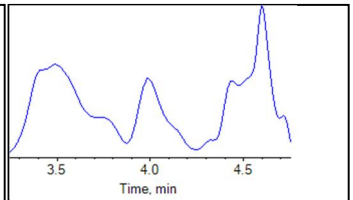
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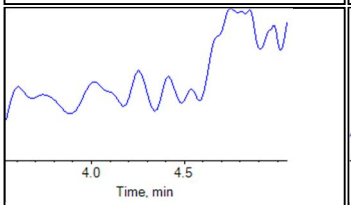
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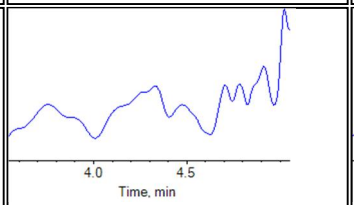
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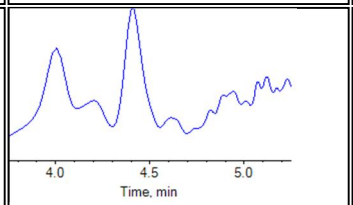
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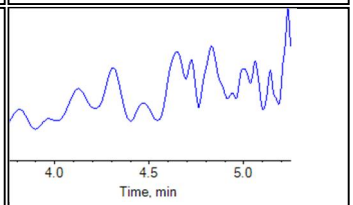
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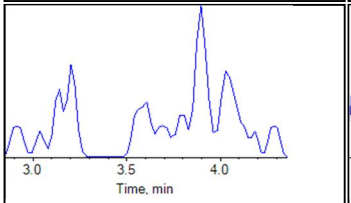
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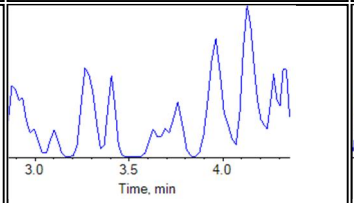
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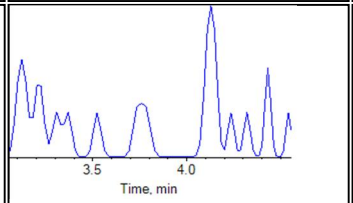
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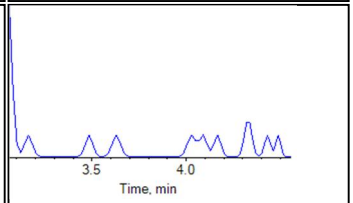
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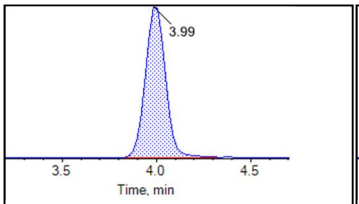


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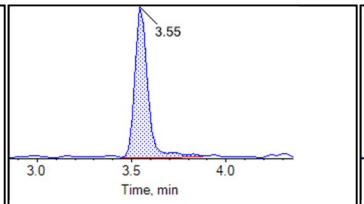


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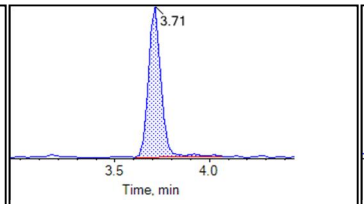
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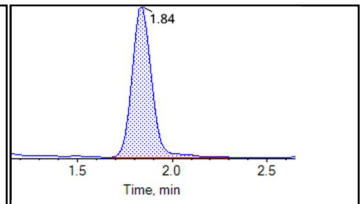
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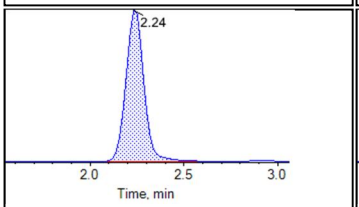
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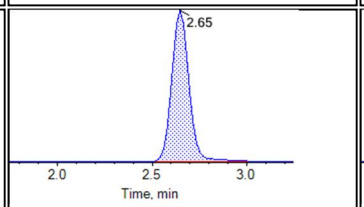
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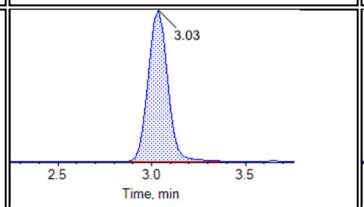
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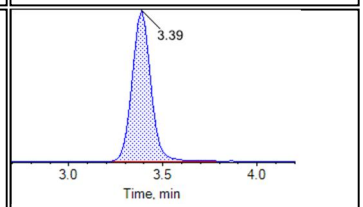
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13C8-PFOA



13C9-PFNA

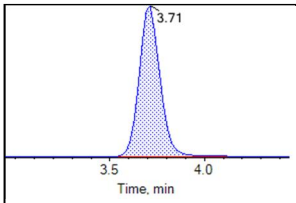


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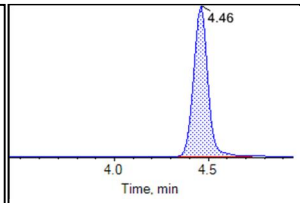
BATTELLE

Chromatogram Report

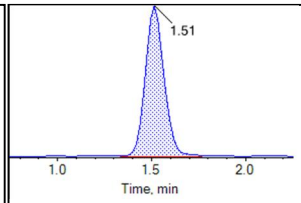
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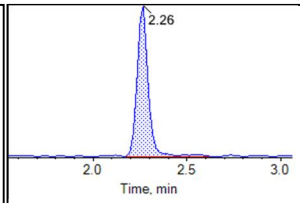
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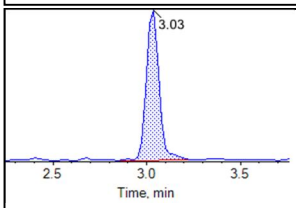
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13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

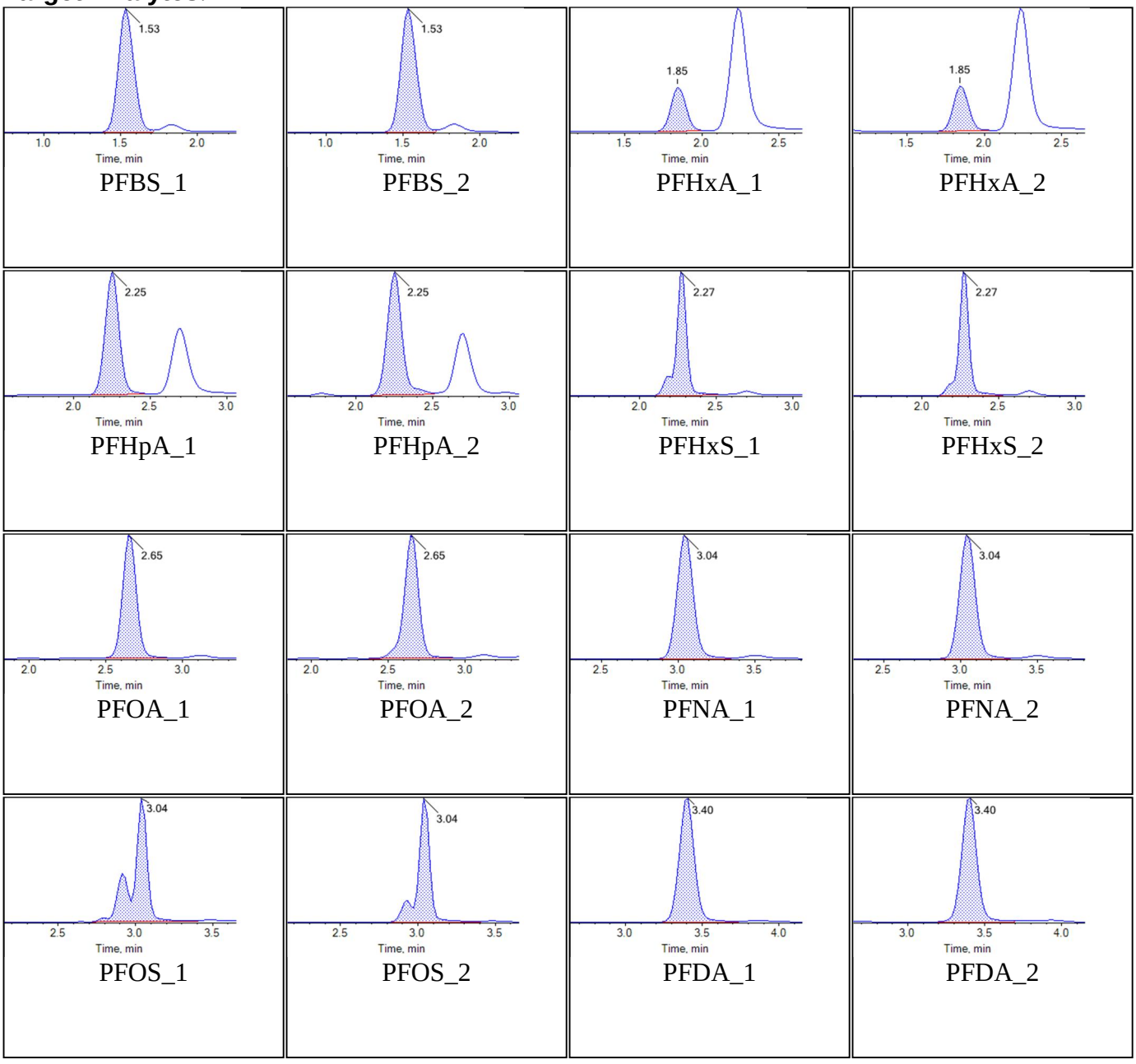
Chromatogram Report

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Sample Name	KB77 CCV	**Injection Vial**	40
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:49:54	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

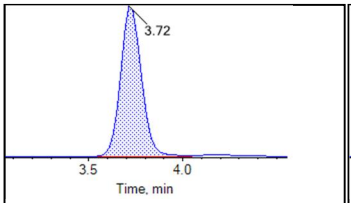
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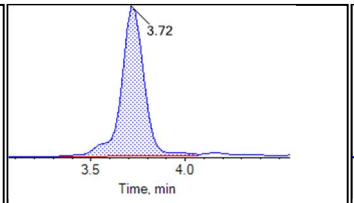
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Chromatogram Report

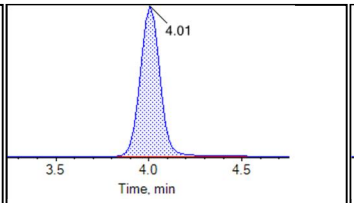
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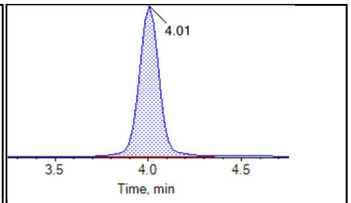
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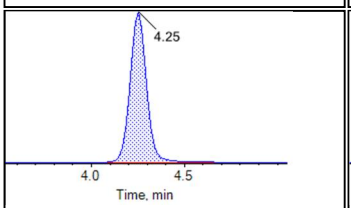
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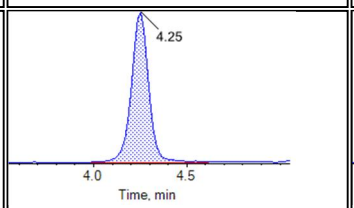
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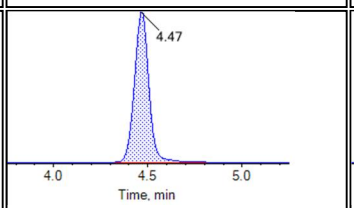
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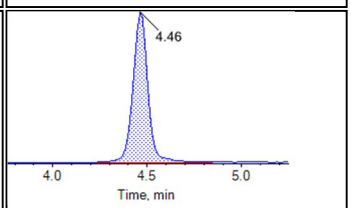
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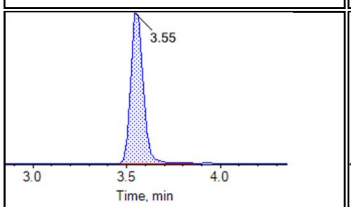
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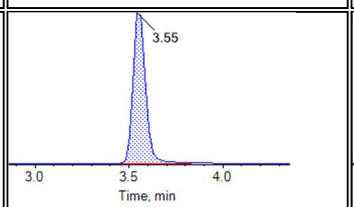
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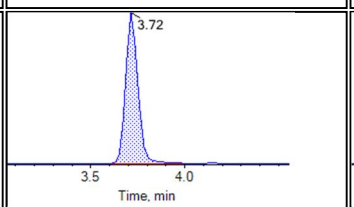
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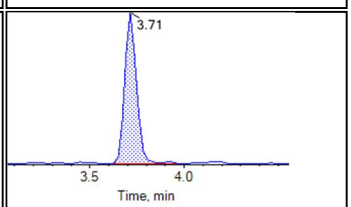
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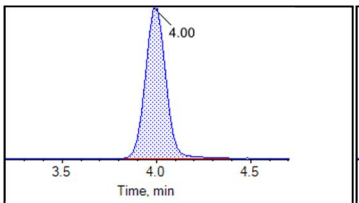


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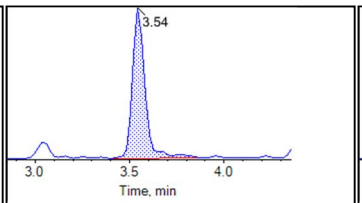


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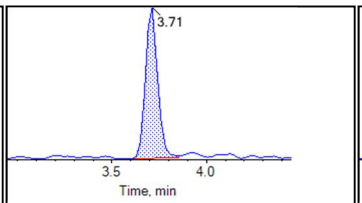
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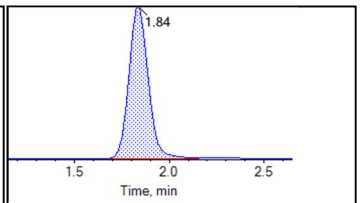
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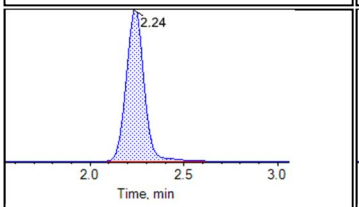
d3-MeFOSAA



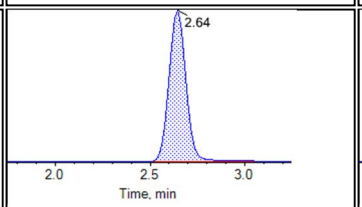
d5-EtFOSAA



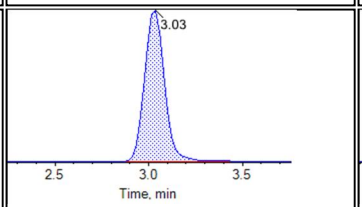
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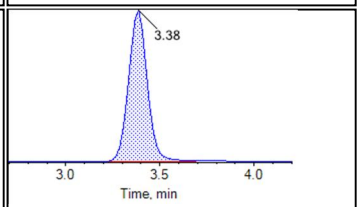
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13C8-PFOA



13C9-PFNA

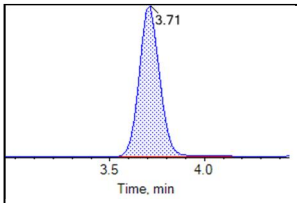


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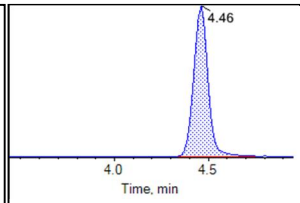
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Chromatogram Report

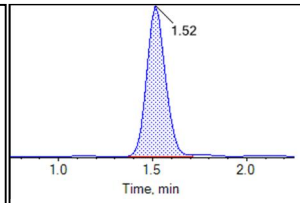
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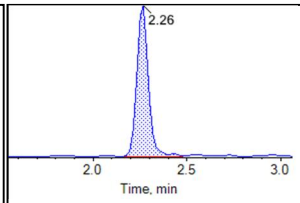
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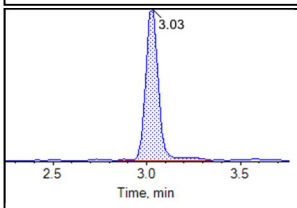
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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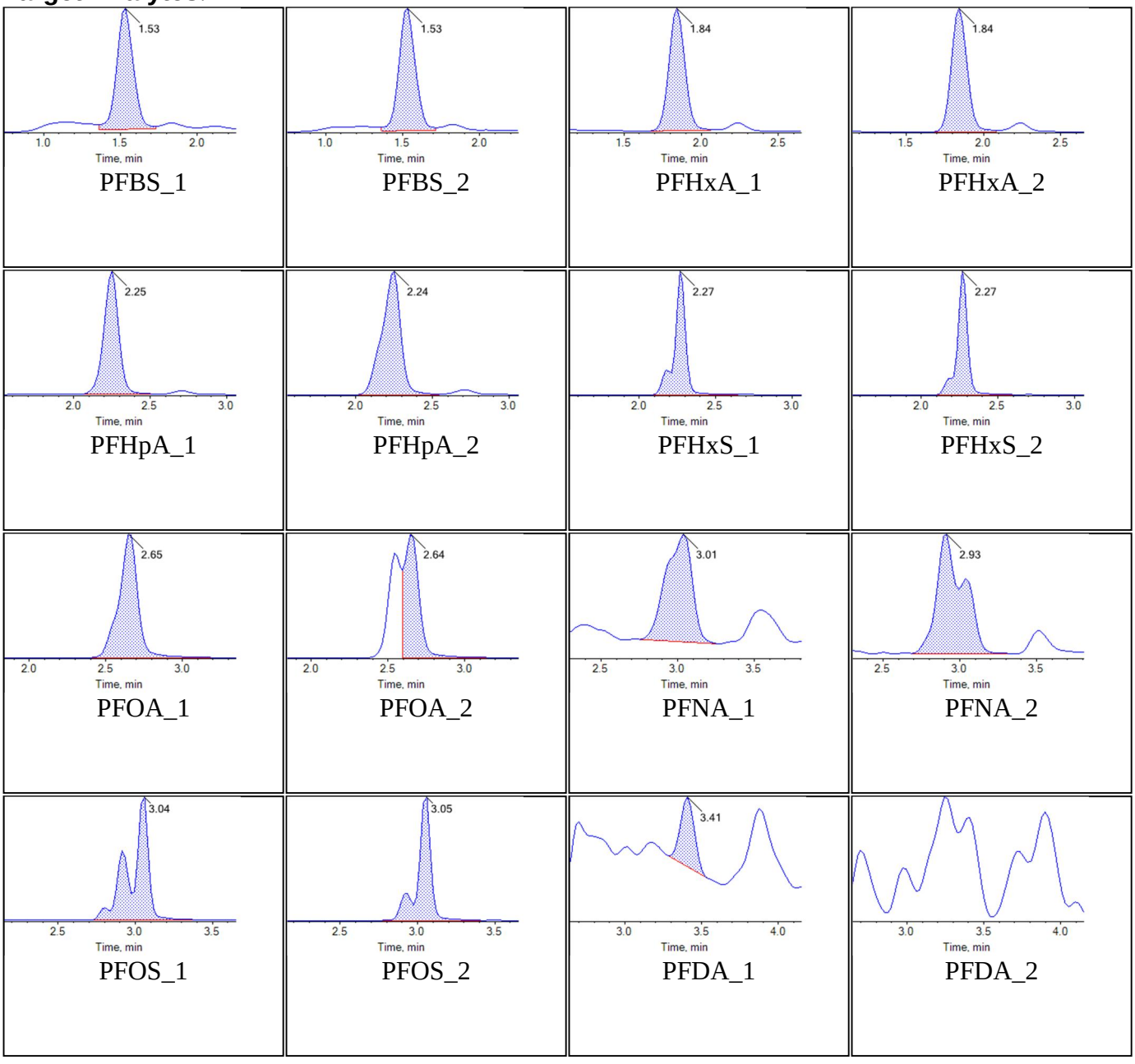
Chromatogram Report

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Printed: 05/10/2018 5:37:17 PM

Sample Name	J8272-FS(0)	**Injection Vial**	41
Sample ID	VC-PM553-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:11:39	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

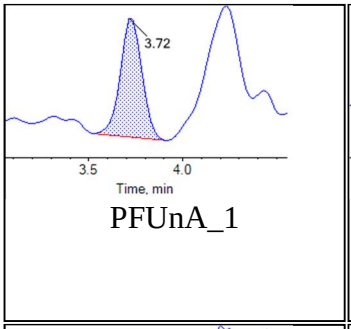
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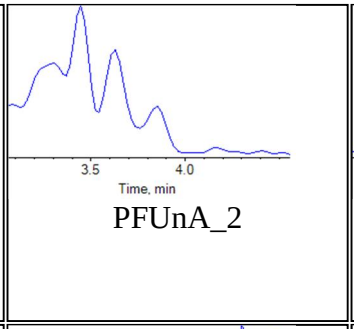
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Chromatogram Report

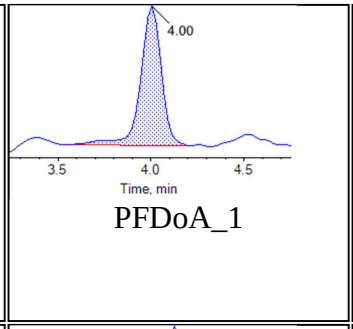
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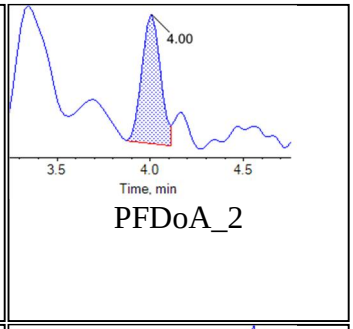
PFUnA_1



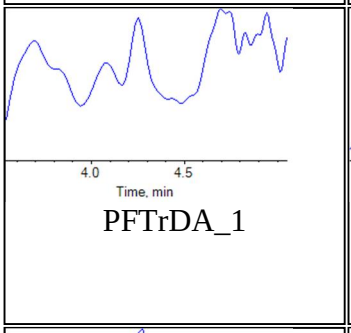
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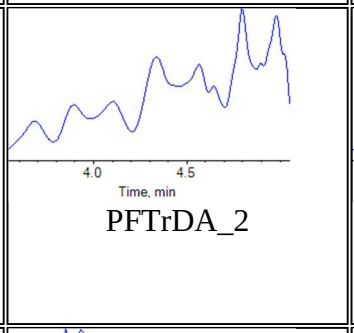
PFDoA_1



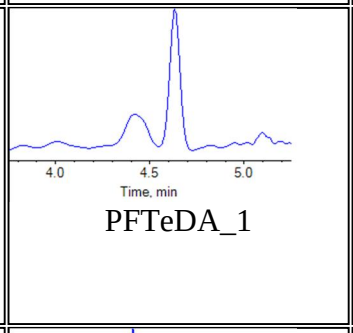
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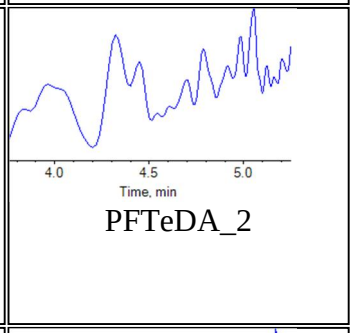
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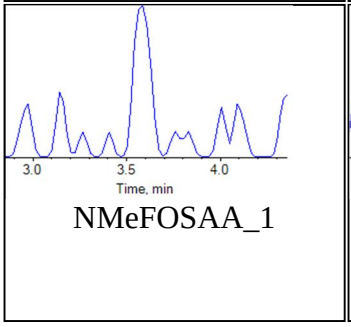
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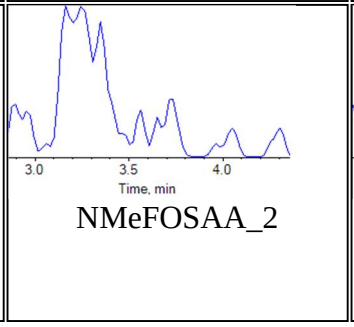
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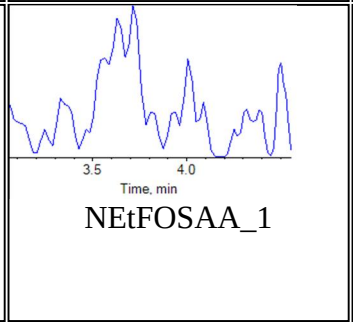
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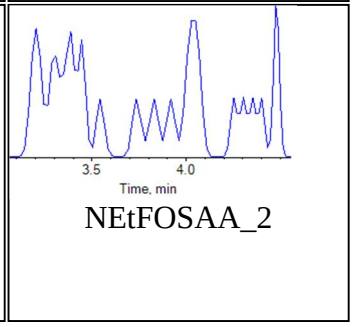
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NMeFOSAA_2

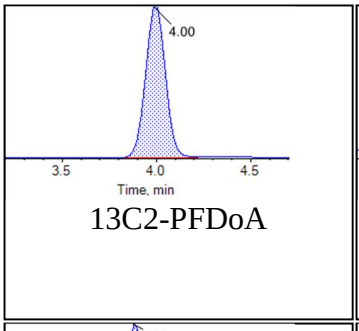


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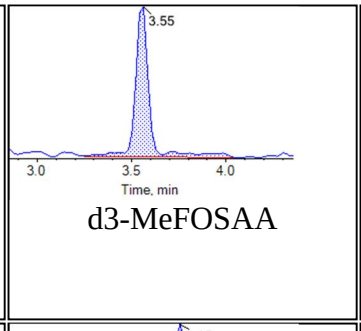


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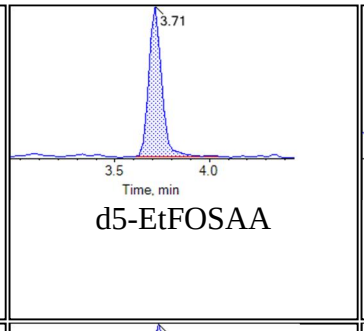
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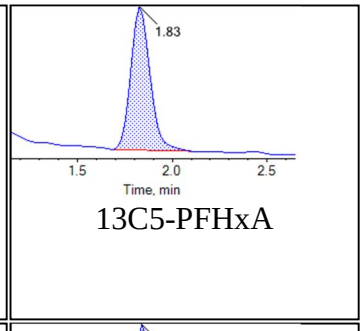
13C2-PFDoA



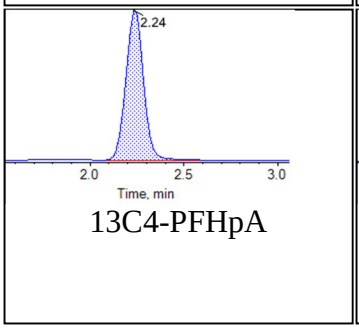
d3-MeFOSAA



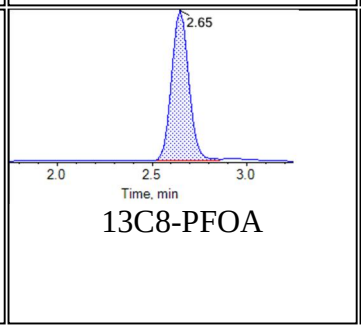
d5-EtFOSAA



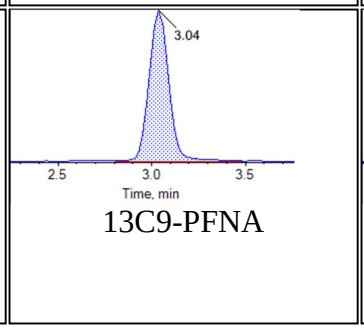
13C5-PFHxA



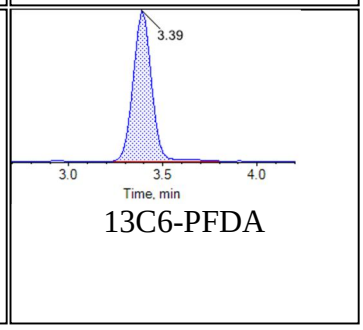
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13C8-PFOA



13C9-PFNA

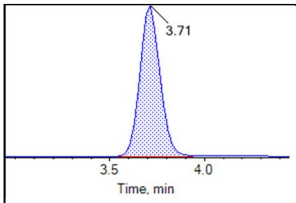


13C6-PFDA

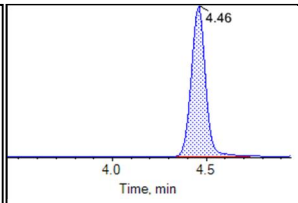
BATTELLE

Chromatogram Report

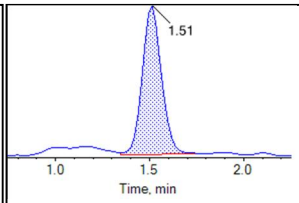
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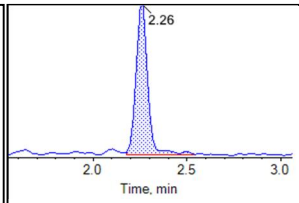
13C7-PFUnA



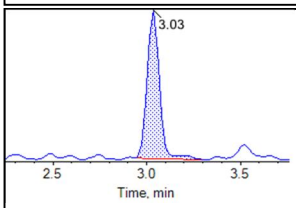
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

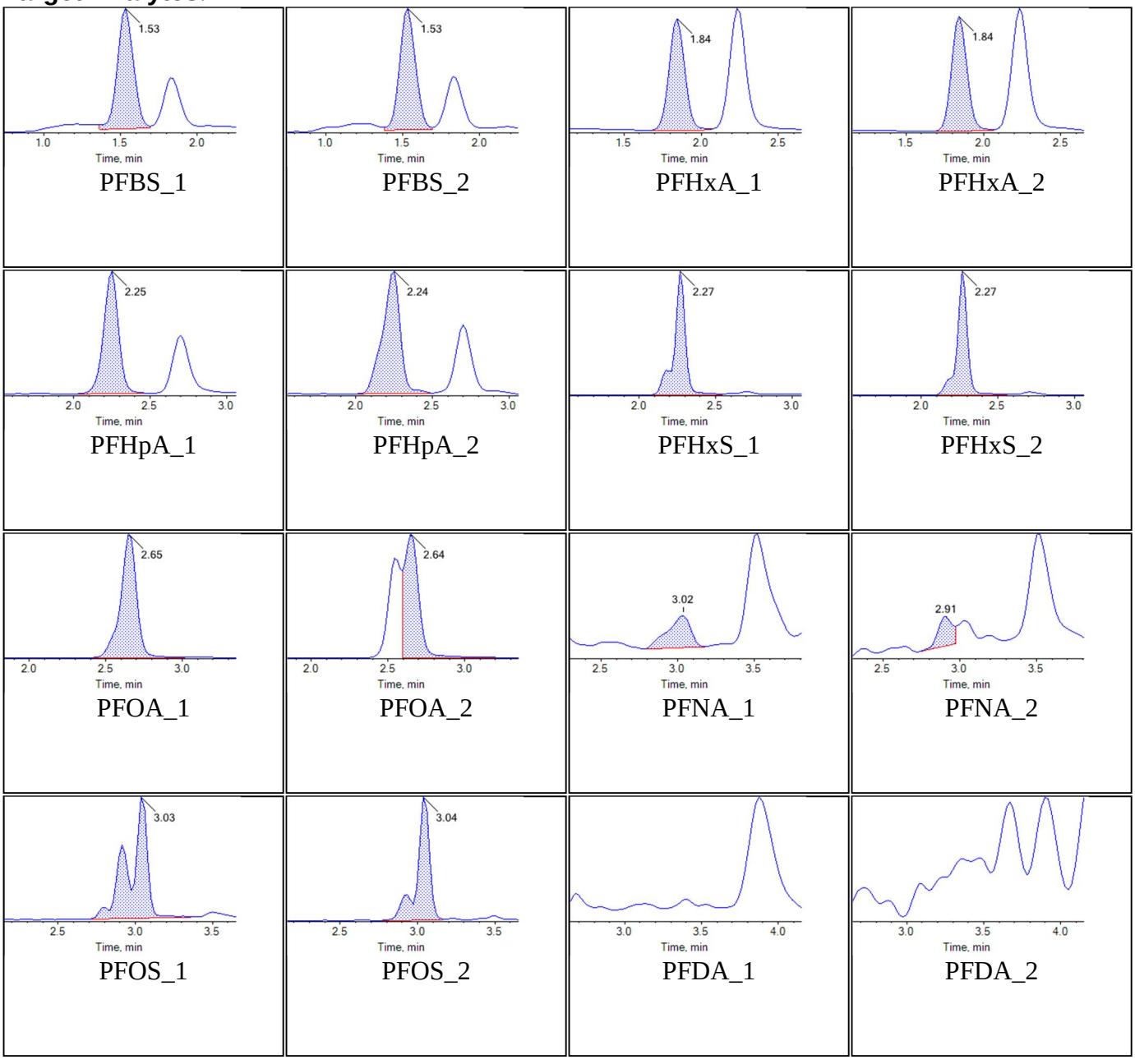
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:37:23 PM

Sample Name	J8272-FS-D(5)	**Injection Vial**	42
Sample ID	VC-PM553-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:22:32	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

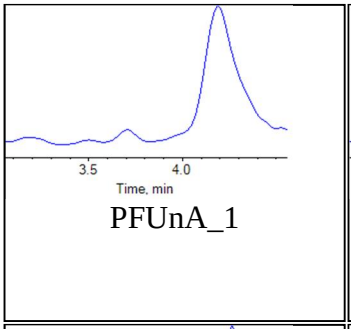
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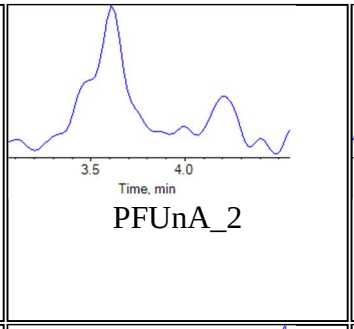
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Chromatogram Report

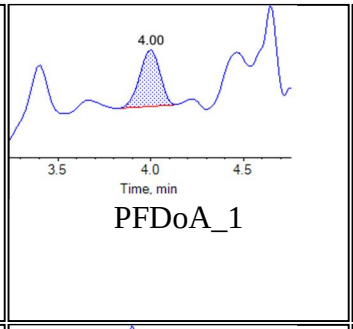
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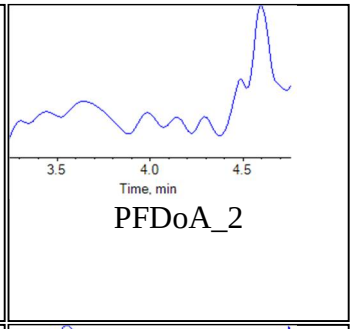
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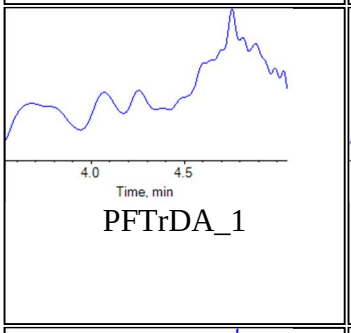
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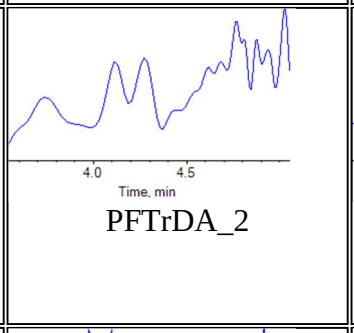
PFDoA_1



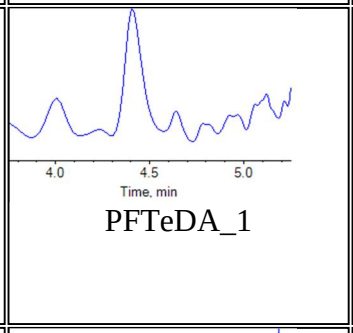
PFDoA_2



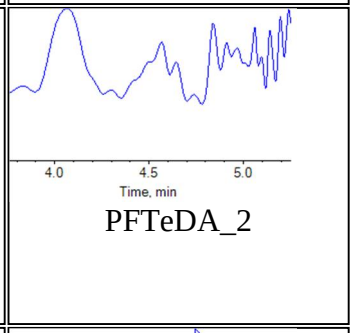
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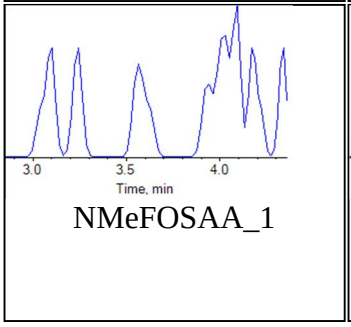
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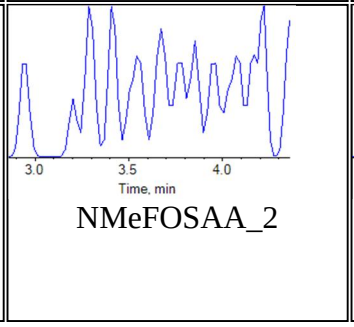
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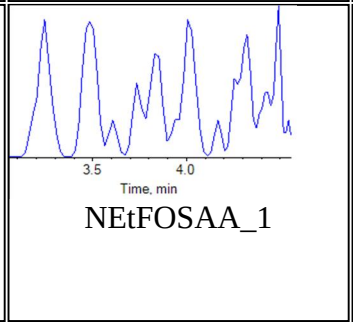
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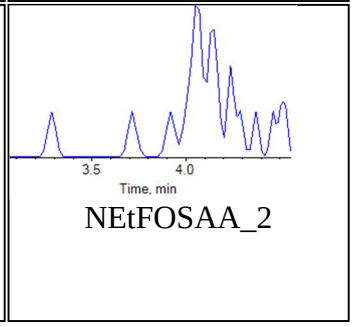
NMeFOSAA_1



NMeFOSAA_2

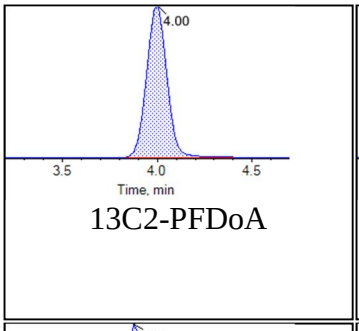


NEtFOSAA_1

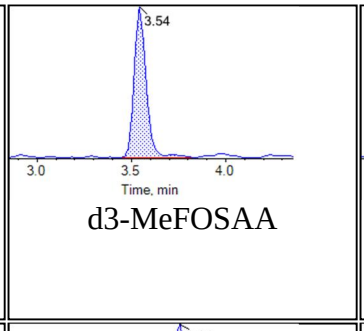


NEtFOSAA_2

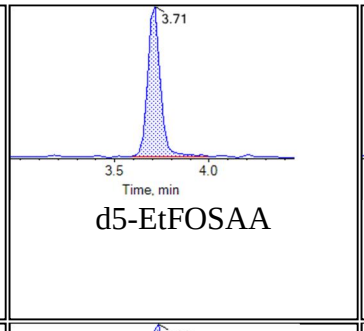
Internal Standards:



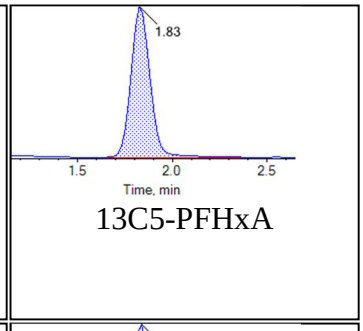
13C2-PFDoA



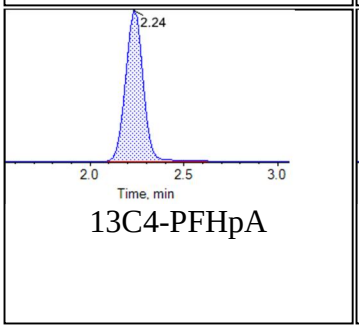
d3-MeFOSAA



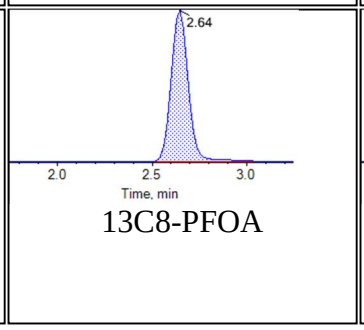
d5-EtFOSAA



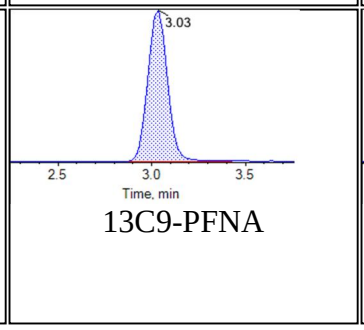
13C5-PFHxA



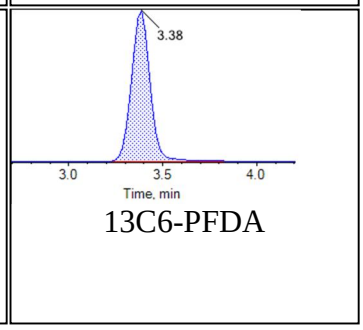
13C4-PFHpA



13C8-PFOA



13C9-PFNA

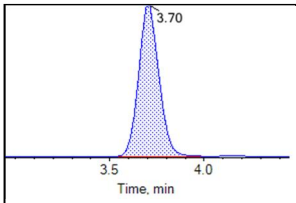


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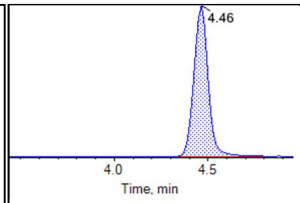
BATTELLE

Chromatogram Report

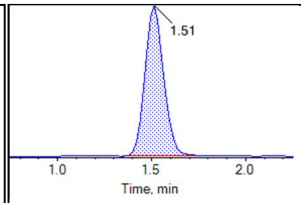
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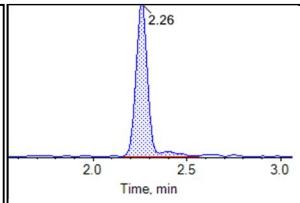
13C7-PFUnA



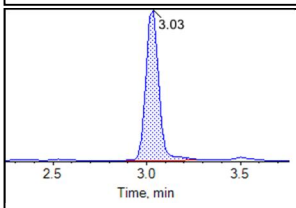
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

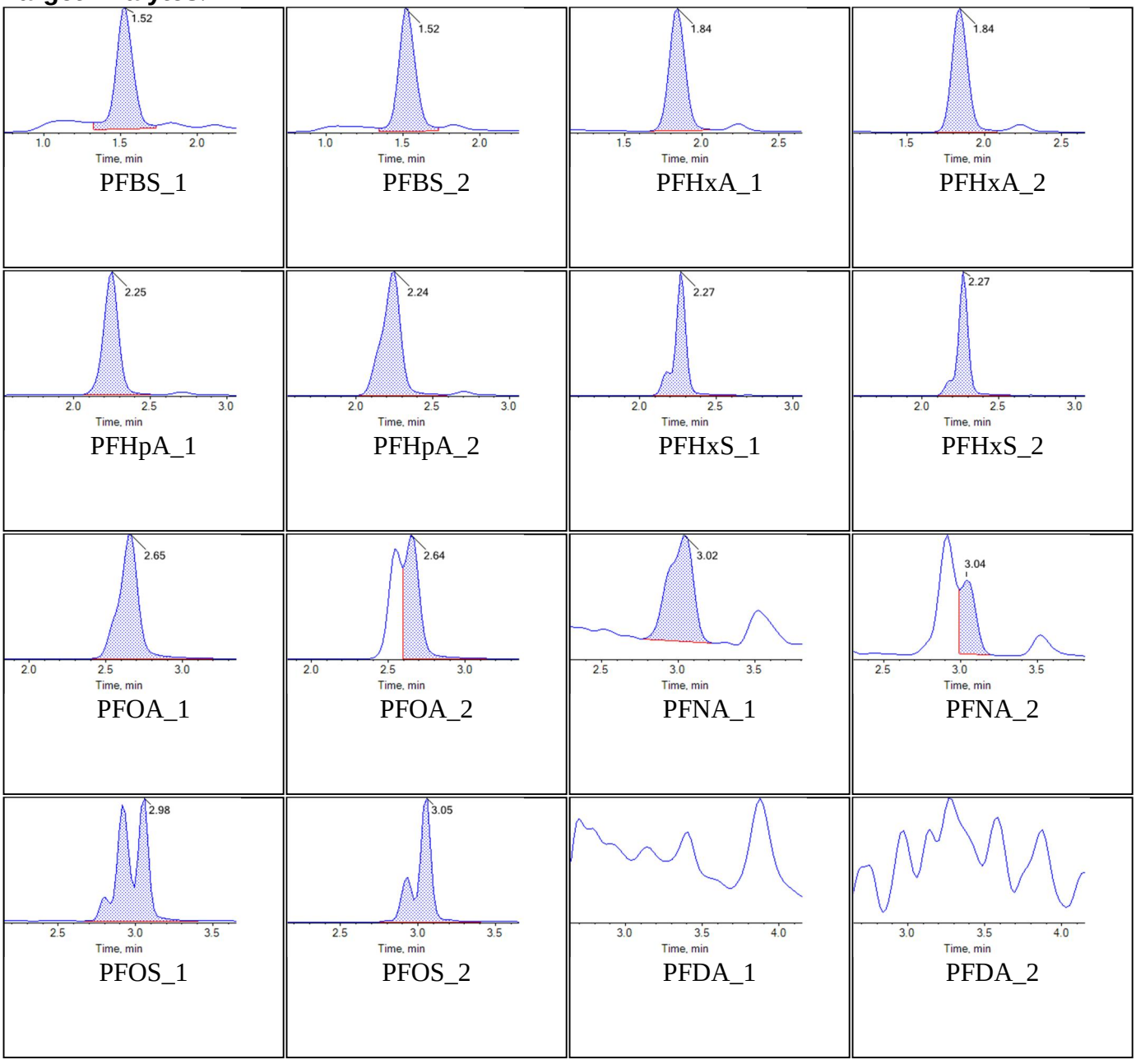
Chromatogram Report

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Printed: 05/10/2018 5:37:28 PM

Sample Name	J8273-FS(0)	**Injection Vial**	43
Sample ID	VC-PM553-DW01P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:33:25	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

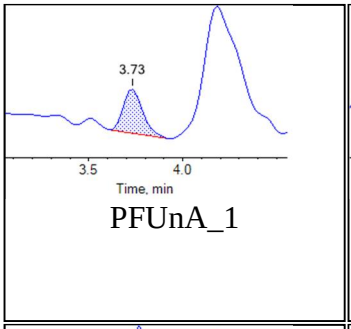
Target Analytes:



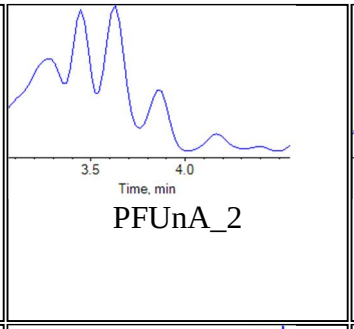
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Chromatogram Report

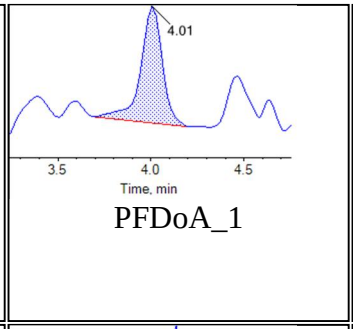
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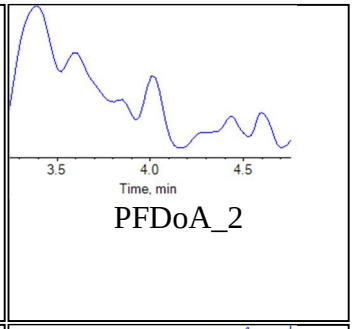
PFUnA_1



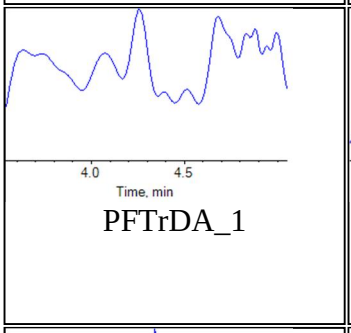
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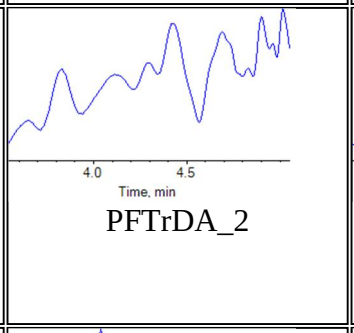
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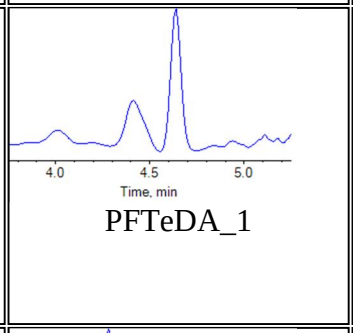
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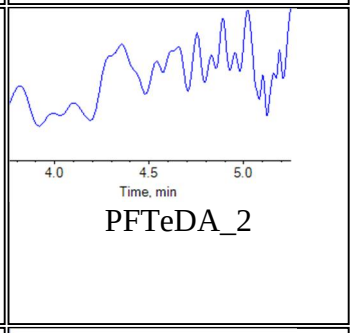
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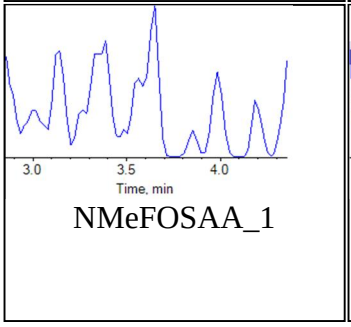
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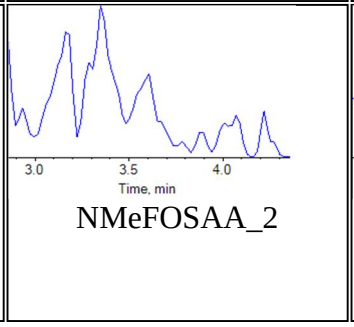
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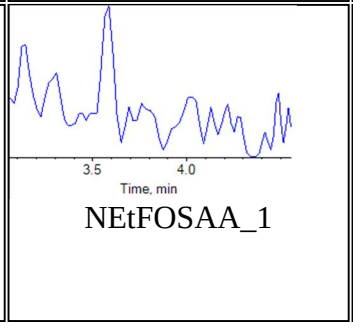
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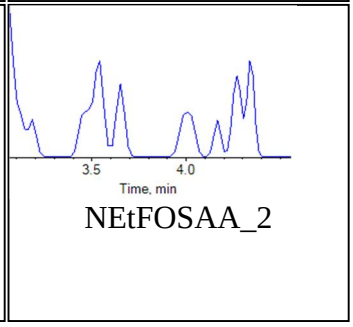
NMeFOSAA_1



NMeFOSAA_2

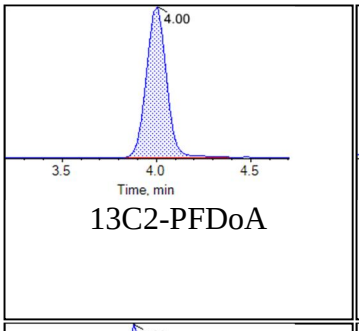


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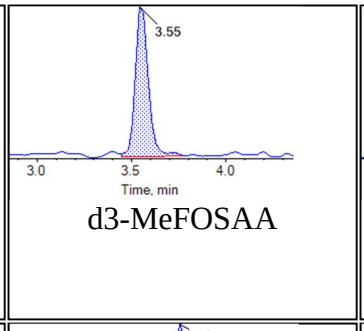


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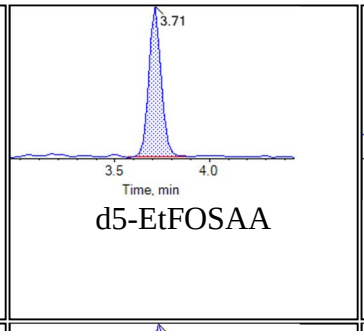
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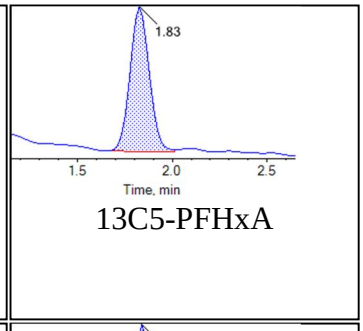
13C2-PFDoA



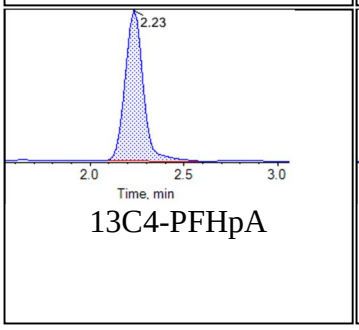
d3-MeFOSAA



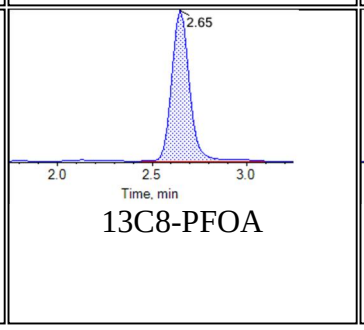
d5-EtFOSAA



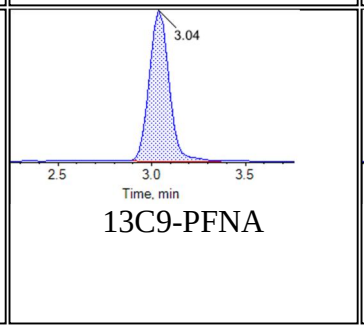
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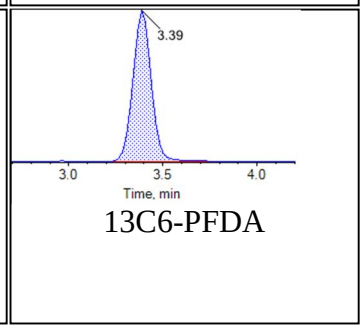
13C4-PFHpA



13C8-PFOA



13C9-PFNA

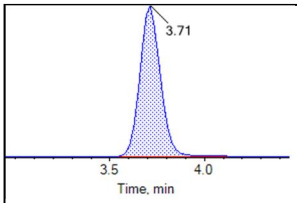


13C6-PFDA

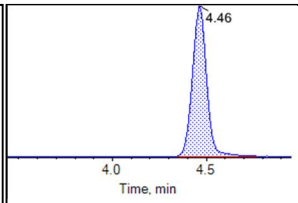
BATTELLE

Chromatogram Report

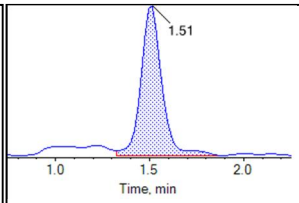
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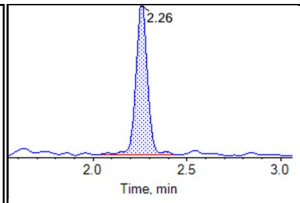
13C7-PFUnA



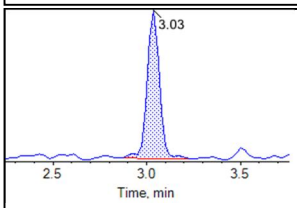
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

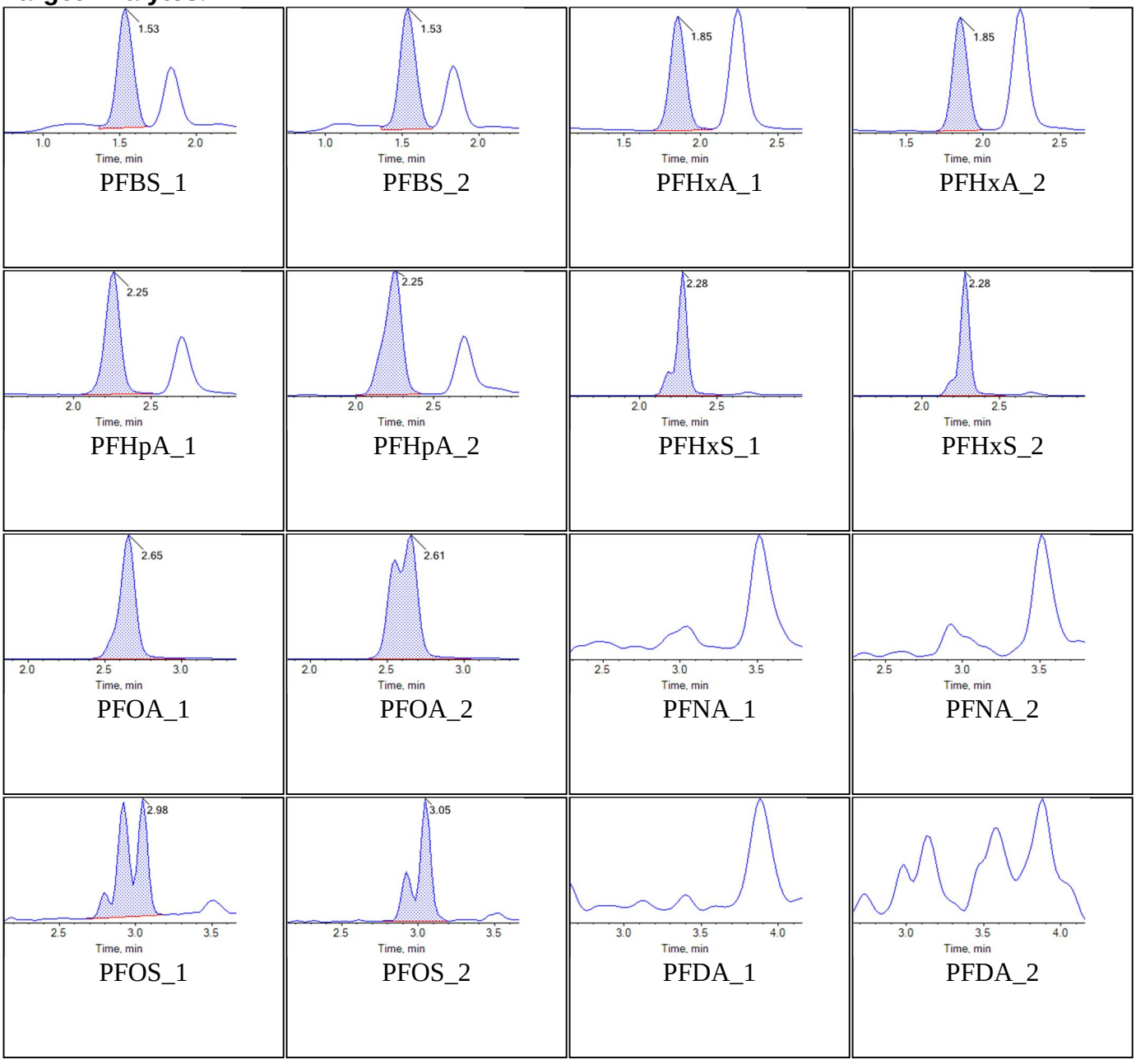
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:37:33 PM

Sample Name	J8273-FS-D(5)	**Injection Vial**	44
Sample ID	VC-PM553-DW01P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:44:17	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

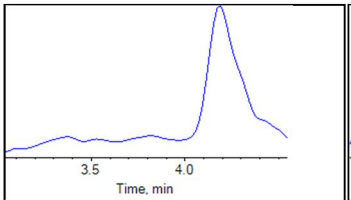
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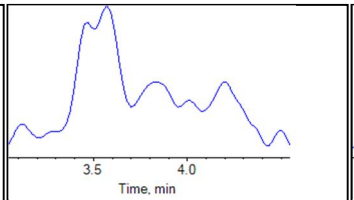
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Chromatogram Report

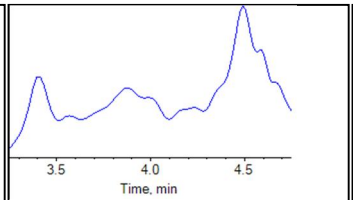
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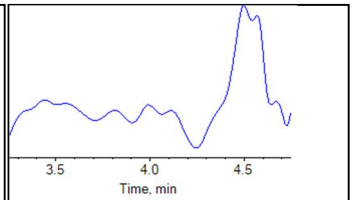
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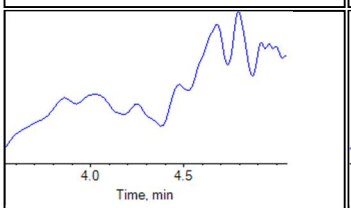
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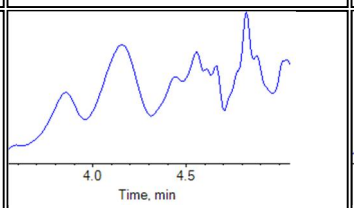
PFDoA_1



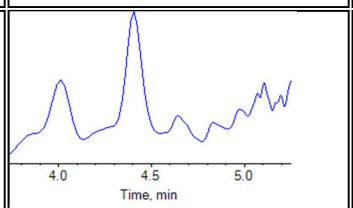
PFDoA_2



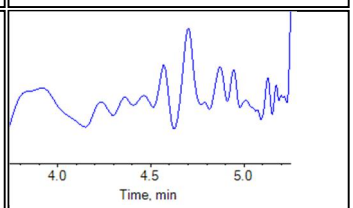
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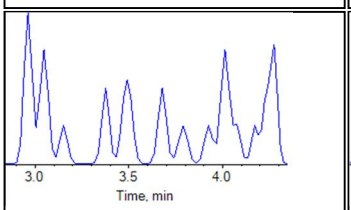
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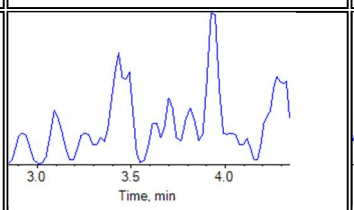
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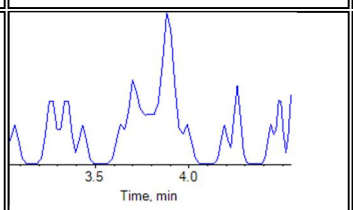
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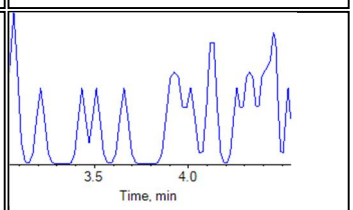
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NMeFOSAA_2

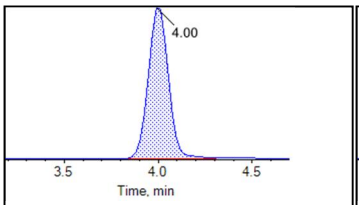


NEtFOSAA_1

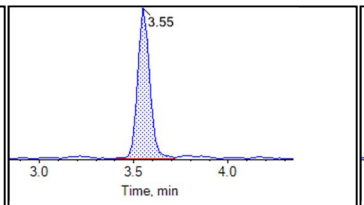


NEtFOSAA_2

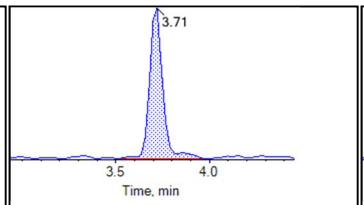
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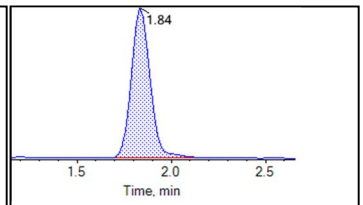
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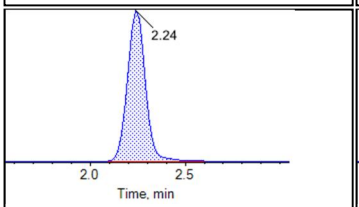
d3-MeFOSAA



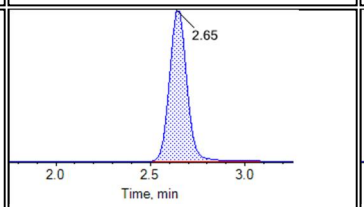
d5-EtFOSAA



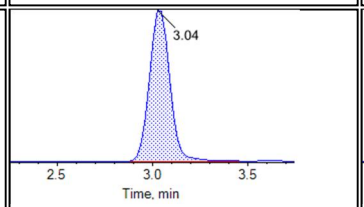
13C5-PFHxA



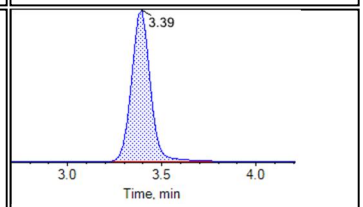
13C4-PFHpA



13C8-PFOA



13C9-PFNA

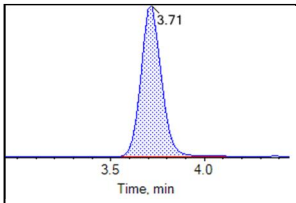


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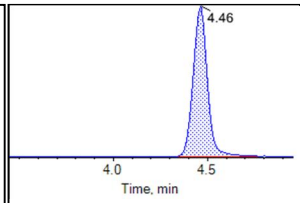
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Chromatogram Report

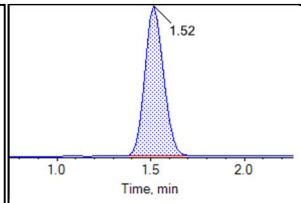
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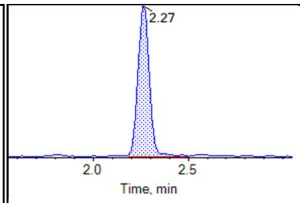
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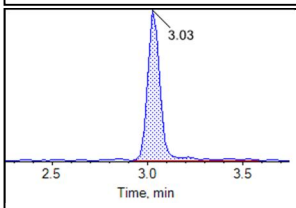
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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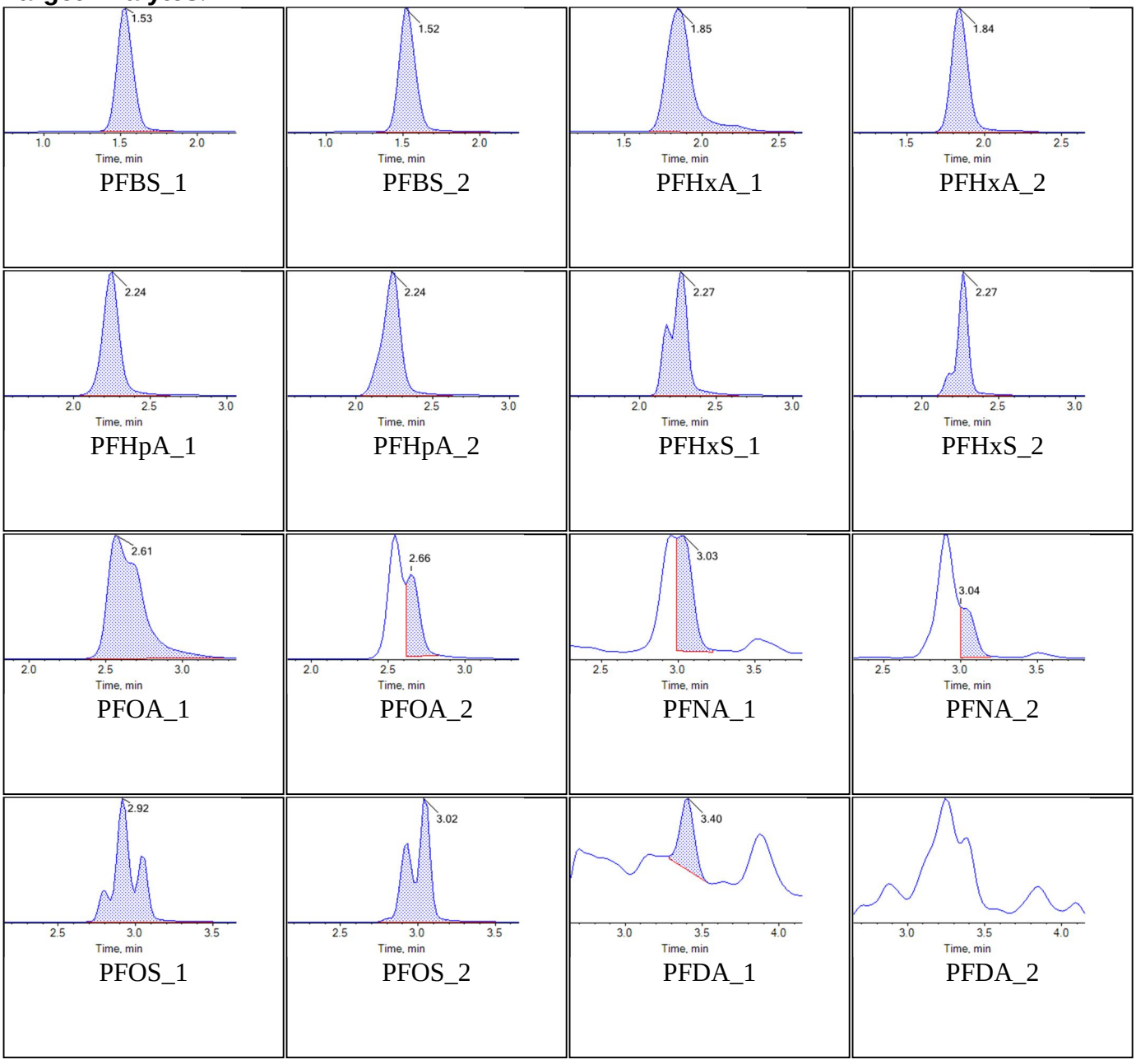
Chromatogram Report

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Printed: 05/10/2018 5:37:37 PM

Sample Name	J8274-FS(0)	**Injection Vial**	45
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:55:09	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

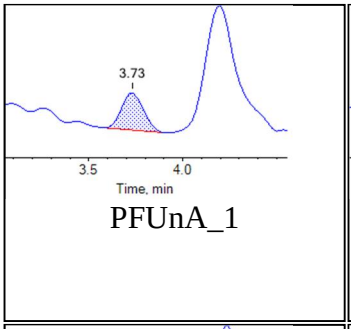
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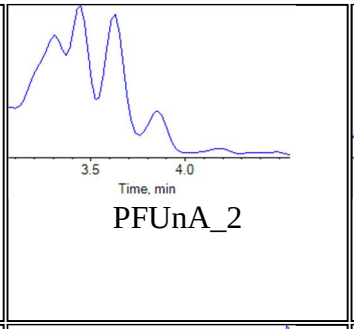
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Chromatogram Report

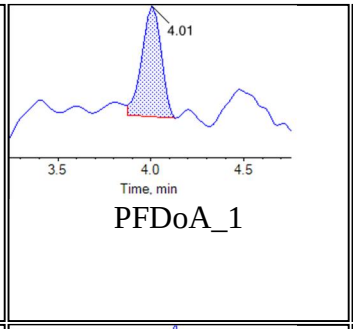
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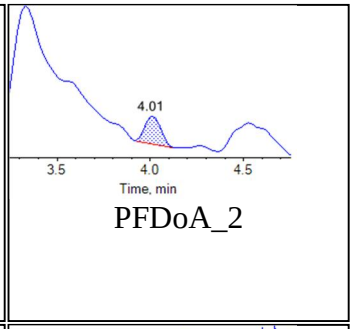
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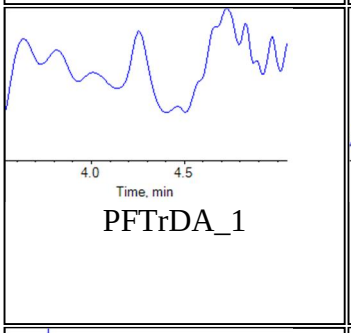
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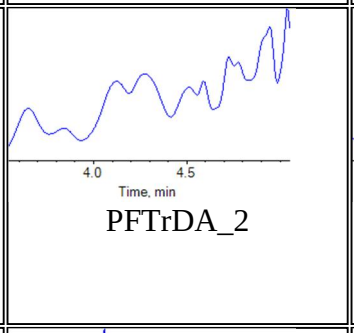
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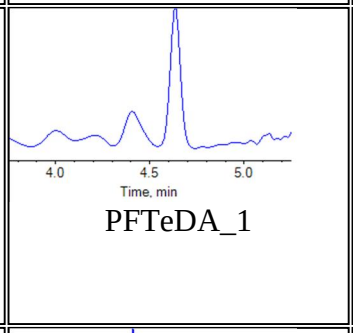
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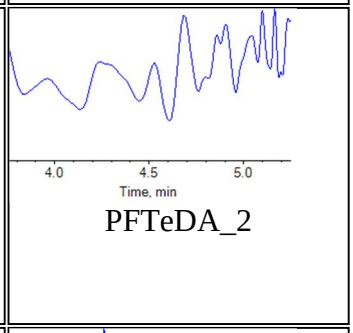
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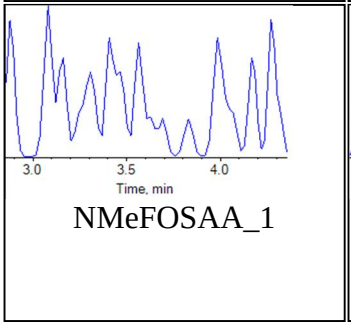
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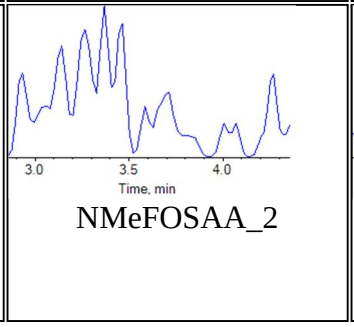
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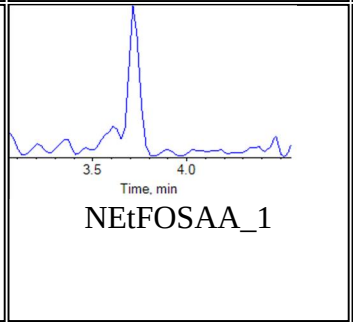
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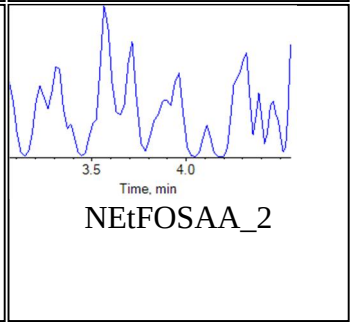
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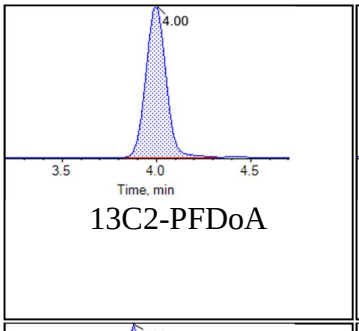


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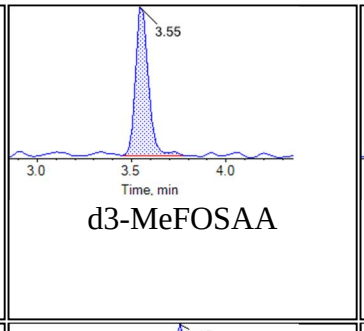


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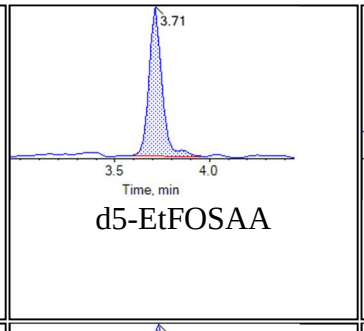
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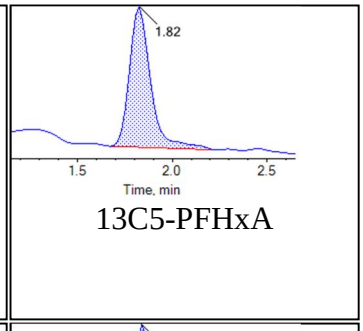
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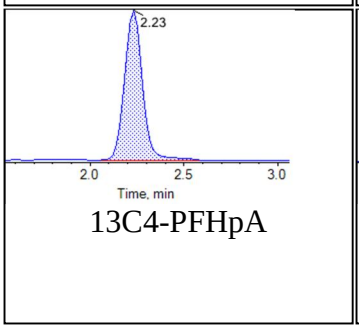
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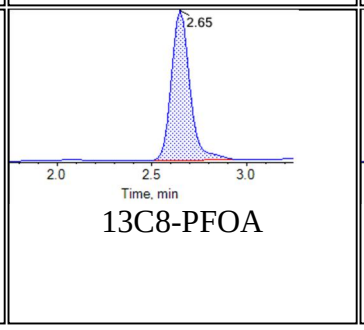
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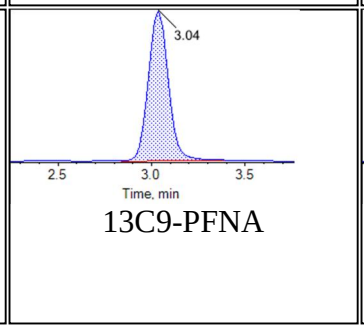
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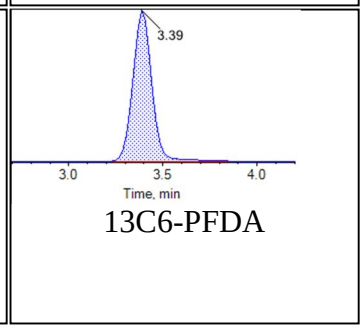
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13C8-PFOA



13C9-PFNA

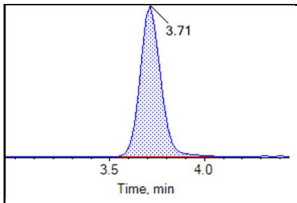


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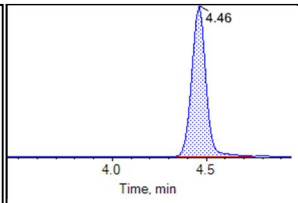
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Chromatogram Report

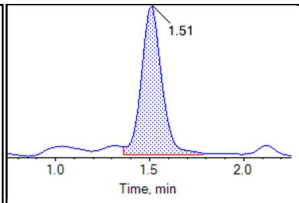
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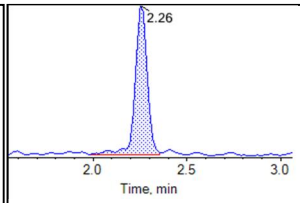
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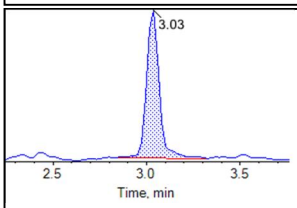
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13C3-PFBS



13C3-PFHxS



13C8-PFOS

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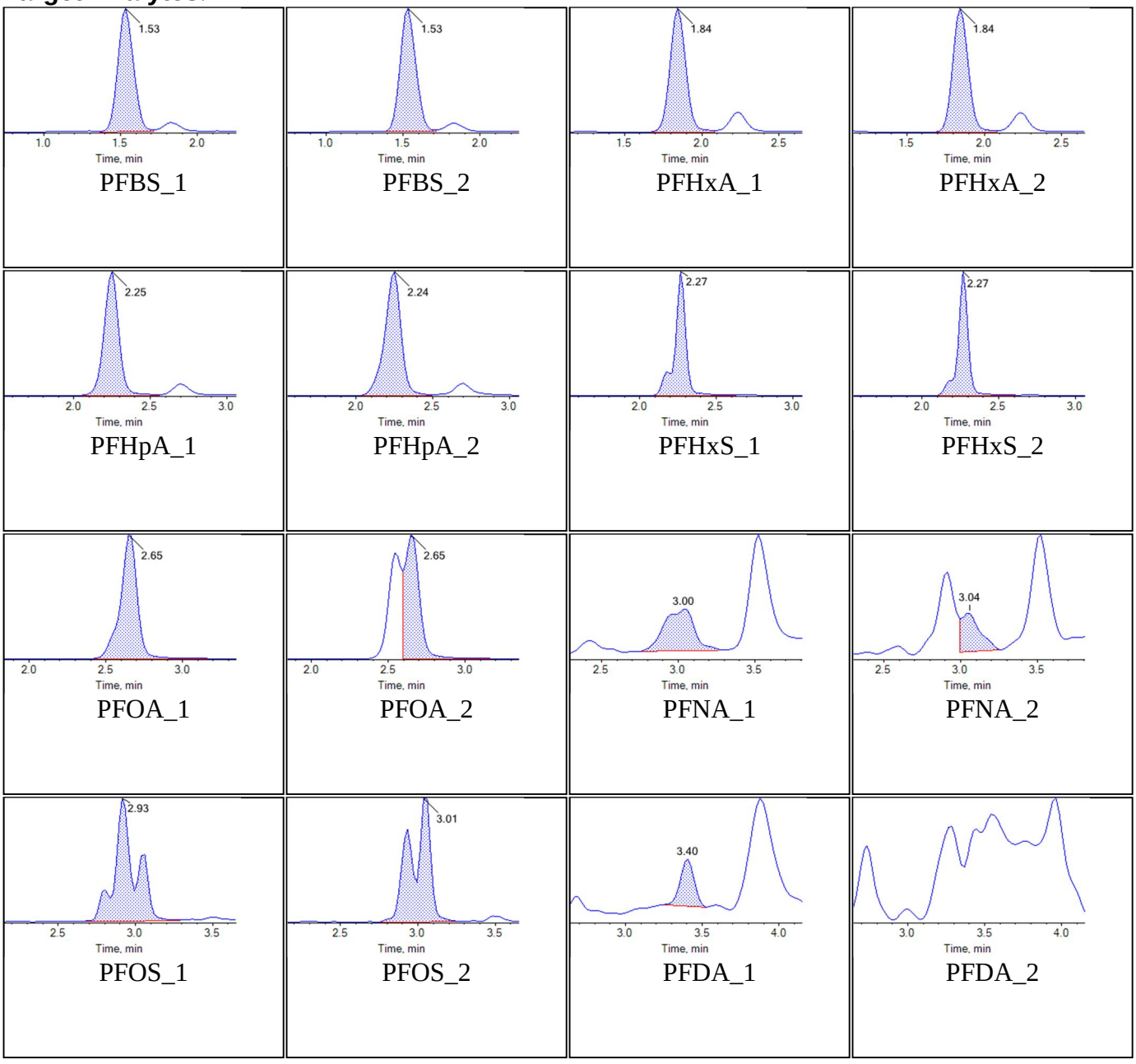
Chromatogram Report

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Printed: 05/10/2018 5:37:42 PM

Sample Name	J8274-FS-D(9)	**Injection Vial**	46
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:06:02	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

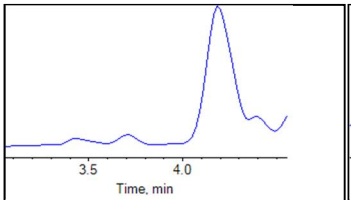
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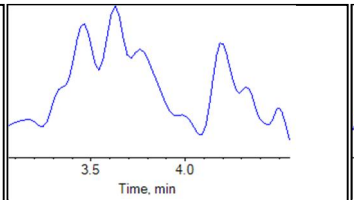
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Chromatogram Report

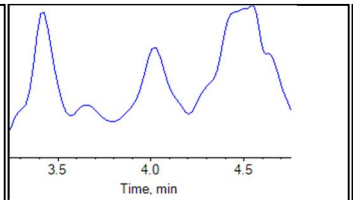
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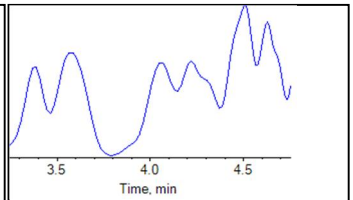
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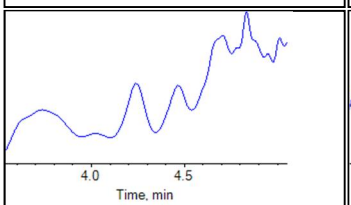
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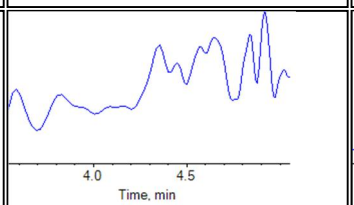
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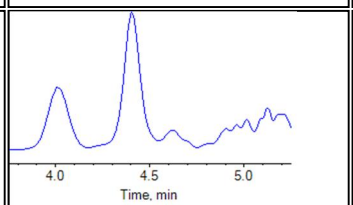
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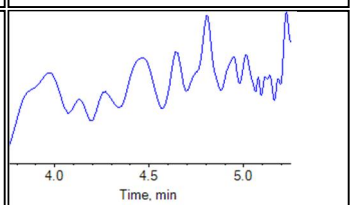
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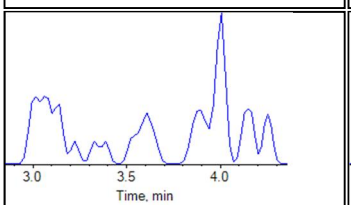
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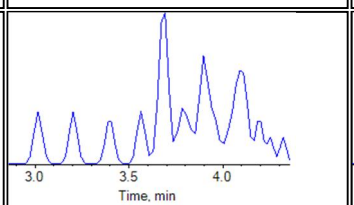
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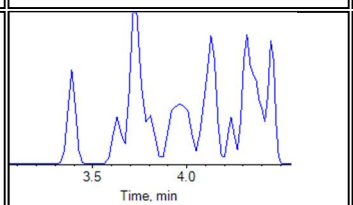
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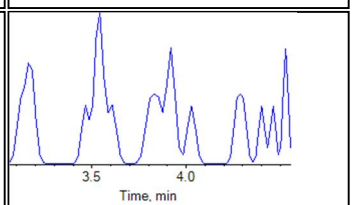
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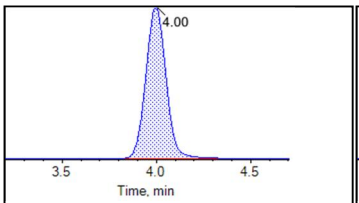


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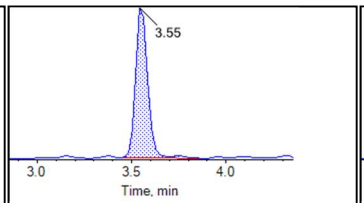


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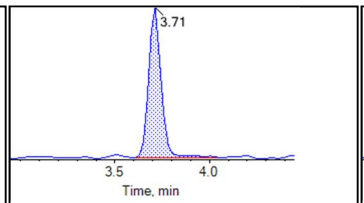
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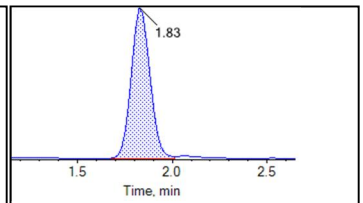
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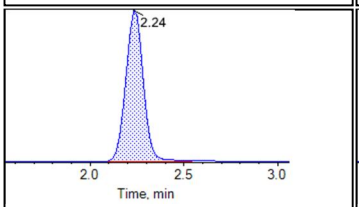
d3-MeFOSAA



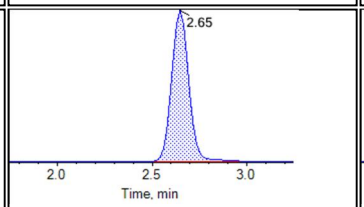
d5-EtFOSAA



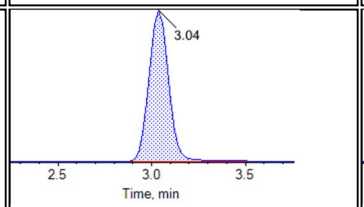
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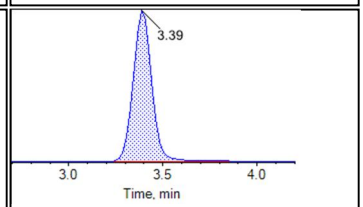
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13C8-PFOA



13C9-PFNA

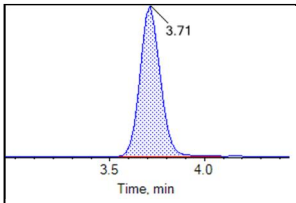


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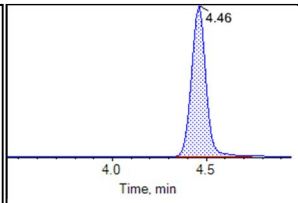
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Chromatogram Report

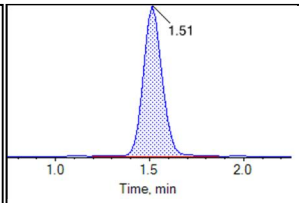
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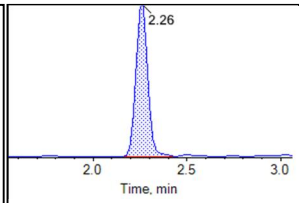
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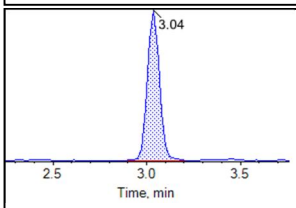
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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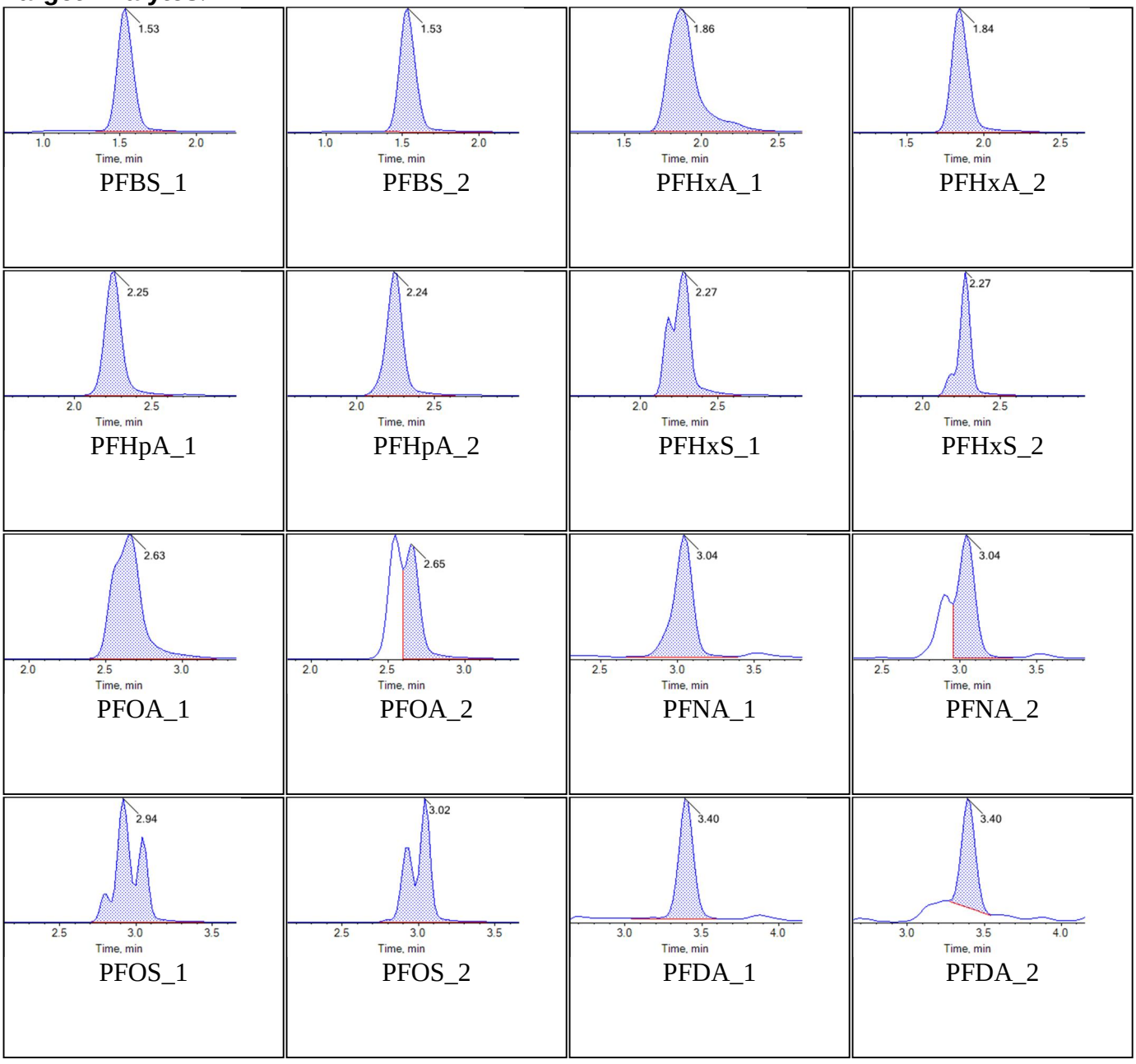
Chromatogram Report

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Printed: 05/10/2018 5:37:51 PM

Sample Name	J8275-FS(0)	**Injection Vial**	48
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:27:47	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

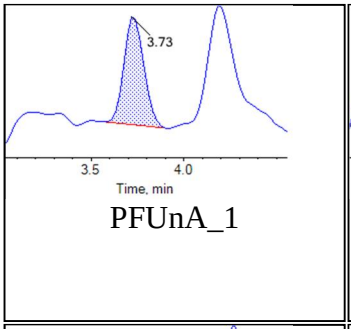
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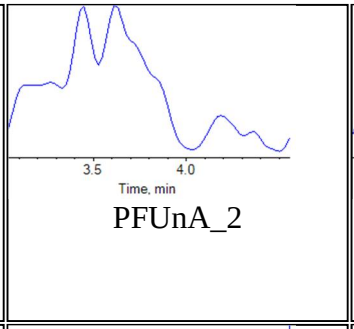
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Chromatogram Report

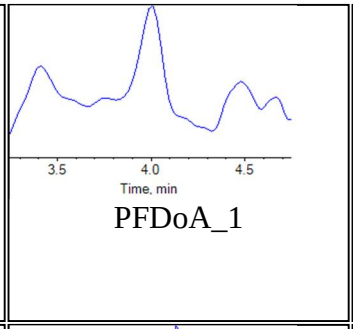
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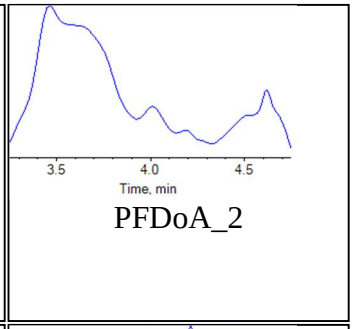
PFUnA_1



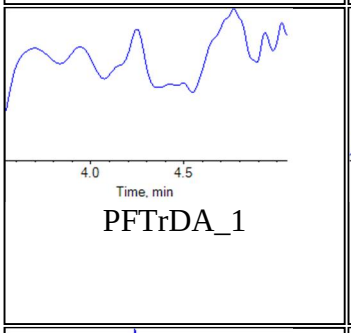
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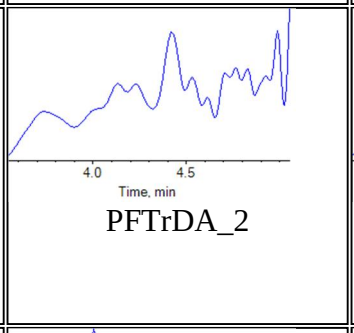
PFDoA_1



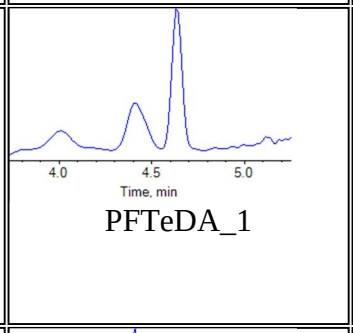
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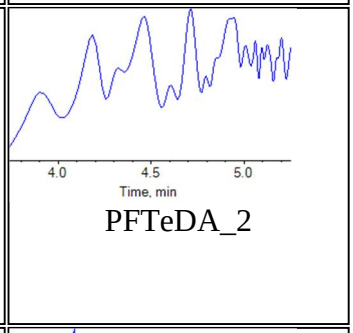
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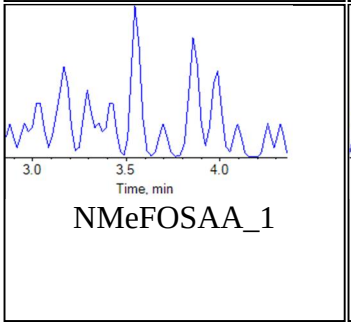
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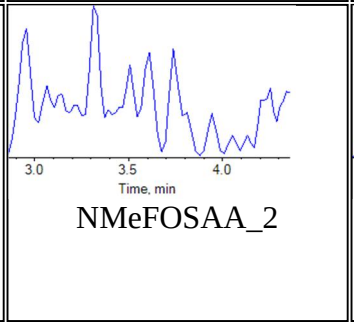
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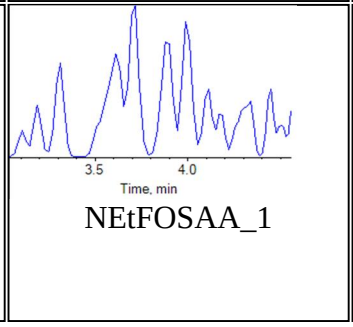
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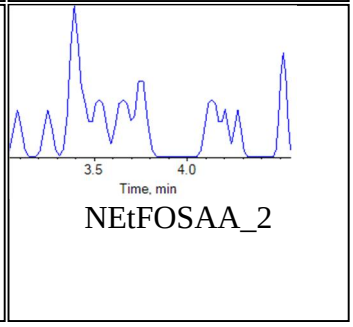
NMeFOSAA_1



NMeFOSAA_2

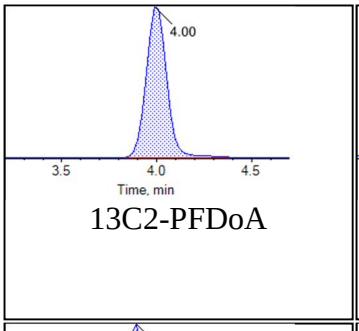


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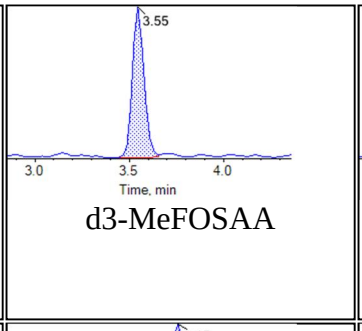


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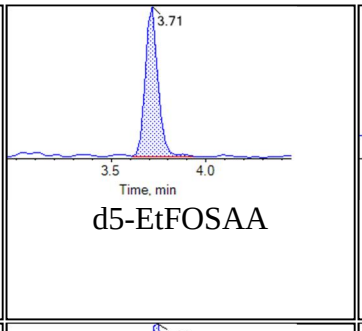
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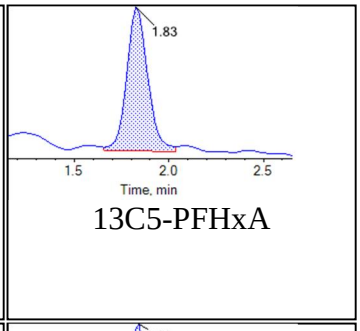
13C2-PFDoA



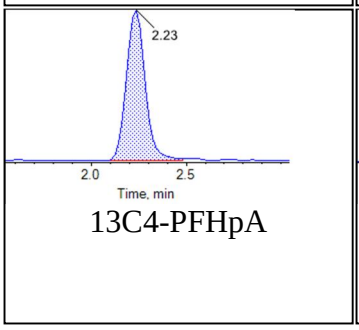
d3-MeFOSAA



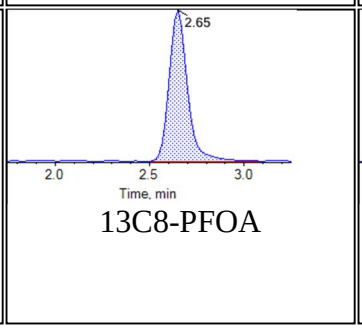
d5-EtFOSAA



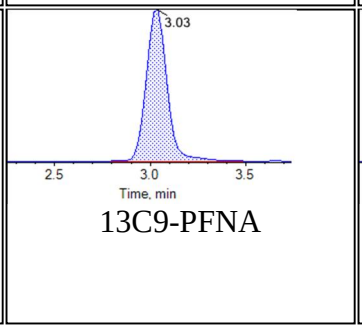
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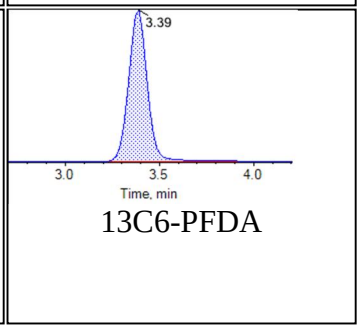
13C4-PFHpA



13C8-PFOA



13C9-PFNA

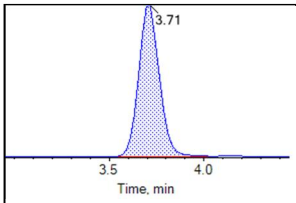


13C6-PFDA

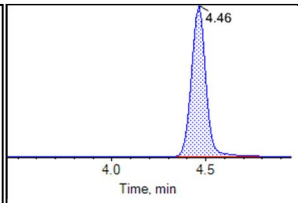
BATTELLE

Chromatogram Report

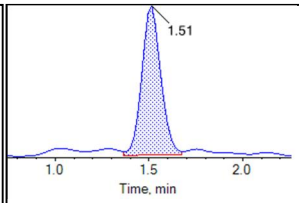
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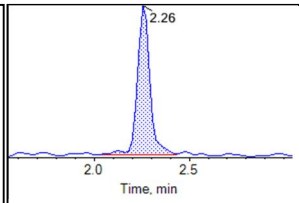
13C7-PFUnA



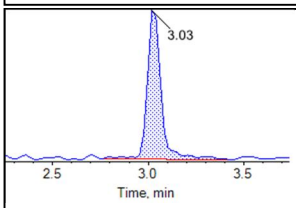
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

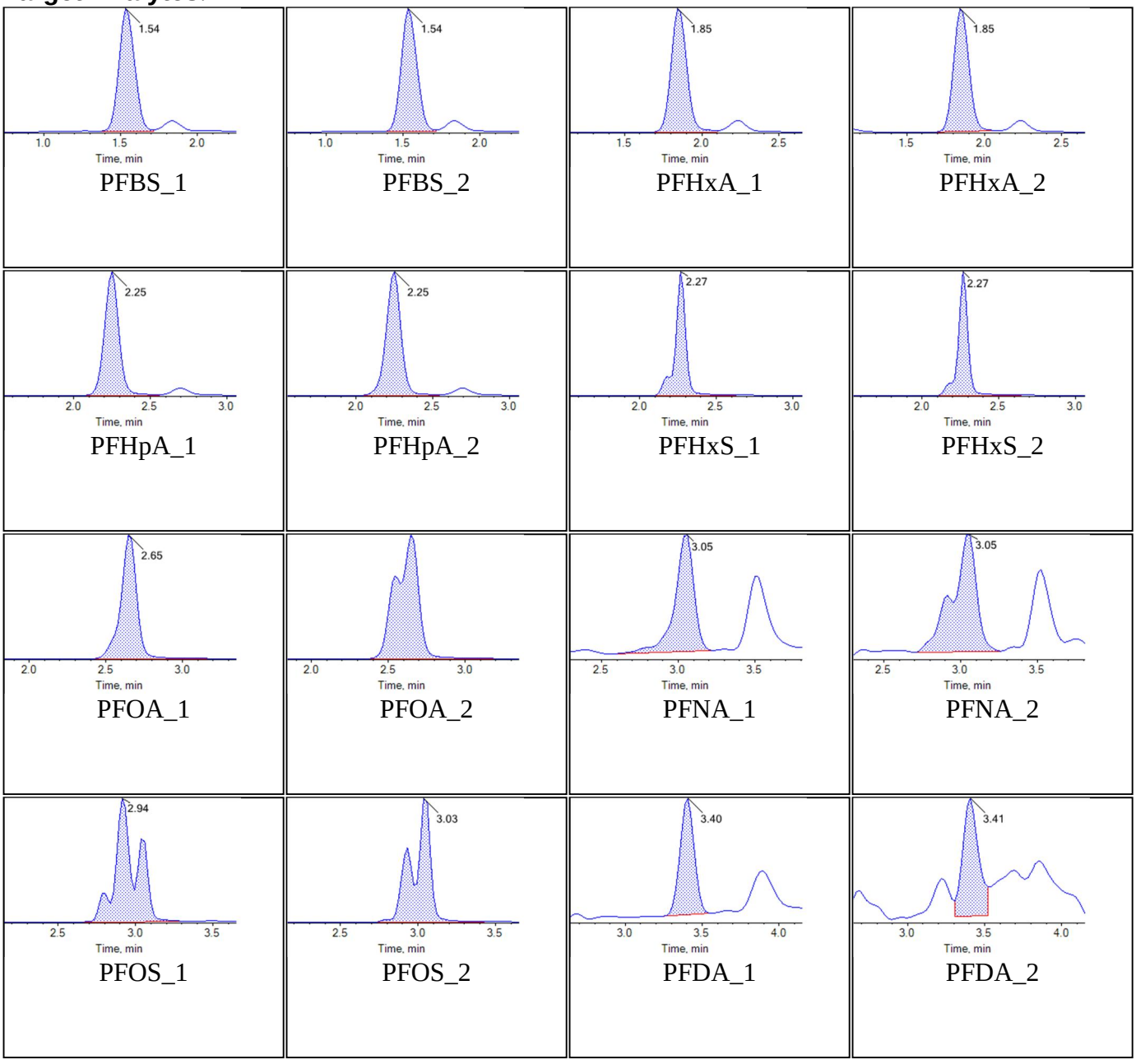
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:37:56 PM

Sample Name	J8275-FS-D(7)	**Injection Vial**	49
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:38:40	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

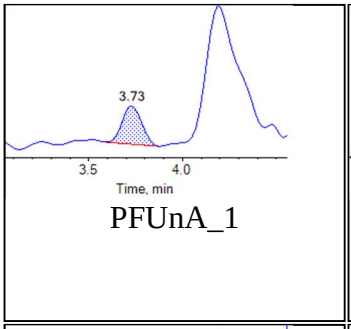
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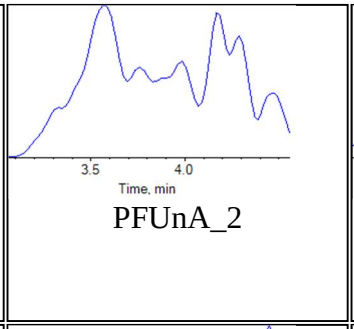
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Chromatogram Report

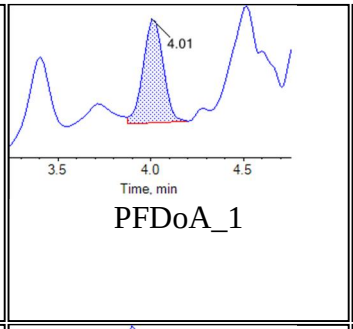
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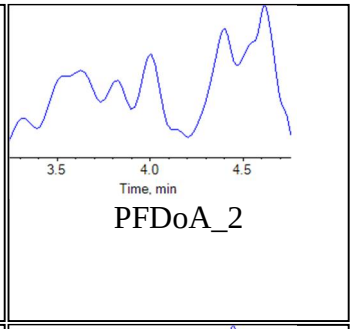
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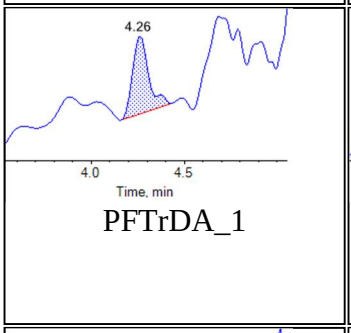
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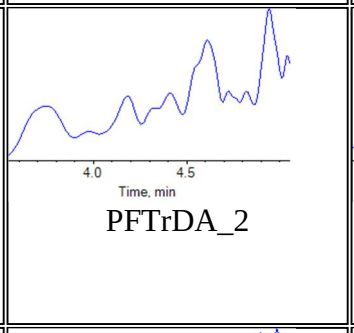
PFDoA_1



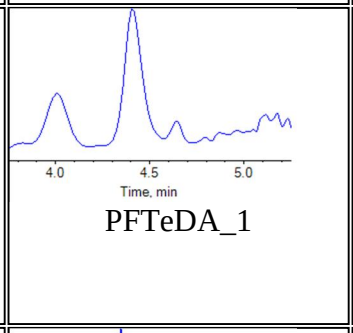
PFDoA_2



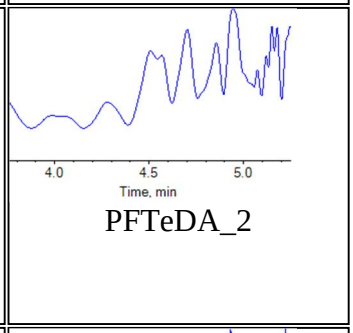
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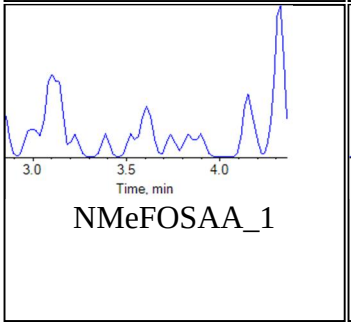
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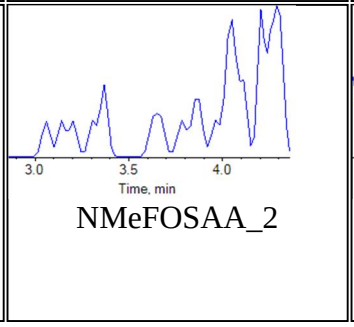
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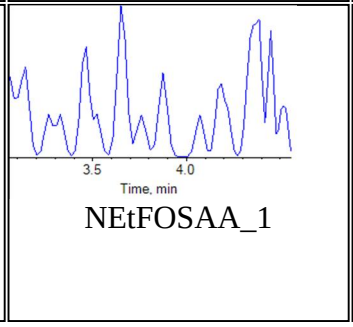
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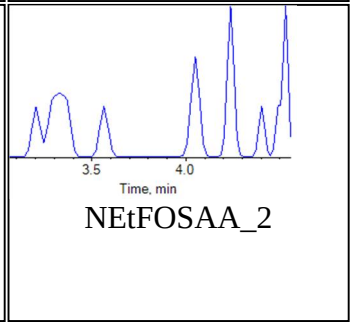
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NMeFOSAA_2

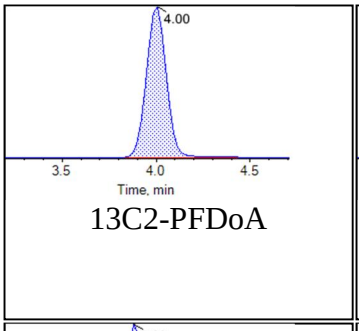


NEtFOSAA_1

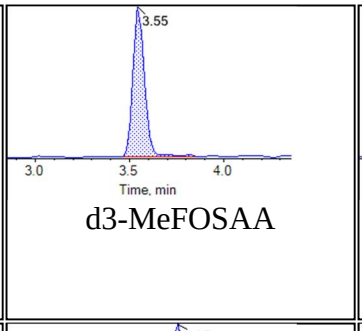


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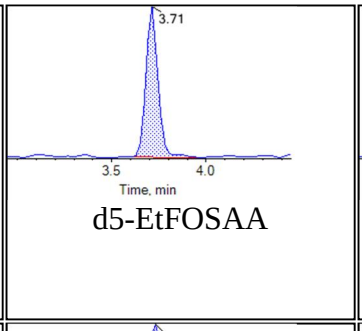
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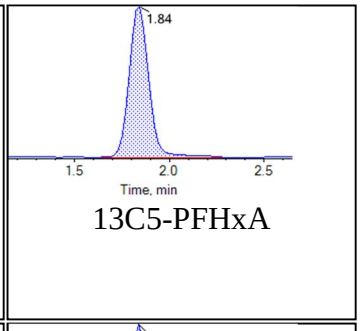
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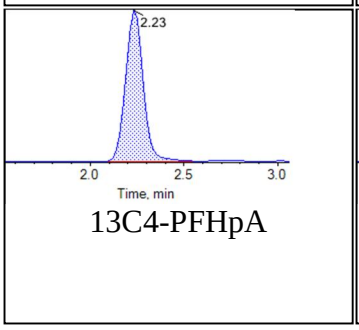
d3-MeFOSAA



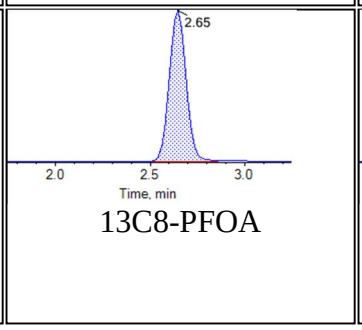
d5-EtFOSAA



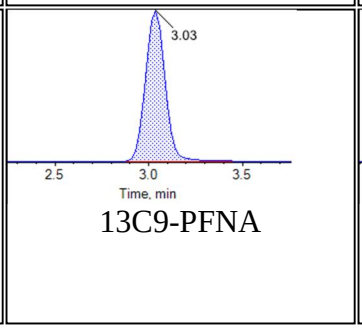
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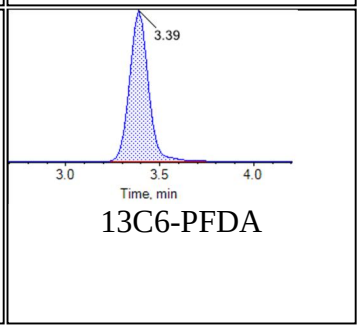
13C4-PFHpA



13C8-PFOA



13C9-PFNA

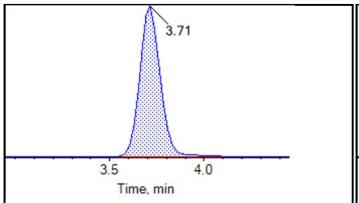


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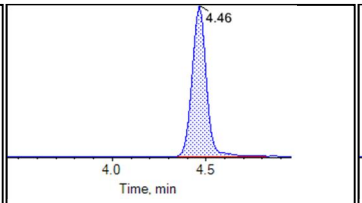
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Chromatogram Report

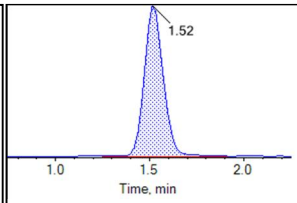
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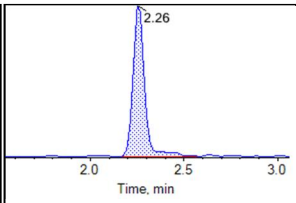
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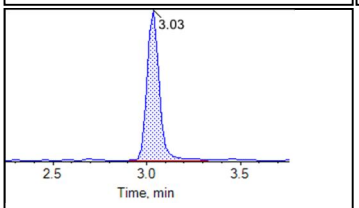
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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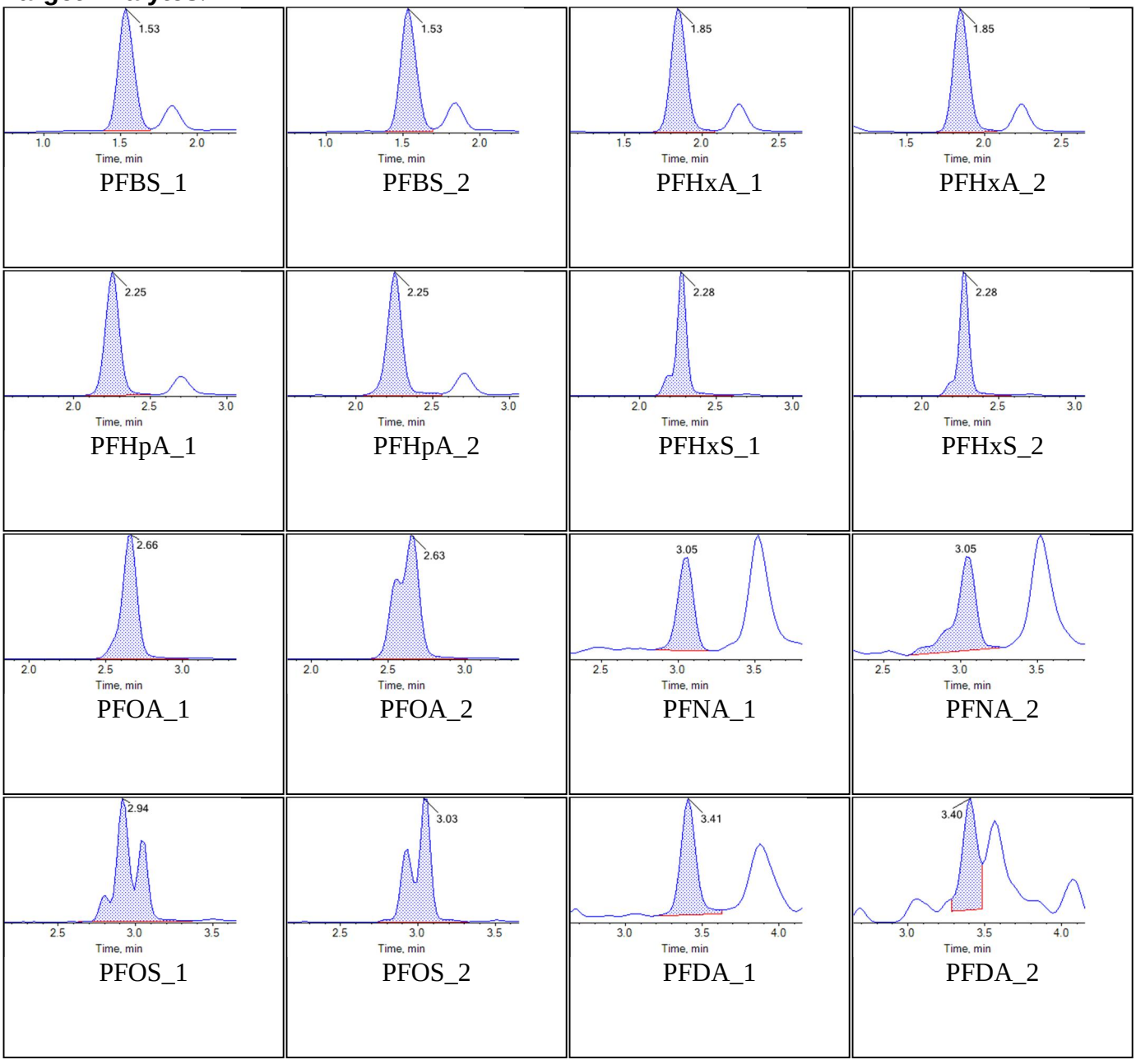
Chromatogram Report

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Printed: 05/10/2018 5:38:00 PM

Sample Name	J8275-FS-D(9)	**Injection Vial**	50
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:49:33	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

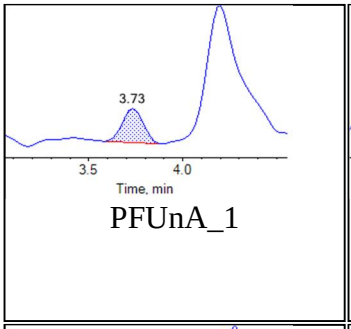
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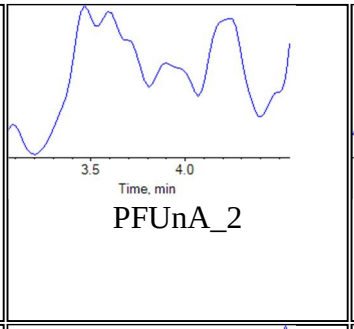
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Chromatogram Report

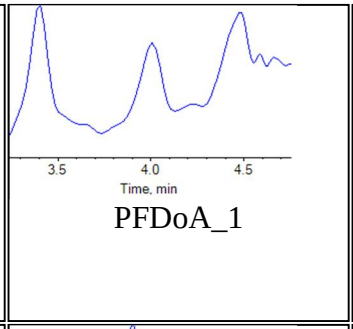
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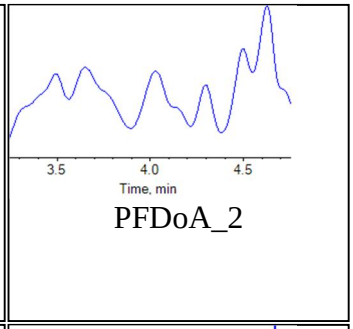
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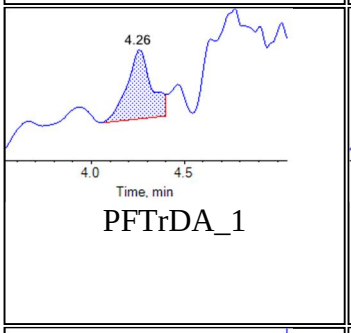
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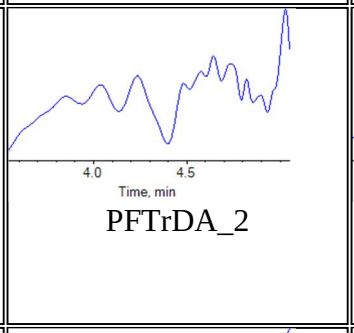
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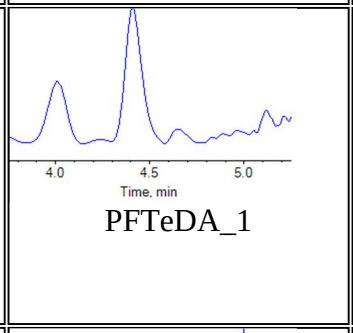
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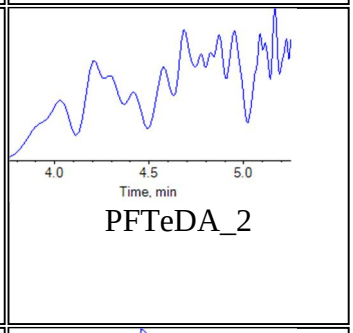
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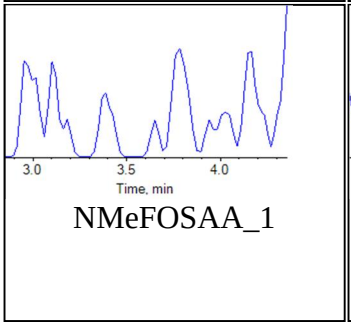
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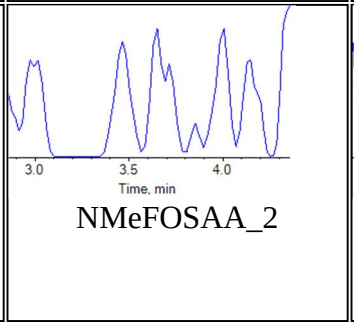
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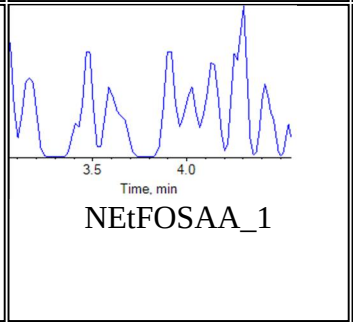
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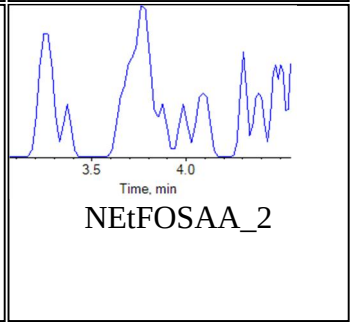
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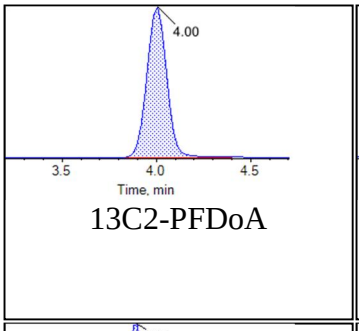


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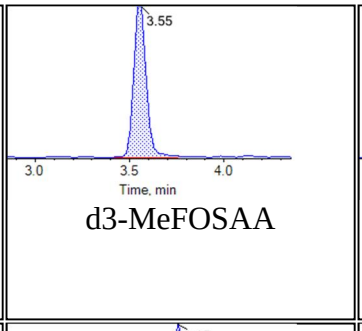


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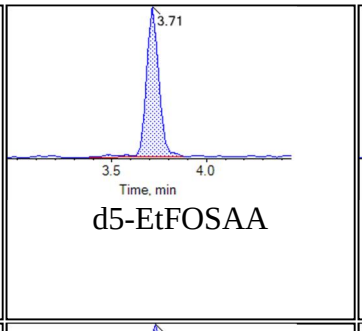
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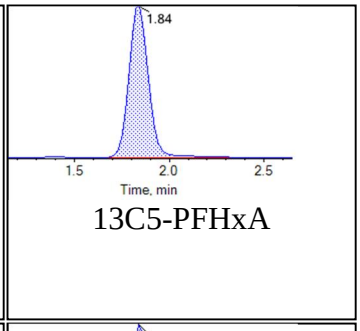
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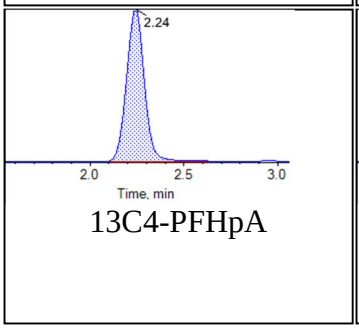
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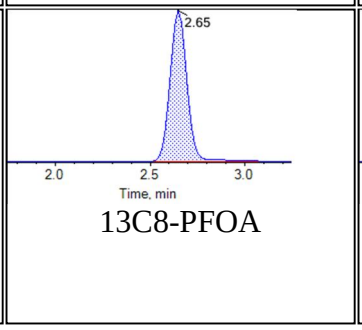
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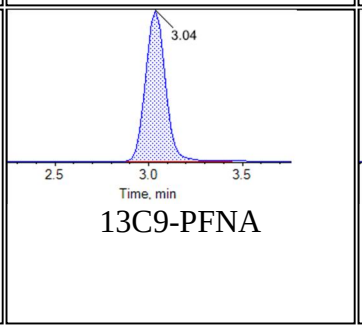
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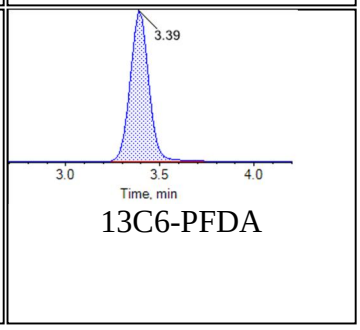
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13C9-PFNA

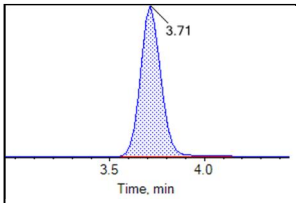


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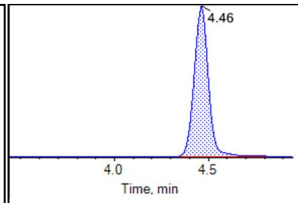
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Chromatogram Report

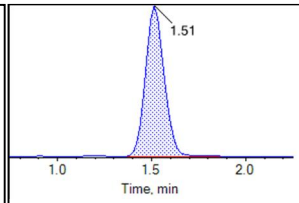
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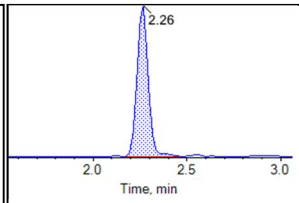
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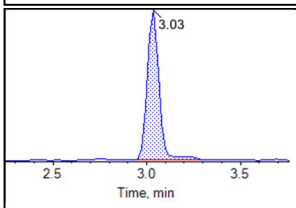
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13C3-PFBS



13C3-PFHxS



13C8-PFOS

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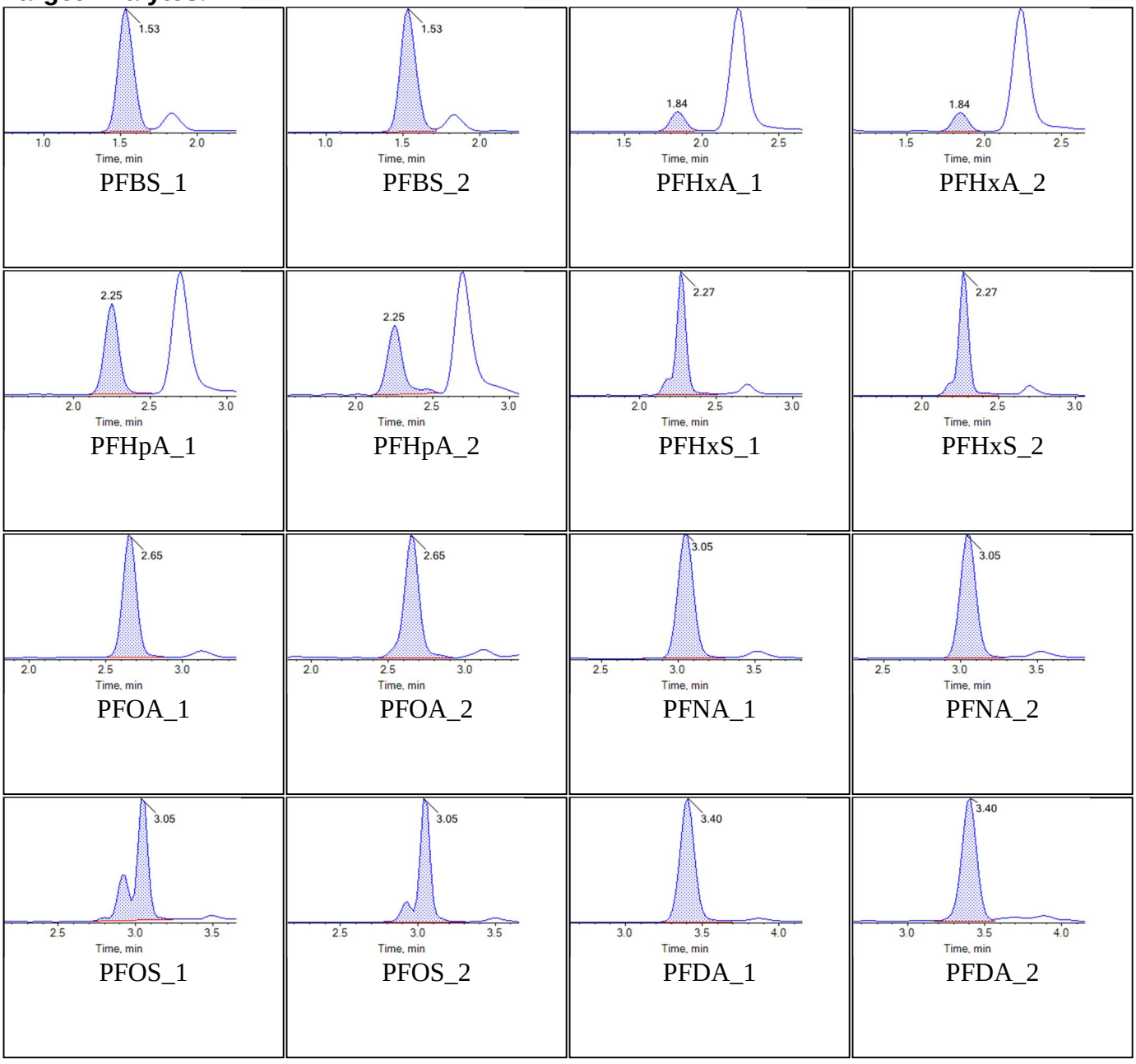
Chromatogram Report

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Sample Name	KB76 CCV	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T05:11:17	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

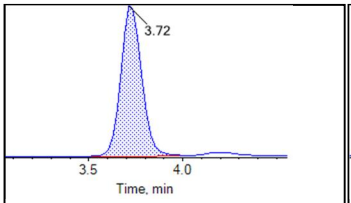
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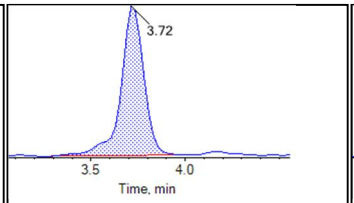
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Chromatogram Report

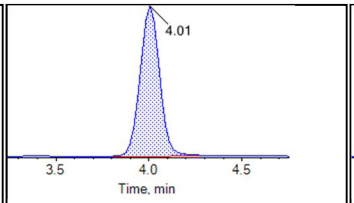
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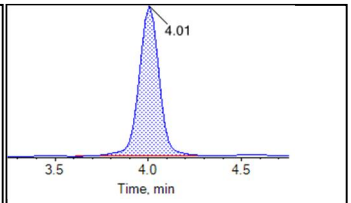
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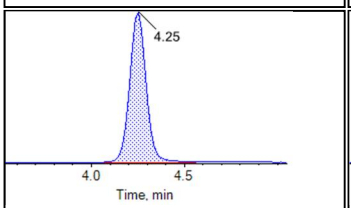
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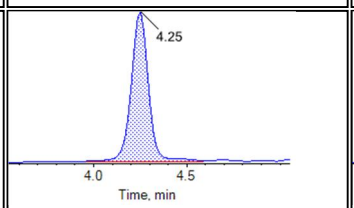
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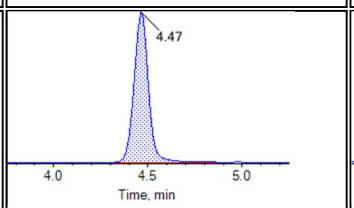
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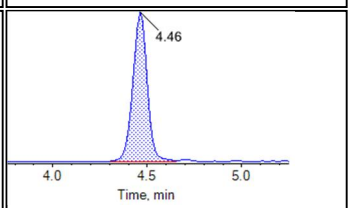
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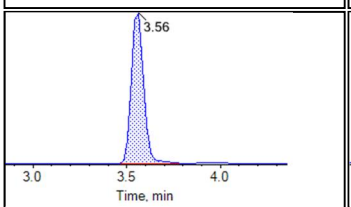
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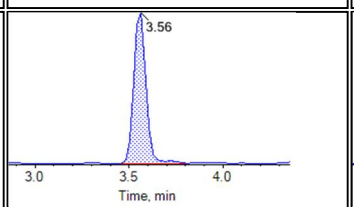
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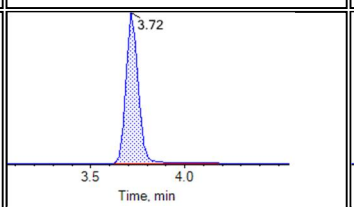
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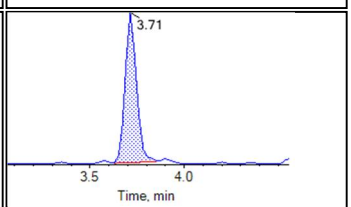
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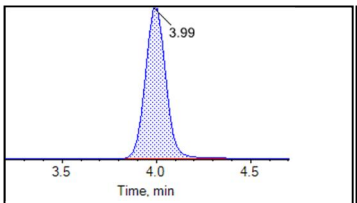


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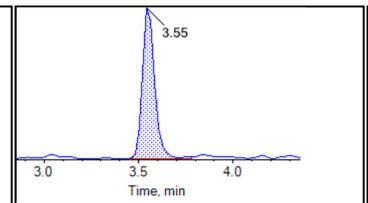


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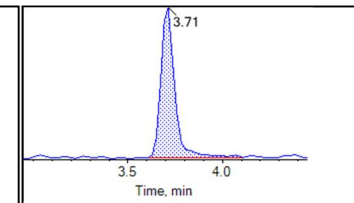
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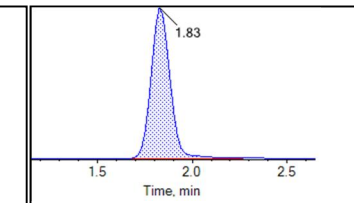
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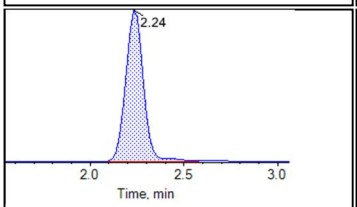
d3-MeFOSAA



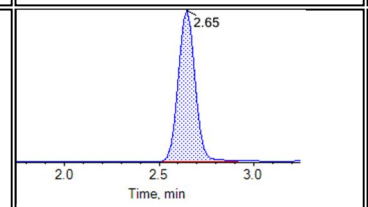
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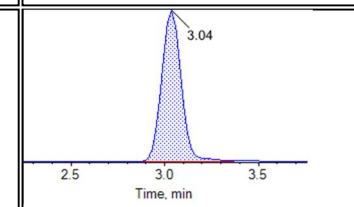
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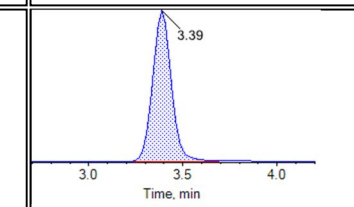
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13C8-PFOA



13C9-PFNA

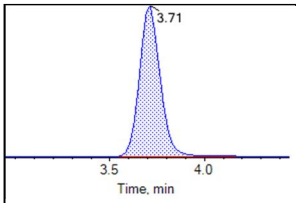


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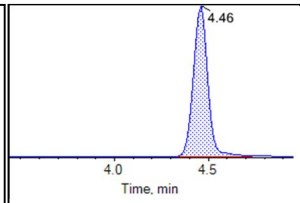
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Chromatogram Report

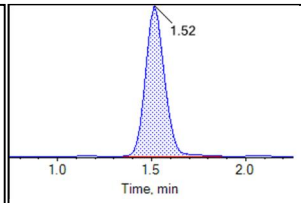
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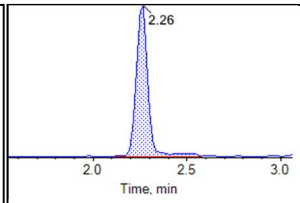
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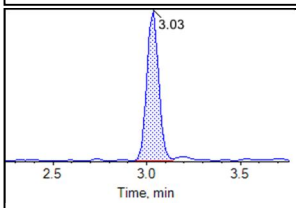
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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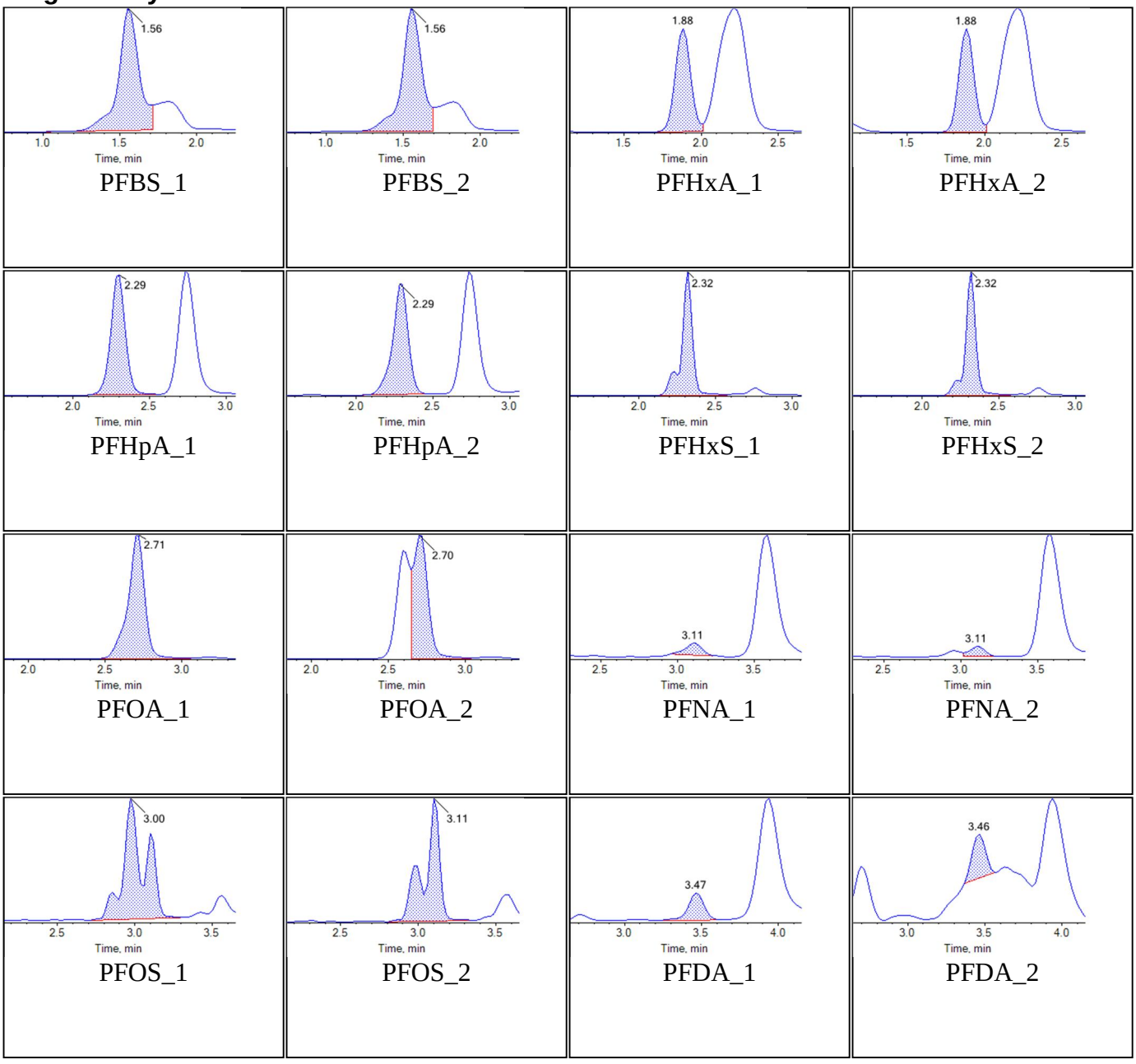
Chromatogram Report

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Printed: 15/10/2018 3:45:08 PM

Sample Name	J8274-FS-D(11)	**Injection Vial**	53
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T15:43:57	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

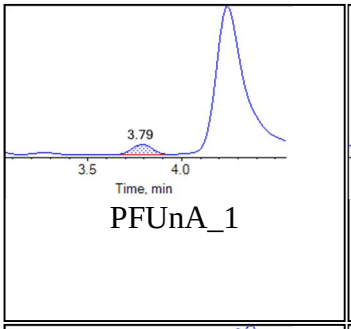
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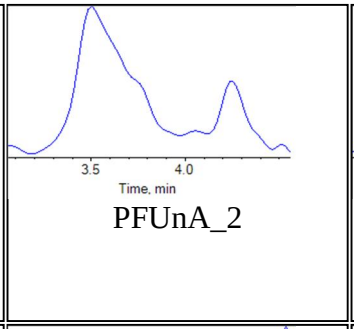
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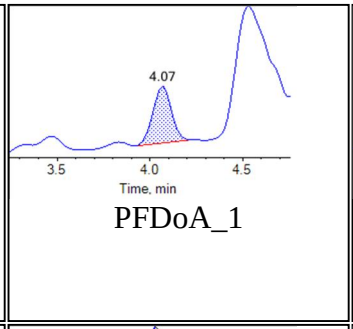
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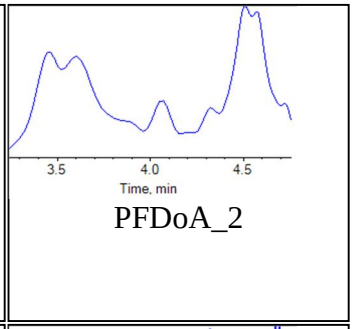
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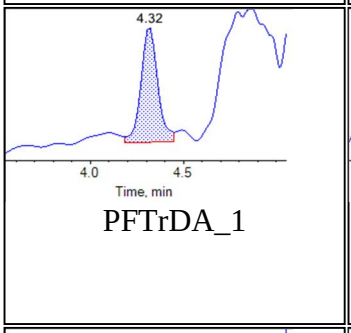
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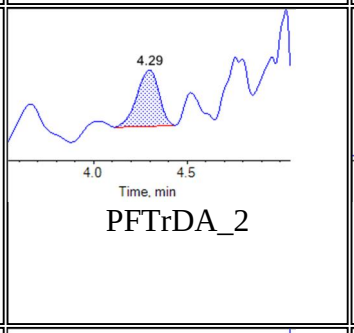
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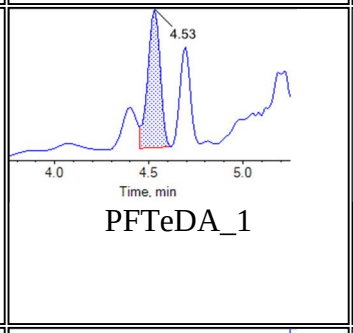
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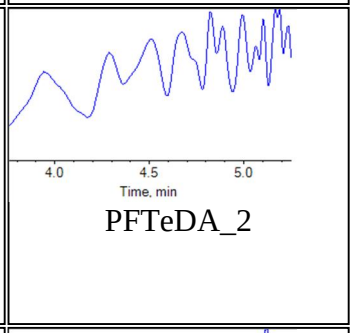
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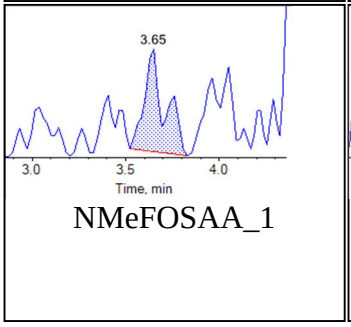
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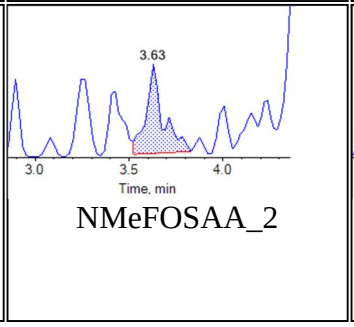
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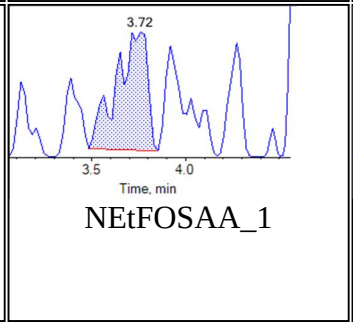
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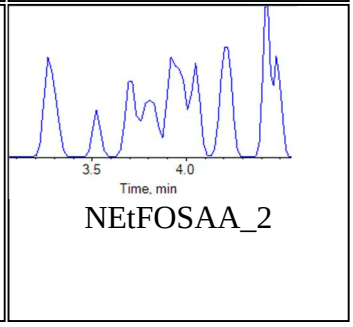
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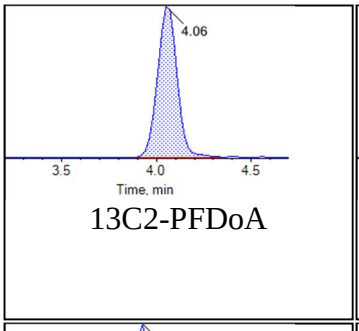


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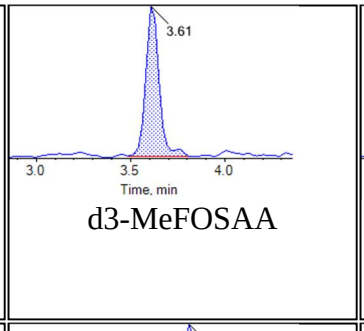


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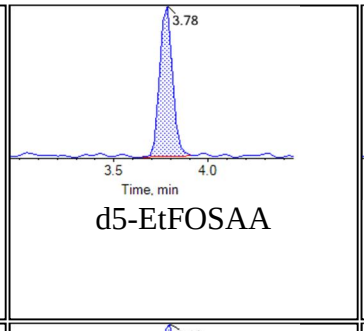
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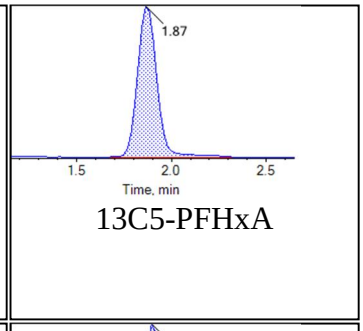
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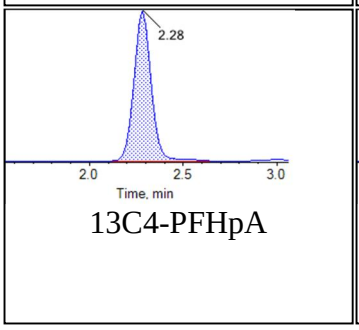
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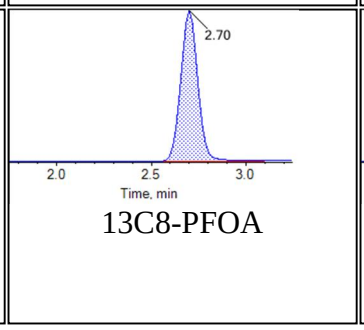
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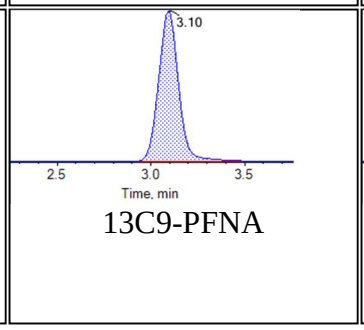
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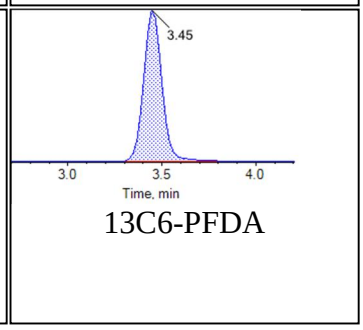
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13C8-PFOA



13C9-PFNA

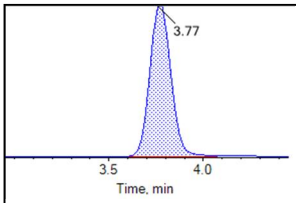


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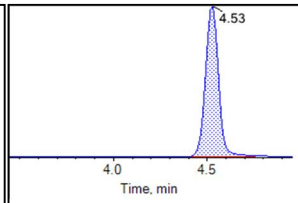
BATTELLE

Chromatogram Report

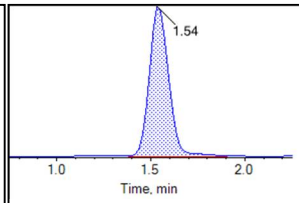
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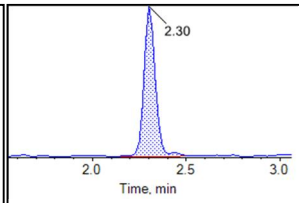
13C7-PFUnA



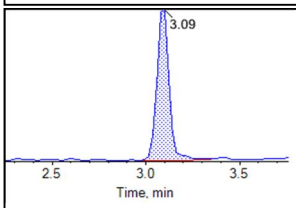
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13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

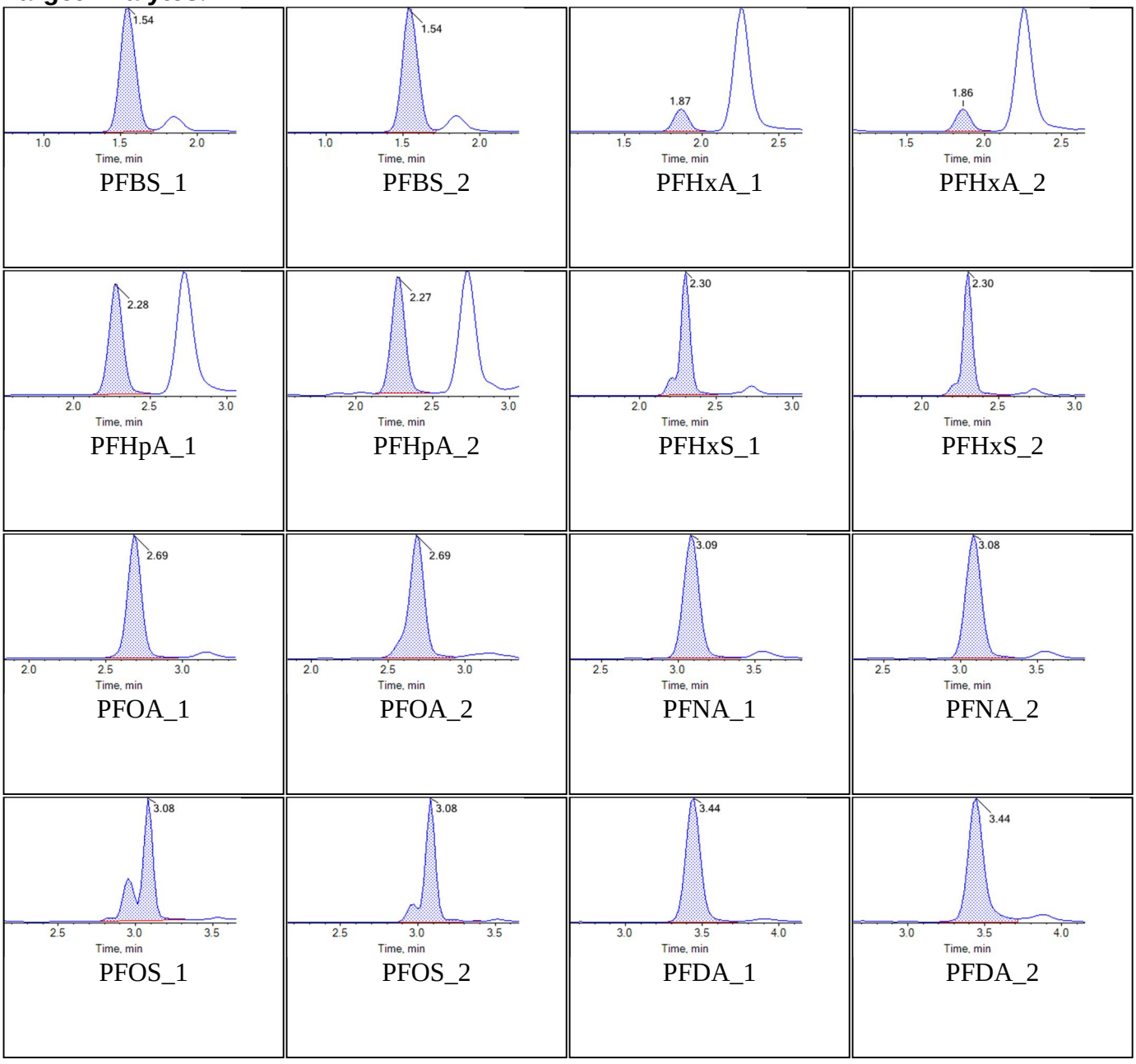
Chromatogram Report

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Printed: 05/10/2018 5:38:21 PM

Sample Name	KB76 CCV	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T15:54:52	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_BASE
Sample Comment			

Chromatograms

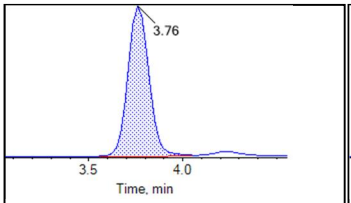
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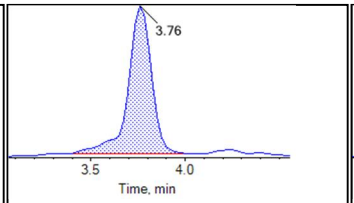
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Chromatogram Report

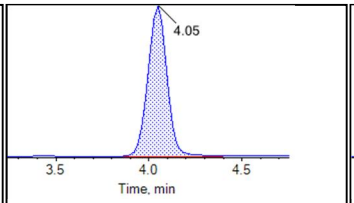
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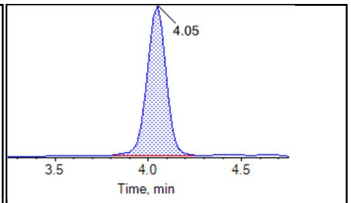
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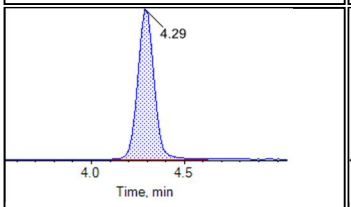
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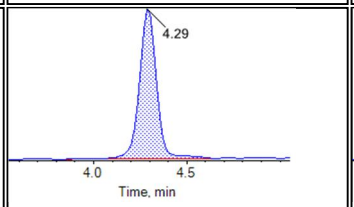
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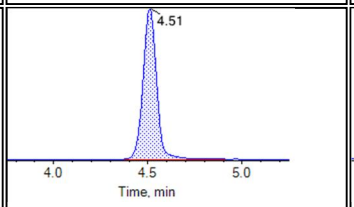
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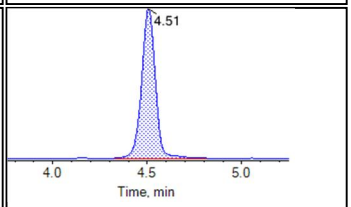
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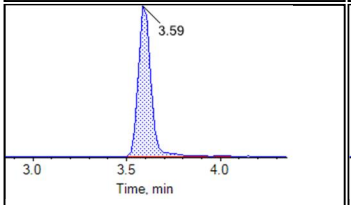
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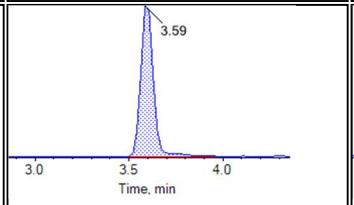
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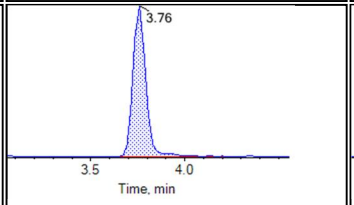
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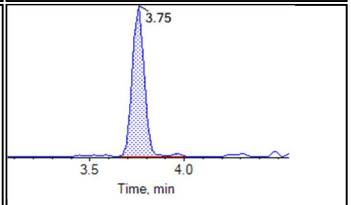
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NMeFOSAA_2

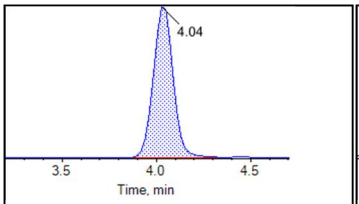


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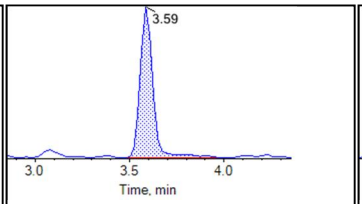


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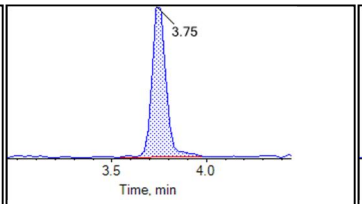
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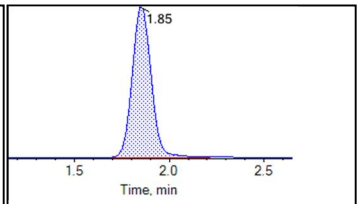
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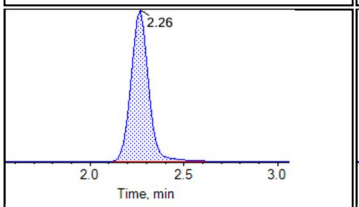
d3-MeFOSAA



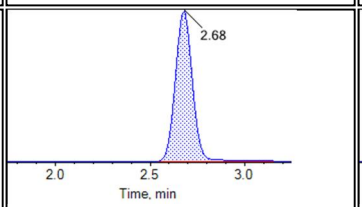
d5-EtFOSAA



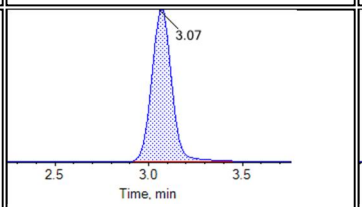
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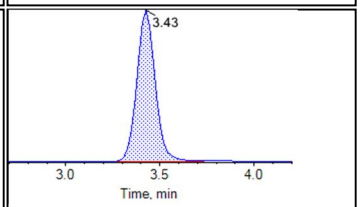
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13C8-PFOA



13C9-PFNA

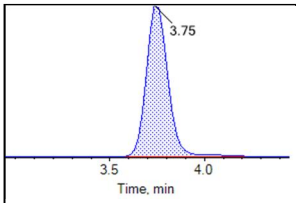


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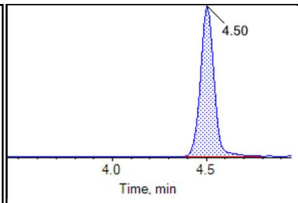
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Chromatogram Report

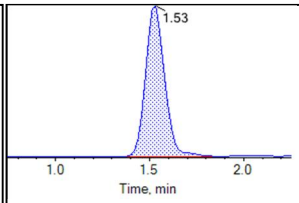
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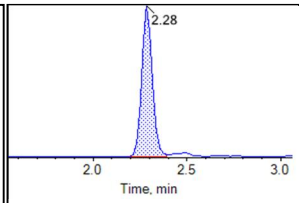
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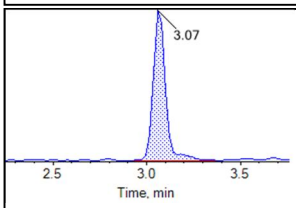
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

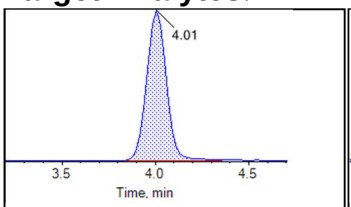
Chromatogram Report

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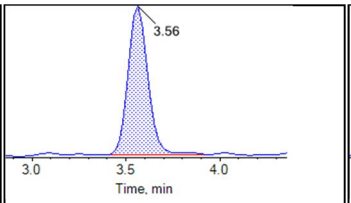
Sample Name	KB73	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:23:54	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

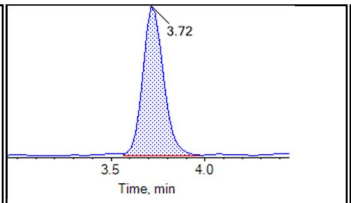
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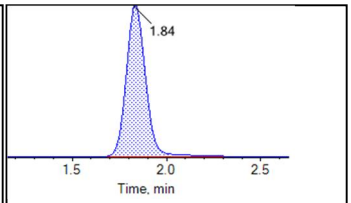
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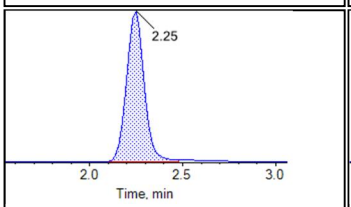
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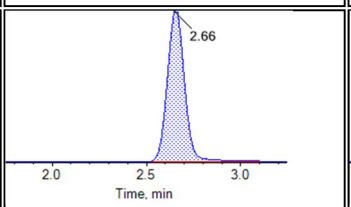
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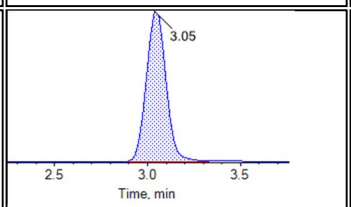
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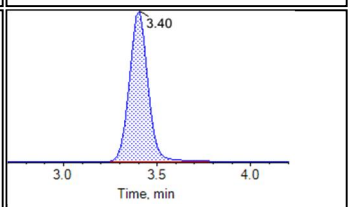
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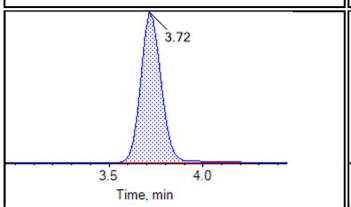
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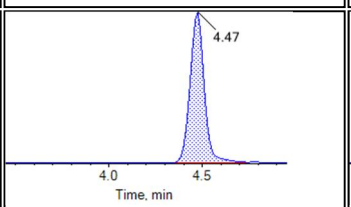
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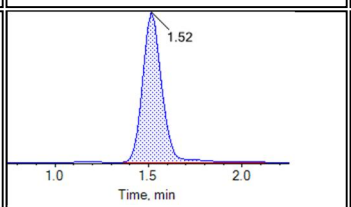
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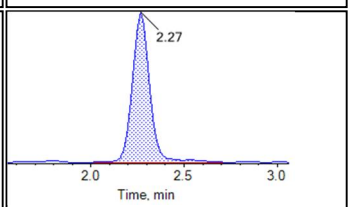
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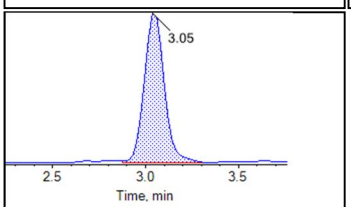
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



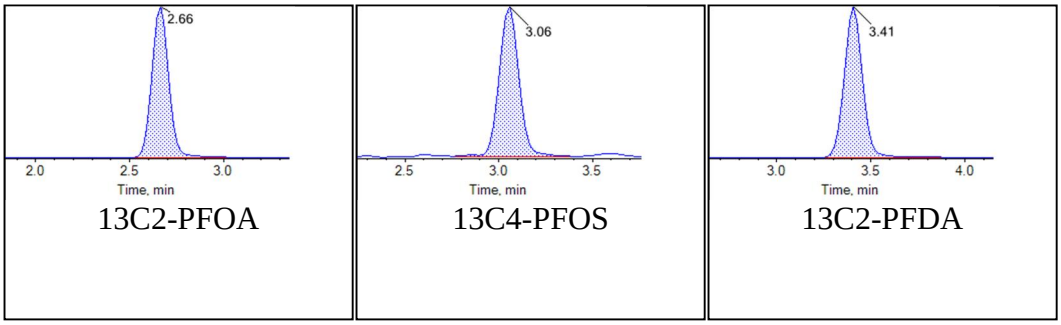
13C8-PFOS

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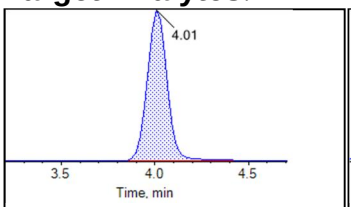
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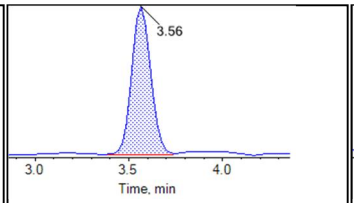
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Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:34:48	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

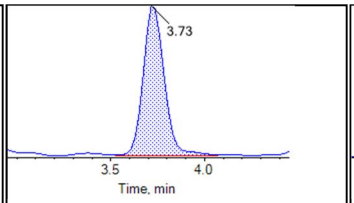
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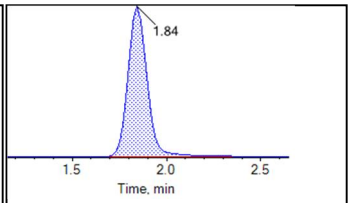
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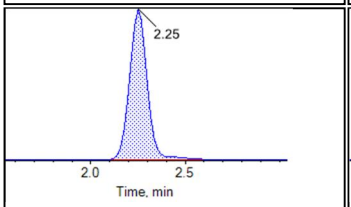
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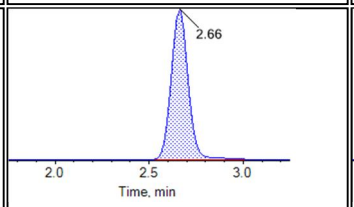
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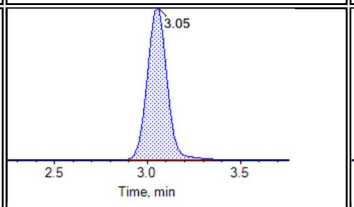
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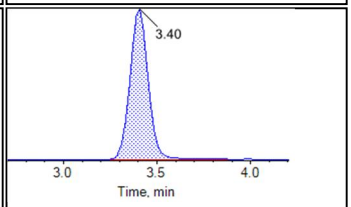
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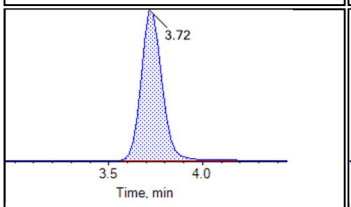
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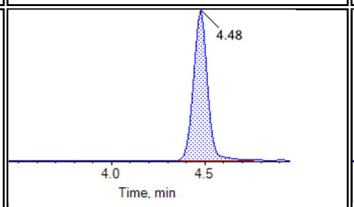
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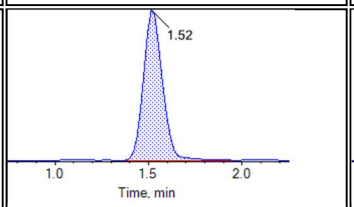
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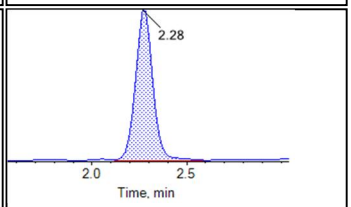
13C7-PFUnA



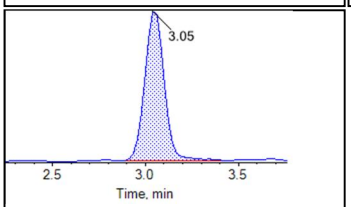
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



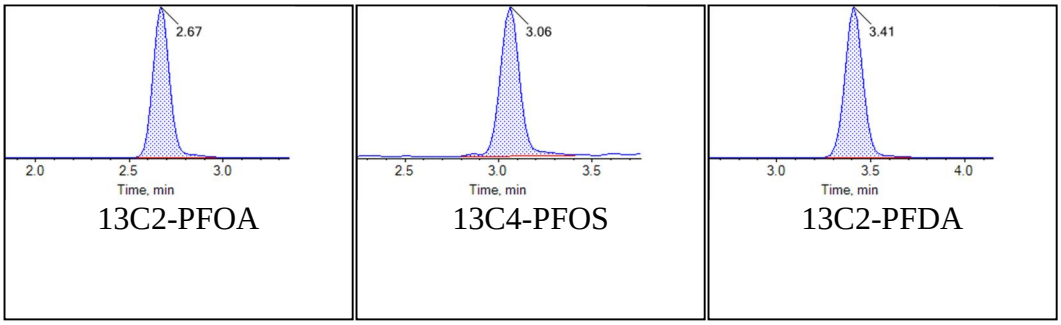
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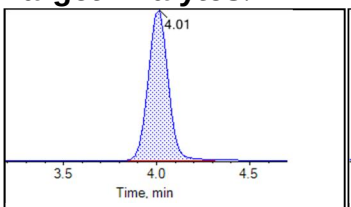
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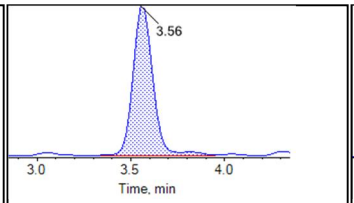
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Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:45:42	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

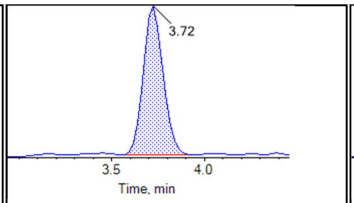
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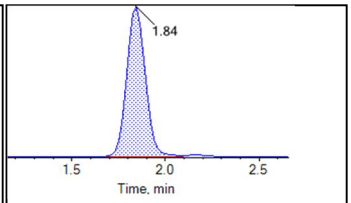
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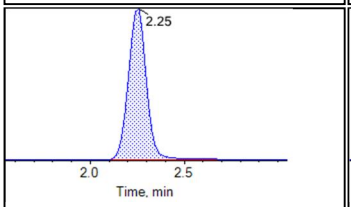
d3-MeFOSAA



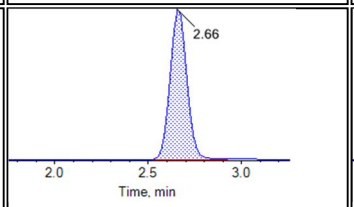
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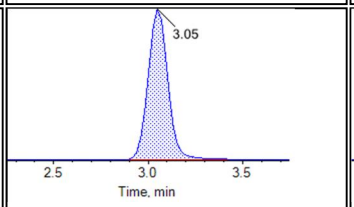
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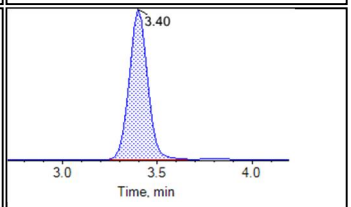
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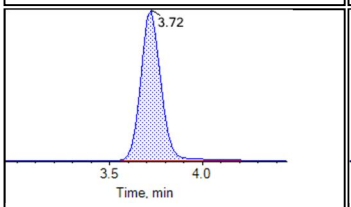
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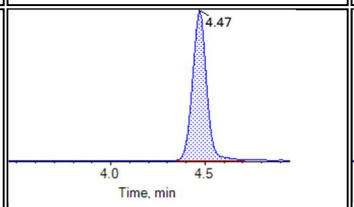
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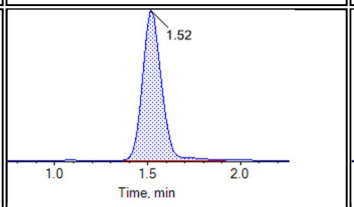
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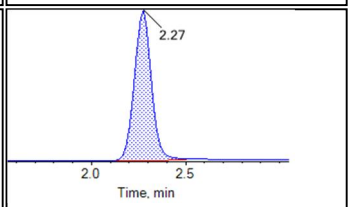
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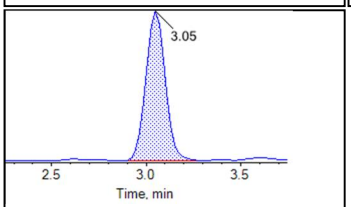
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



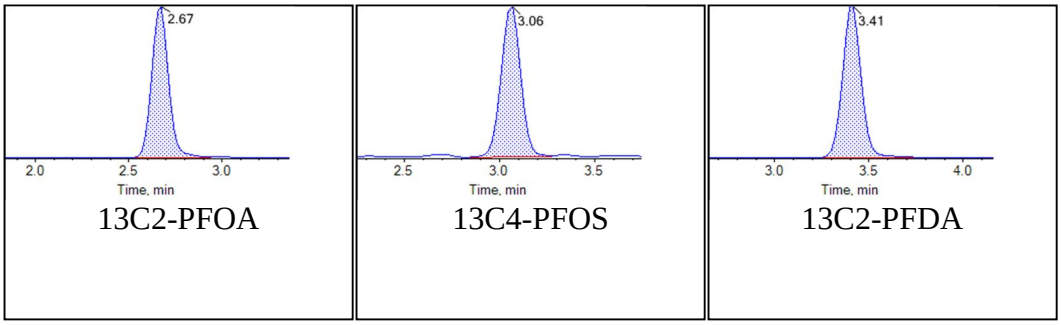
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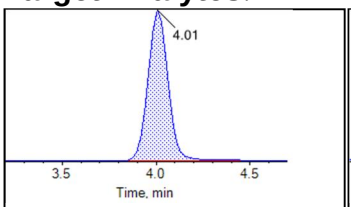
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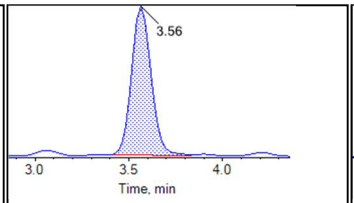
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Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T19:56:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

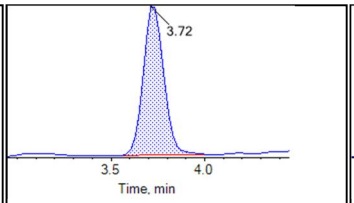
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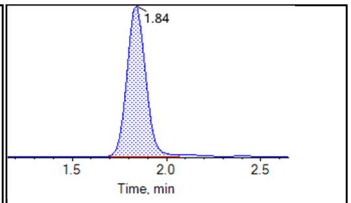
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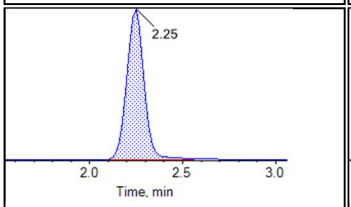
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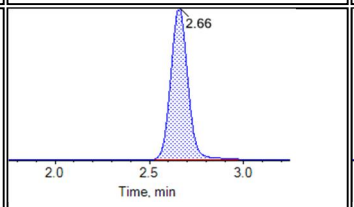
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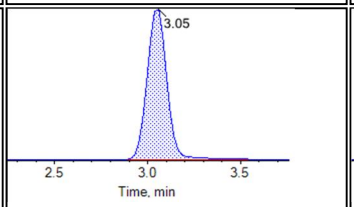
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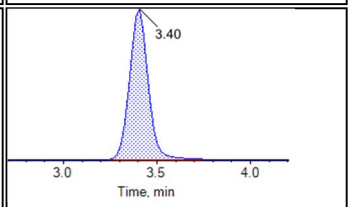
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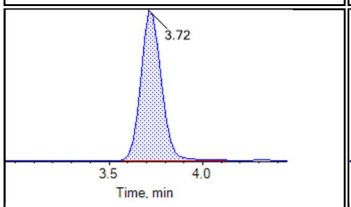
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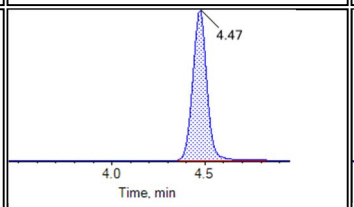
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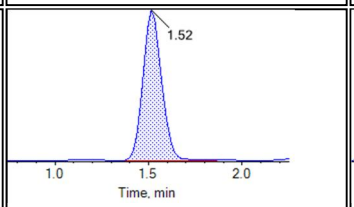
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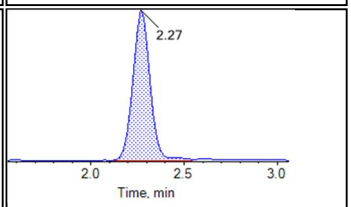
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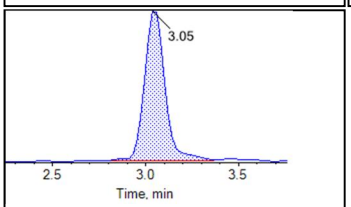
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13C3-PFBS



13C3-PFHxS



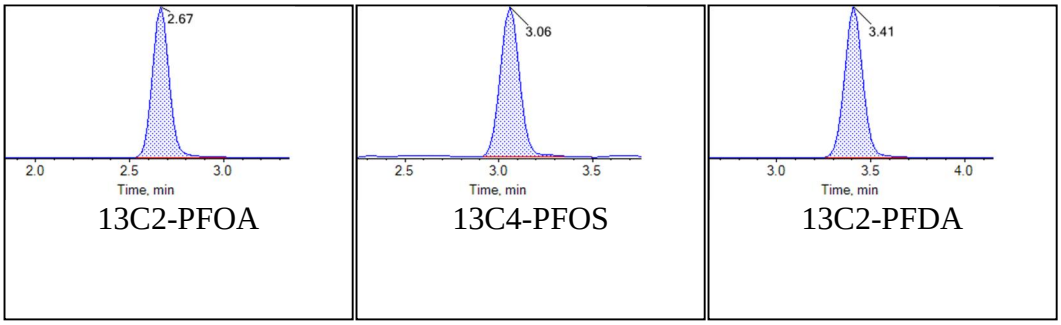
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Chromatogram Report

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Printed: 05/10/2018 5:30:24 PM

Internal Standards:



BATTELLE

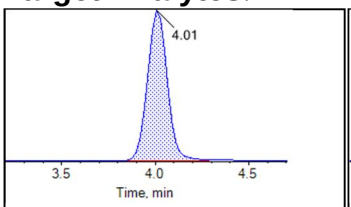
Chromatogram Report

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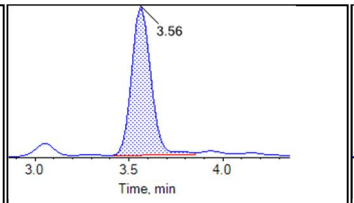
Sample Name	KB77	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:07:29	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

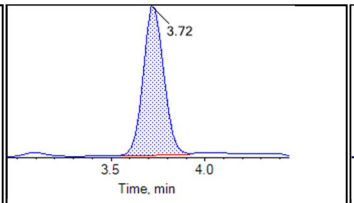
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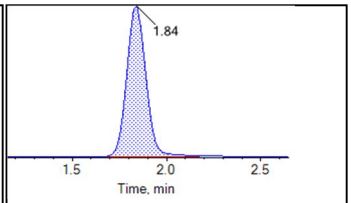
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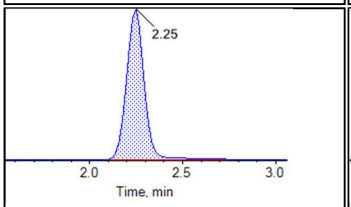
d3-MeFOSAA



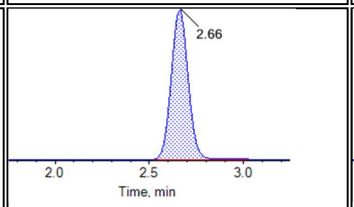
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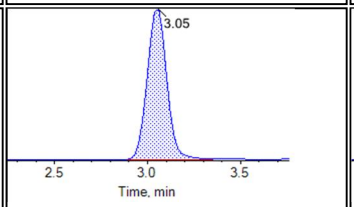
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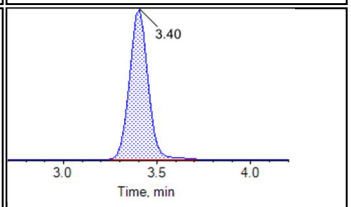
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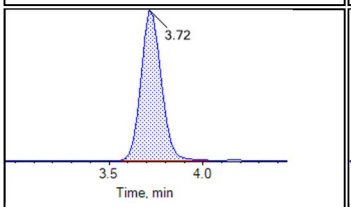
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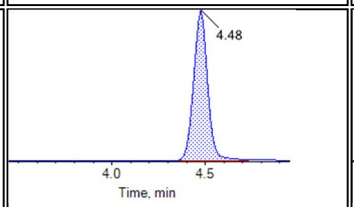
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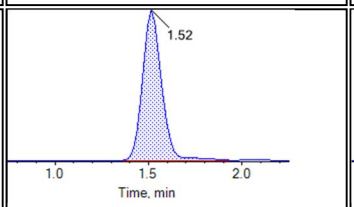
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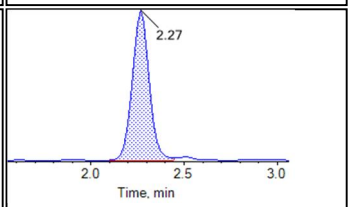
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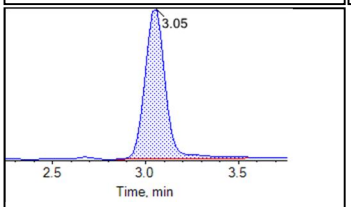
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13C3-PFBS



13C3-PFHxS



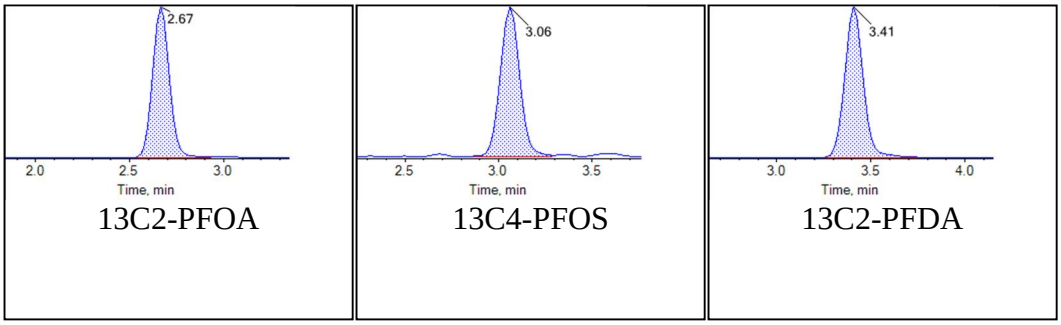
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Internal Standards:



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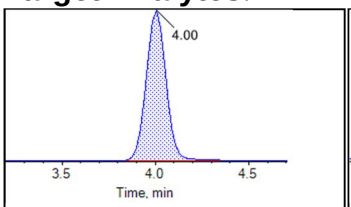
Chromatogram Report

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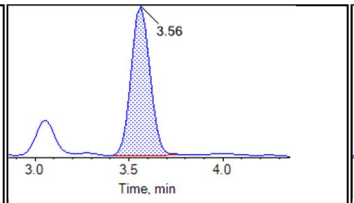
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Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:18:21	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

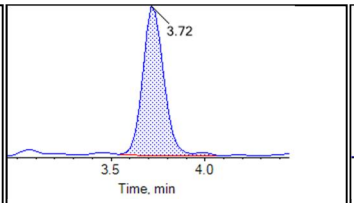
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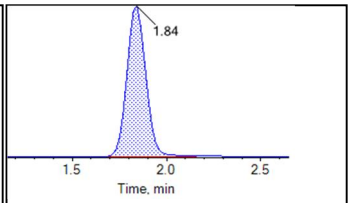
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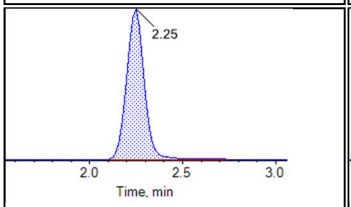
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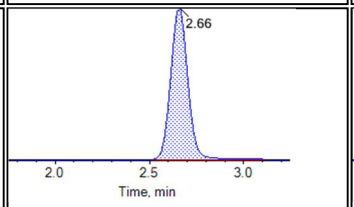
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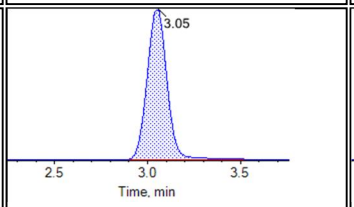
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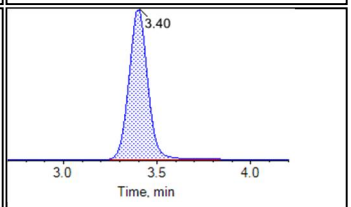
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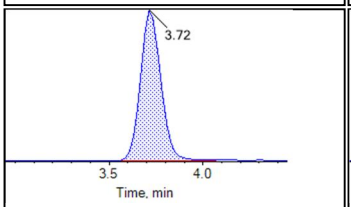
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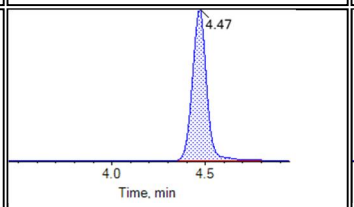
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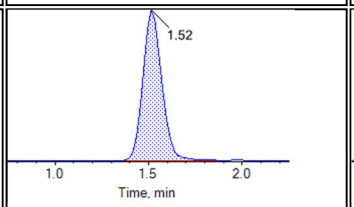
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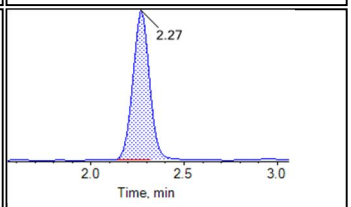
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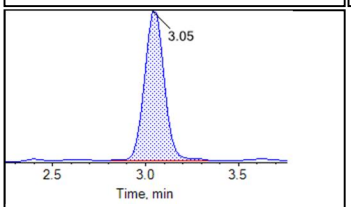
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



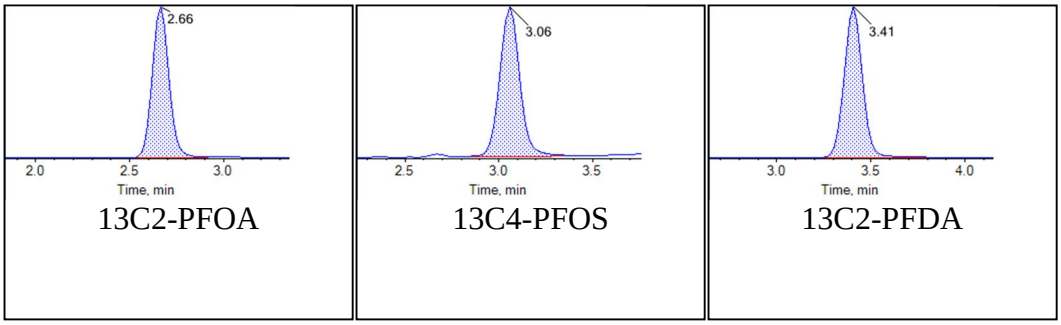
13C8-PFOS

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Internal Standards:



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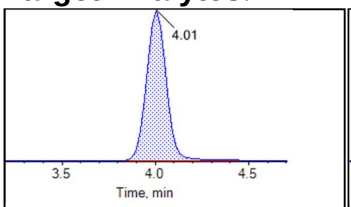
Chromatogram Report

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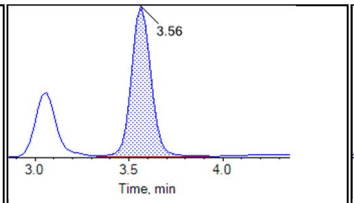
Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:29:13	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

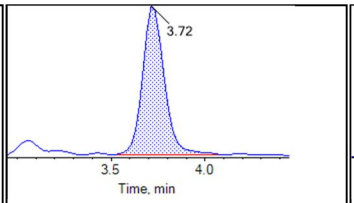
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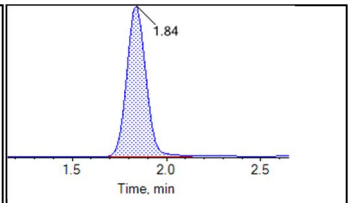
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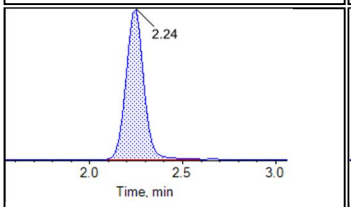
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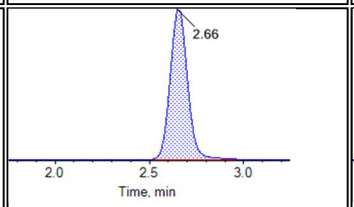
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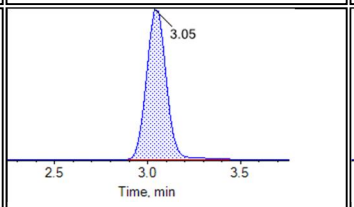
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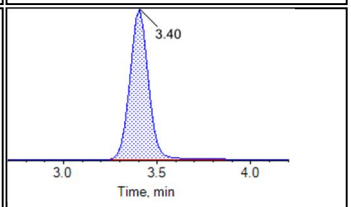
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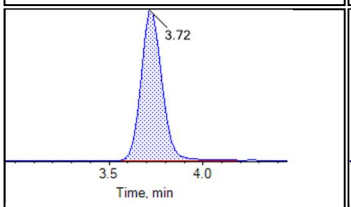
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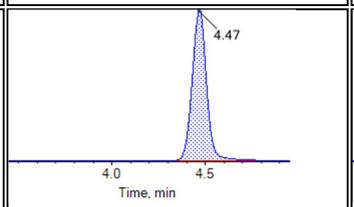
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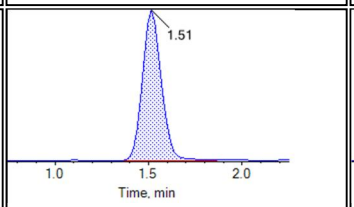
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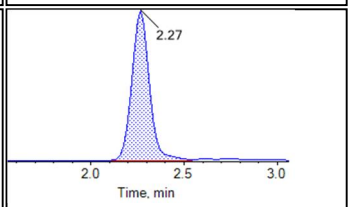
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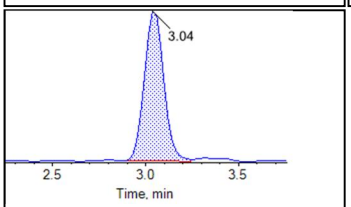
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13C3-PFBS



13C3-PFHxS



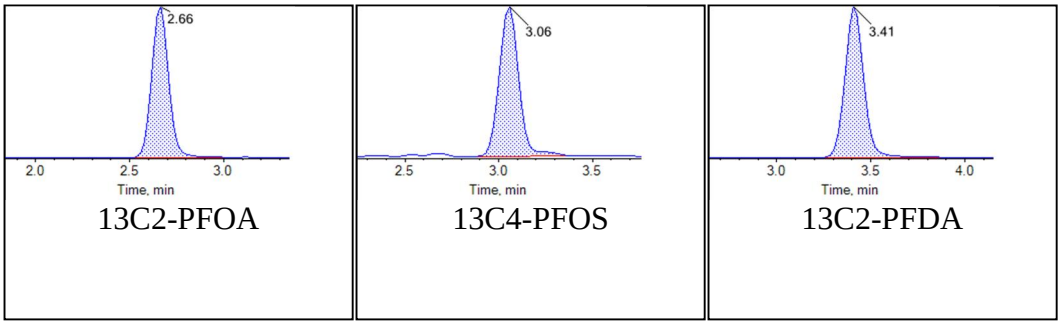
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Chromatogram Report

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Internal Standards:



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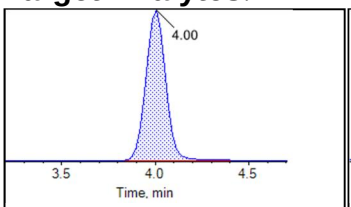
Chromatogram Report

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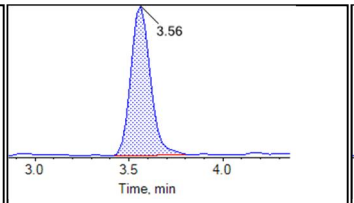
Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:40:04	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

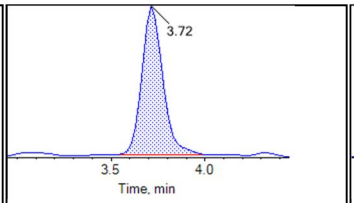
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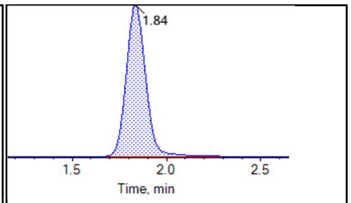
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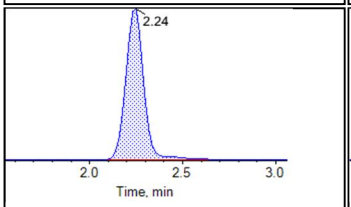
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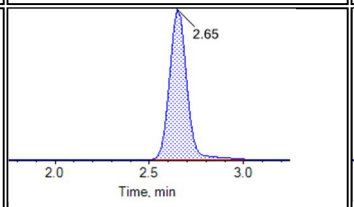
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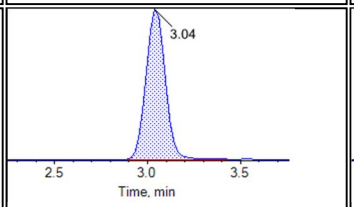
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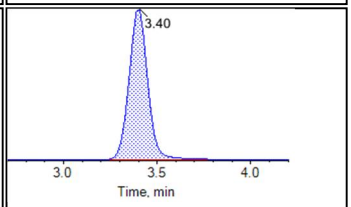
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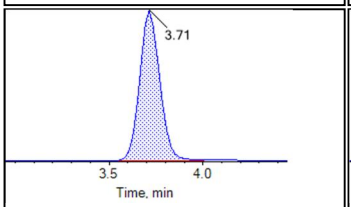
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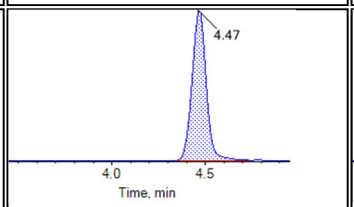
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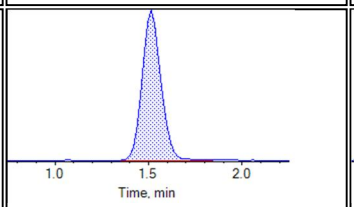
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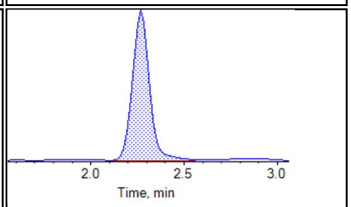
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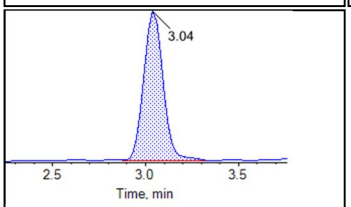
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



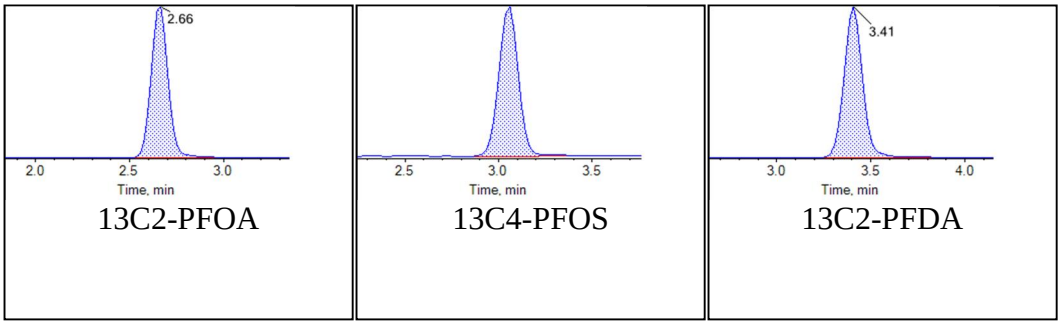
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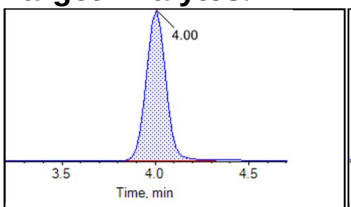
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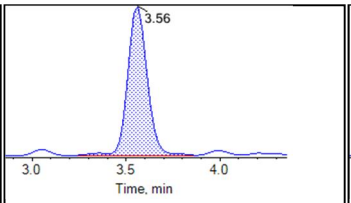
Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T20:50:56	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

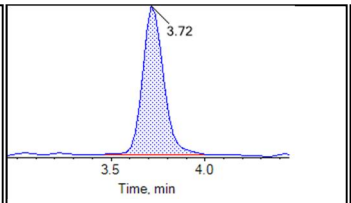
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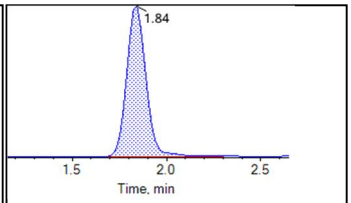
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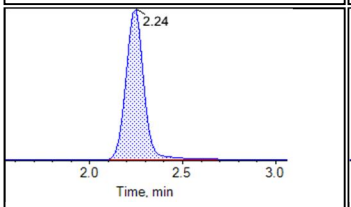
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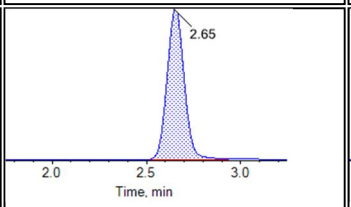
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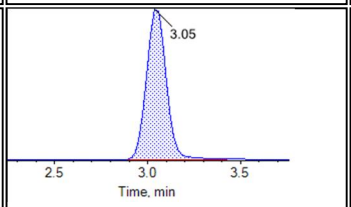
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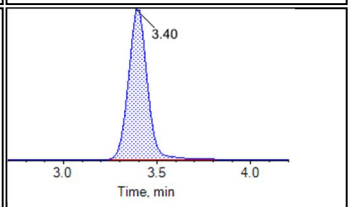
13C4-PFHpA



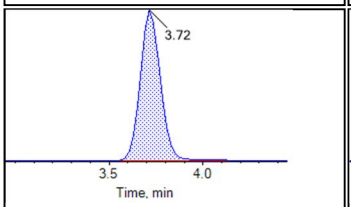
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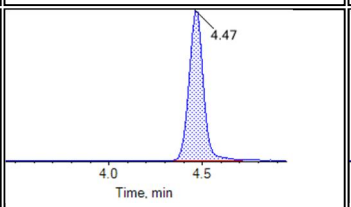
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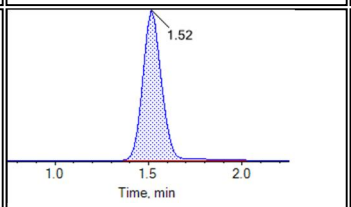
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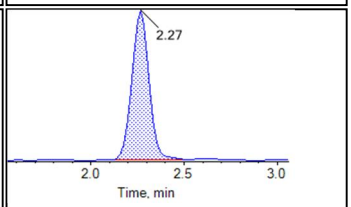
13C7-PFUnA



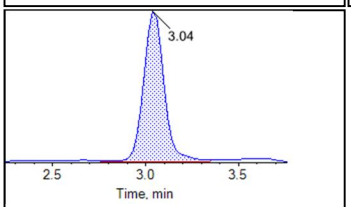
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



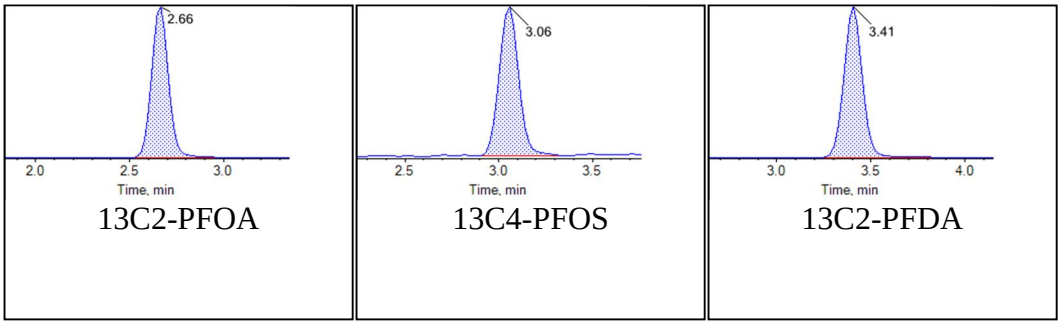
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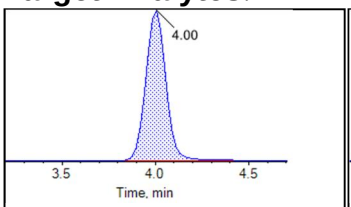
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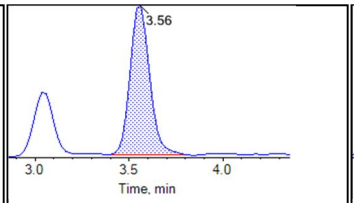
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Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T22:28:49	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

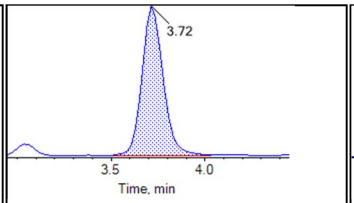
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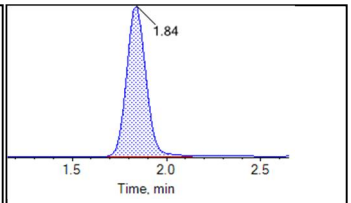
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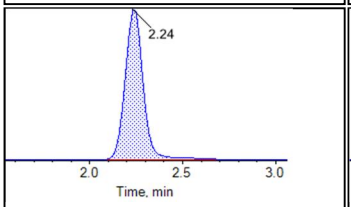
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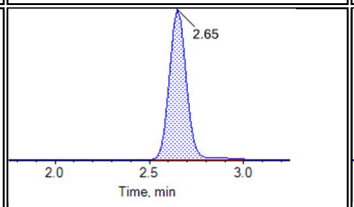
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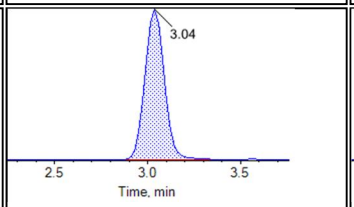
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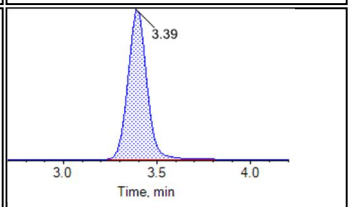
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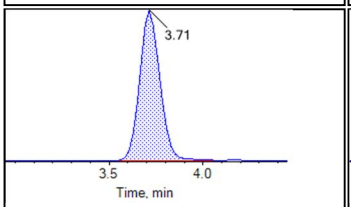
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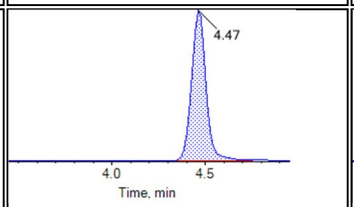
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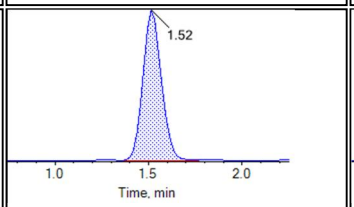
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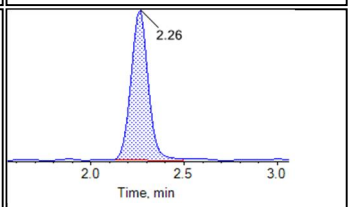
13C7-PFUnA



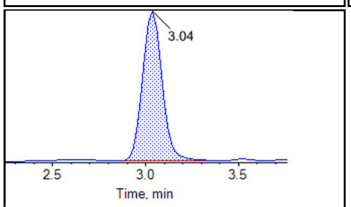
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



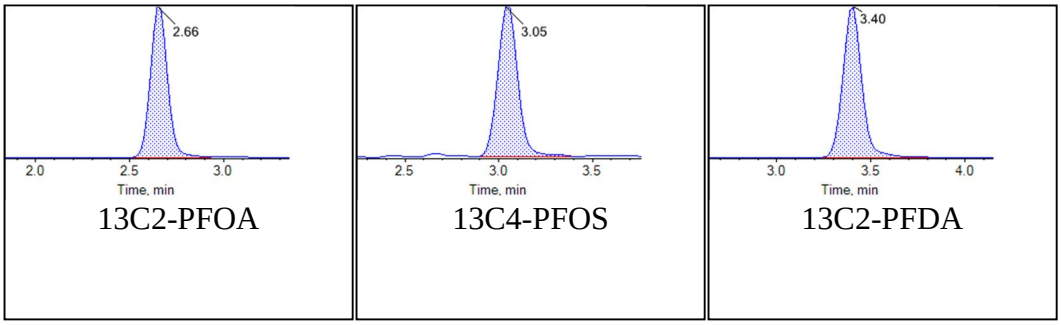
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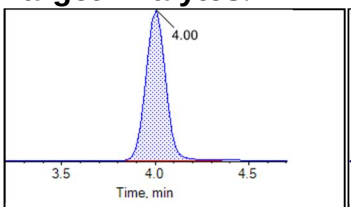
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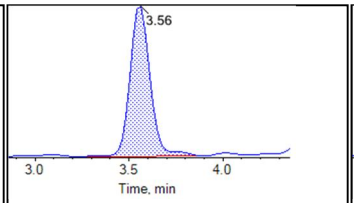
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Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T22:50:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

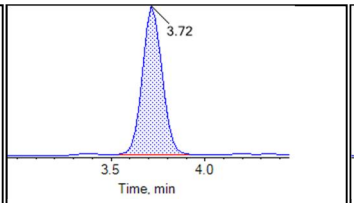
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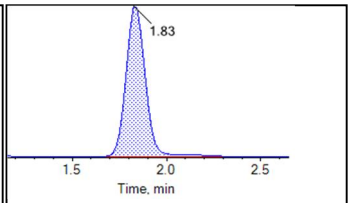
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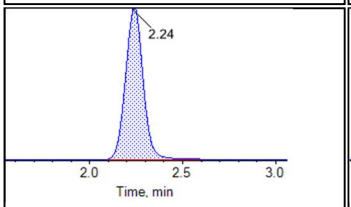
d3-MeFOSAA



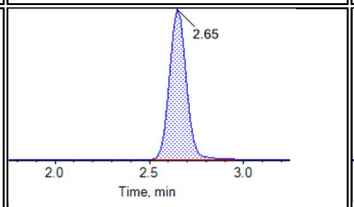
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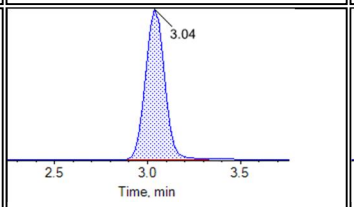
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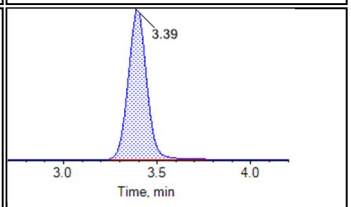
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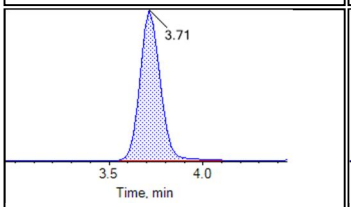
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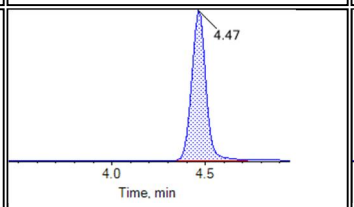
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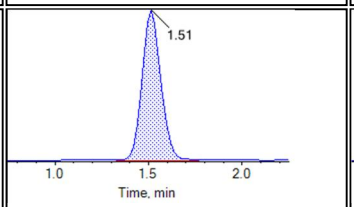
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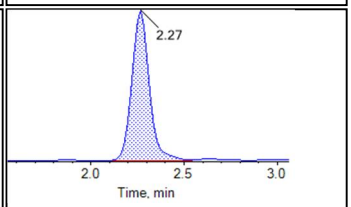
13C7-PFUnA



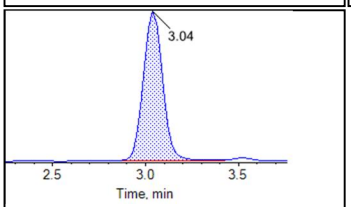
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



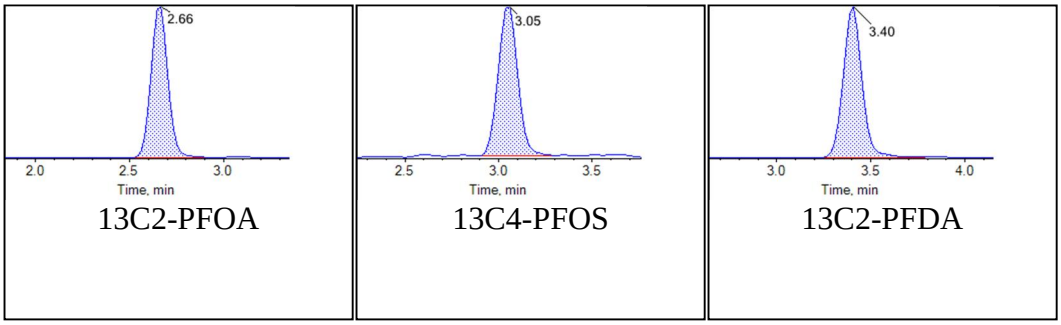
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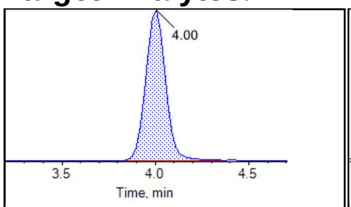
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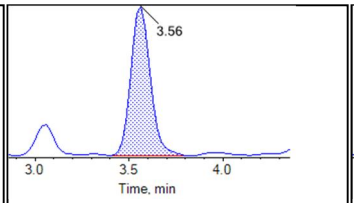
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Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:01:28	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

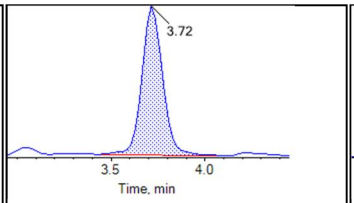
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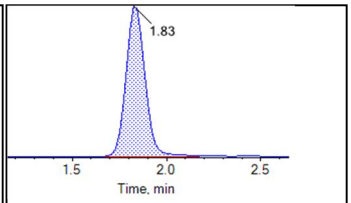
13C2-PFDoA



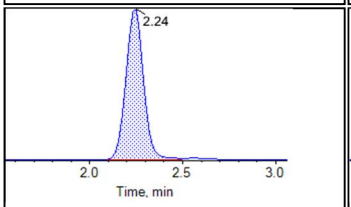
d3-MeFOSAA



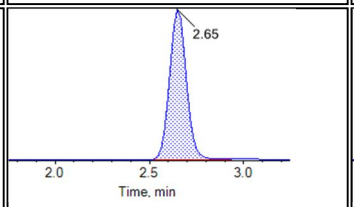
d5-EtFOSAA



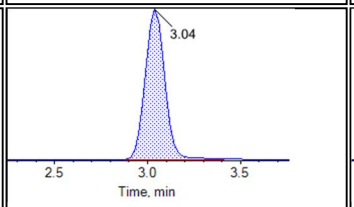
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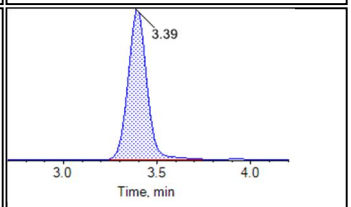
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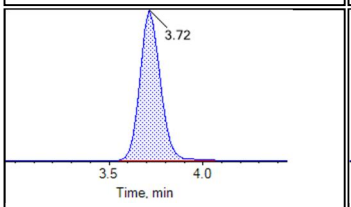
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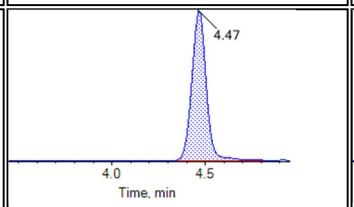
13C9-PFNA



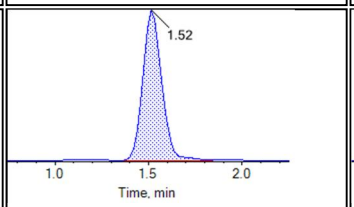
13C6-PFDA



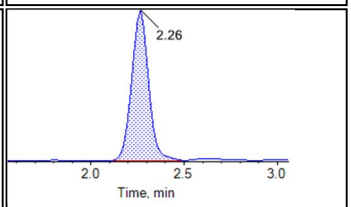
13C7-PFUnA



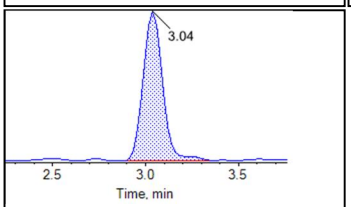
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



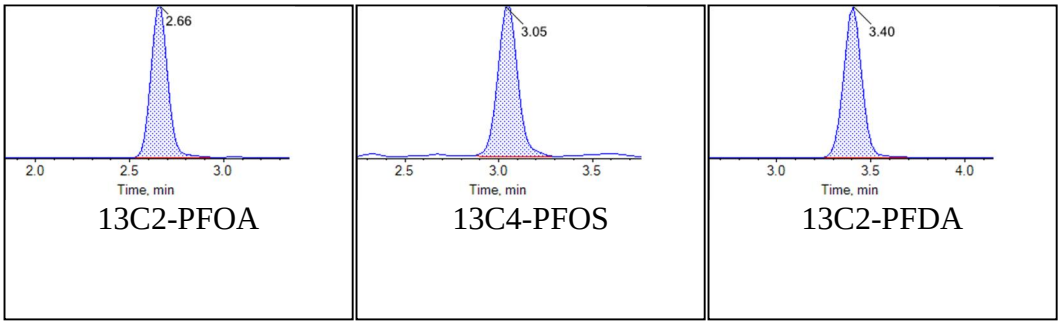
13C8-PFOS

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Chromatogram Report

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Internal Standards:



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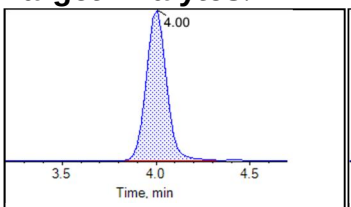
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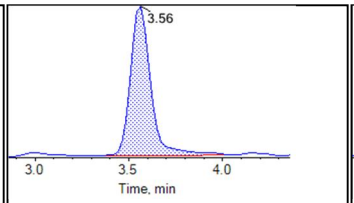
Sample Name	J8246-FS(0)	**Injection Vial**	21
Sample ID	VC-AQ-FB01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:12:20	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

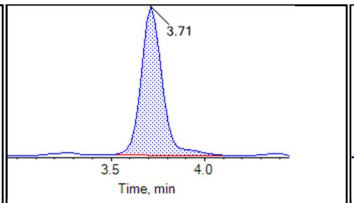
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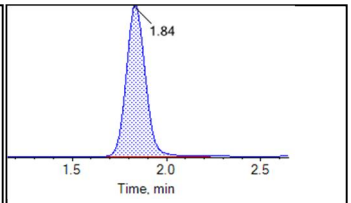
13C2-PFDoA



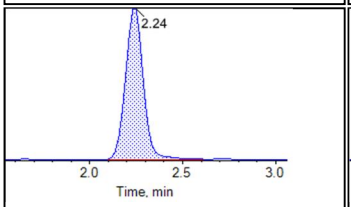
d3-MeFOSAA



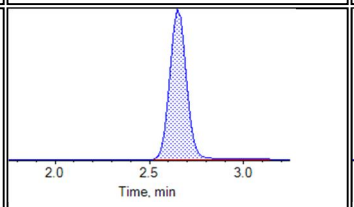
d5-EtFOSAA



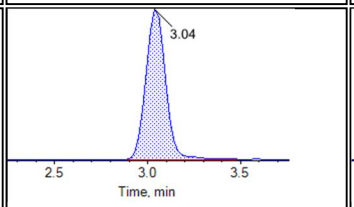
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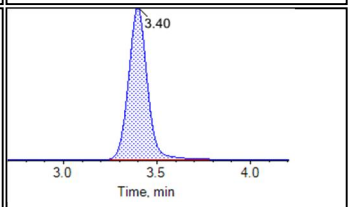
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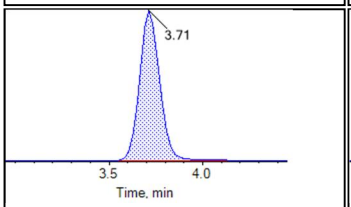
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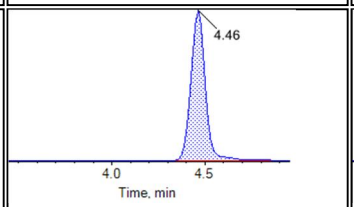
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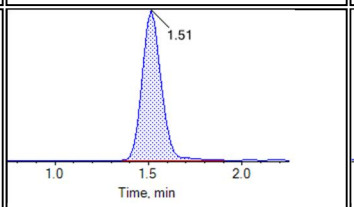
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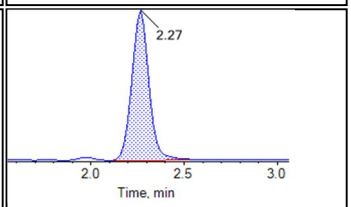
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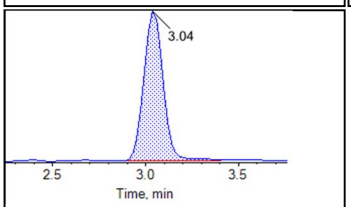
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



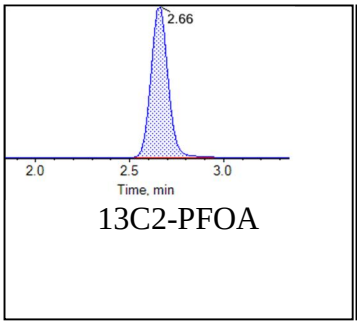
13C8-PFOS

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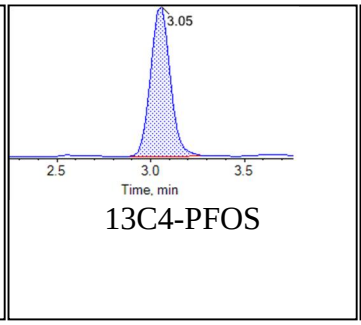
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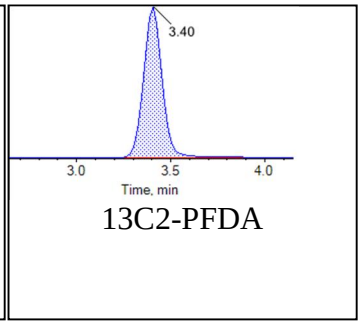
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

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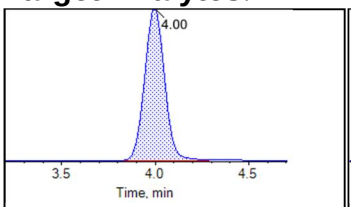
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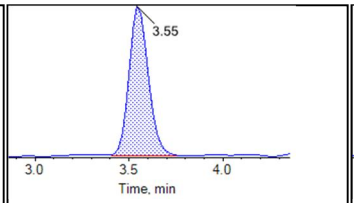
Sample Name	J8247-FS(0)	**Injection Vial**	22
Sample ID	VC-AQ-EB01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:23:13	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

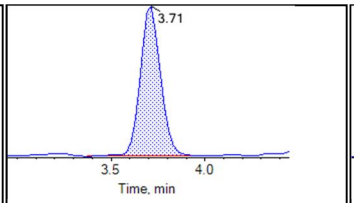
Target Analytes:



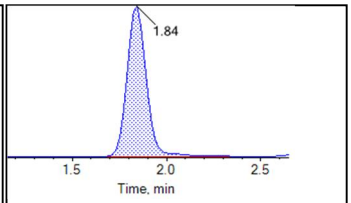
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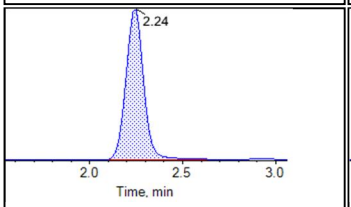
d3-MeFOSAA



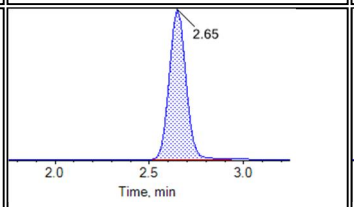
d5-EtFOSAA



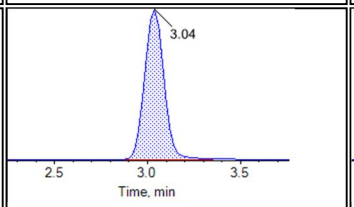
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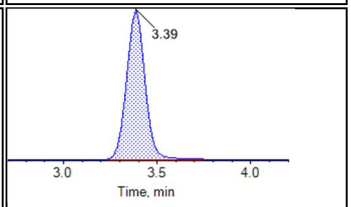
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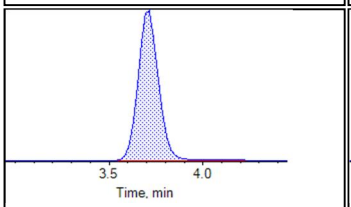
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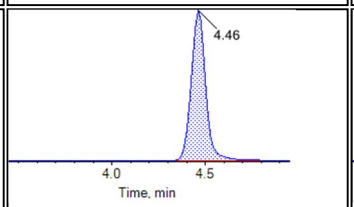
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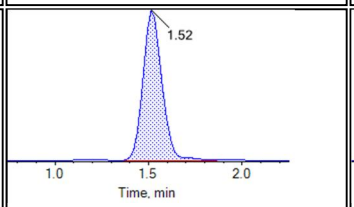
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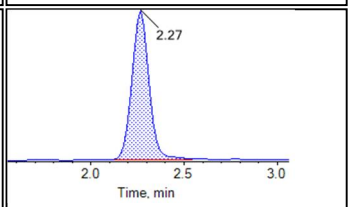
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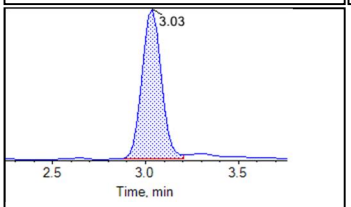
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



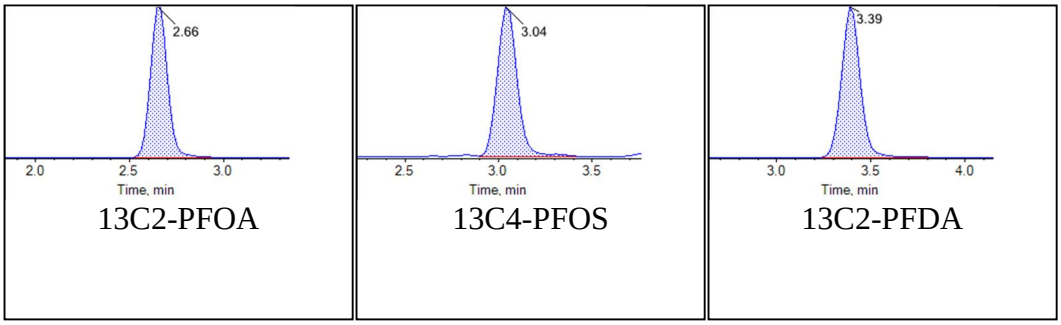
13C8-PFOS

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Internal Standards:



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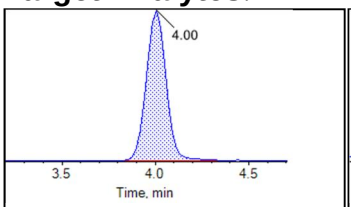
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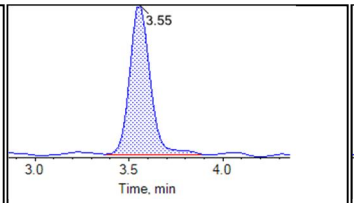
Sample Name	J8276-FS(0)	**Injection Vial**	23
Sample ID	VC-SO-FB02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:34:06	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

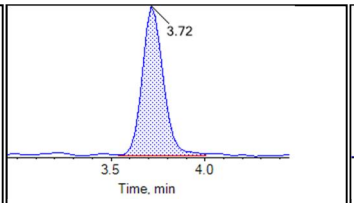
Target Analytes:



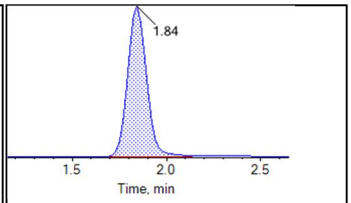
13C2-PFDoA



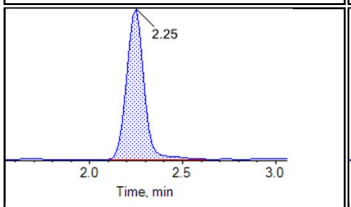
d3-MeFOSAA



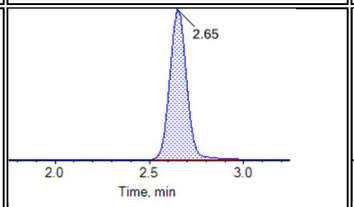
d5-EtFOSAA



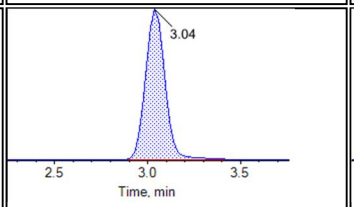
13C5-PFHxA



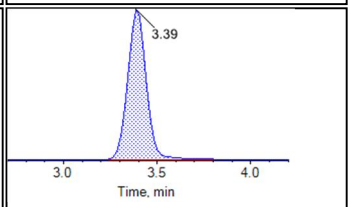
13C4-PFHpA



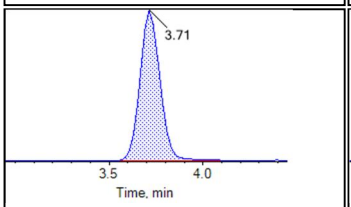
13C8-PFOA



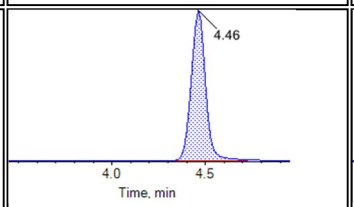
13C9-PFNA



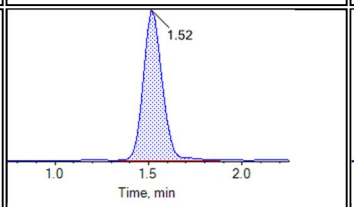
13C6-PFDA



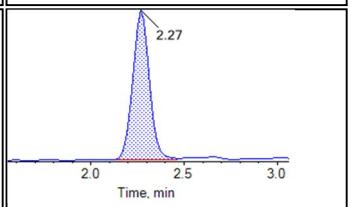
13C7-PFUnA



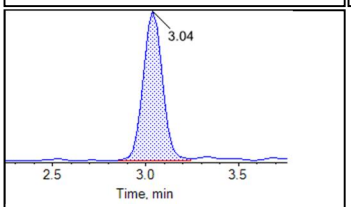
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

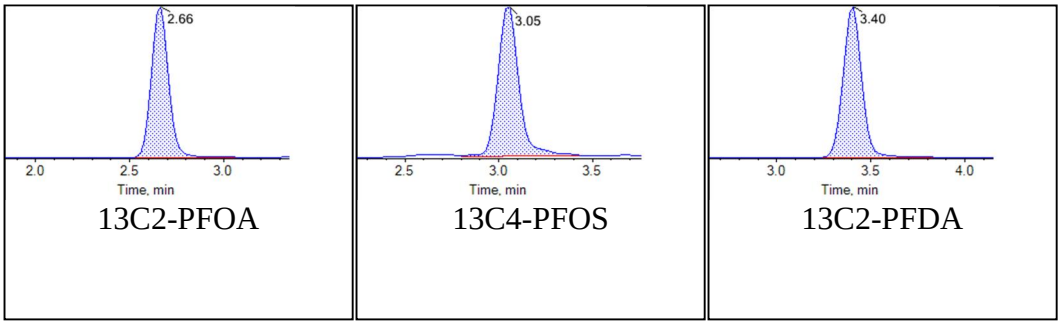


13C8-PFOS

Chromatogram Report

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Internal Standards:



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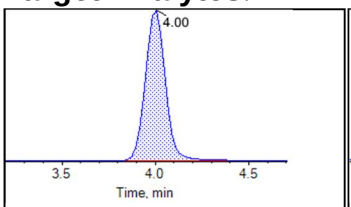
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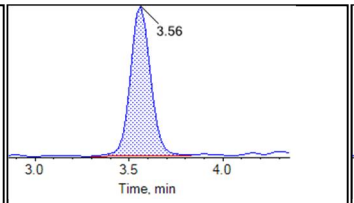
Sample Name	J8277-FS(0)	**Injection Vial**	24
Sample ID	VC-SO-EB02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:44:58	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

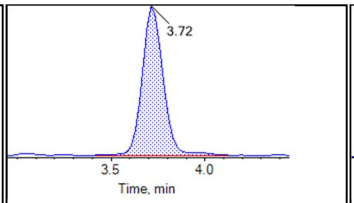
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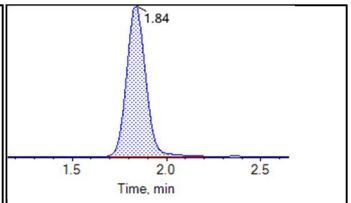
13C2-PFDoA



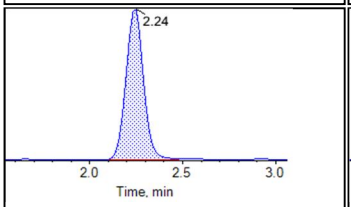
d3-MeFOSAA



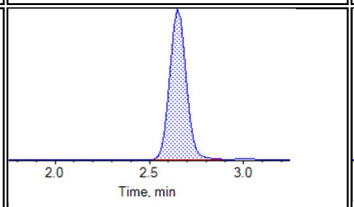
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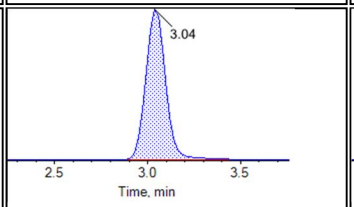
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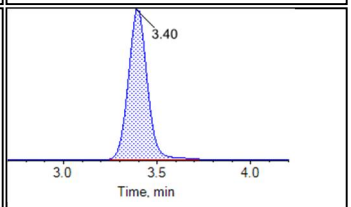
13C4-PFHpA



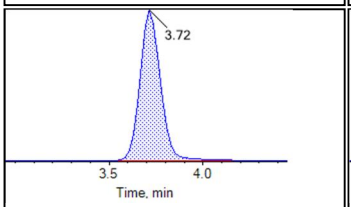
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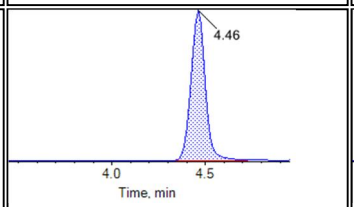
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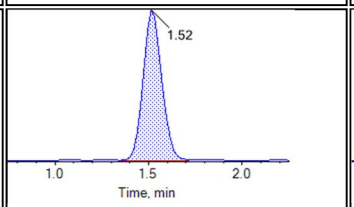
13C6-PFDA



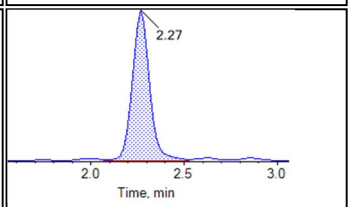
13C7-PFUnA



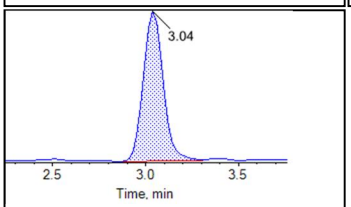
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

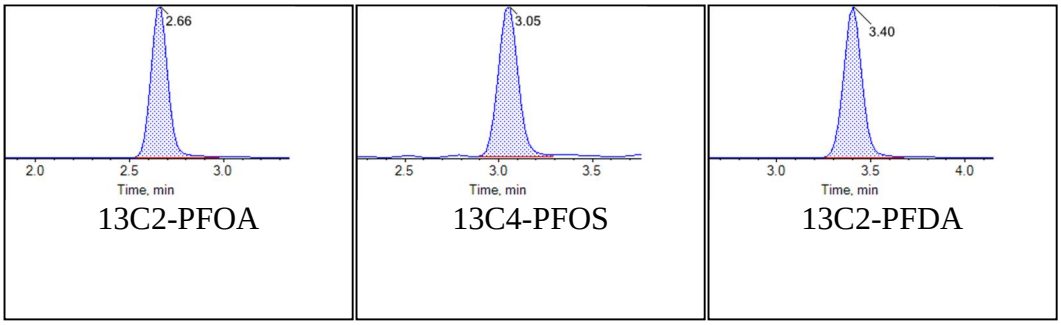


13C8-PFOS

Chromatogram Report

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Internal Standards:



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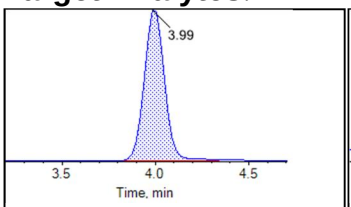
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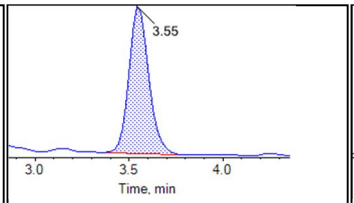
Sample Name	J8259-FS(0)	**Injection Vial**	25
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-03T23:55:49	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

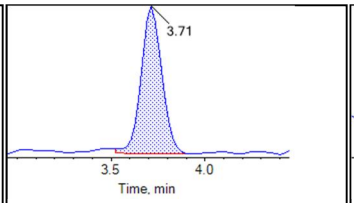
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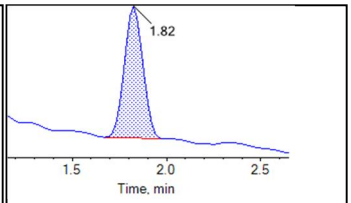
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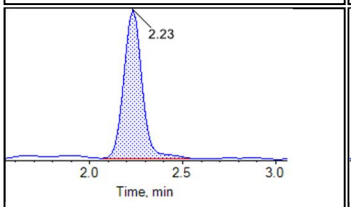
d3-MeFOSAA



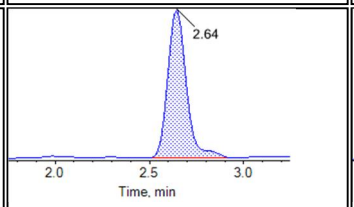
d5-EtFOSAA



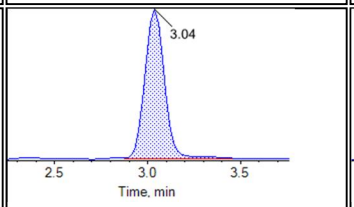
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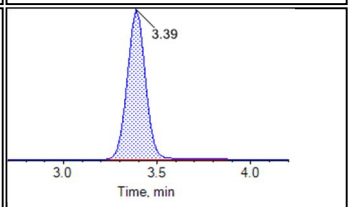
13C4-PFHpA



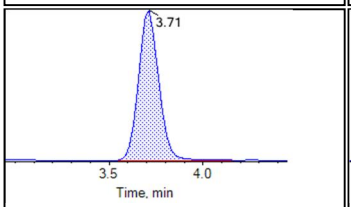
13C8-PFOA



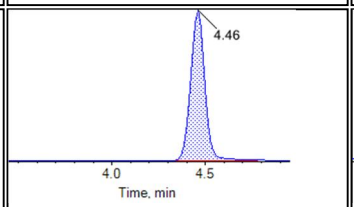
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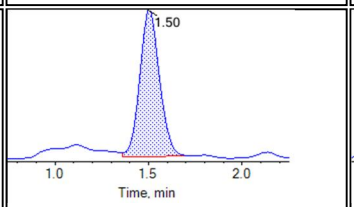
13C6-PFDA



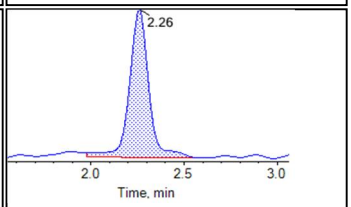
13C7-PFUnA



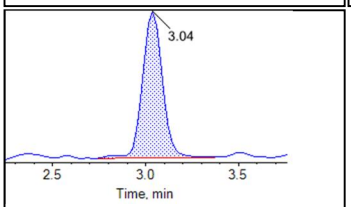
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



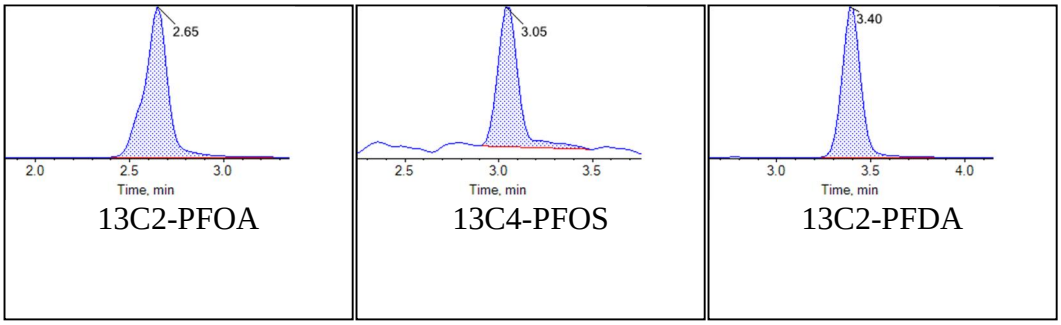
13C8-PFOS

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Chromatogram Report

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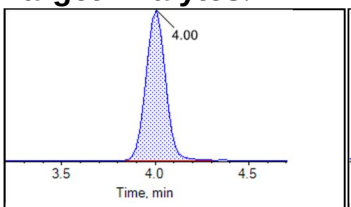
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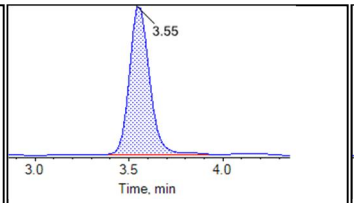
Sample Name	J8259-FS-D(3)	**Injection Vial**	26
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:06:43	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

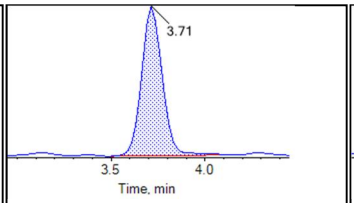
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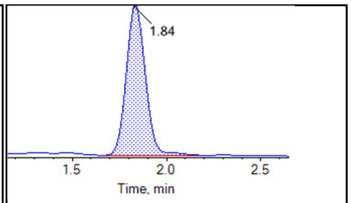
13C2-PFDoA



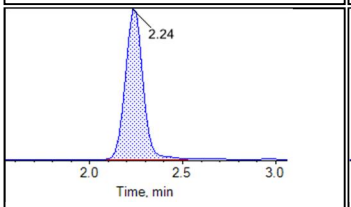
d3-MeFOSAA



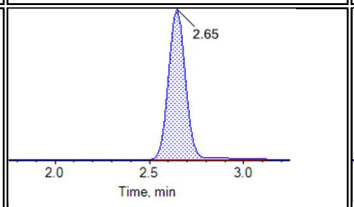
d5-EtFOSAA



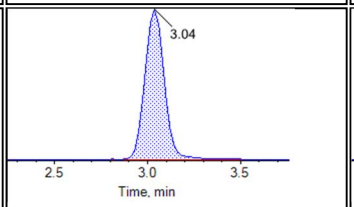
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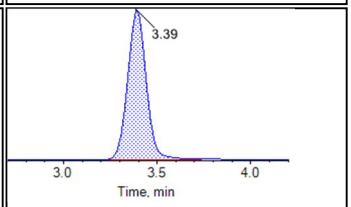
13C4-PFHpA



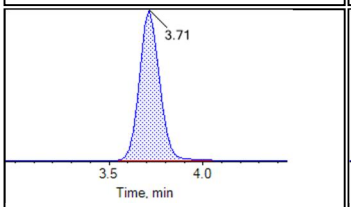
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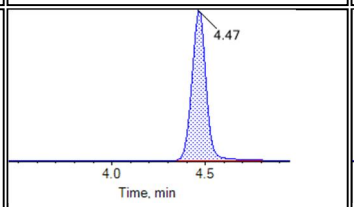
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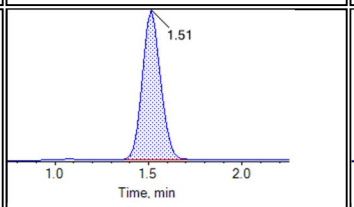
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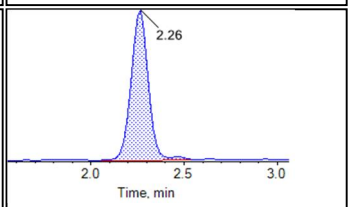
13C7-PFUnA



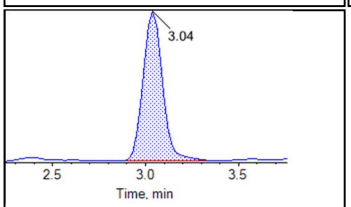
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



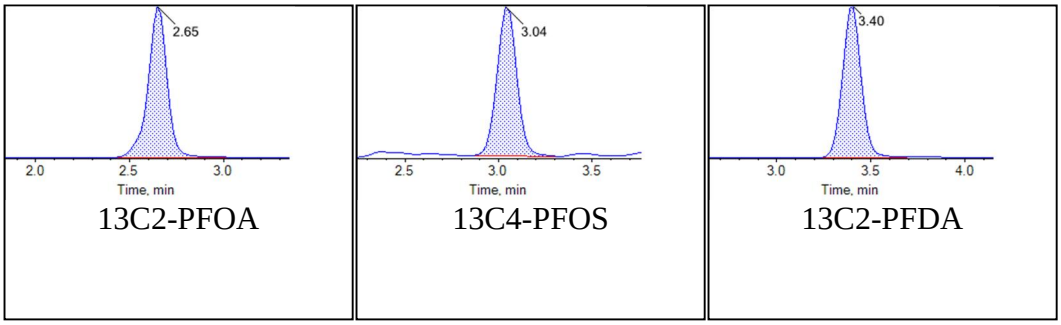
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Chromatogram Report

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Internal Standards:



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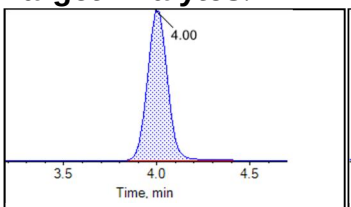
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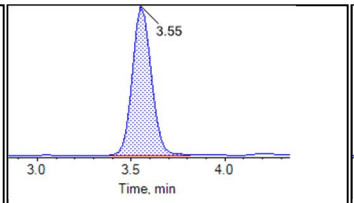
Sample Name	J8259-FS-D(7)	**Injection Vial**	27
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:17:35	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

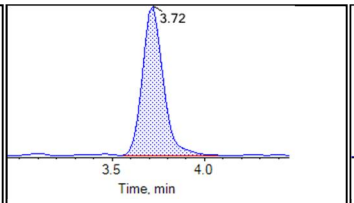
Target Analytes:



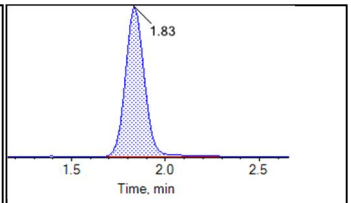
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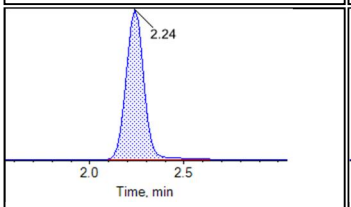
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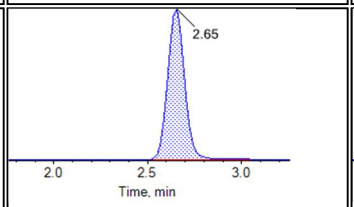
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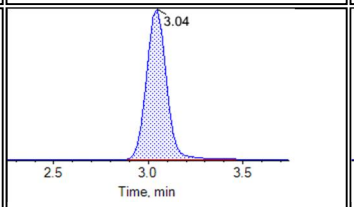
13C5-PFHxA



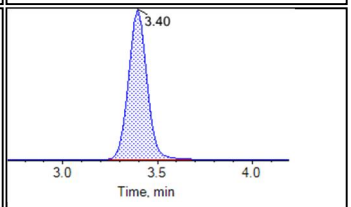
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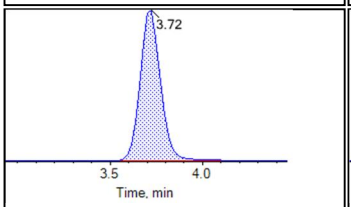
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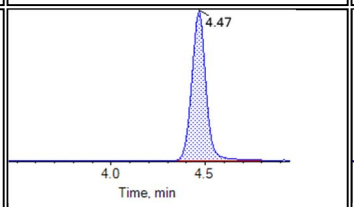
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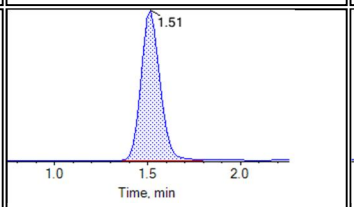
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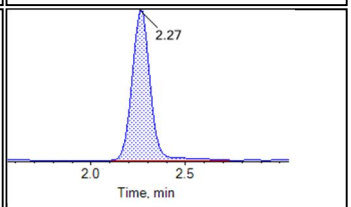
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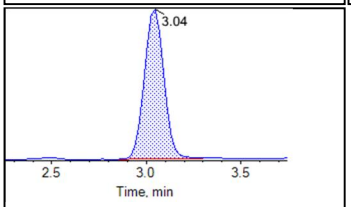
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



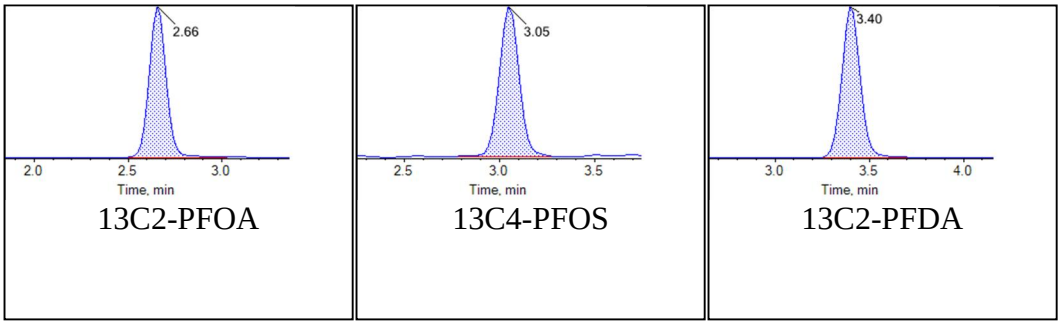
13C8-PFOS

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Chromatogram Report

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Internal Standards:



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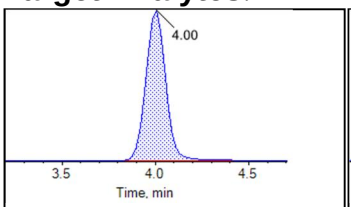
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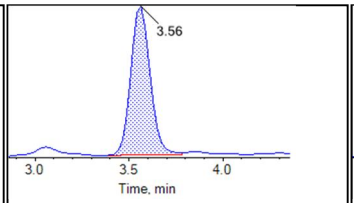
Sample Name	KB76 CCV	**Injection Vial**	29
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T00:39:21	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

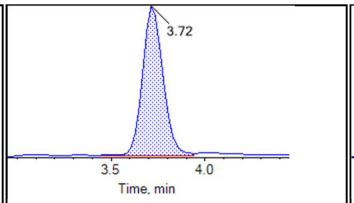
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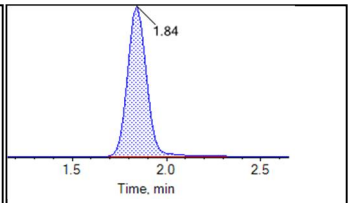
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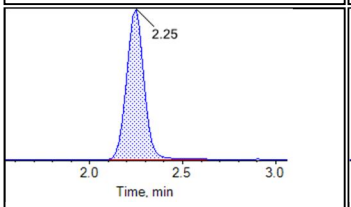
d3-MeFOSAA



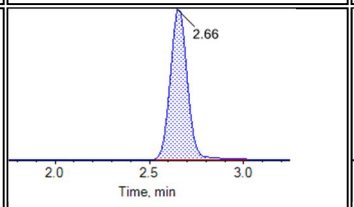
d5-EtFOSAA



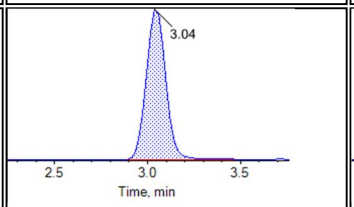
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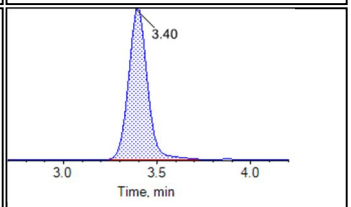
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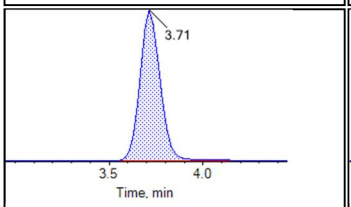
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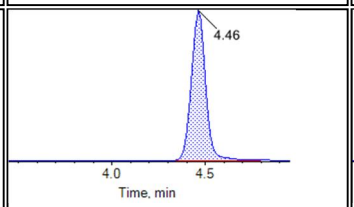
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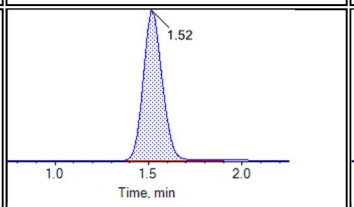
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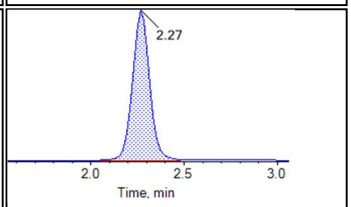
13C7-PFUnA



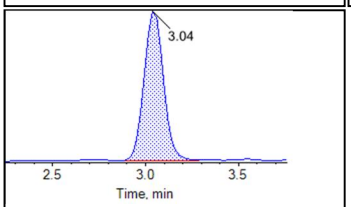
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



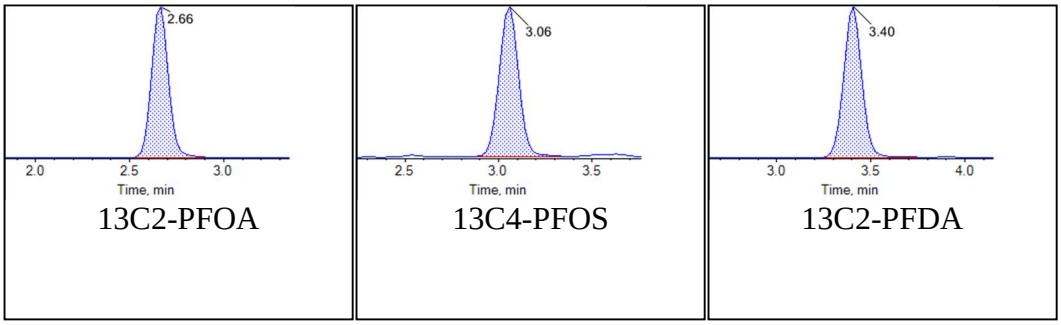
13C8-PFOS

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Chromatogram Report

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Internal Standards:



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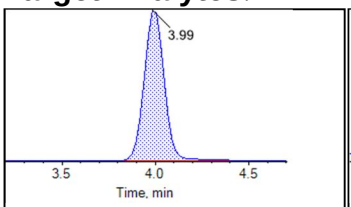
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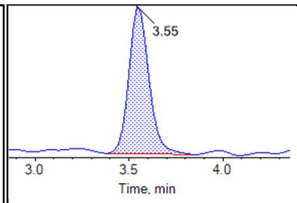
Sample Name	J8260-FS(0)	**Injection Vial**	30
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:01:07	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

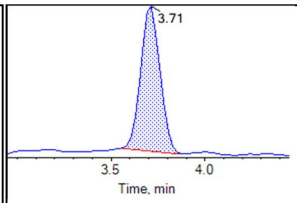
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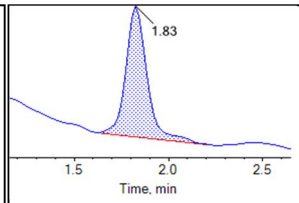
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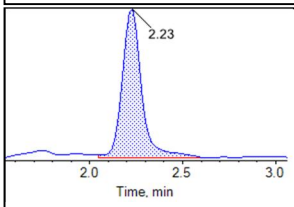
d3-MeFOSAA



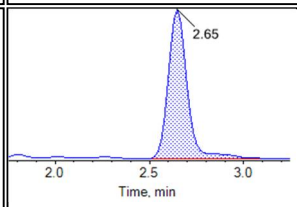
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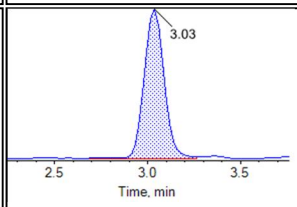
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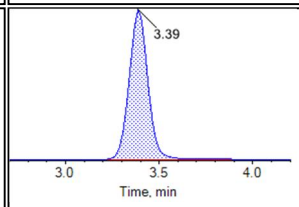
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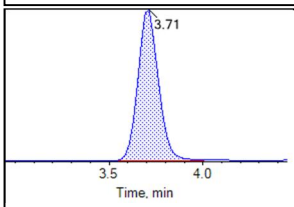
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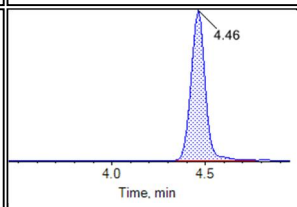
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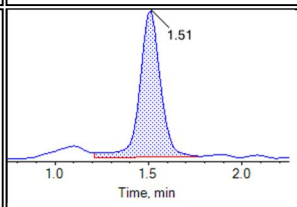
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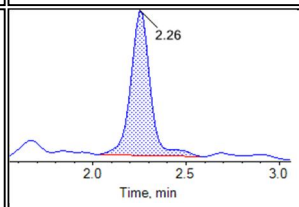
13C7-PFUnA



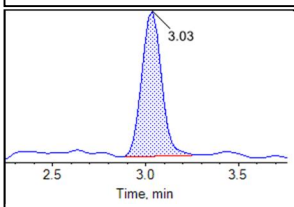
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



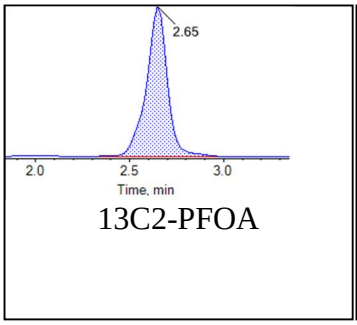
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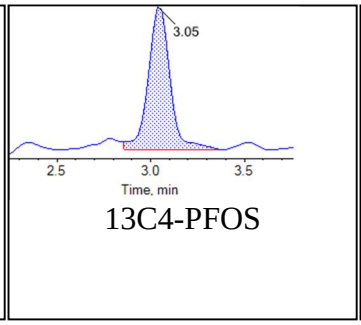
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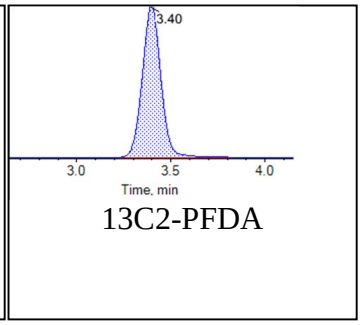
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

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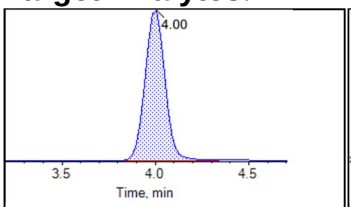
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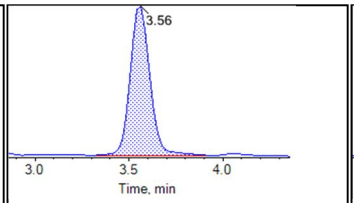
Sample Name	J8260-FS-D(3)	**Injection Vial**	31
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:11:59	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

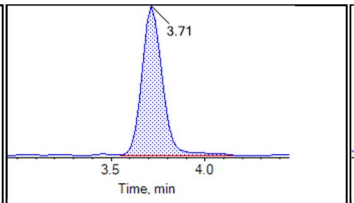
Target Analytes:



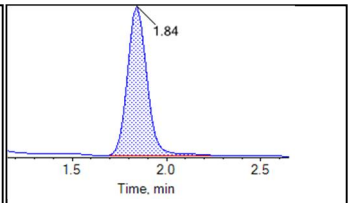
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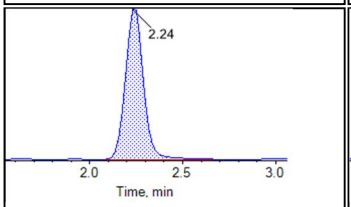
d3-MeFOSAA



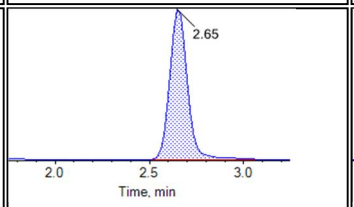
d5-EtFOSAA



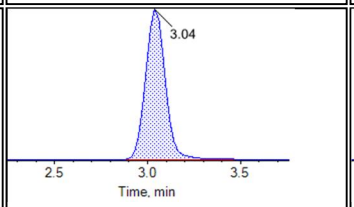
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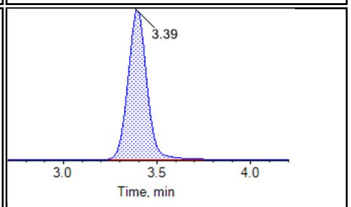
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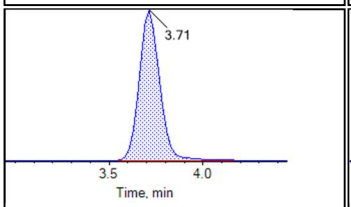
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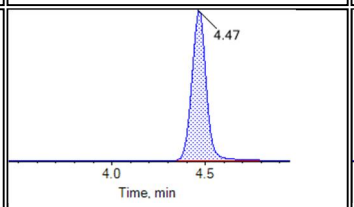
13C9-PFNA



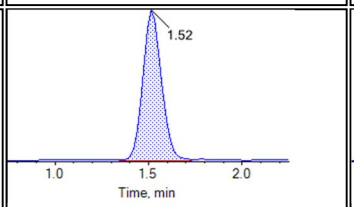
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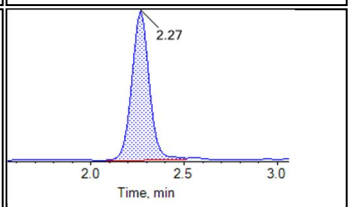
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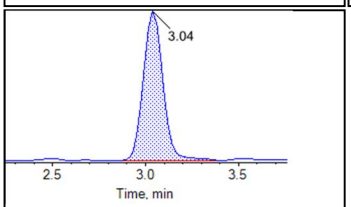
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13C3-PFBS



13C3-PFHxS

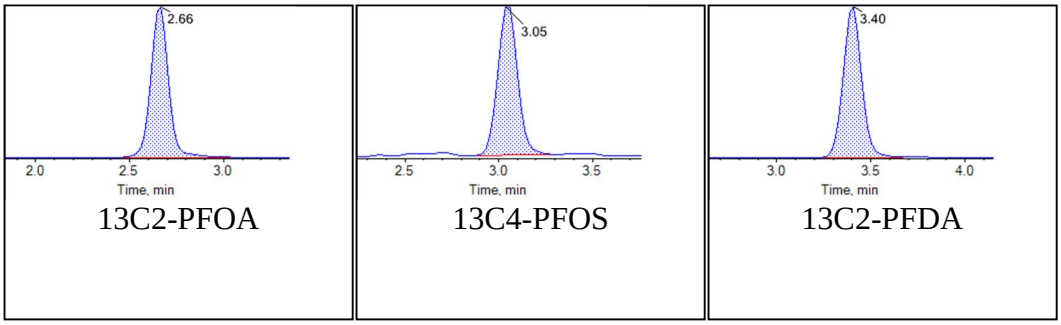


13C8-PFOS

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Internal Standards:



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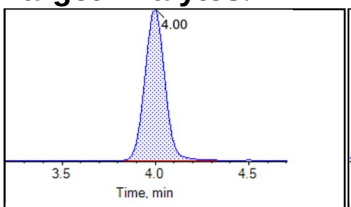
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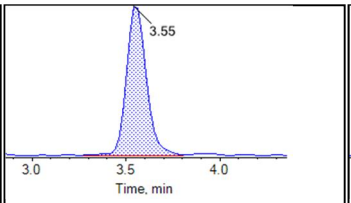
Sample Name	J8260-FS-D(9)	**Injection Vial**	32
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:22:52	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

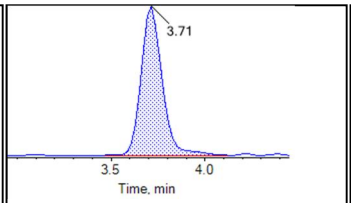
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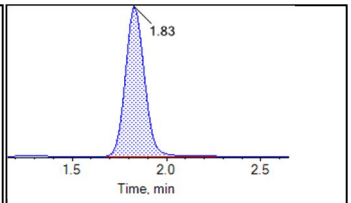
13C2-PFDoA



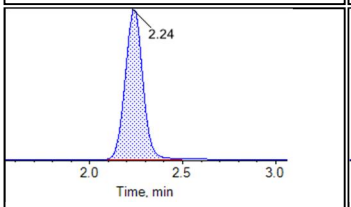
d3-MeFOSAA



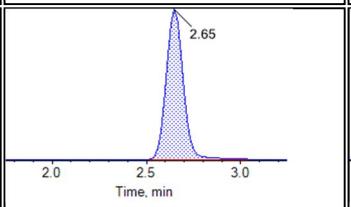
d5-EtFOSAA



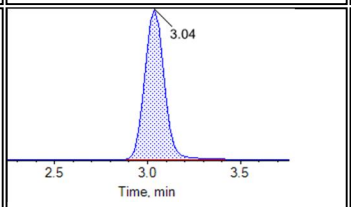
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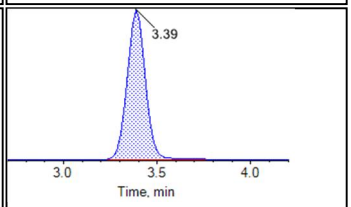
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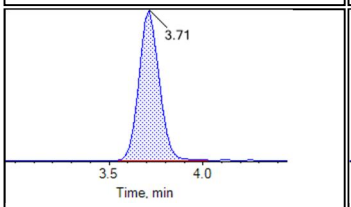
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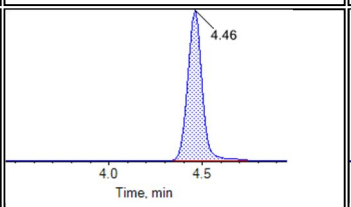
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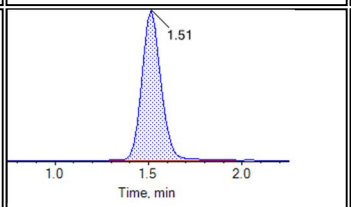
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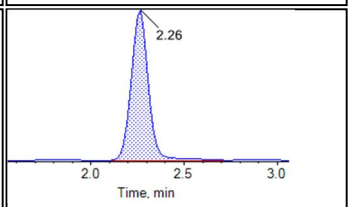
13C7-PFUnA



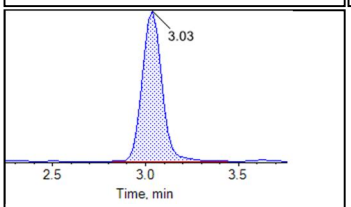
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



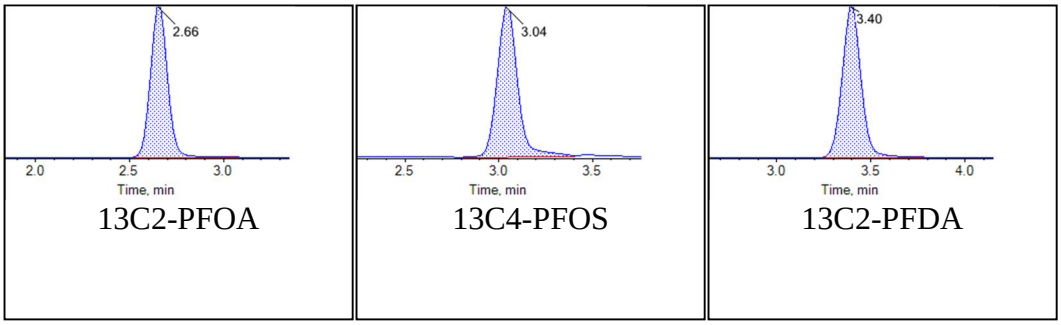
13C8-PFOS

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Internal Standards:



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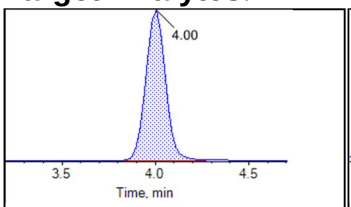
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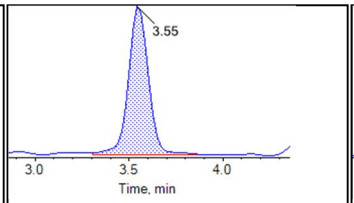
Sample Name	J8261-FS(0)	**Injection Vial**	33
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:33:45	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

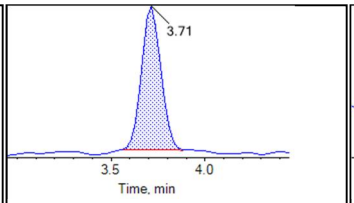
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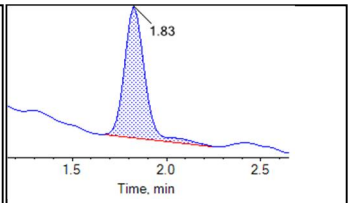
13C2-PFDoA



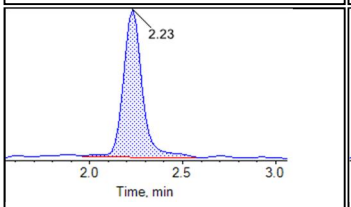
d3-MeFOSAA



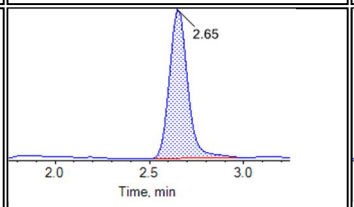
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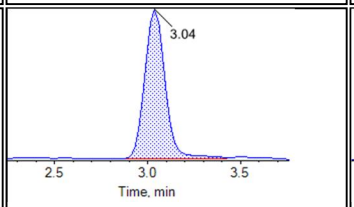
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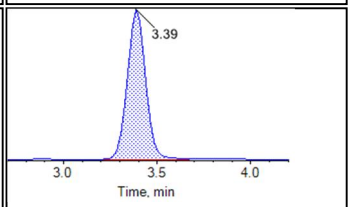
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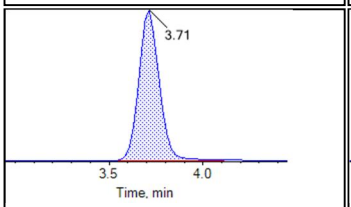
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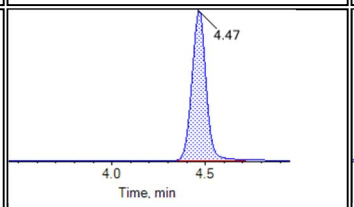
13C9-PFNA



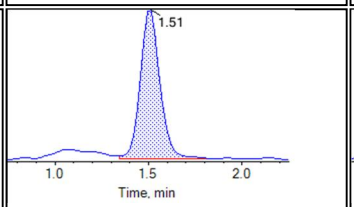
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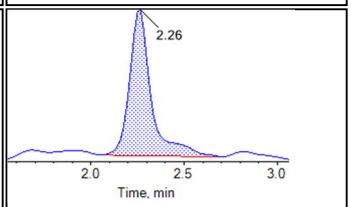
13C7-PFUnA



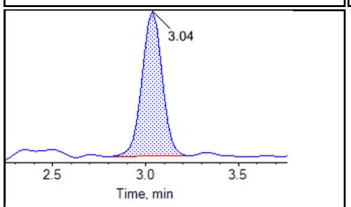
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



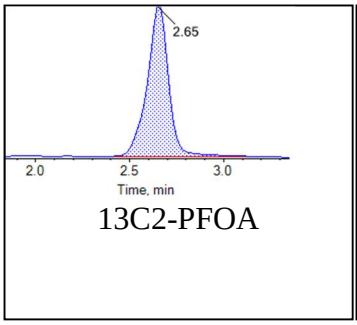
13C8-PFOS

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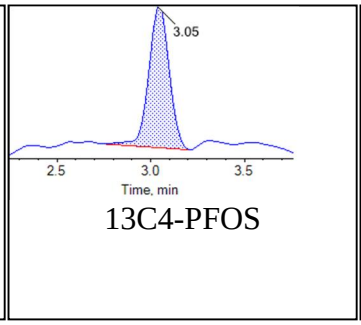
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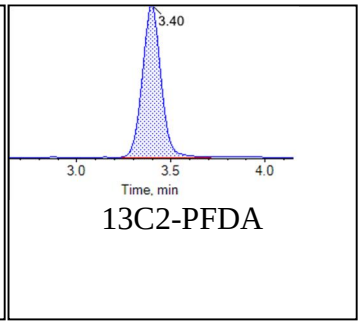
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

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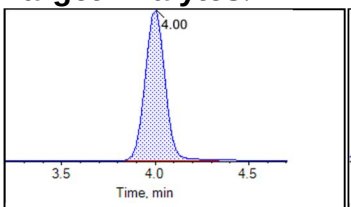
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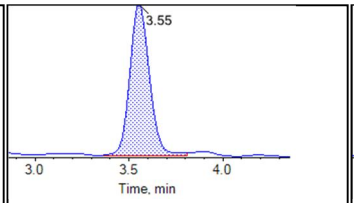
Sample Name	J8261-FS-D(3)	**Injection Vial**	34
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:44:38	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

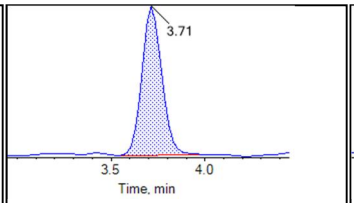
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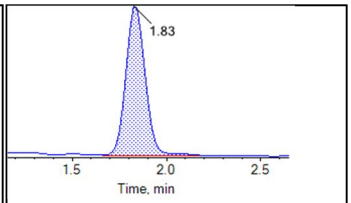
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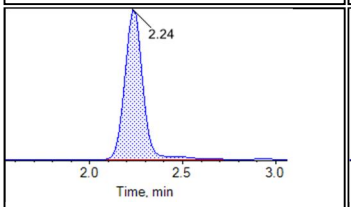
d3-MeFOSAA



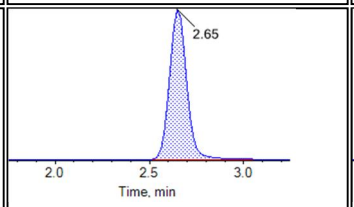
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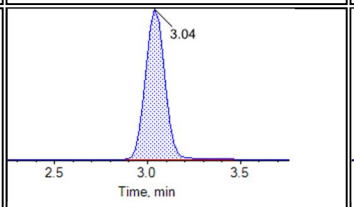
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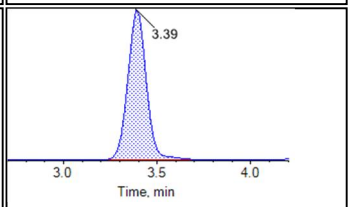
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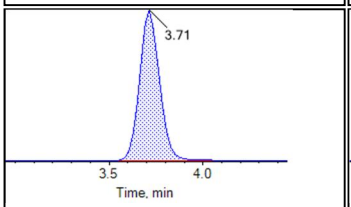
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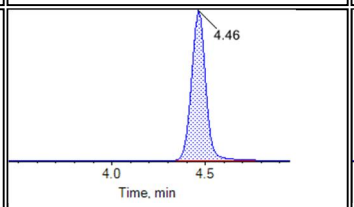
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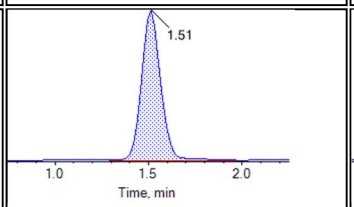
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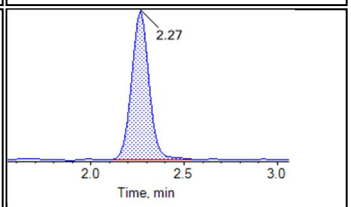
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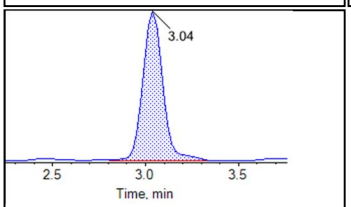
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

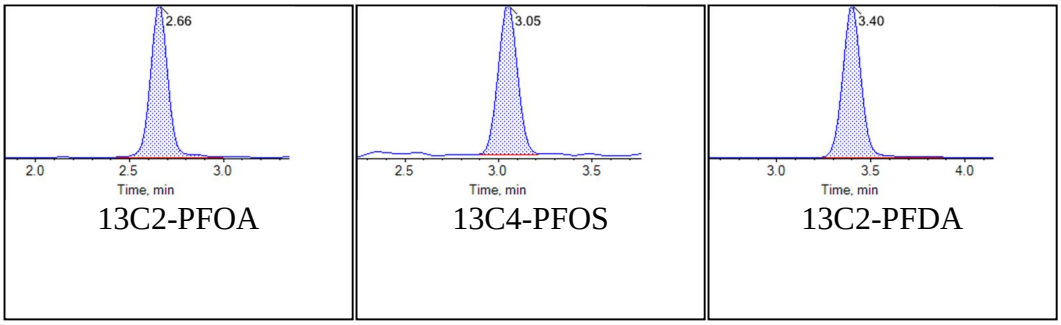


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Internal Standards:



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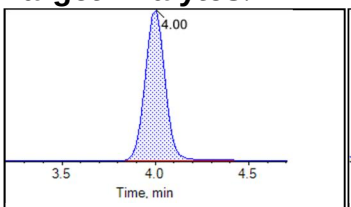
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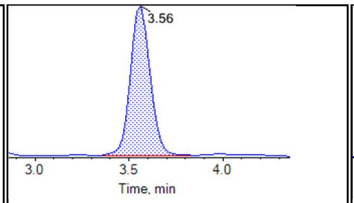
Sample Name	J8261-FS-D(9)	**Injection Vial**	35
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T01:55:30	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

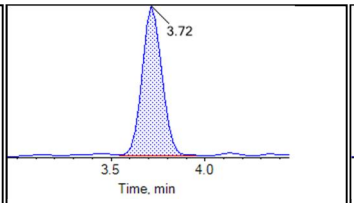
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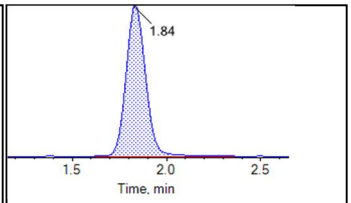
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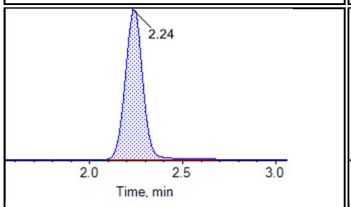
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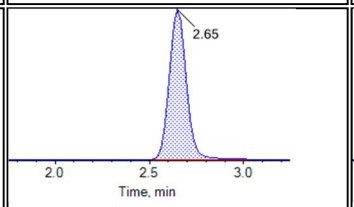
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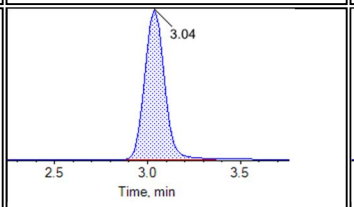
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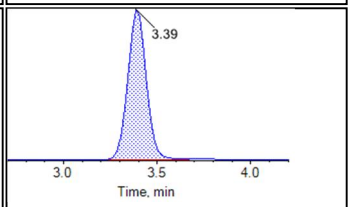
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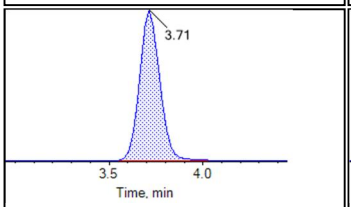
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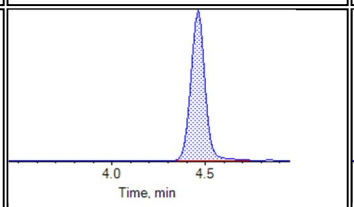
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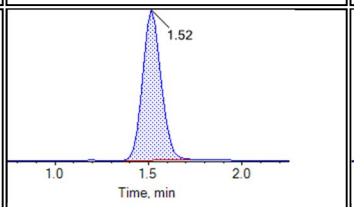
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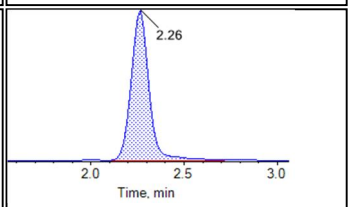
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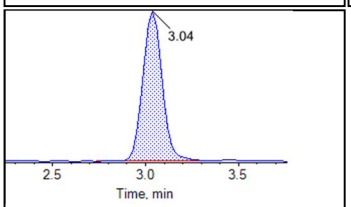
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13C3-PFBS



13C3-PFHxS



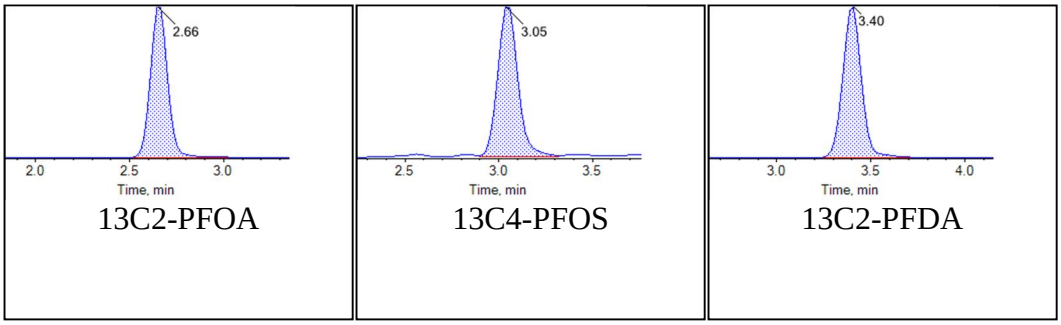
13C8-PFOS

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Chromatogram Report

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Internal Standards:



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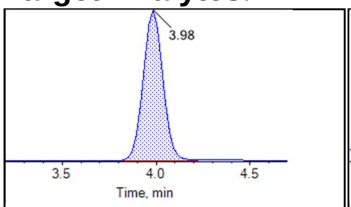
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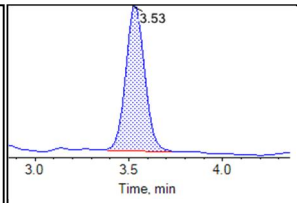
Sample Name	J8262-FS(0)	**Injection Vial**	36
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:06:22	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

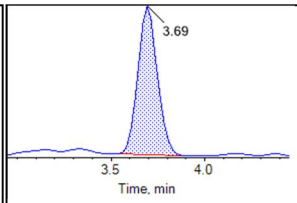
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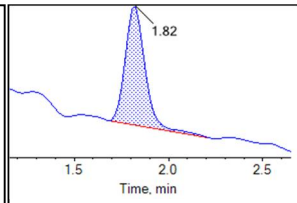
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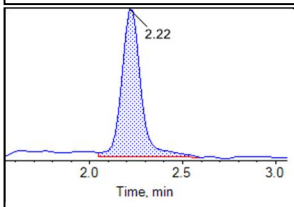
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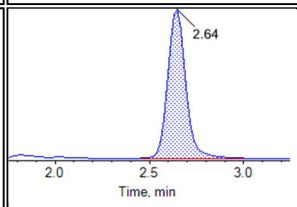
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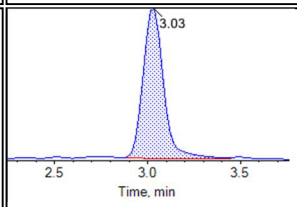
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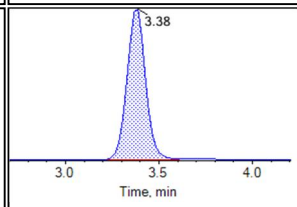
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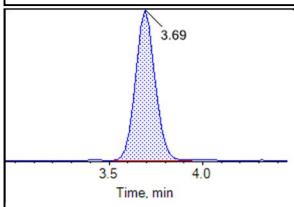
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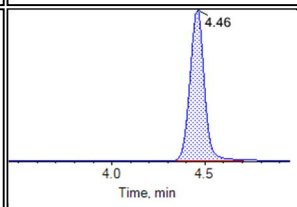
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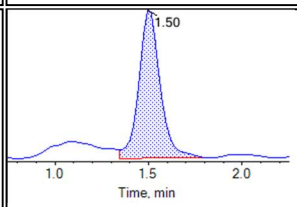
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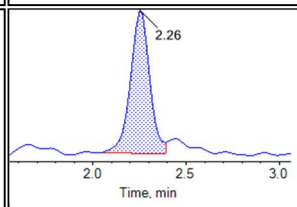
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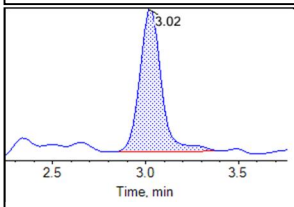
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13C3-PFBS



13C3-PFHxS



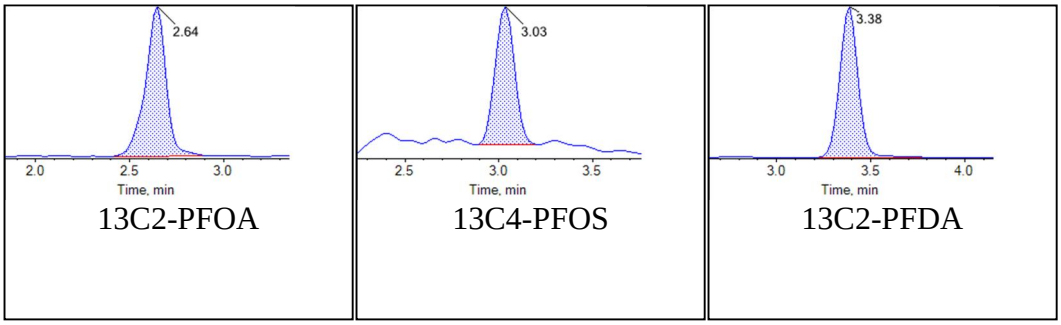
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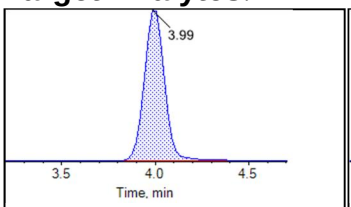
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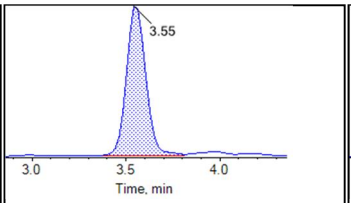
Sample Name	J8262-FS-D(7)	**Injection Vial**	37
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:17:15	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

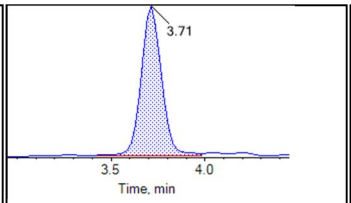
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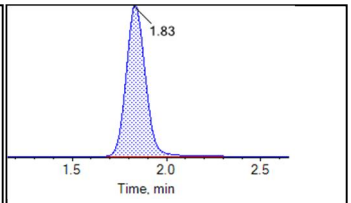
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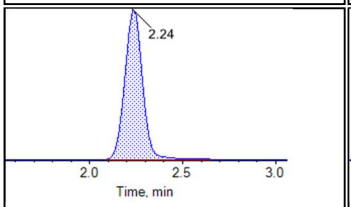
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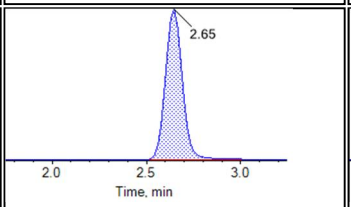
d5-EtFOSAA



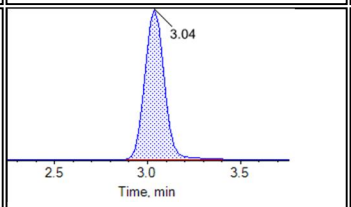
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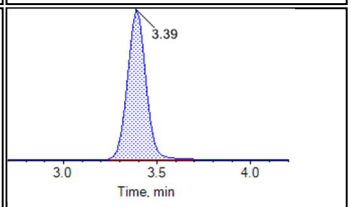
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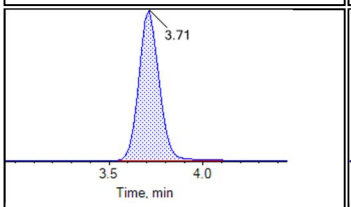
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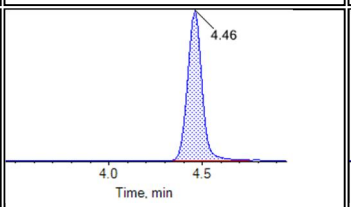
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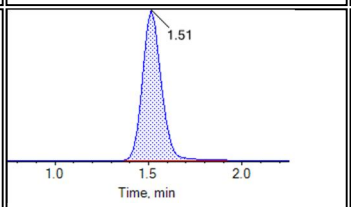
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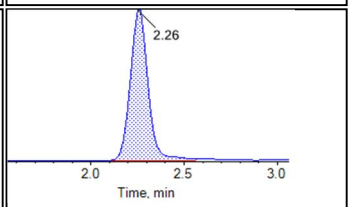
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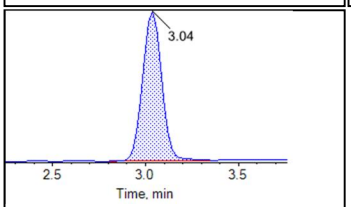
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



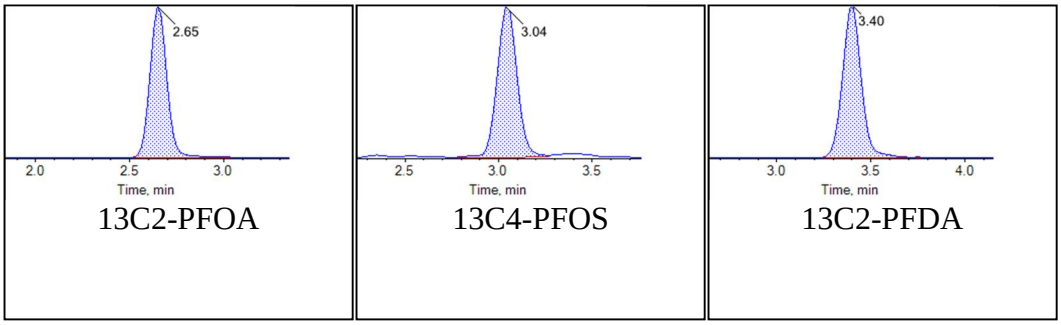
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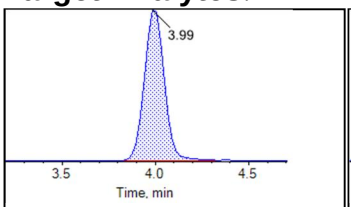
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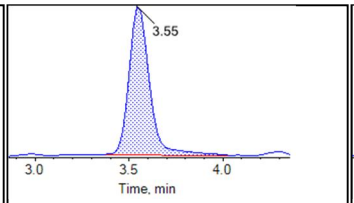
Sample Name	J8262-FS-D(9)	**Injection Vial**	38
Sample ID	VC-PM365-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:28:08	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

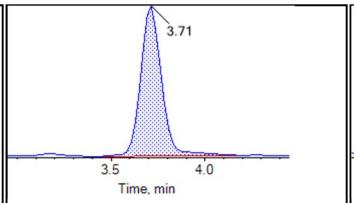
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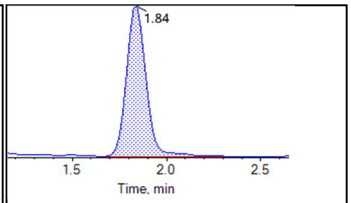
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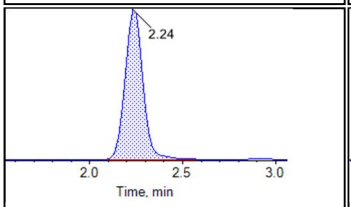
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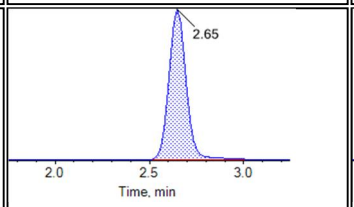
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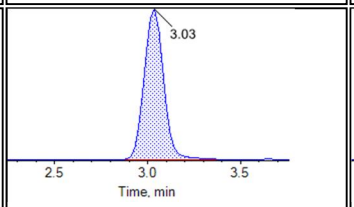
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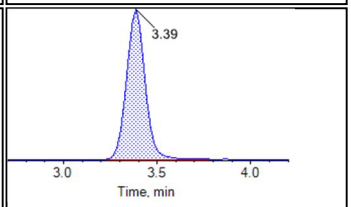
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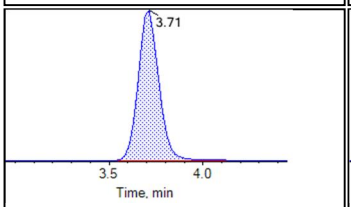
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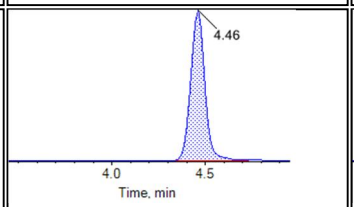
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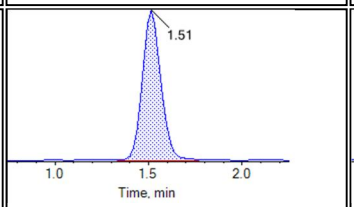
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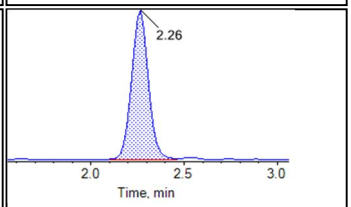
13C7-PFUnA



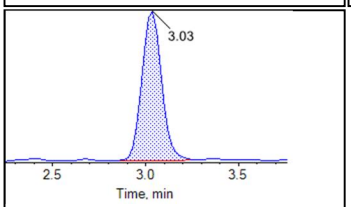
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



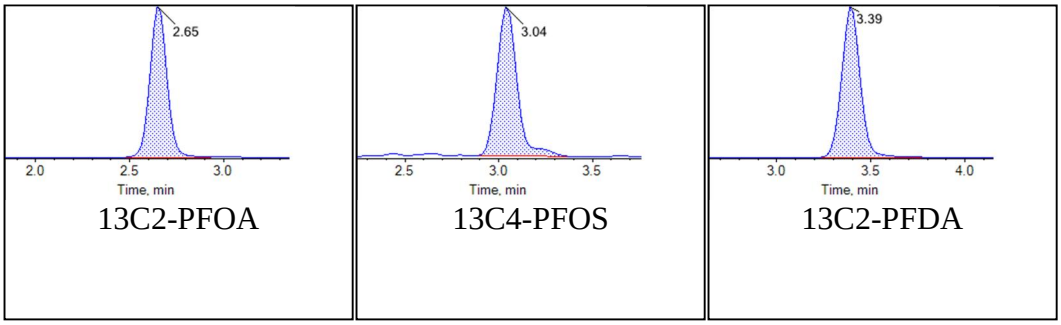
13C8-PFOS

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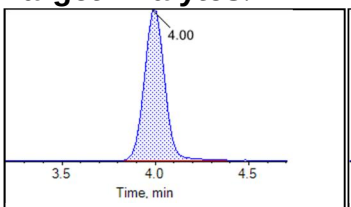
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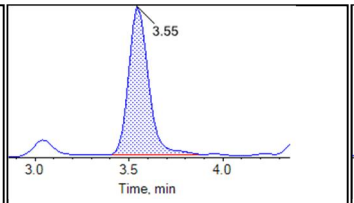
Sample Name	KB77 CCV	**Injection Vial**	40
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T02:49:54	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

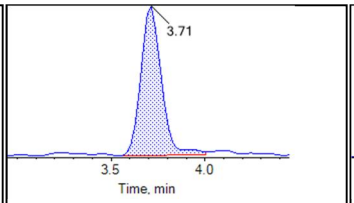
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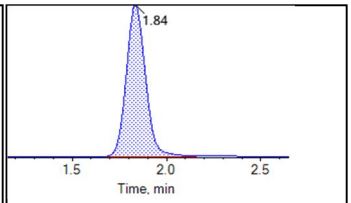
13C2-PFDoA



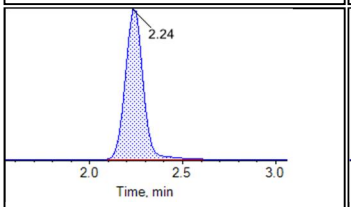
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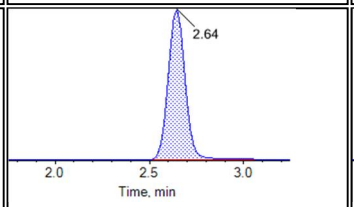
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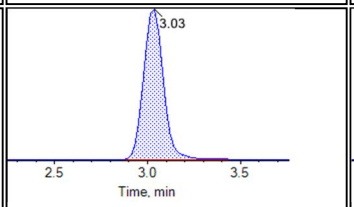
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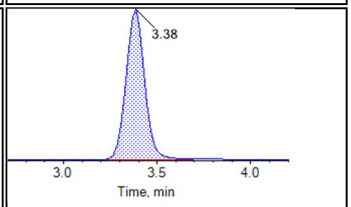
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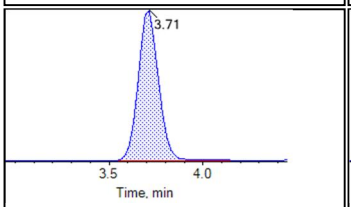
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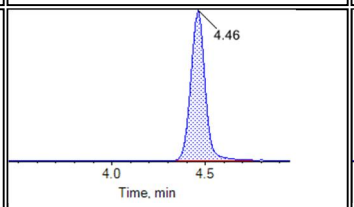
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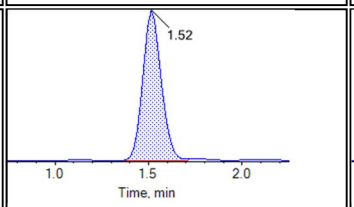
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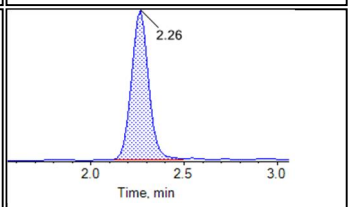
13C7-PFUnA



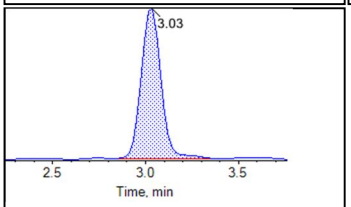
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



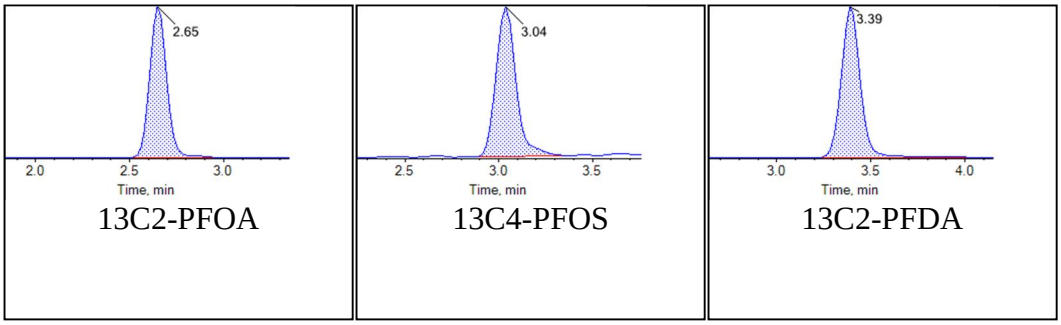
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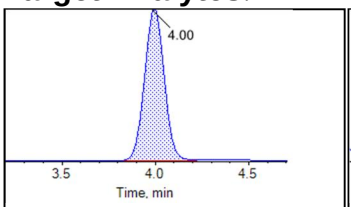
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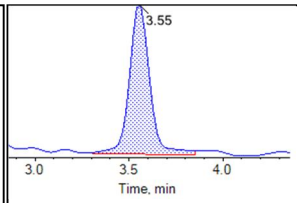
Sample Name	J8272-FS(0)	**Injection Vial**	41
Sample ID	VC-PM553-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:11:39	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

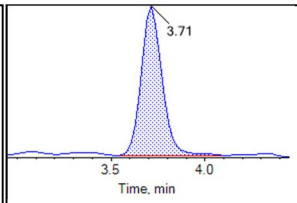
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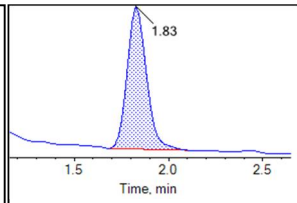
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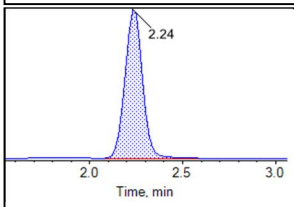
d3-MeFOSAA



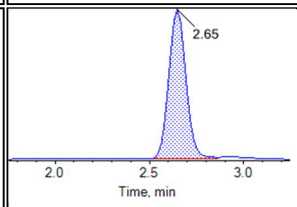
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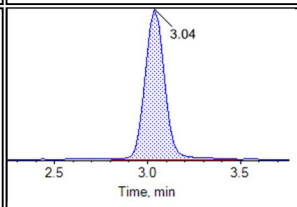
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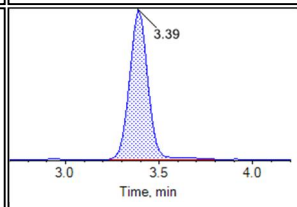
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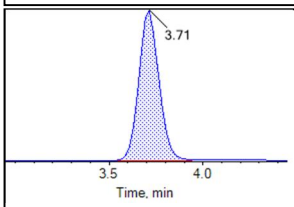
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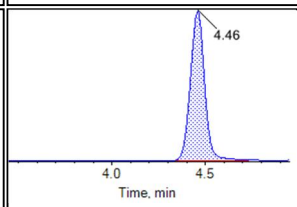
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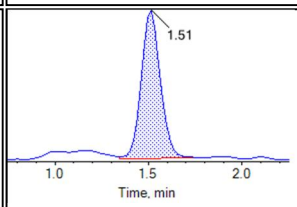
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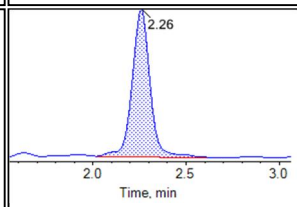
13C7-PFUnA



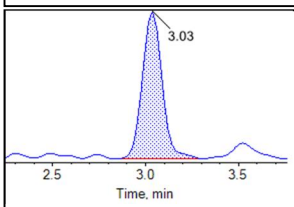
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



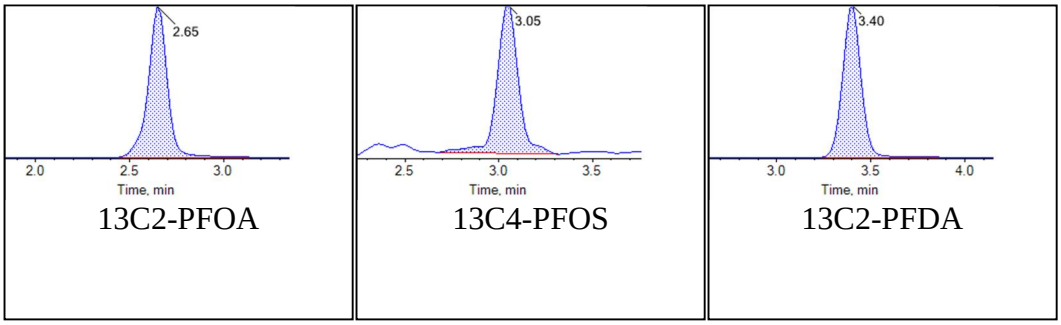
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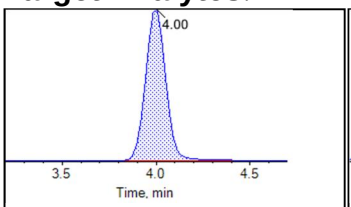
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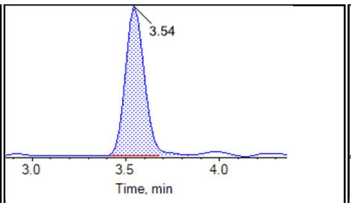
Sample Name	J8272-FS-D(5)	**Injection Vial**	42
Sample ID	VC-PM553-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:22:32	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

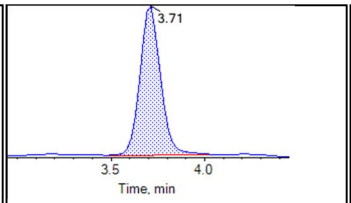
Target Analytes:



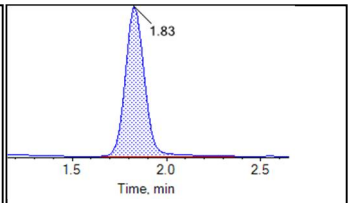
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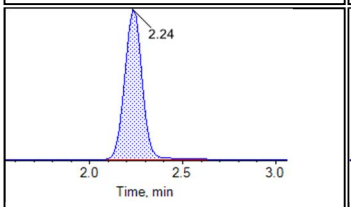
d3-MeFOSAA



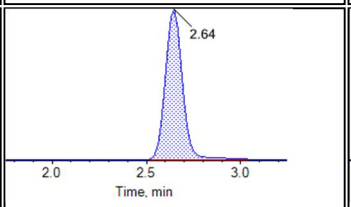
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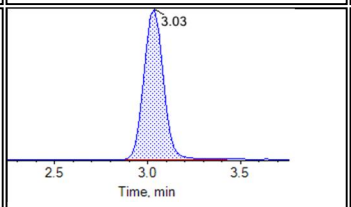
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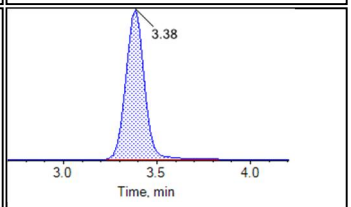
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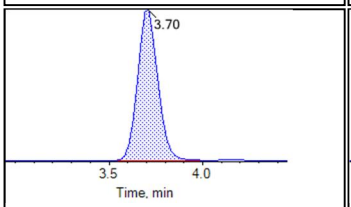
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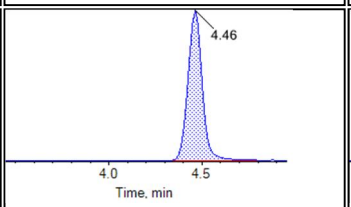
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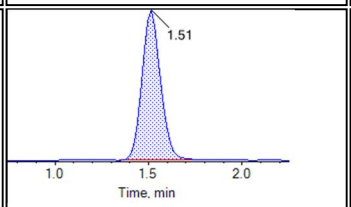
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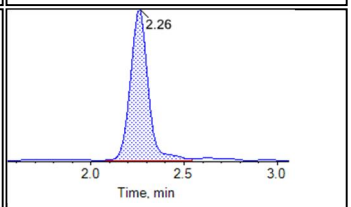
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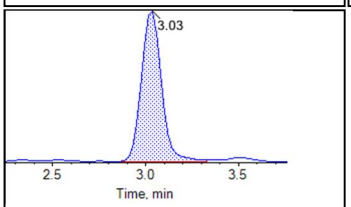
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



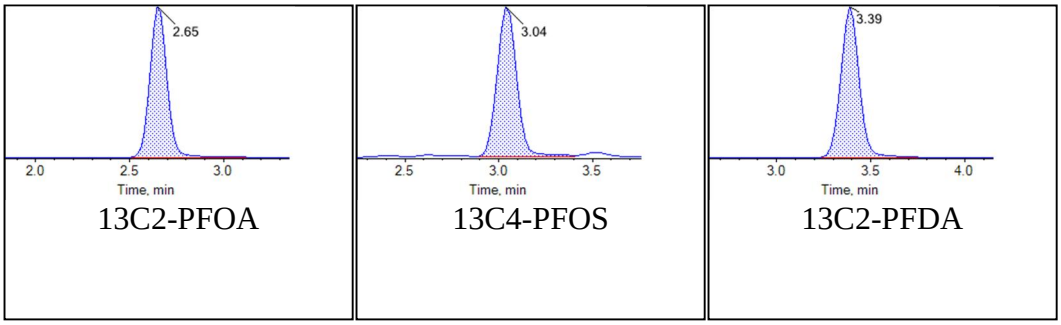
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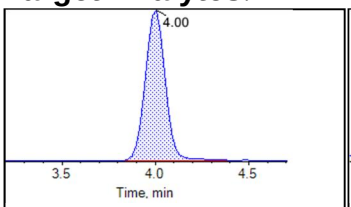
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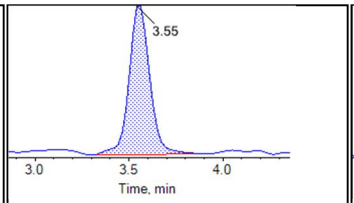
Sample Name	J8273-FS(0)	**Injection Vial**	43
Sample ID	VC-PM553-DW01P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:33:25	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

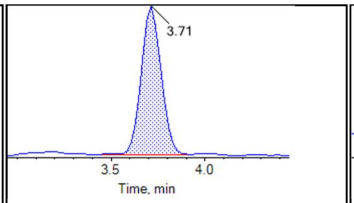
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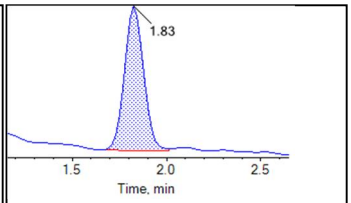
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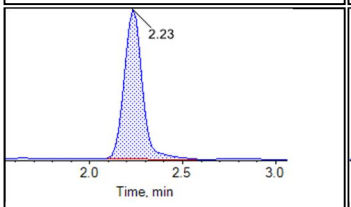
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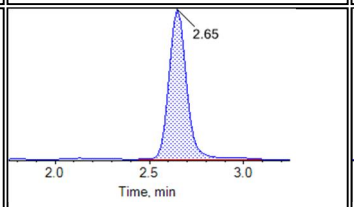
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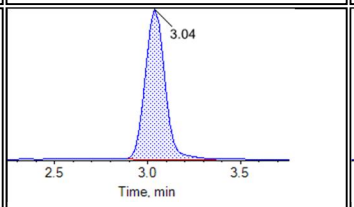
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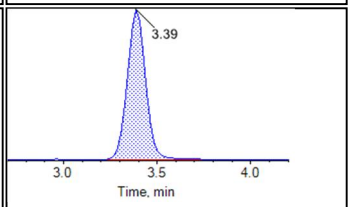
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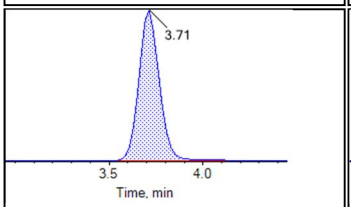
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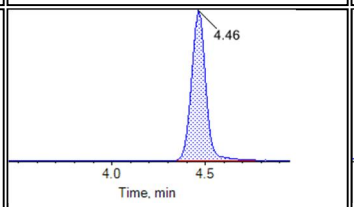
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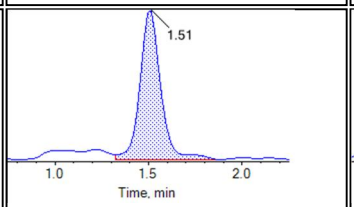
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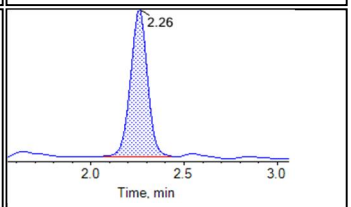
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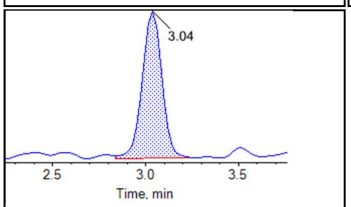
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13C3-PFBS



13C3-PFHxS



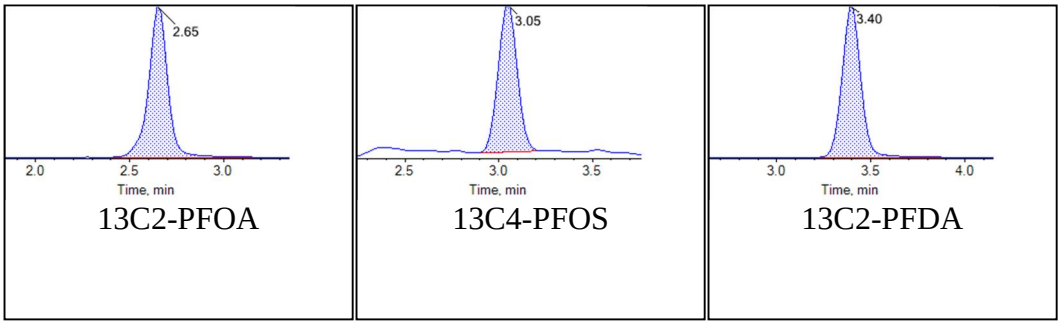
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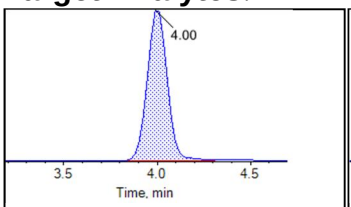
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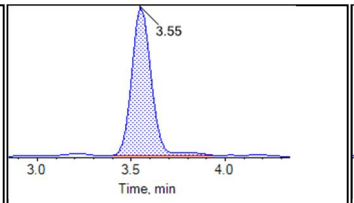
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Sample ID	VC-PM553-DW01P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:44:17	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

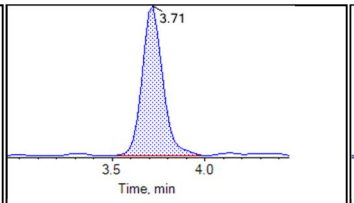
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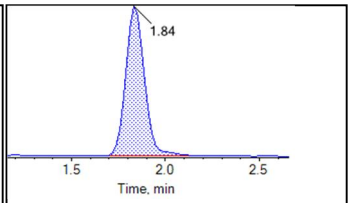
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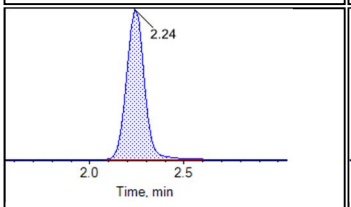
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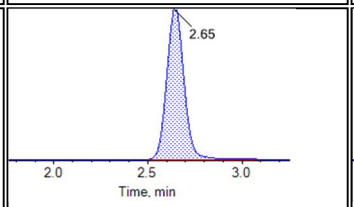
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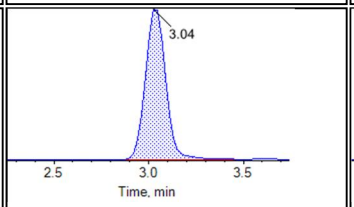
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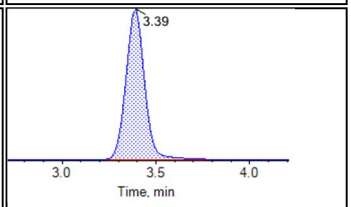
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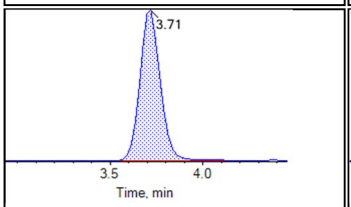
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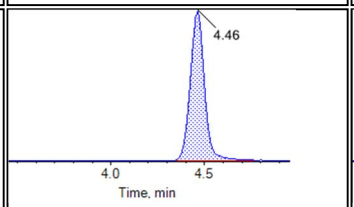
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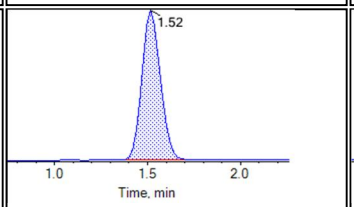
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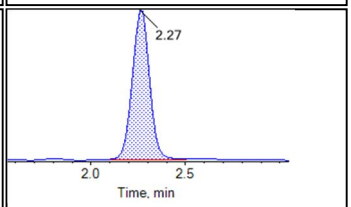
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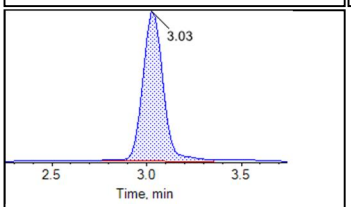
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



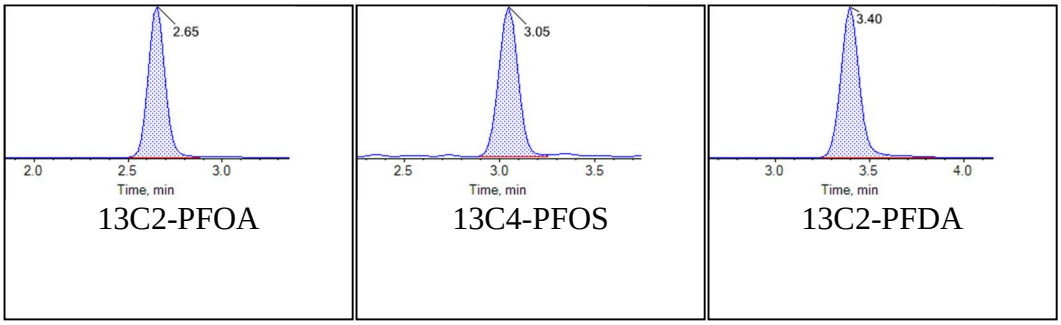
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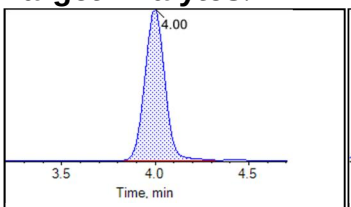
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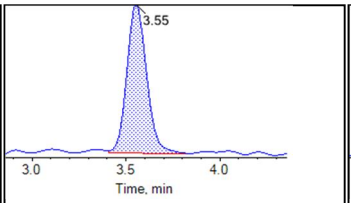
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Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T03:55:09	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

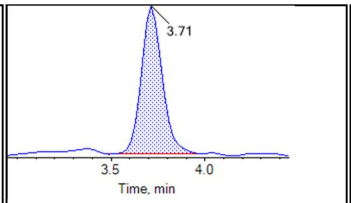
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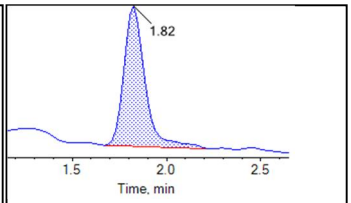
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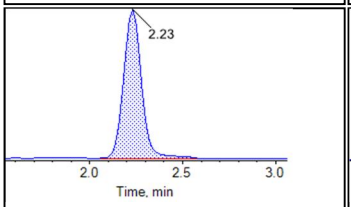
d3-MeFOSAA



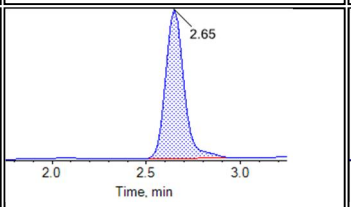
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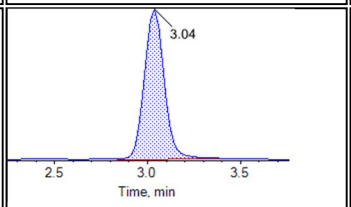
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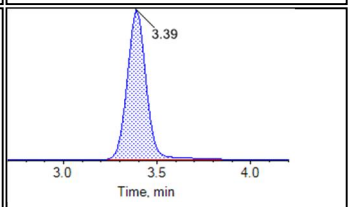
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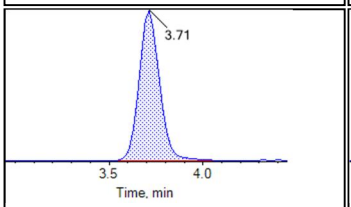
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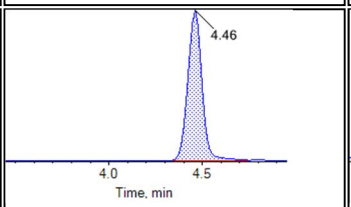
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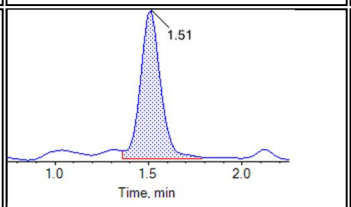
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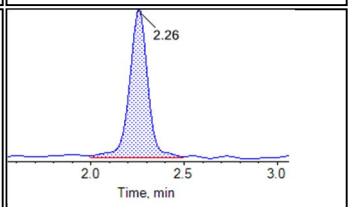
13C7-PFUnA



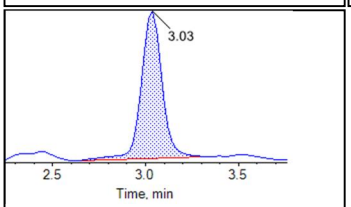
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13C3-PFBS



13C3-PFHxS



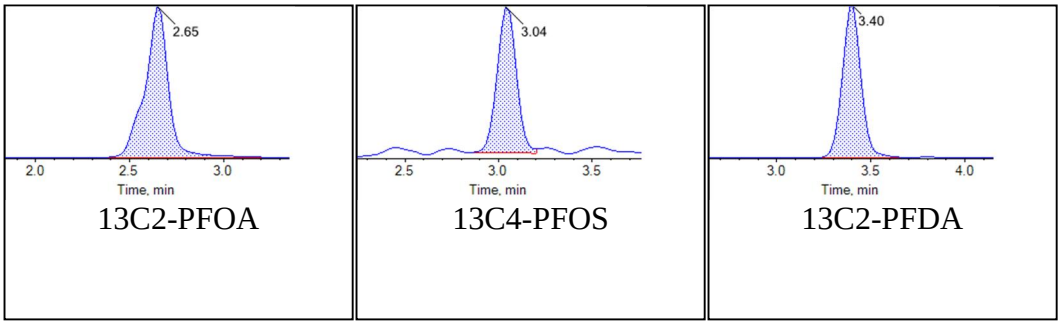
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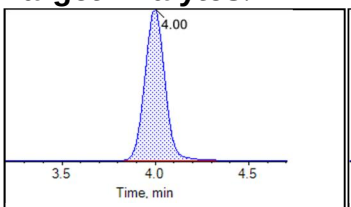
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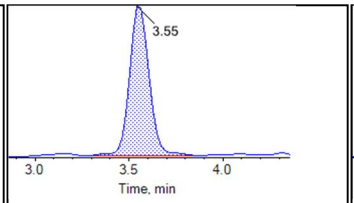
Sample Name	J8274-FS-D(9)	**Injection Vial**	46
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:06:02	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

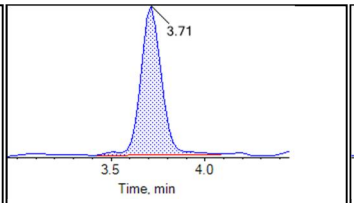
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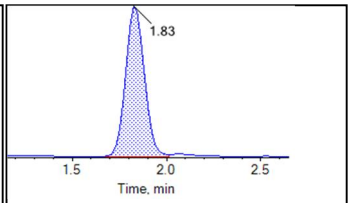
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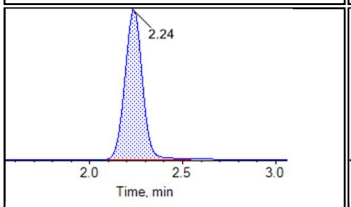
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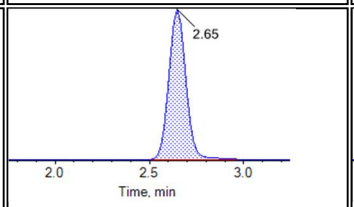
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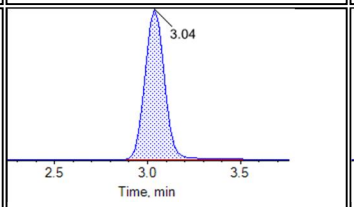
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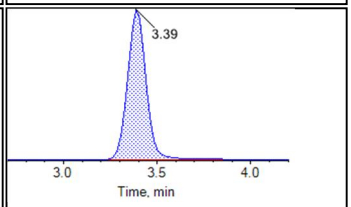
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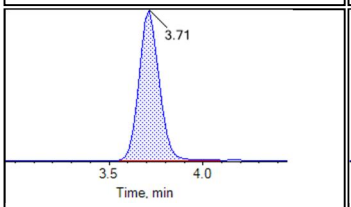
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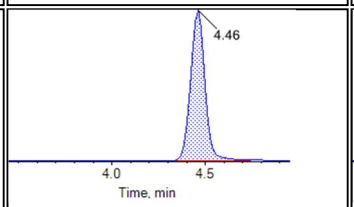
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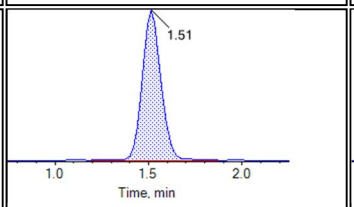
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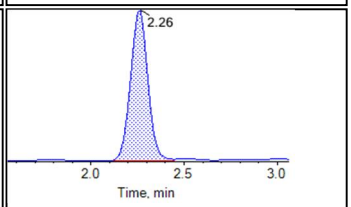
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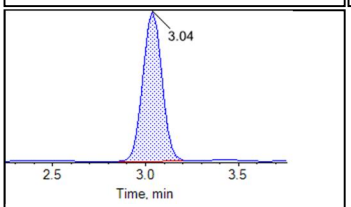
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



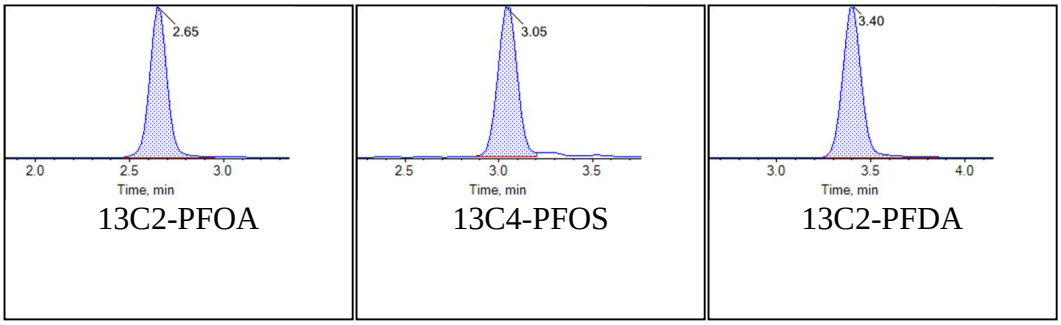
13C8-PFOS

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Internal Standards:



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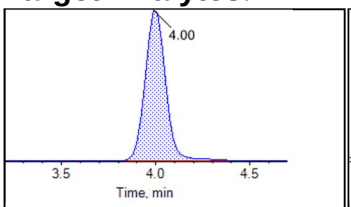
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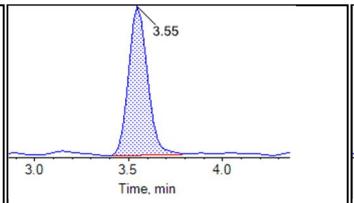
Sample Name	J8275-FS(0)	**Injection Vial**	48
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:27:47	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

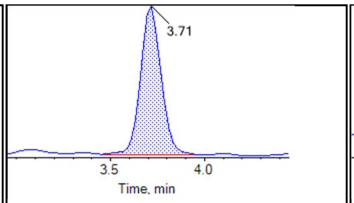
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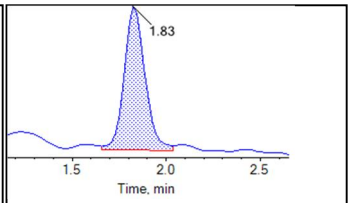
13C2-PFDoA



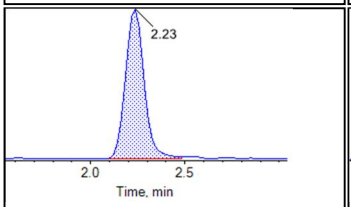
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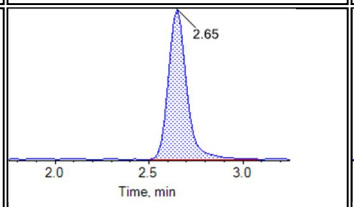
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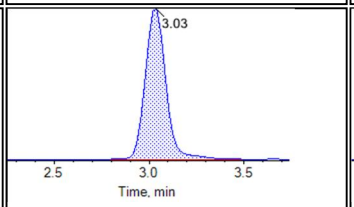
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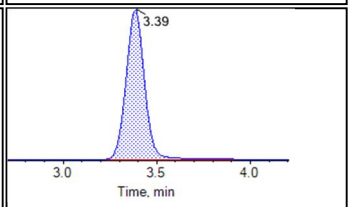
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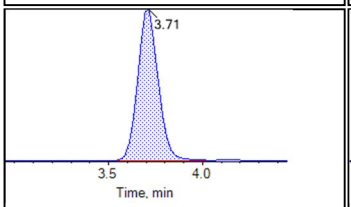
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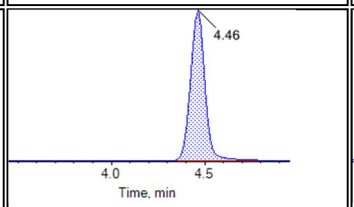
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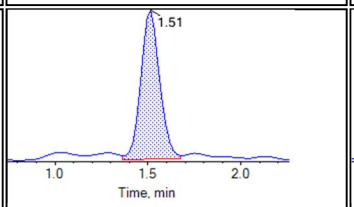
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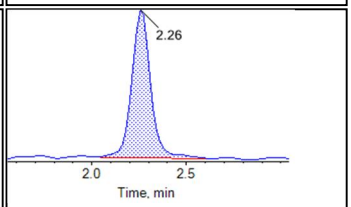
13C7-PFUnA



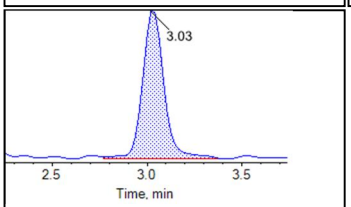
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



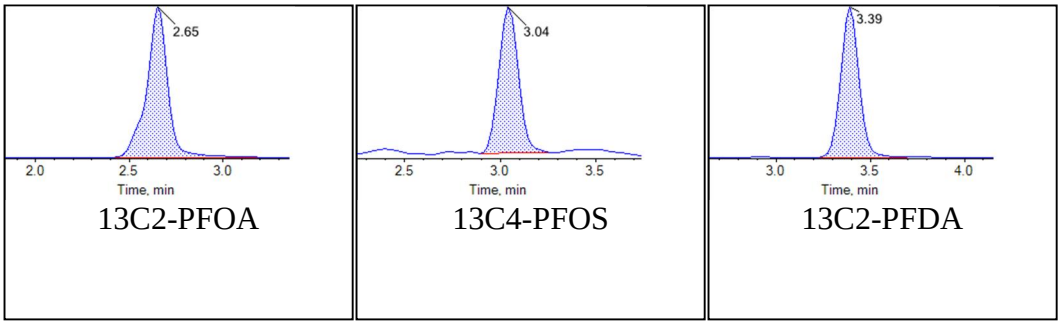
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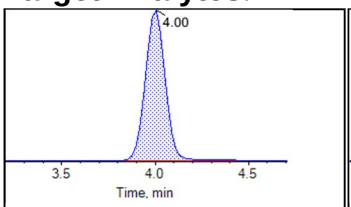
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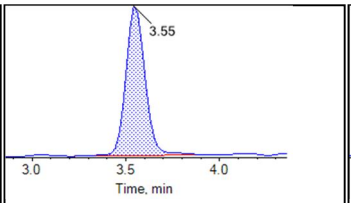
Sample Name	J8275-FS-D(7)	**Injection Vial**	49
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:38:40	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

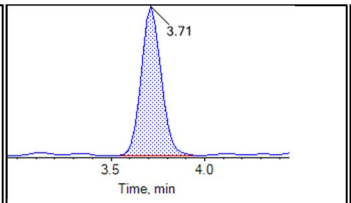
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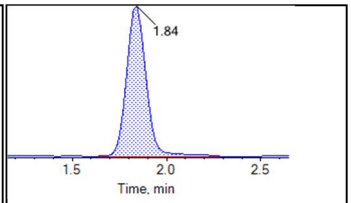
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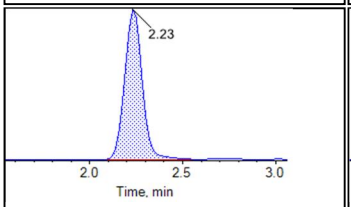
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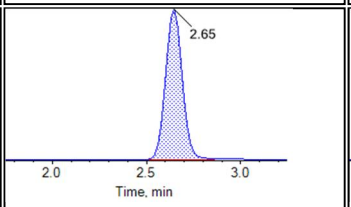
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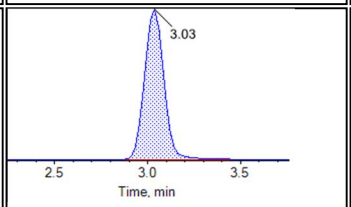
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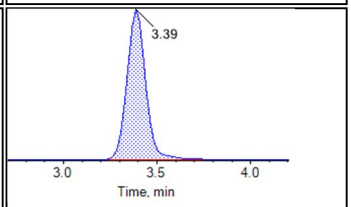
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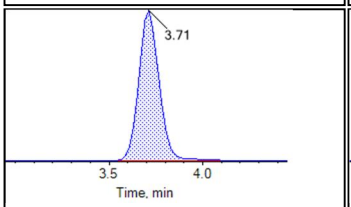
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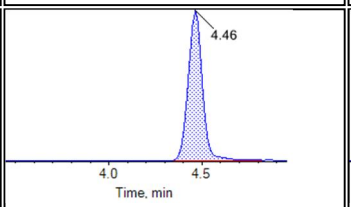
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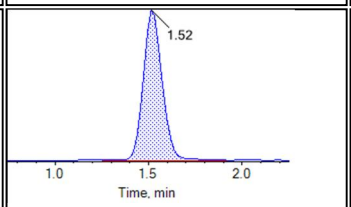
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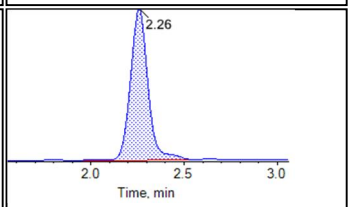
13C7-PFUnA



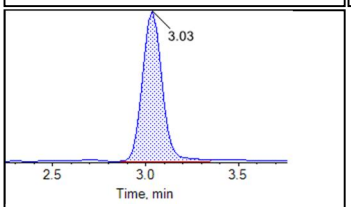
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



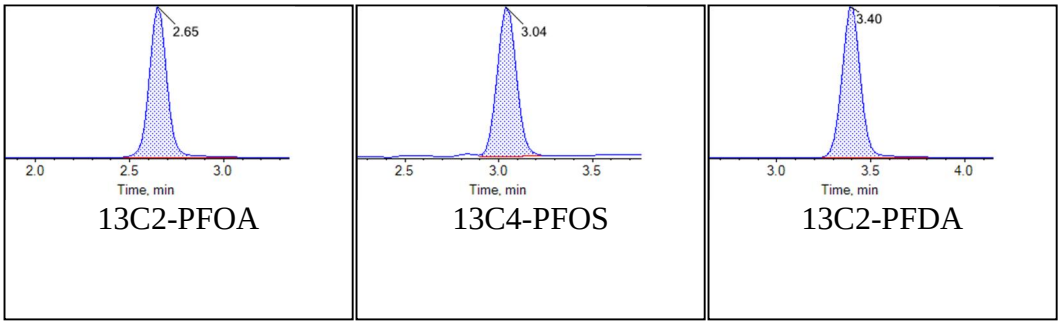
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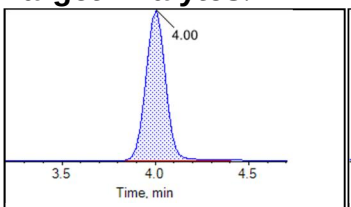
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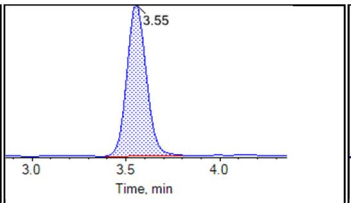
Sample Name	J8275-FS-D(9)	**Injection Vial**	50
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:49:33	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

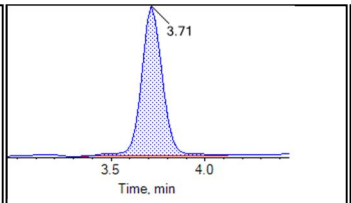
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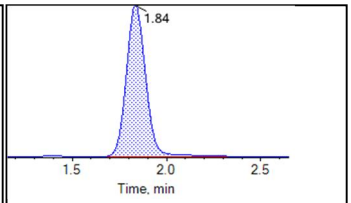
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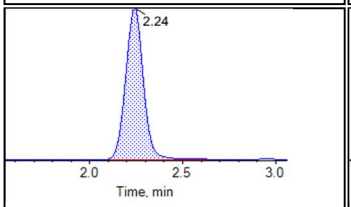
d3-MeFOSAA



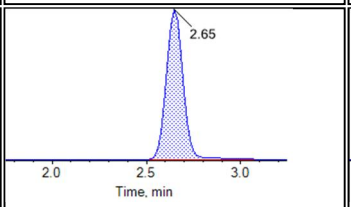
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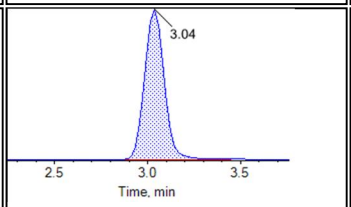
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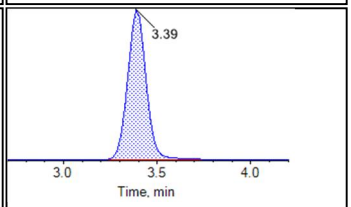
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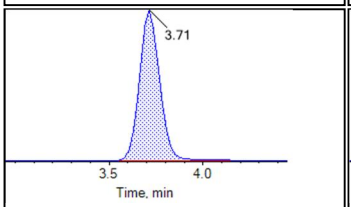
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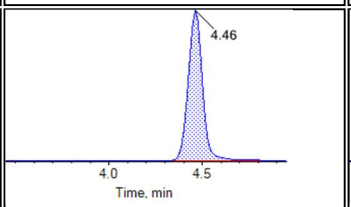
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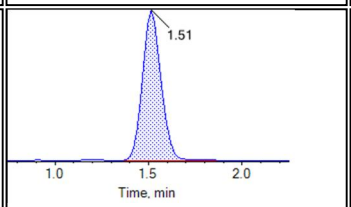
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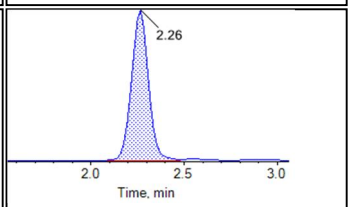
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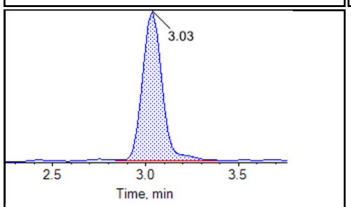
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



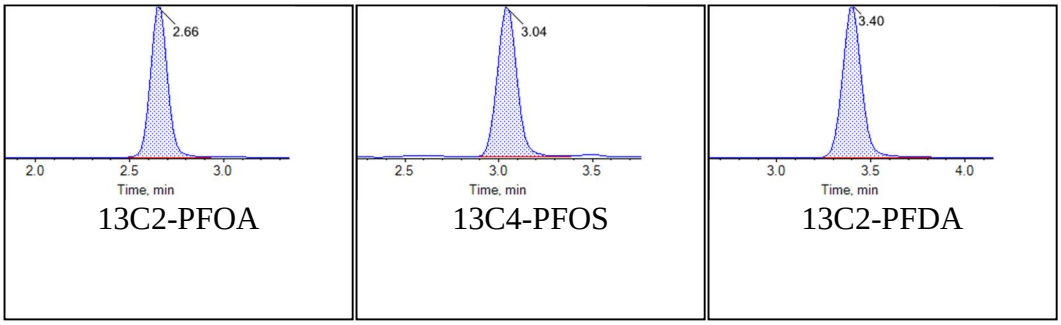
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Internal Standards:



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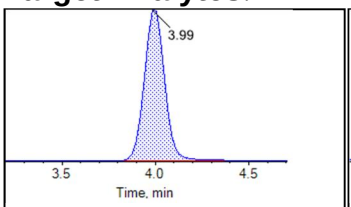
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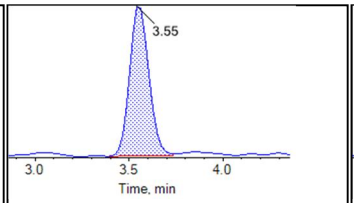
Sample Name	KB76 CCV	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T05:11:17	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

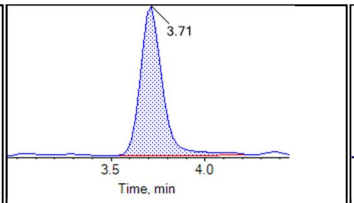
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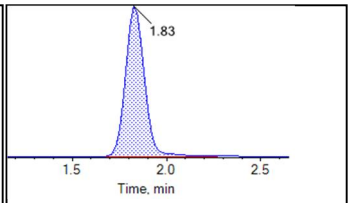
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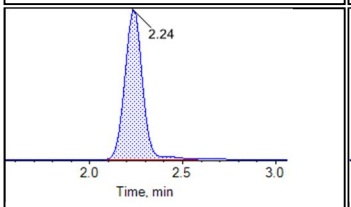
d3-MeFOSAA



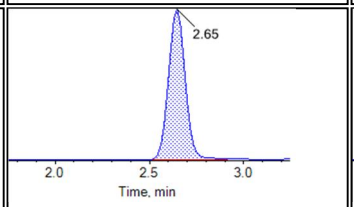
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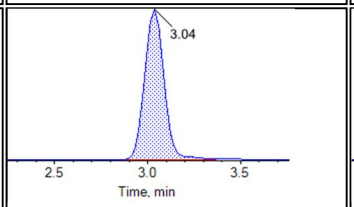
13C5-PFHxA



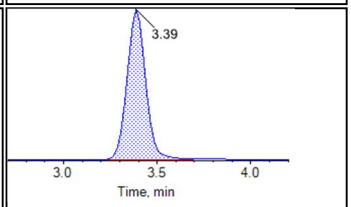
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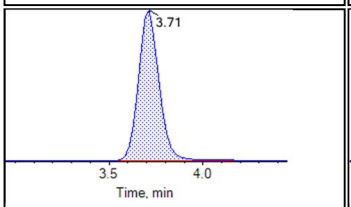
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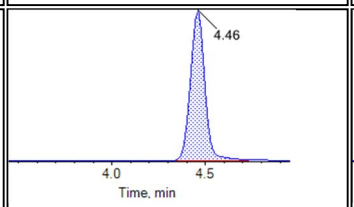
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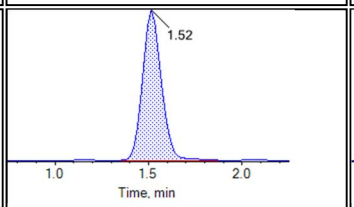
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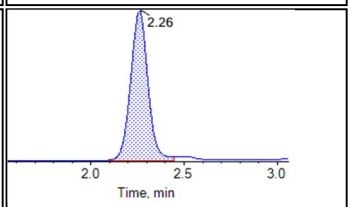
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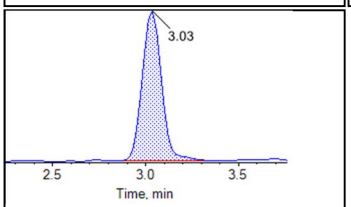
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



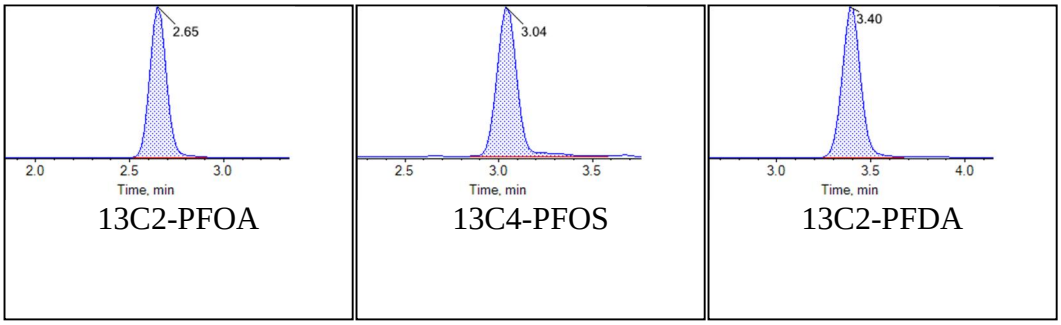
13C8-PFOS

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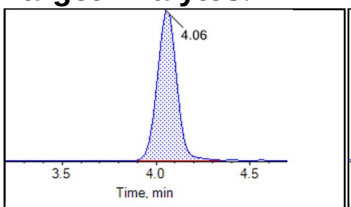
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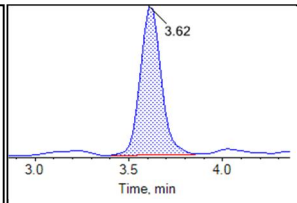
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Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T15:43:57	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

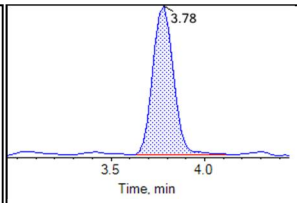
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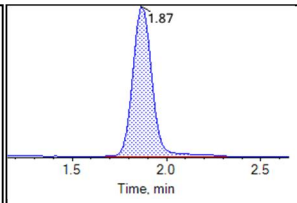
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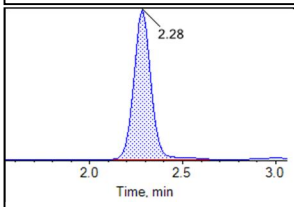
d3-MeFOSAA



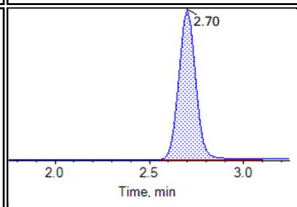
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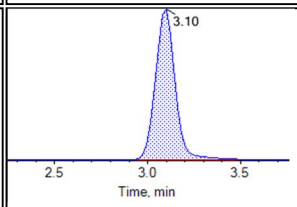
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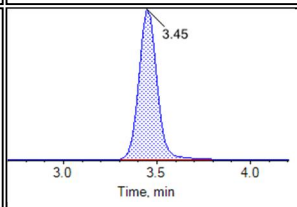
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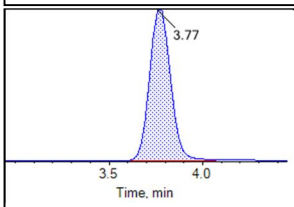
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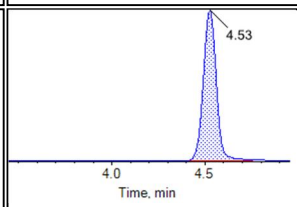
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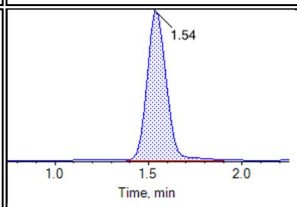
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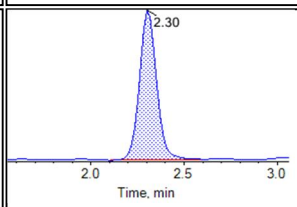
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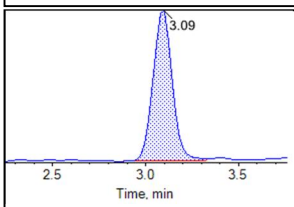
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



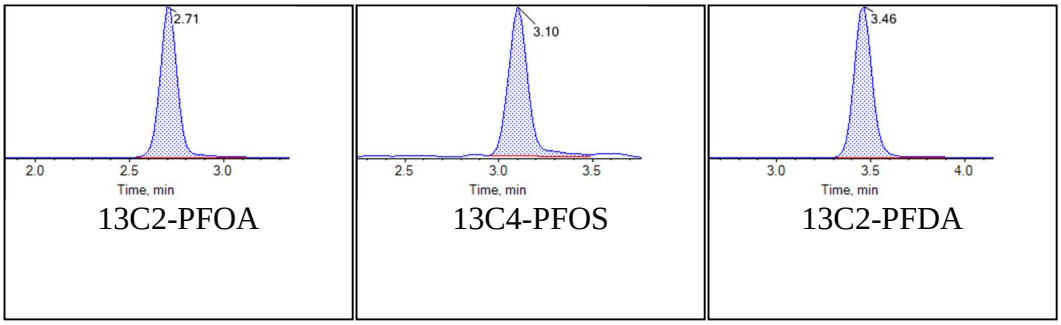
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Internal Standards:



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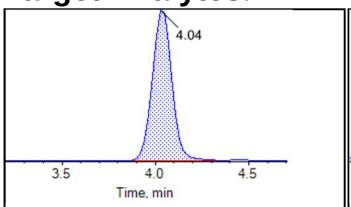
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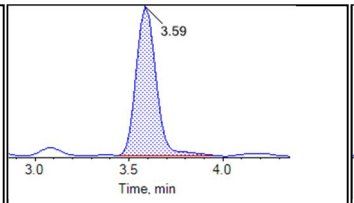
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Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T15:54:52	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Chromatograms

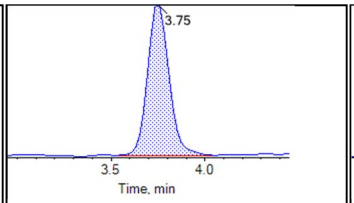
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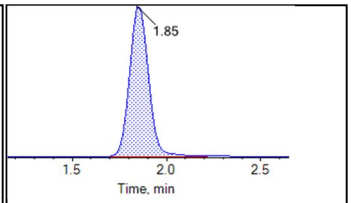
13C2-PFDoA



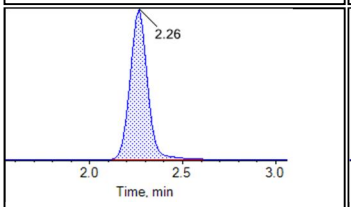
d3-MeFOSAA



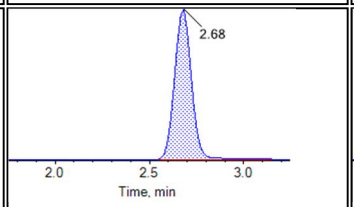
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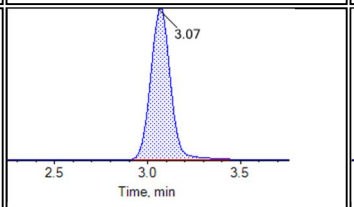
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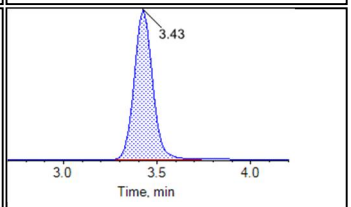
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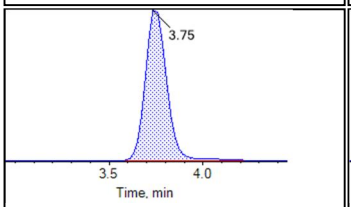
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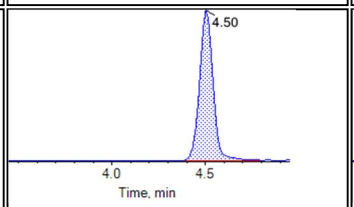
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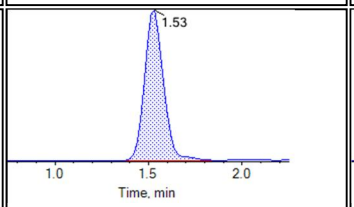
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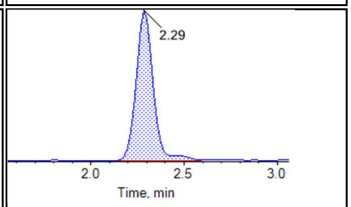
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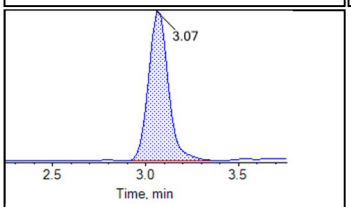
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



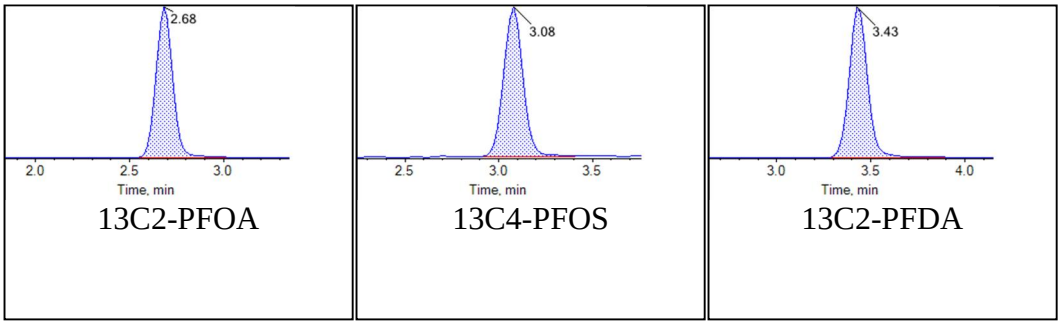
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Internal Standards:



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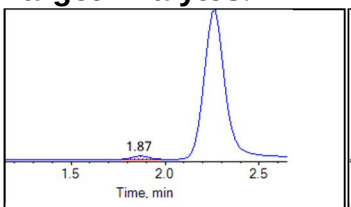
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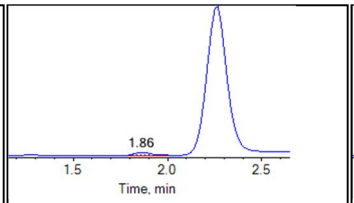
Sample Name	KB73	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:28:31	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Chromatograms

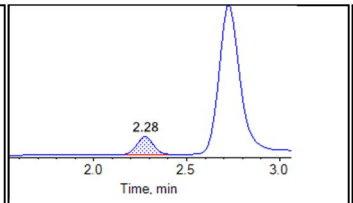
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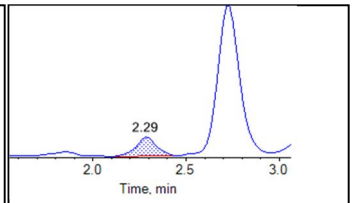
PFHxA_1



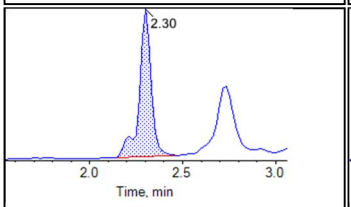
PFHxA_2



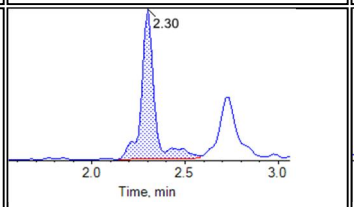
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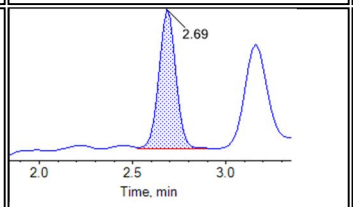
PFHpA_2



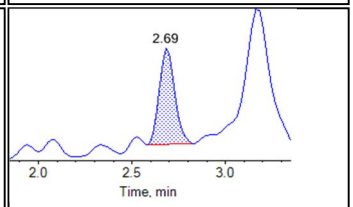
PFHxS_1



PFHxS_2

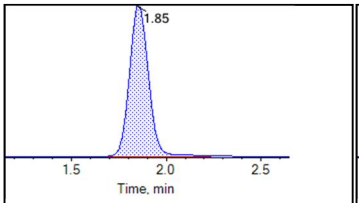


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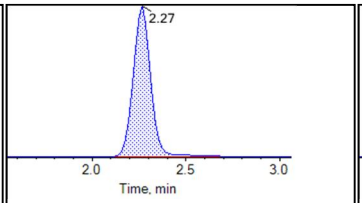


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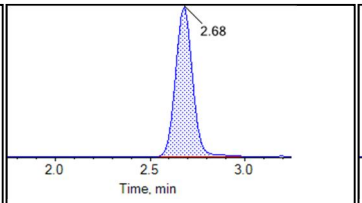
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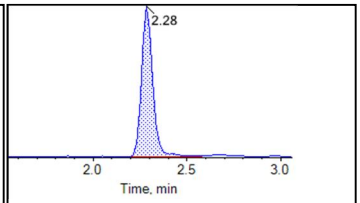
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C3-PFHxS

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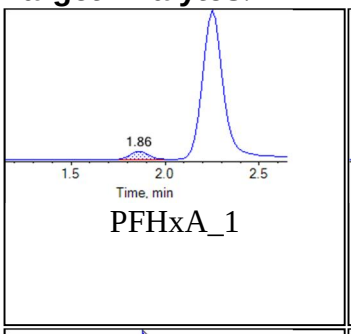
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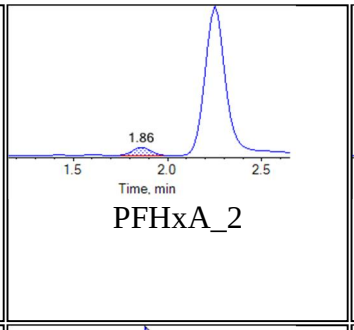
Sample Name	KB74	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:39:24	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Chromatograms

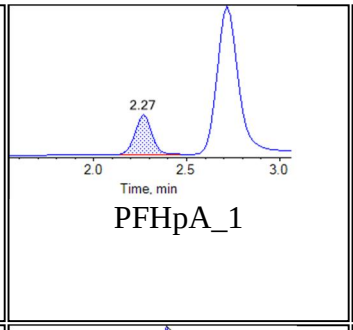
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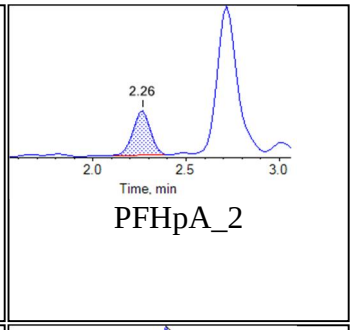
PFHxA_1



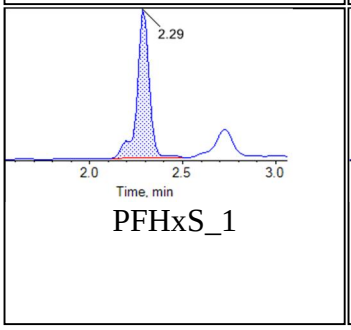
PFHxA_2



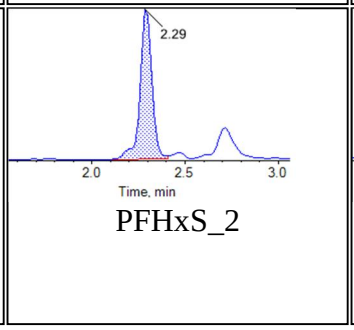
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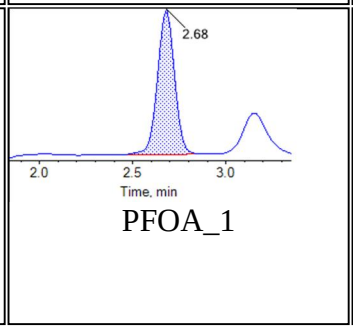
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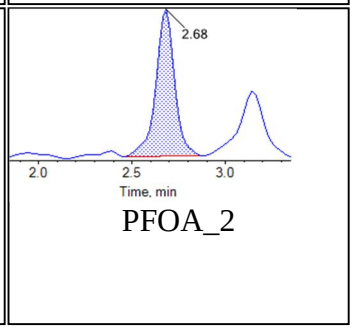
PFHxS_1



PFHxS_2

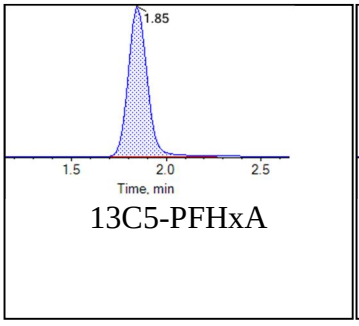


PFOA_1

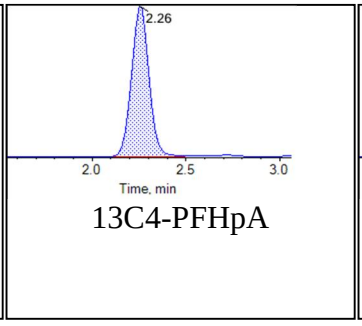


PFOA_2

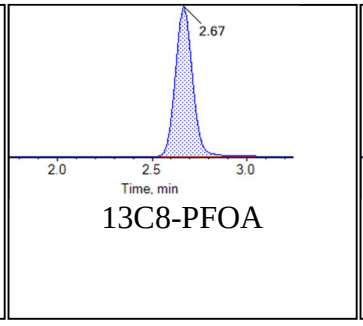
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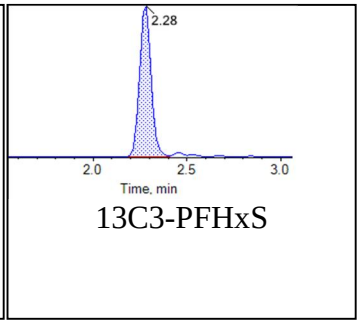
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C3-PFHxS

BATTELLE

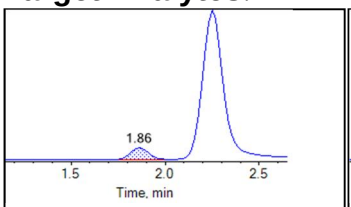
Chromatogram Report

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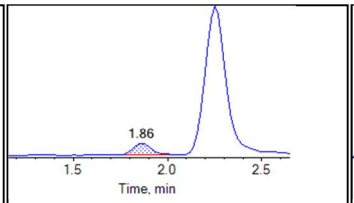
Sample Name	KB75	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:50:18	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Chromatograms

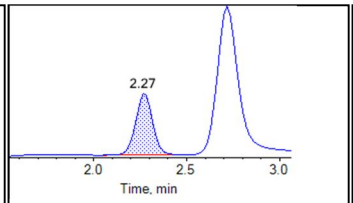
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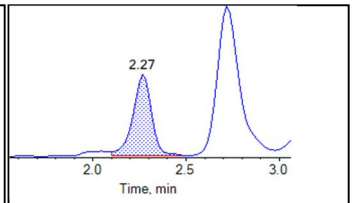
PFHxA_1



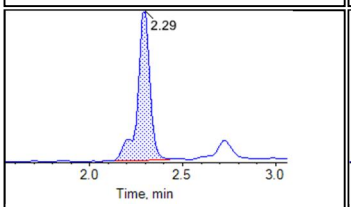
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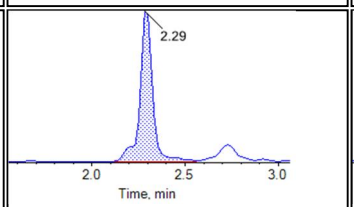
PFHpA_1



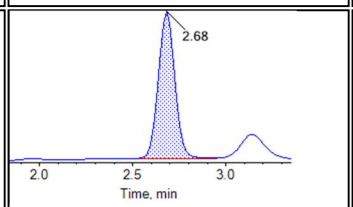
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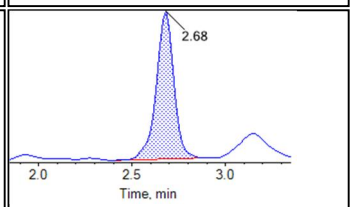
PFHxS_1



PFHxS_2

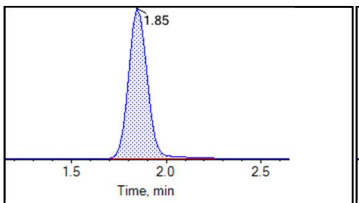


PFOA_1

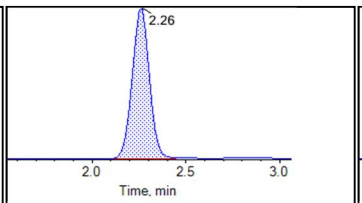


PFOA_2

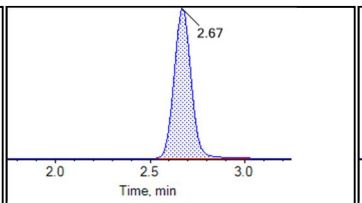
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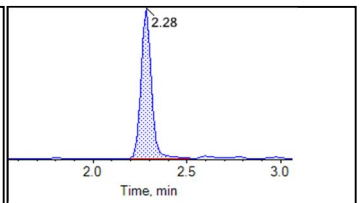
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C3-PFHxS

BATTELLE

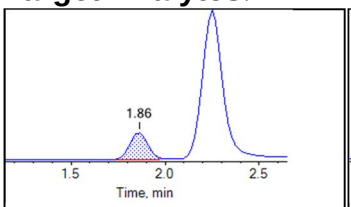
Chromatogram Report

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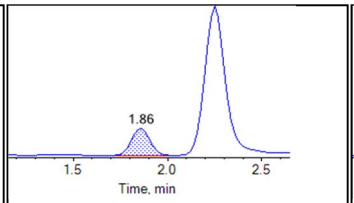
Sample Name	KB76	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:01:11	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Chromatograms

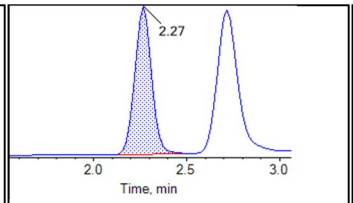
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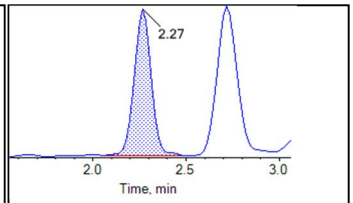
PFHxA_1



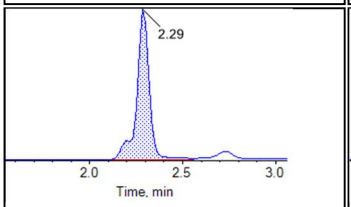
PFHxA_2



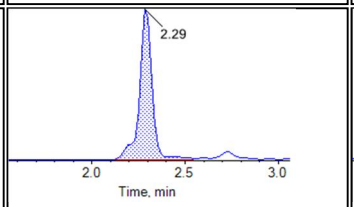
PFHpA_1



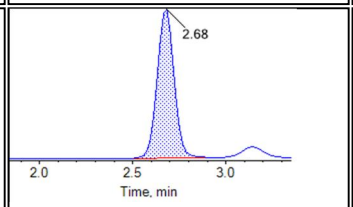
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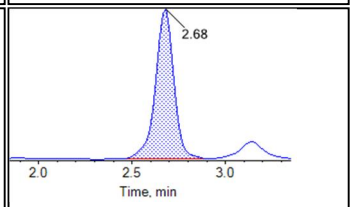
PFHxS_1



PFHxS_2

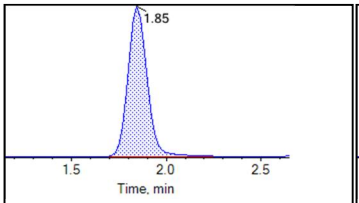


PFOA_1

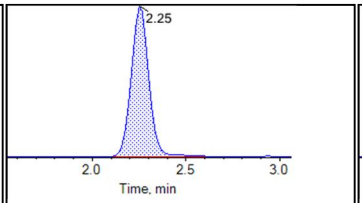


PFOA_2

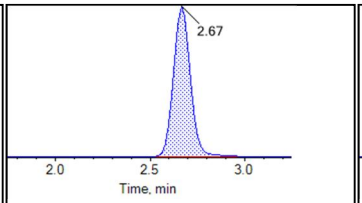
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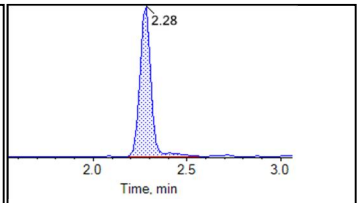
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C3-PFHxS

BATTELLE

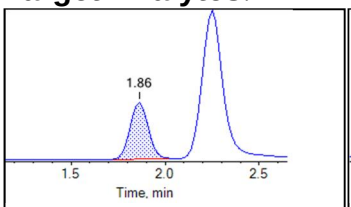
Chromatogram Report

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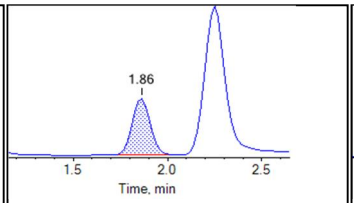
Sample Name	KB77	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:12:02	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Chromatograms

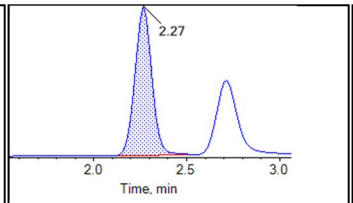
Target Analytes:



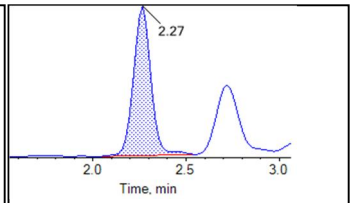
PFHxA_1



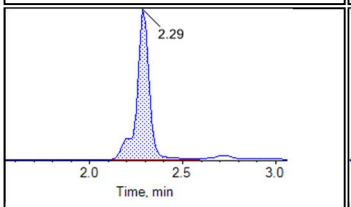
PFHxA_2



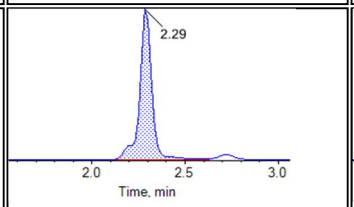
PFHpA_1



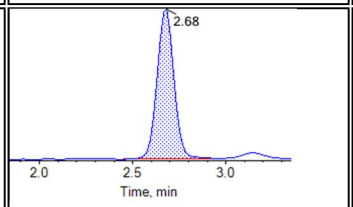
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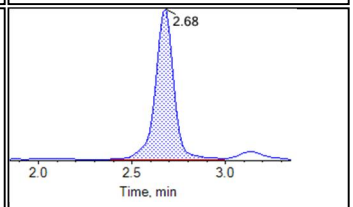
PFHxS_1



PFHxS_2

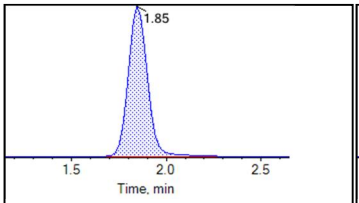


PFOA_1

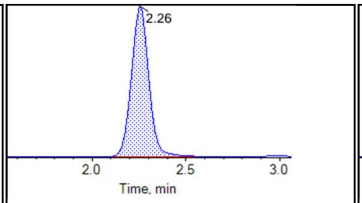


PFOA_2

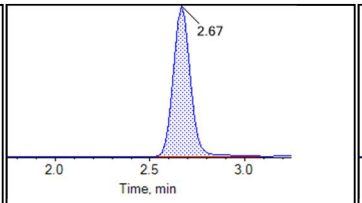
Internal Standards:



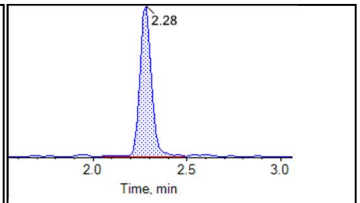
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C3-PFHxS

BATTELLE

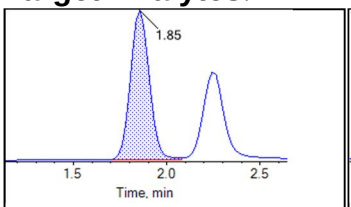
Chromatogram Report

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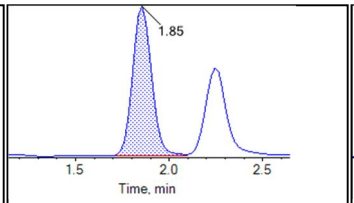
Sample Name	KB78	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:22:53	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Chromatograms

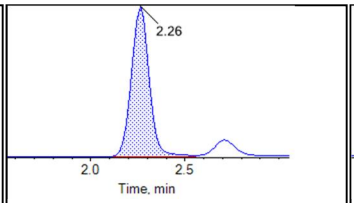
Target Analytes:



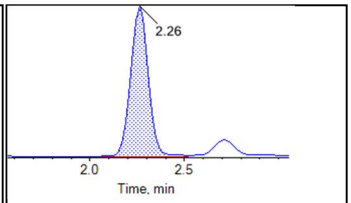
PFHxA_1



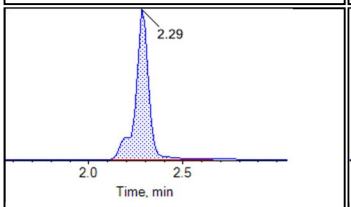
PFHxA_2



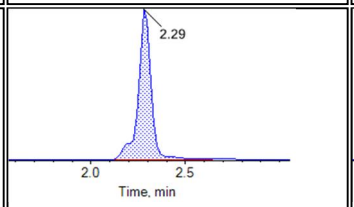
PFHpA_1



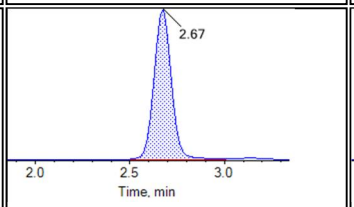
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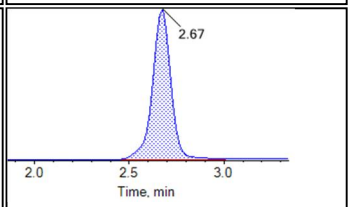
PFHxS_1



PFHxS_2

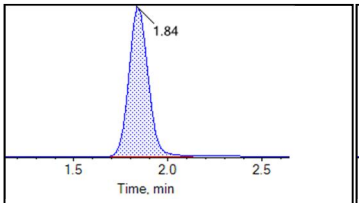


PFOA_1

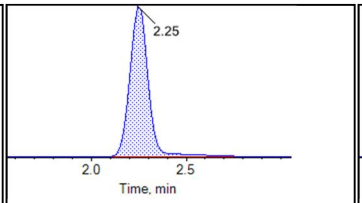


PFOA_2

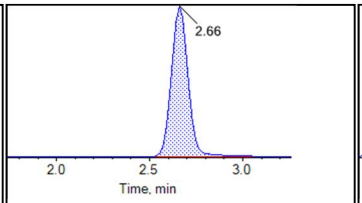
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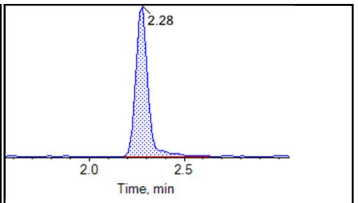
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C3-PFHxS

BATTELLE

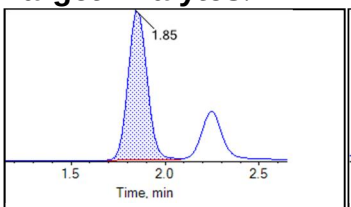
Chromatogram Report

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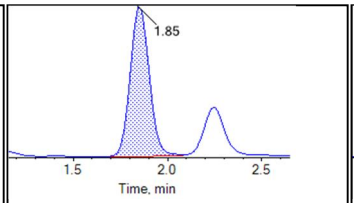
Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:33:45	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Chromatograms

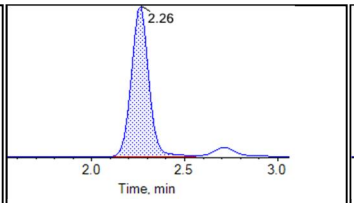
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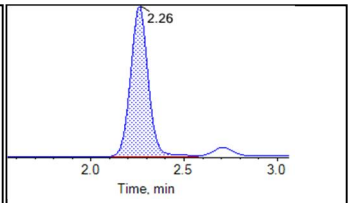
PFHxA_1



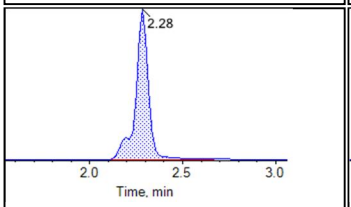
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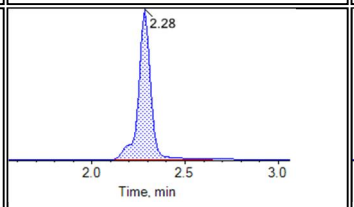
PFHpA_1



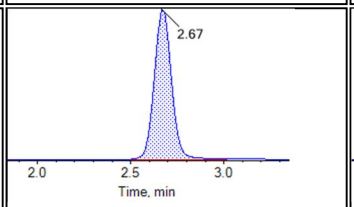
PFHpA_2



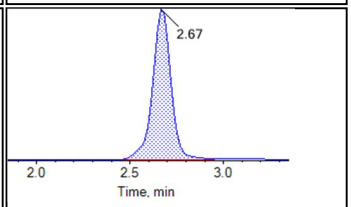
PFHxS_1



PFHxS_2

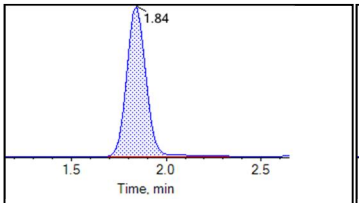


PFOA_1

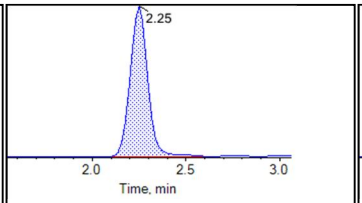


PFOA_2

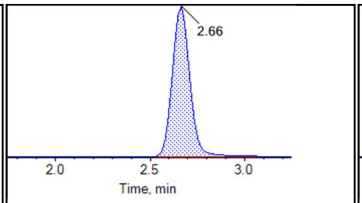
Internal Standards:



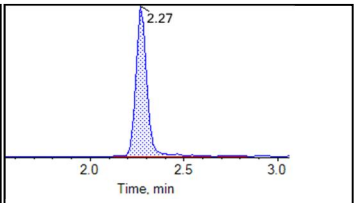
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C3-PFHxS

BATTELLE

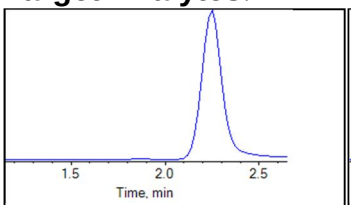
Chromatogram Report

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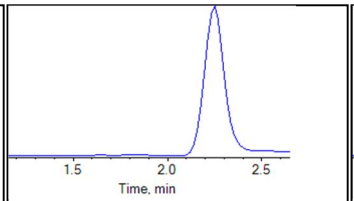
Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:44:37	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Chromatograms

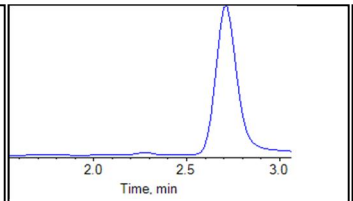
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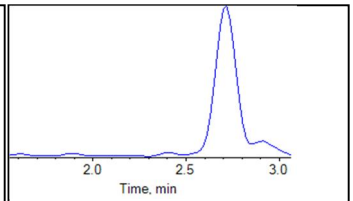
PFHxA_1



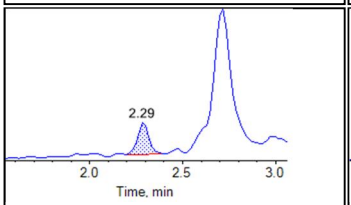
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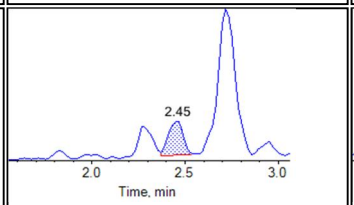
PFHpA_1



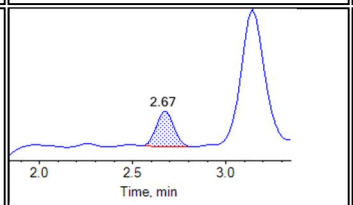
PFHpA_2



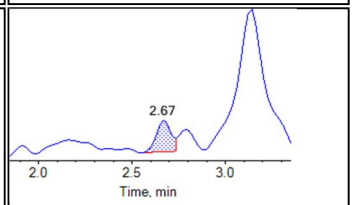
PFHxS_1



PFHxS_2

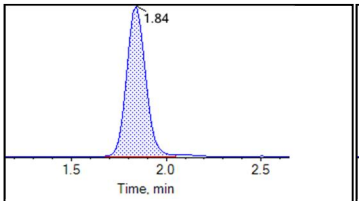


PFOA_1

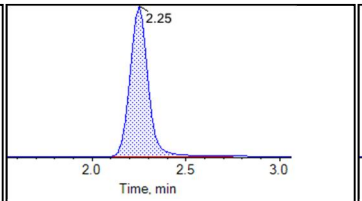


PFOA_2

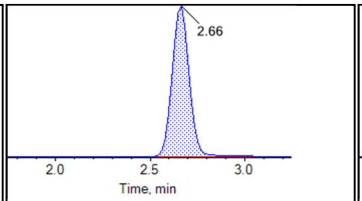
Internal Standards:



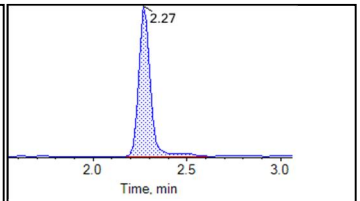
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C3-PFHxS

BATTELLE

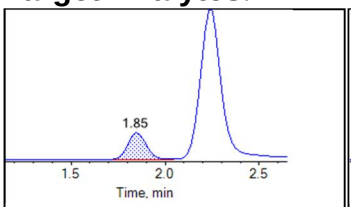
Chromatogram Report

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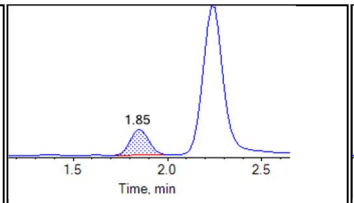
Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:55:29	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Chromatograms

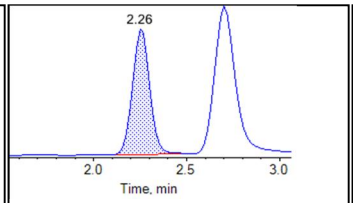
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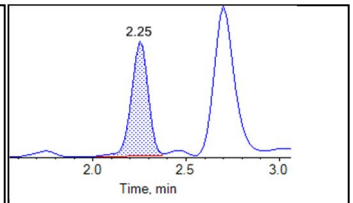
PFHxA_1



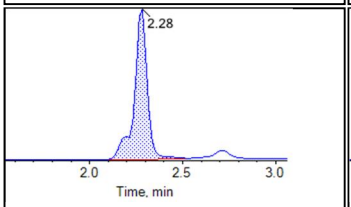
PFHxA_2



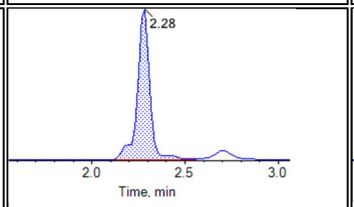
PFHpA_1



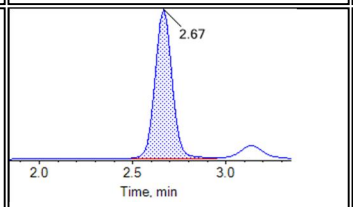
PFHpA_2



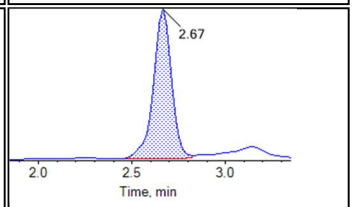
PFHxS_1



PFHxS_2

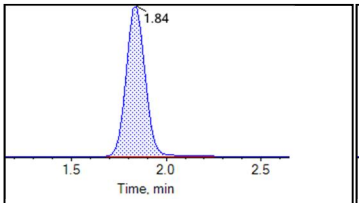


PFOA_1

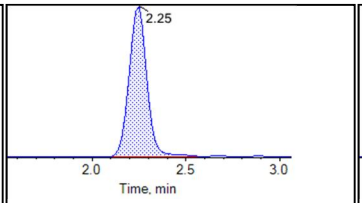


PFOA_2

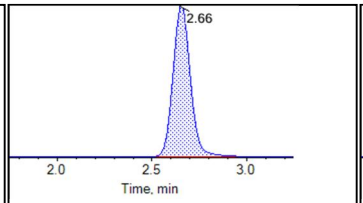
Internal Standards:



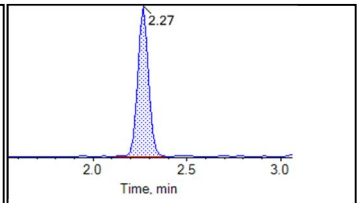
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C3-PFHxS

BATTELLE

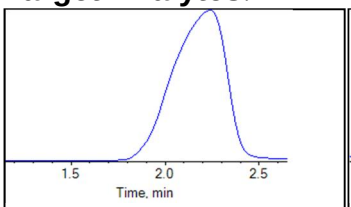
Chromatogram Report

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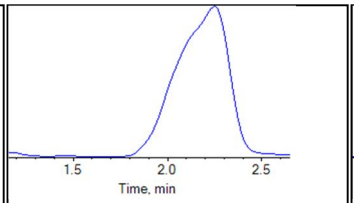
Sample Name	J8260-FS-D(11)	**Injection Vial**	13
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T13:44:17	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Chromatograms

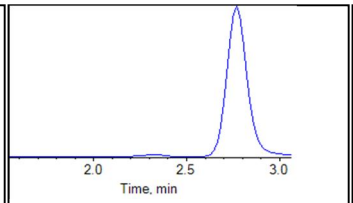
Target Analytes:



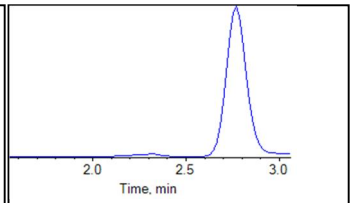
PFHxA_1



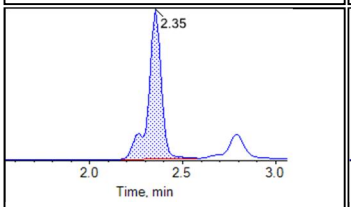
PFHxA_2



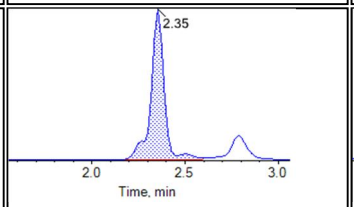
PFHpA_1



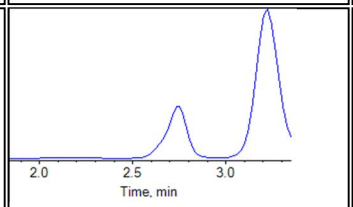
PFHpA_2



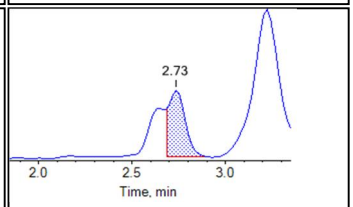
PFHxS_1



PFHxS_2

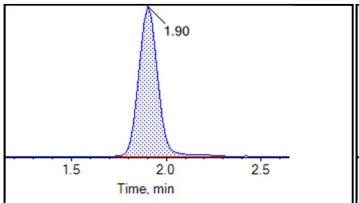


PFOA_1

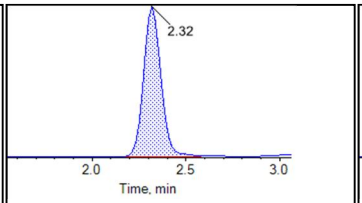


PFOA_2

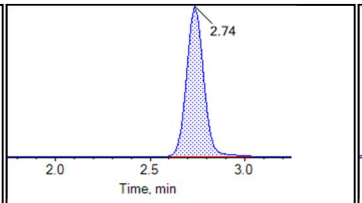
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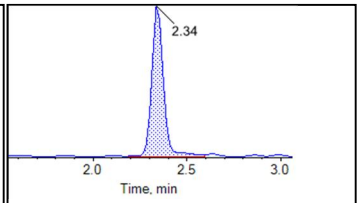
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C3-PFHxS

BATTELLE

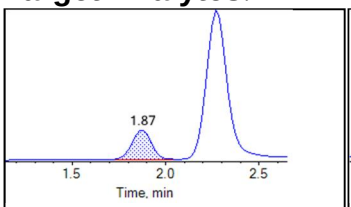
Chromatogram Report

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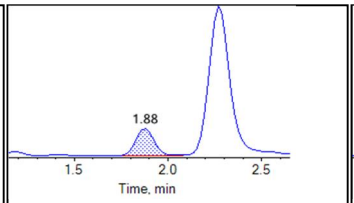
Sample Name	J8261-FS-D(11)	**Injection Vial**	14
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T13:55:43	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Chromatograms

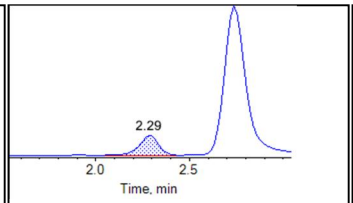
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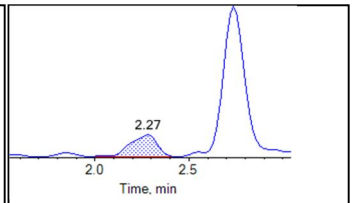
PFHxA_1



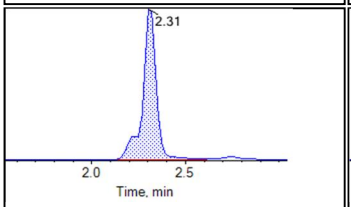
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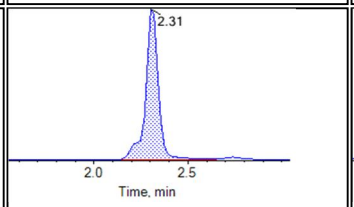
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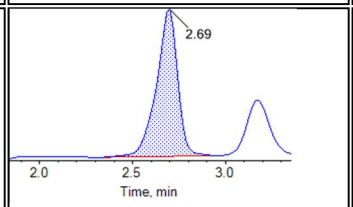
PFHpA_2



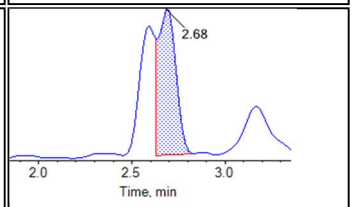
PFHxS_1



PFHxS_2

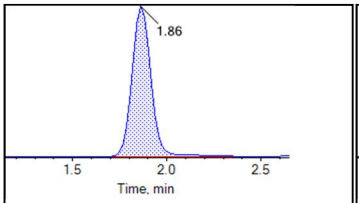


PFOA_1

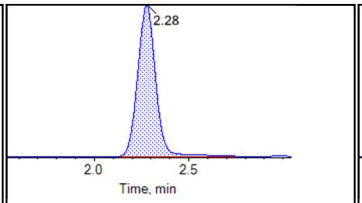


PFOA_2

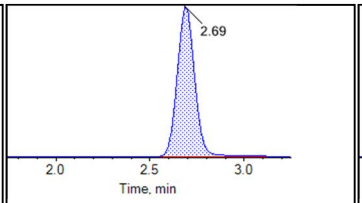
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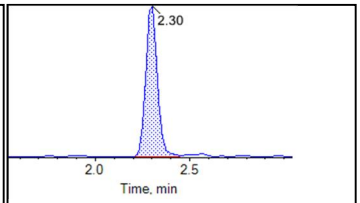
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C3-PFHxS

BATTELLE

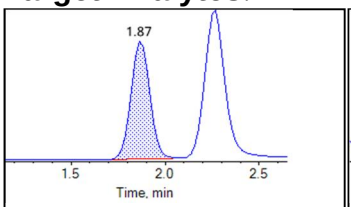
Chromatogram Report

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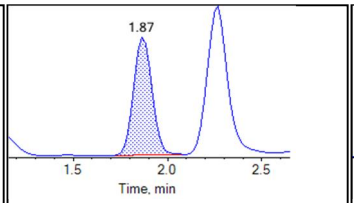
Sample Name	J8274-FS-D(13)	**Injection Vial**	15
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:06:36	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Chromatograms

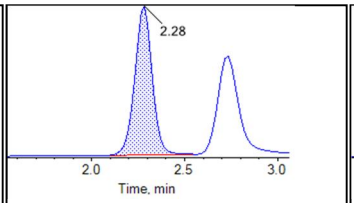
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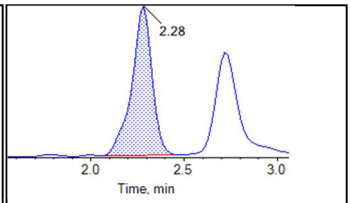
PFHxA_1



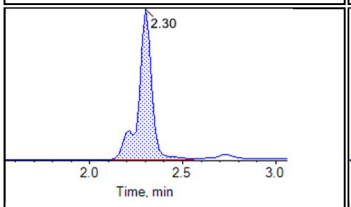
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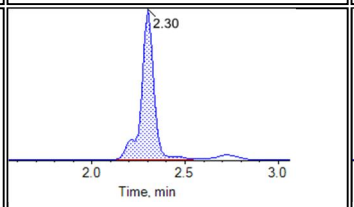
PFHpA_1



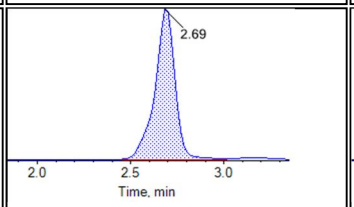
PFHpA_2



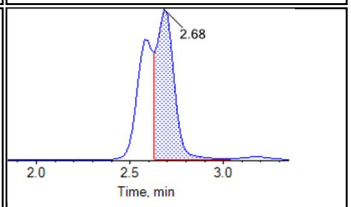
PFHxS_1



PFHxS_2

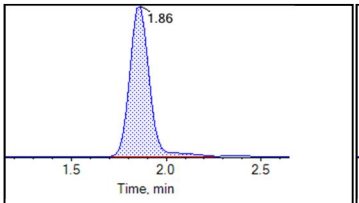


PFOA_1

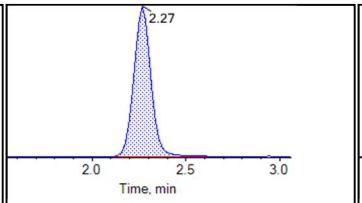


PFOA_2

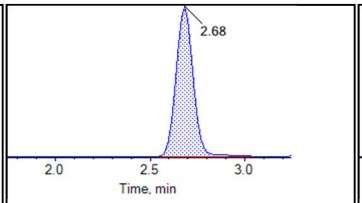
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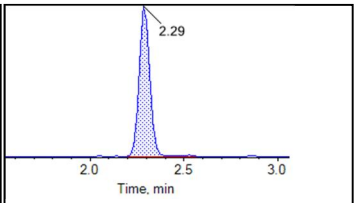
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C3-PFHxS

BATTELLE

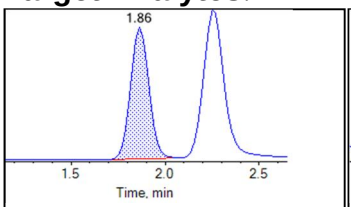
Chromatogram Report

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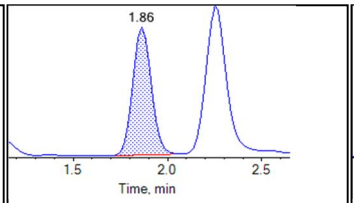
Sample Name	J8275-FS-D(11)	**Injection Vial**	16
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:17:29	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Chromatograms

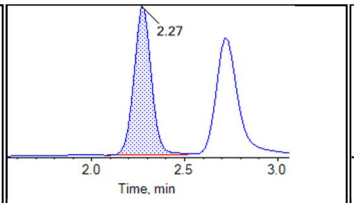
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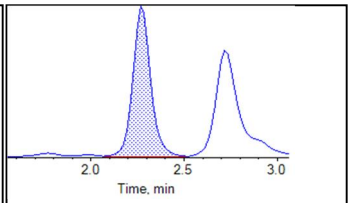
PFHxA_1



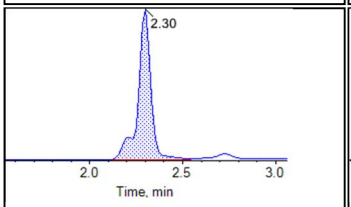
PFHxA_2



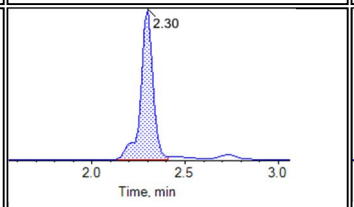
PFHpA_1



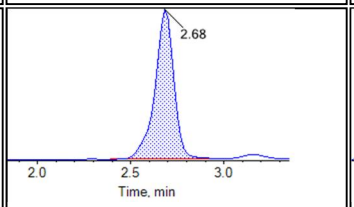
PFHpA_2



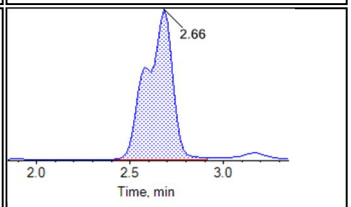
PFHxS_1



PFHxS_2

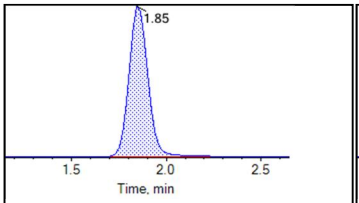


PFOA_1

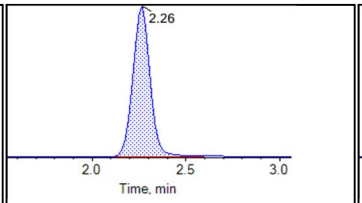


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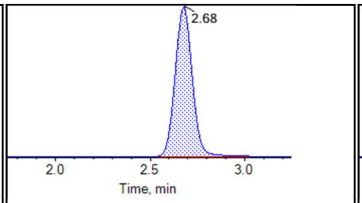
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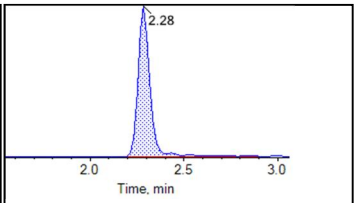
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C3-PFHxS

BATTELLE

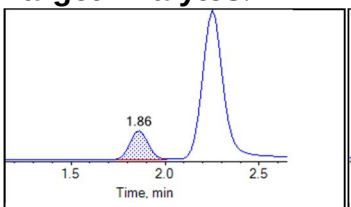
Chromatogram Report

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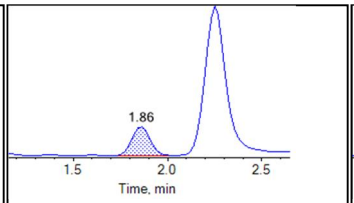
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Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:28:21	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Chromatograms

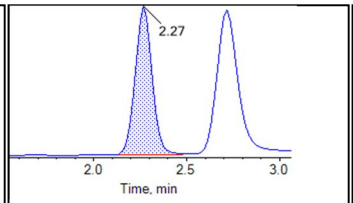
Target Analytes:



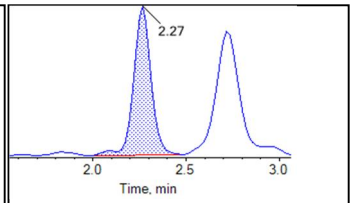
PFHxA_1



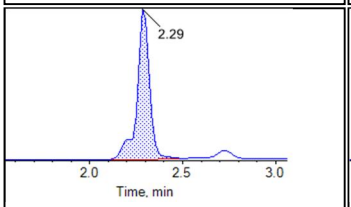
PFHxA_2



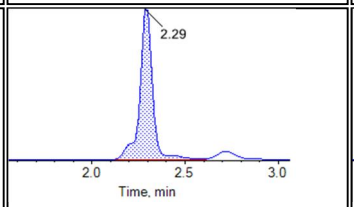
PFHpA_1



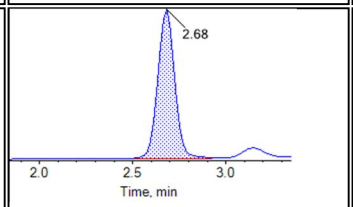
PFHpA_2



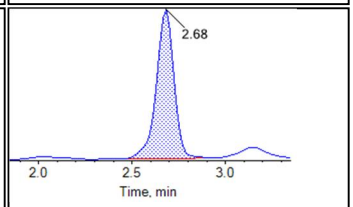
PFHxS_1



PFHxS_2

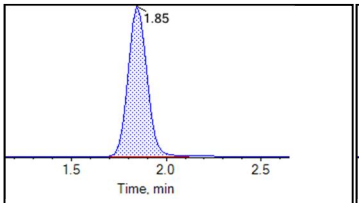


PFOA_1

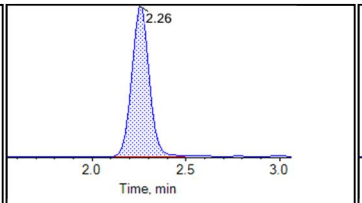


PFOA_2

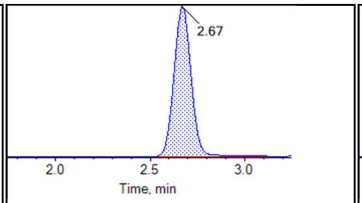
Internal Standards:



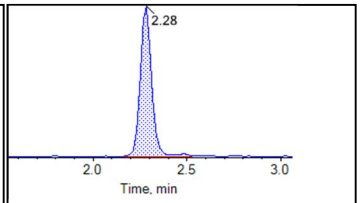
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C3-PFHxS

BATTELLE

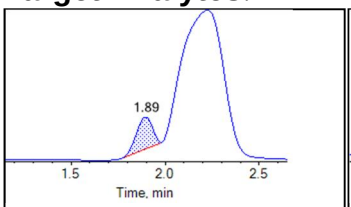
Chromatogram Report

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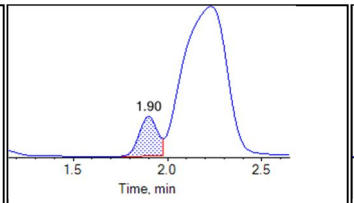
Sample Name	J8259-FS-D(5)	**Injection Vial**	19
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T15:35:51	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Chromatograms

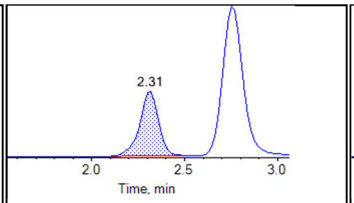
Target Analytes:



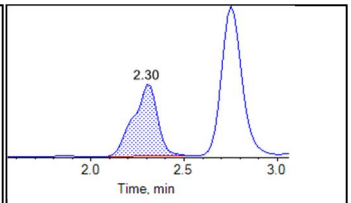
PFHxA_1



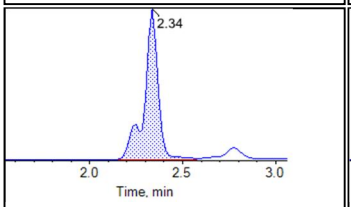
PFHxA_2



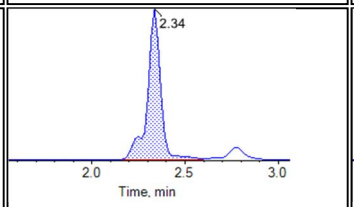
PFHpA_1



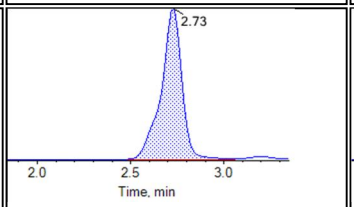
PFHpA_2



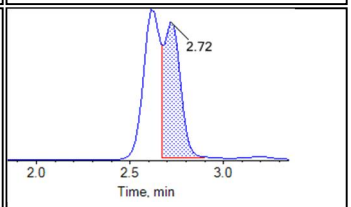
PFHxS_1



PFHxS_2

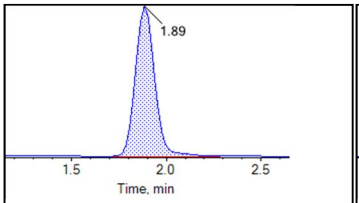


PFOA_1

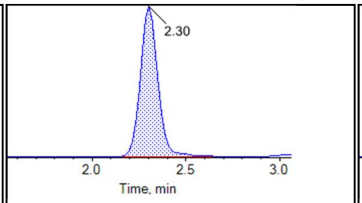


PFOA_2

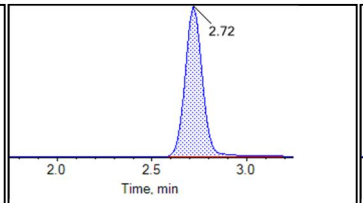
Internal Standards:



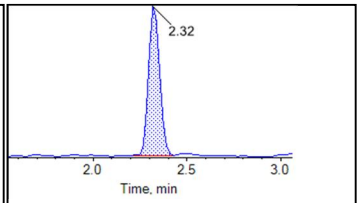
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C3-PFHxS

BATTELLE

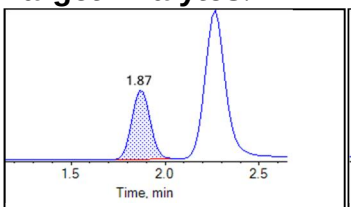
Chromatogram Report

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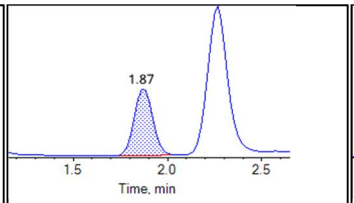
Sample Name	KB77	**Injection Vial**	6
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T15:46:45	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_BASE
Sample Comment			

Chromatograms

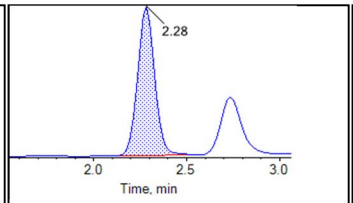
Target Analytes:



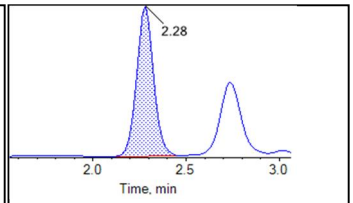
PFHxA_1



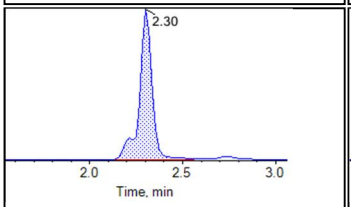
PFHxA_2



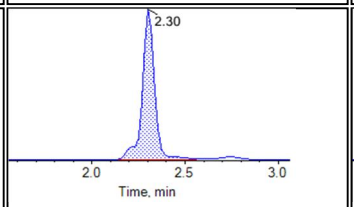
PFHpA_1



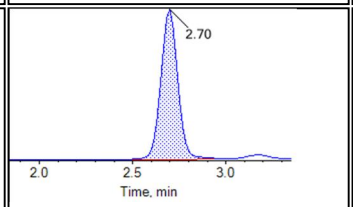
PFHpA_2



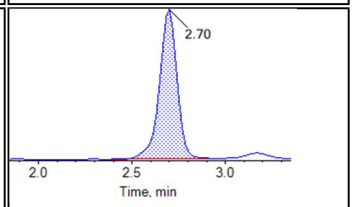
PFHxS_1



PFHxS_2

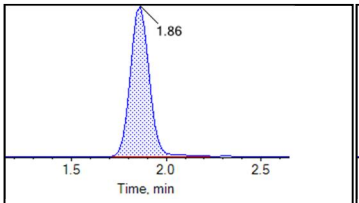


PFOA_1

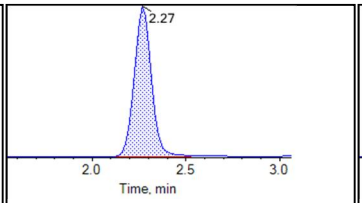


PFOA_2

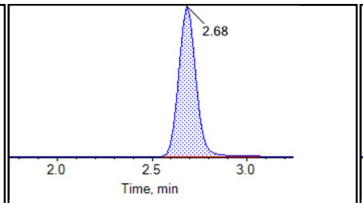
Internal Standards:



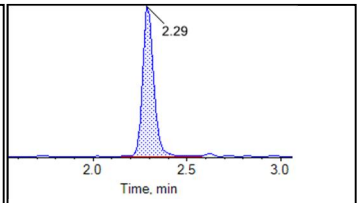
13C5-PFHxA



13C4-PFHpA



13C8-PFOA



13C3-PFHxS

BATTELLE

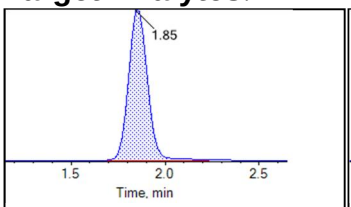
Chromatogram Report

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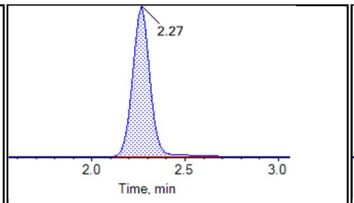
Sample Name	KB73	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:28:31	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Chromatograms

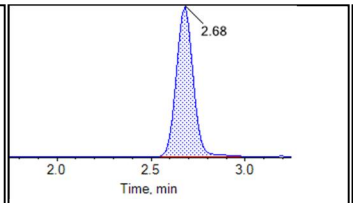
Target Analytes:



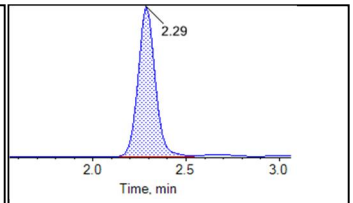
13C5-PFHxA



13C4-PFHpA

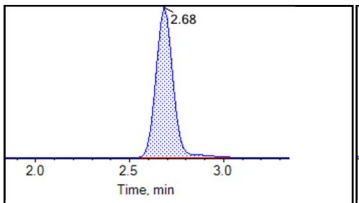


13C8-PFOA

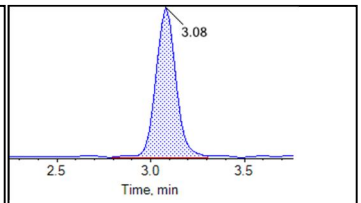


13C3-PFHxS

Internal Standards:



13C2-PFOA



13C4-PFOS

BATTELLE

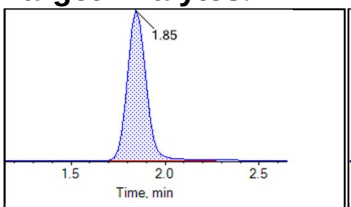
Chromatogram Report

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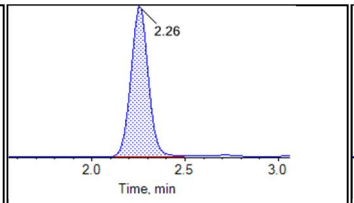
Sample Name	KB74	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:39:24	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Chromatograms

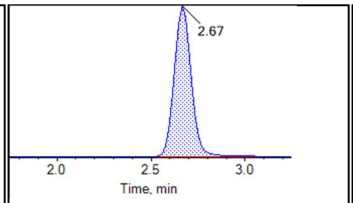
Target Analytes:



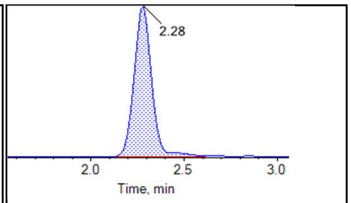
13C5-PFHxA



13C4-PFHpA

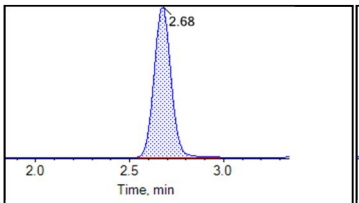


13C8-PFOA

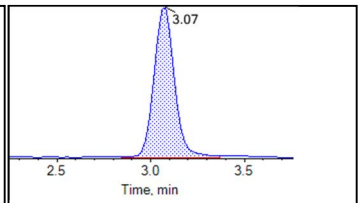


13C3-PFHxS

Internal Standards:



13C2-PFOA



13C4-PFOS

BATTELLE

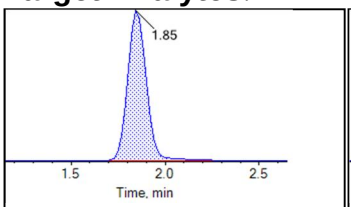
Chromatogram Report

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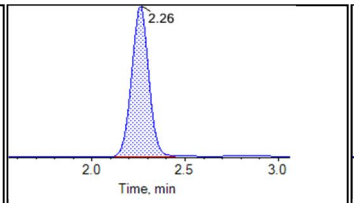
Sample Name	KB75	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T10:50:18	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Chromatograms

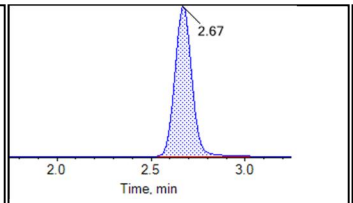
Target Analytes:



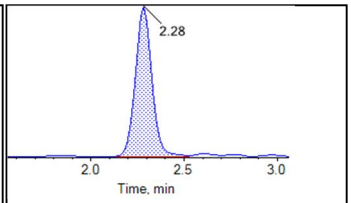
13C5-PFHxA



13C4-PFHpA

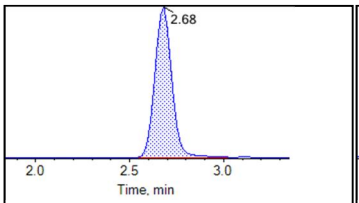


13C8-PFOA

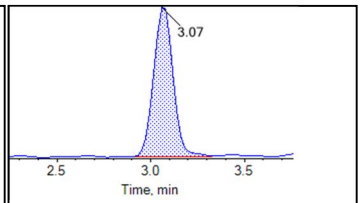


13C3-PFHxS

Internal Standards:



13C2-PFOA



13C4-PFOS

BATTELLE

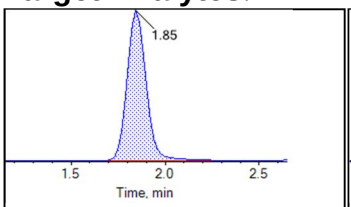
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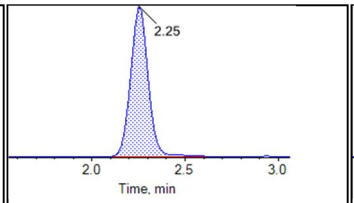
Sample Name	KB76	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:01:11	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Chromatograms

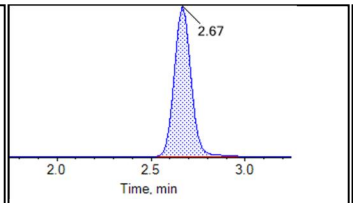
Target Analytes:



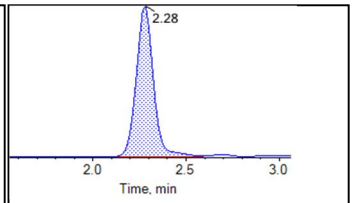
13C5-PFHxA



13C4-PFHpA

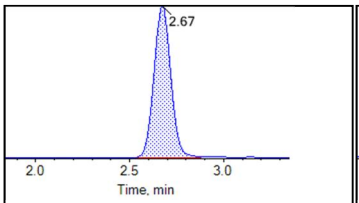


13C8-PFOA

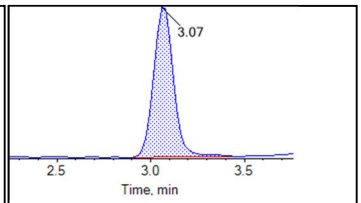


13C3-PFHxS

Internal Standards:



13C2-PFOA



13C4-PFOS

BATTELLE

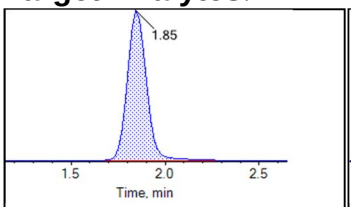
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:38:58 PM

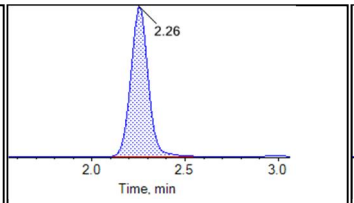
Sample Name	KB77	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:12:02	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Chromatograms

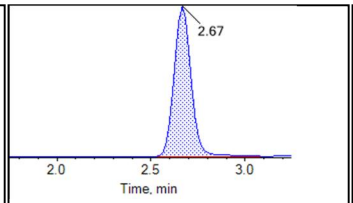
Target Analytes:



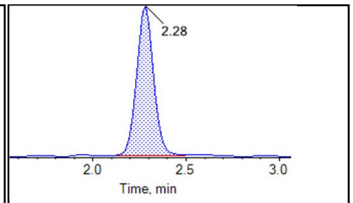
13C5-PFHxA



13C4-PFHpA

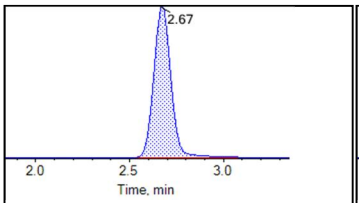


13C8-PFOA

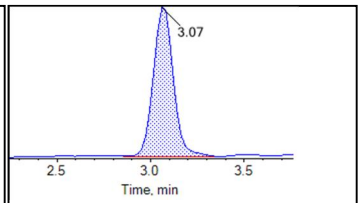


13C3-PFHxS

Internal Standards:



13C2-PFOA



13C4-PFOS

BATTELLE

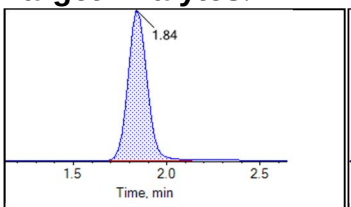
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:39:03 PM

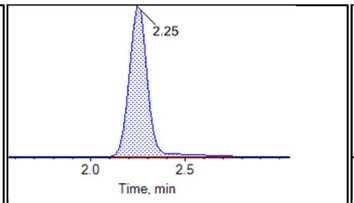
Sample Name	KB78	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:22:53	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Chromatograms

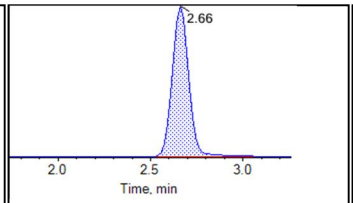
Target Analytes:



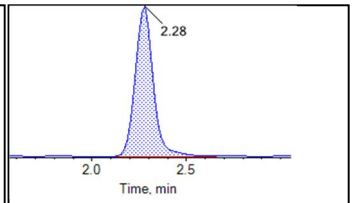
13C5-PFHxA



13C4-PFHpA

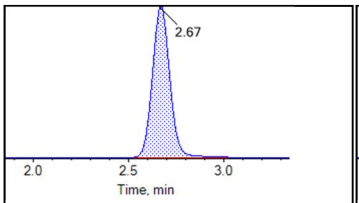


13C8-PFOA

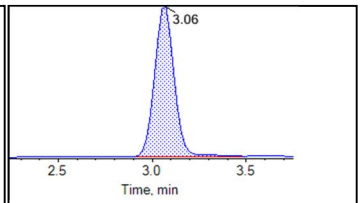


13C3-PFHxS

Internal Standards:



13C2-PFOA



13C4-PFOS

BATTELLE

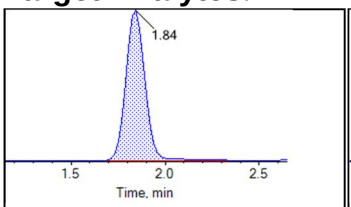
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:39:07 PM

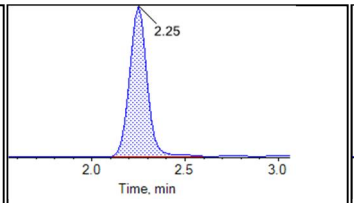
Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:33:45	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Chromatograms

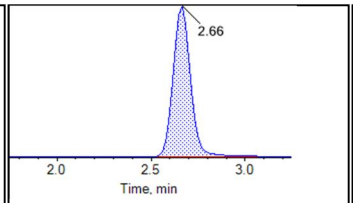
Target Analytes:



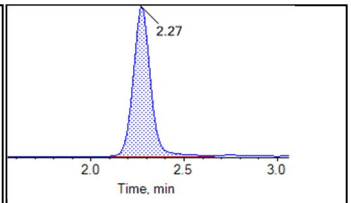
13C5-PFHxA



13C4-PFHpA

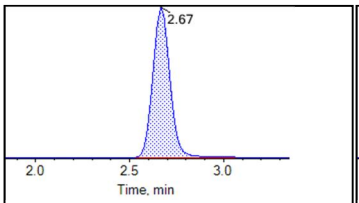


13C8-PFOA

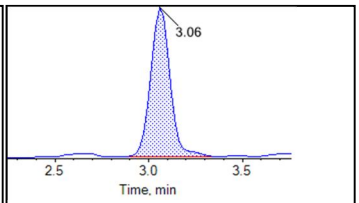


13C3-PFHxS

Internal Standards:



13C2-PFOA



13C4-PFOS

BATTELLE

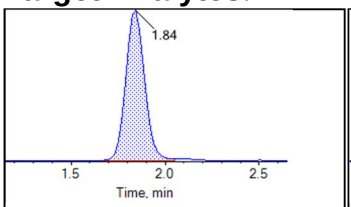
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:39:12 PM

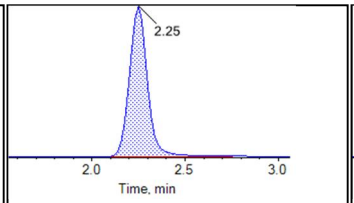
Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:44:37	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Chromatograms

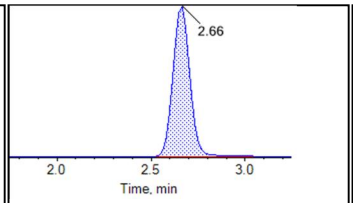
Target Analytes:



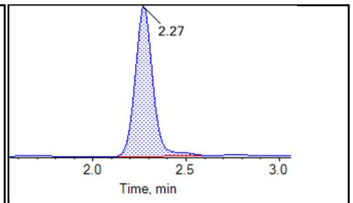
13C5-PFHxA



13C4-PFHpA

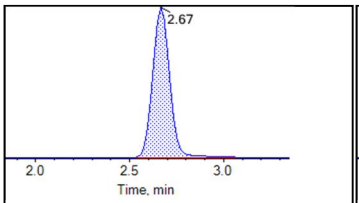


13C8-PFOA

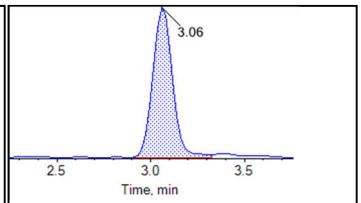


13C3-PFHxS

Internal Standards:



13C2-PFOA



13C4-PFOS

BATTELLE

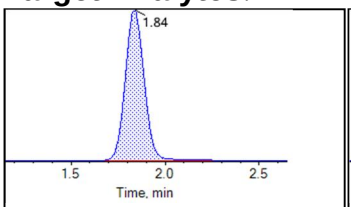
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:39:16 PM

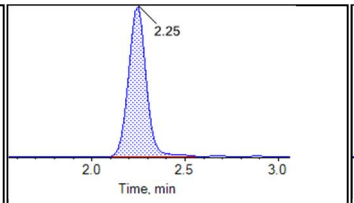
Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T11:55:29	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Chromatograms

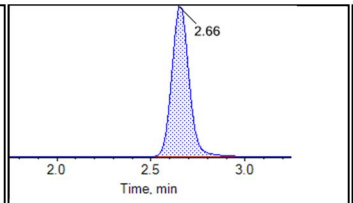
Target Analytes:



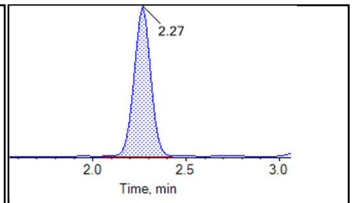
13C5-PFHxA



13C4-PFHpA

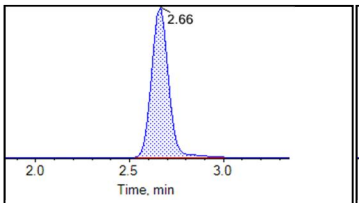


13C8-PFOA

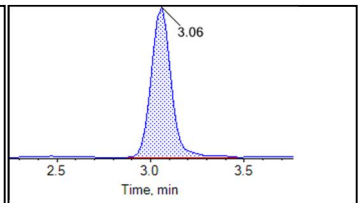


13C3-PFHxS

Internal Standards:



13C2-PFOA



13C4-PFOS

BATTELLE

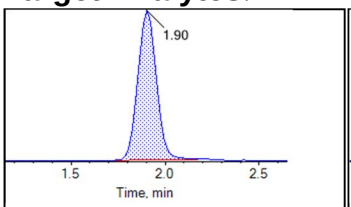
Chromatogram Report

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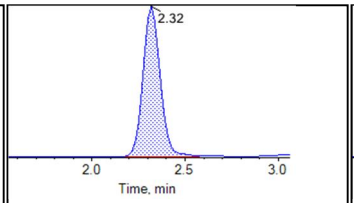
Sample Name	J8260-FS-D(11)	**Injection Vial**	13
Sample ID	VC-PM365-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T13:44:17	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Chromatograms

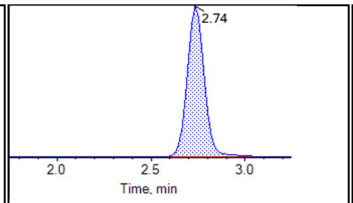
Target Analytes:



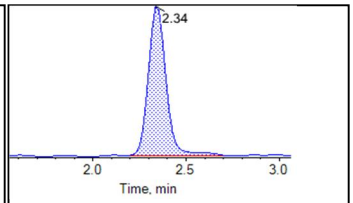
13C5-PFHxA



13C4-PFHpA

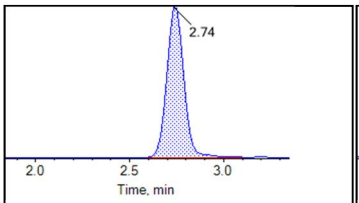


13C8-PFOA

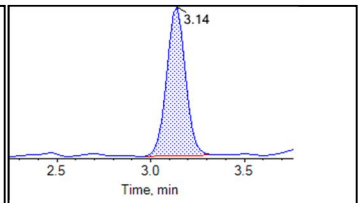


13C3-PFHxS

Internal Standards:



13C2-PFOA



13C4-PFOS

BATTELLE

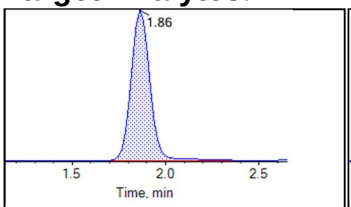
Chromatogram Report

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Printed: 05/10/2018 5:39:33 PM

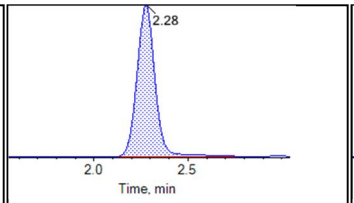
Sample Name	J8261-FS-D(11)	**Injection Vial**	14
Sample ID	VC-PM365-DW02P-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T13:55:43	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Chromatograms

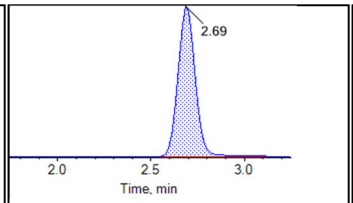
Target Analytes:



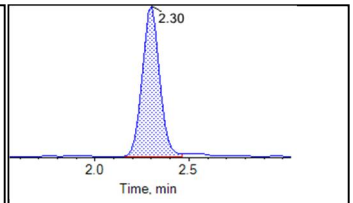
13C5-PFHxA



13C4-PFHpA

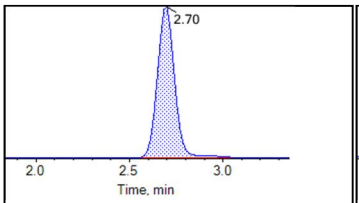


13C8-PFOA

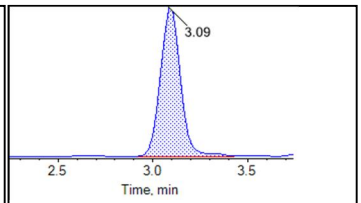


13C3-PFHxS

Internal Standards:



13C2-PFOA



13C4-PFOS

BATTELLE

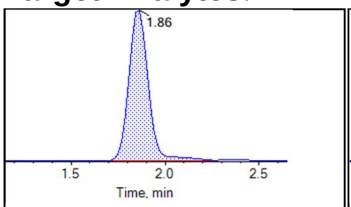
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:39:37 PM

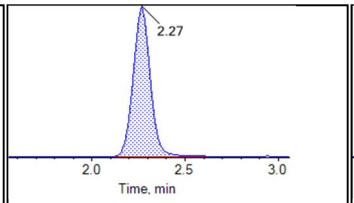
Sample Name	J8274-FS-D(13)	**Injection Vial**	15
Sample ID	VC-PM553-DW02-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:06:36	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Chromatograms

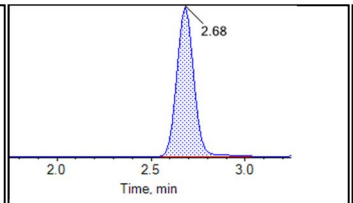
Target Analytes:



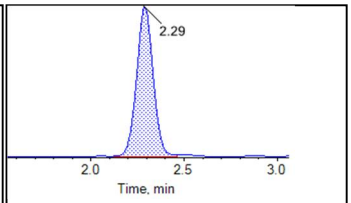
13C5-PFHxA



13C4-PFHpA

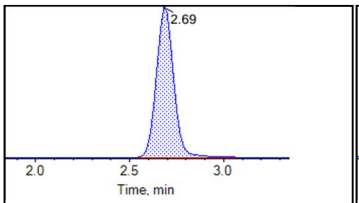


13C8-PFOA

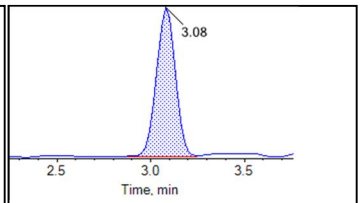


13C3-PFHxS

Internal Standards:



13C2-PFOA



13C4-PFOS

BATTELLE

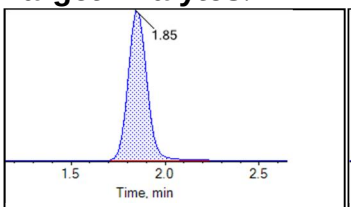
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:39:41 PM

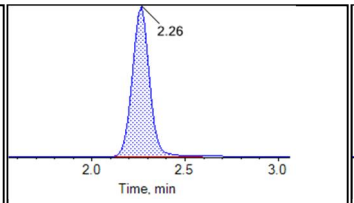
Sample Name	J8275-FS-D(11)	**Injection Vial**	16
Sample ID	VC-PM553-DW03-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:17:29	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Chromatograms

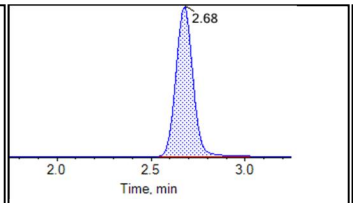
Target Analytes:



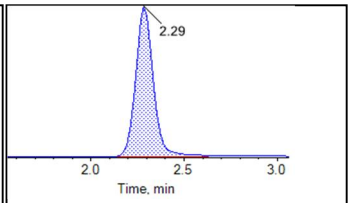
13C5-PFHxA



13C4-PFHpA

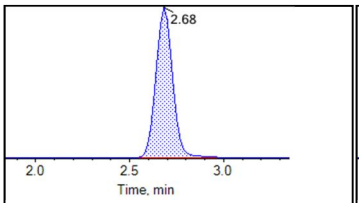


13C8-PFOA

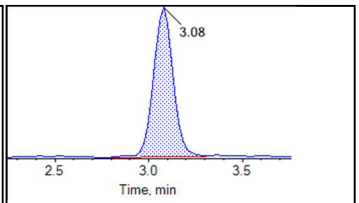


13C3-PFHxS

Internal Standards:



13C2-PFOA



13C4-PFOS

BATTELLE

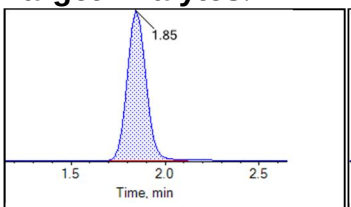
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:39:46 PM

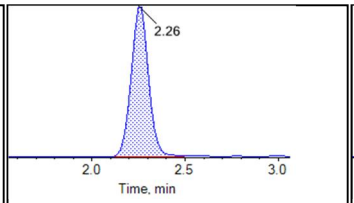
Sample Name	KB76	**Injection Vial**	17
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T14:28:21	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Chromatograms

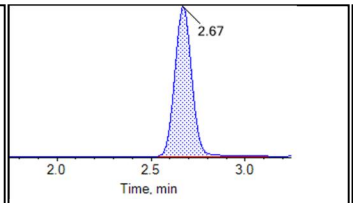
Target Analytes:



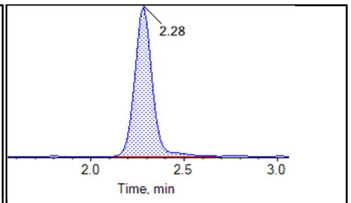
13C5-PFHxA



13C4-PFHpA

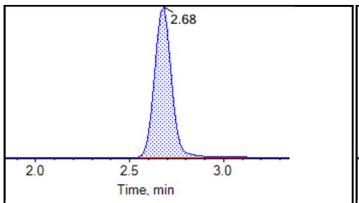


13C8-PFOA

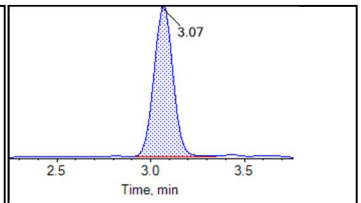


13C3-PFHxS

Internal Standards:



13C2-PFOA



13C4-PFOS

BATTELLE

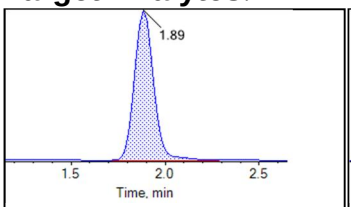
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:39:55 PM

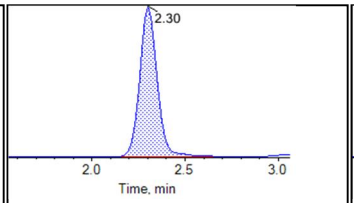
Sample Name	J8259-FS-D(5)	**Injection Vial**	19
Sample ID	VC-PM365-DW01-0918	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T15:35:51	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Chromatograms

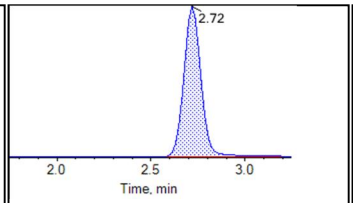
Target Analytes:



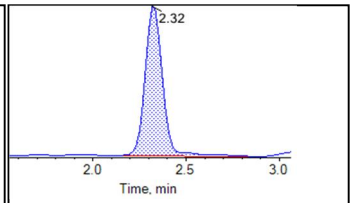
13C5-PFHxA



13C4-PFHpA

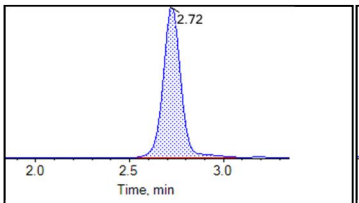


13C8-PFOA

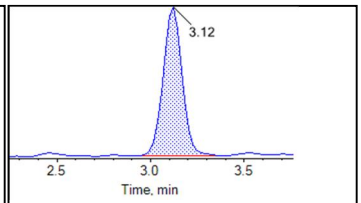


13C3-PFHxS

Internal Standards:



13C2-PFOA



13C4-PFOS

BATTELLE

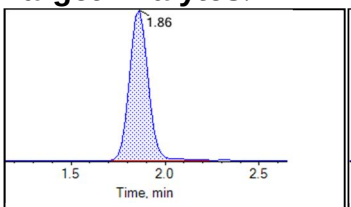
Chromatogram Report

Created with Analyst Reporter
Printed: 05/10/2018 5:40:00 PM

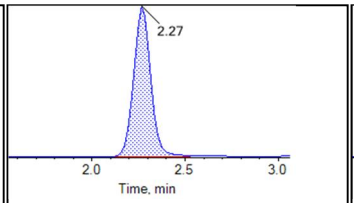
Sample Name	KB77	**Injection Vial**	6
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-05T15:46:45	**Data File**	18-0568B.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568B_SIS
Sample Comment			

Chromatograms

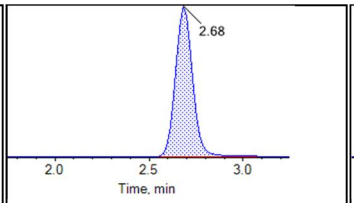
Target Analytes:



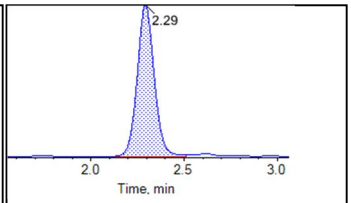
13C5-PFHxA



13C4-PFHpA

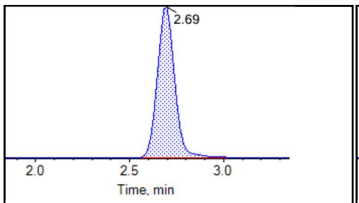


13C8-PFOA

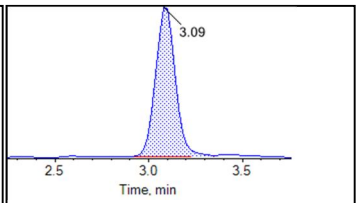


13C3-PFHxS

Internal Standards:



13C2-PFOA



13C4-PFOS

Unused Data

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:15:51 PM

Sample Name	J8274-FS-D(11)	**Injection Vial**	47
Sample ID	VC-PM553-DW02-0919	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:16:54	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_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	79758.56	1095.969464	98.5	false
PFBS_2	298.9 / 99.0	1.55	26703.30	1263.832751	111.3	false
PFHxA_1	313.0 / 269.0	1.86	1385954.28	25011.758851	70.3	false
PFHxA_2	313.0 / 119.0	1.86	95297.51	23363.474094	68.4	false
PFHpA_1	363.0 / 319.0	2.26	388652.32	7018.258456	89.2	false
PFHpA_2	363.0 / 169.0	2.25	8529.30	7630.418360	82.4	false
PFHxS_1	399.0 / 80.0	2.28	733360.86	9921.933087	290.7	false
PFHxS_2	399.0 / 99.0	2.28	203109.37	9724.807537	415.6	false
PFOA_1	413.0 / 369.0	2.66	2986040.11	37303.860331	493.2	false
PFOA_2	413.0 / 169.0	2.65	169009.25	34151.991990	299.2	true
PFNA_1	463.0 / 419.0	3.06	2394.12	15.353867	11.9	false
PFNA_2	463.0 / 219.0	3.05	2350.76	73.719799	20.6	false
PFOS_1	499.0 / 80.0	2.93	123145.64	998.042571	63.9	false
PFOS_2	499.0 / 99.0	3.04	14668.10	675.418331	81.6	false
PFDA_1	513.0 / 469.0	3.40	2417.93	17.804527	14.8	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	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

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/10/2018 5:12:01 PM

Sample Name	J8274-FS-D(11)	**Injection Vial**	47
Sample ID	VC-PM553-DW02-0919	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-04T04:16:54	**Data File**	18-0568.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0568_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.00	21377.91	252.136833	531.5	false
d3-MeFOSAA	573.0 / 419.0	3.56	2801.98	203.146616	73.8	false
d5-EtFOSAA	589.0 / 419.0	3.71	5144.15	335.751854	78.3	false
13C5-PFHxA	318.0 / 273.0	1.84	13604.62	208.869524	240.2	false
13C4-PFHpA	367.0 / 322.0	2.25	15937.95	222.482817	324.9	false
13C8-PFOA	421.0 / 376.0	2.65	19227.22	224.859579	884.3	false
13C9-PFNA	472.0 / 427.0	3.04	19275.52	229.572930	500.5	false
13C6-PFDA	519.0 / 474.0	3.39	23605.69	284.066780	491.4	false
13C7-PFUnA	570.0 / 525.0	3.71	23517.39	284.289744	577.6	false
13C2-PFTeDA	715.0 / 670.0	4.46	14493.18	226.406272	760.0	false
13C3-PFBS	302.0 / 99.0	1.53	5851.19	187.851396	253.4	false
13C3-PFHxS	402.0 / 99.0	2.27	5015.47	194.903684	166.8	false
13C8-PFOS	507.0 / 99.0	3.04	6030.84	233.335424	122.9	false

EDD

Contract_ID	DO_CTO_Number	Phase	Installation_ID	Sample_Name	CH2M_Code	Analysis_Group	Analytical_Method	PRC_Code	Lab_Code	Lab_Name	Leachate_Method	SAMPLE_BASIS	Extraction_Method	Result_Type	Lab_QC_type	SAMPLE_MEDIUM	QC_Level	DateTime_Collected	Date_Received	Leachate_Date	Leachate_Time	Extraction_Date	Extraction_Time	Analysis_Date	Analysis_Time	Lab_Sample_ID	Dilution	Run_Number	PERCENT_MOISTURE	PERCENT_LIPID	Chem_Name	Analyte_ID	Analyte_Value	Original_Analyte_Value	Result_Units	Lab_Qualifier	Validator_Qualifier	QC_Column_Type	Analysis_Result_Type	Result_Narrative	QC_Control_Limit_Code	QC_Accuracy_Upper	QC_Accuracy_Lower	Control_Limit_Date	QC_Narrative	MDL	Detection_Limit	QSM_Version	DL	LOD	LOQ	SDG	Analysis_Batch	Validator_Name	Val_Date
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			Perfluorohexanoic Acid (PFHxA)	307-24-4		0.5	NG_L	U		TRG					20171116		0.16	0.16	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			Perfluoroheptanoic acid (PFHpA)	375-85-9		0.5	NG_L	U		TRG					20171116		0.16	0.16	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.46	NG_L	J		TRG					20171116		0.18	0.18	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			Perfluorononanoic acid (PFNA)	375-95-1		1	NG_L	U		TRG					20171116		0.26	0.26	5.1	70	1	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			Perfluorodecanoic Acid (PFDA)	335-76-2		0.5	NG_L	U		TRG					20171116		0.16	0.16	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			Perfluoroundecanoic Acid (PFUnA)	2058-94-8		1	NG_L	U		TRG					20171116		0.29	0.29	5.1	70	1	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			Perfluorododecanoic Acid (PFDoA)	307-55-1		0.5	NG_L	U		TRG					20171116		0.18	0.18	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			Perfluorotridecanoic Acid (PFTrDA)	72629-94-8		0.46	NG_L	U		TRG					20171116		0.15	0.15	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			Perfluorotetradecanoic Acid (PFTeDA)	376-06-7		0.53	NG_L	J		TRG					20171116		0.23	0.23	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA	2355-31-9		2	NG_L	U		TRG					20171116		0.58	0.58	5.1	70	2	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			N-Ethyl Perfluorooctanesulfonamidoacetic Acid (EtFOSAA)	2991-50-6		1	NG_L	U		TRG					20171116		0.49	0.49	5.1	70	1	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.5	NG_L	U		TRG					20171116		0.13	0.13	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			Perfluorohexanesulfonic acid (PFHxS)	355-46-4		0.4	NG_L	U		TRG					20171116		0.11	0.11	5.1	70	0.4	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			Perfluorooctanesulfonic acid (PFOS)	1763-23-1		0.5	NG_L	U		TRG					20171116		0.19	0.19	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			13C5-PFHxA													20171116													
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			13C4-PFHpA													20171116													
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			13C8-PFOA													20171116													
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			13C4-PFBS													20171116													
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			13C5-PFHxS													20171116													
N6247016029000 4164			POINT_MUGU_NBVC	C8H479B-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BLK	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	22:50:35	C8H479B-FS	1	1			13C8-PFOS													20171116													
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			Perfluorohexanoic Acid (PFHxA)	307-24-4		96.7	NG_L			TRG					20171116		0.19	0.19	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			Perfluoroheptanoic acid (PFHpA)	375-85-9		98	NG_L			TRG					20171116		0.16	0.16	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		110	NG_L			TRG					20171116		0.18	0.18	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			Perfluorononanoic acid (PFNA)	375-95-1		111	NG_L			TRG					20171116		0.26	0.26	5.1	70	1	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			Perfluorodecanoic Acid (PFDA)	335-76-2		99	NG_L			TRG					20171116		0.16	0.16	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			Perfluoroundecanoic Acid (PFUnA)	2058-94-8		101	NG_L			TRG					20171116		0.29	0.29	5.1	70	1	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			Perfluorododecanoic Acid (PFDoA)	307-55-1		102	NG_L			TRG					20171116		0.18	0.18	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			Perfluorotridecanoic Acid (PFTrDA)	72629-94-8		104	NG_L			TRG					20171116		0.15	0.15	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			Perfluorotetradecanoic Acid (PFTeDA)	376-06-7		104	NG_L			TRG					20171116		0.23	0.23	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA	2355-31-9		126	NG_L			TRG					20171116		0.58	0.58	5.1	70	2	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			N-Ethyl Perfluorooctanesulfonamidoacetic Acid (EtFOSAA)	2991-50-6		132	NG_L			TRG					20171116		0.49	0.49	5.1	70	1	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		108	NG_L			TRG					20171116		0.13	0.13	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			Perfluorohexanesulfonic acid (PFHxS)	355-46-4		97	NG_L			TRG					20171116		0.11	0.11	5.1	70	0.4	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			Perfluorooctanesulfonic acid (PFOS)	1763-23-1		103	NG_L			TRG					20171116		0.19	0.19	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			13C5-PFHxA													20171116													
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			13C4-PFHpA													20171116													
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			13C8-PFOA													20171116													
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			13C4-PFBS													20171116													
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			13C5-PFHxS													20171116													
N6247016029000 4164			POINT_MUGU_NBVC	C8H4ALCS-FS	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	BS	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:01:28	C8H4ALCS-FS	1	1			13C8-PFOS													20171116													
N6247016029000 4164			POINT_MUGU_NBVC	VC-AQ-EBCL-0918	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:12:20	C8H479B-FS	1	1			Perfluorohexanoic Acid (PFHxA)	307-24-4		0.5	NG_L	U		TRG					20171116		0.18	0.18	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	VC-AQ-EBCL-0918	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:12:20	C8H479B-FS	1	1			Perfluoroheptanoic acid (PFHpA)	375-85-9		0.5	NG_L	U		TRG					20171116		0.15	0.15	5.1	70	0.5	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	VC-AQ-EBCL-0918	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:12:20	C8H479B-FS	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		0.46	NG_L	J		TRG					20171116		0.17	0.17	5.1	70	0.46	5	16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	VC-AQ-EBCL-0918	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:12:20	C8H479B-FS	1	1			Perfluorononanoic acid (PFNA)	375-95-1		0.93	NG_L	U		TRG					20171116		0.24	0.24	5.1	70	0.93	5	4.63-16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	VC-AQ-EBCL-0918	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:12:20	C8H479B-FS	1	1			Perfluorodecanoic Acid (PFDA)	335-76-2		0.46	NG_L	U		TRG					20171116		0.15	0.15	5.1	70	0.46	5	4.63-16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	VC-AQ-EBCL-0918	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:12:20	C8H479B-FS	1	1			Perfluoroundecanoic Acid (PFUnA)	2058-94-8		0.93	NG_L	U		TRG					20171116		0.27	0.27	5.1	70	0.93	5	4.63-16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	VC-AQ-EBCL-0918	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:12:20	C8H479B-FS	1	1			Perfluorododecanoic Acid (PFDoA)	307-55-1		0.23	NG_L	J		TRG					20171116		0.17	0.17	5.1	70	0.46	5	4.63-16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	VC-AQ-EBCL-0918	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:12:20	C8H479B-FS	1	1			Perfluorotridecanoic Acid (PFTrDA)	72629-94-8		0.46	NG_L	U		TRG					20171116		0.14	0.14	5.1	70	0.46	5	4.63-16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	VC-AQ-EBCL-0918	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:12:20	C8H479B-FS	1	1			Perfluorotetradecanoic Acid (PFTeDA)	376-06-7		0.53	NG_L	J		TRG					20171116		0.23	0.23	5.1	70	0.53	5	4.63-16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	VC-AQ-EBCL-0918	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:12:20	C8H479B-FS	1	1			N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA	2355-31-9		1.85	NG_L	U		TRG					20171116		0.58	0.58	5.1	70	1.85	5	4.63-16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	VC-AQ-EBCL-0918	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:12:20	C8H479B-FS	1	1			N-Ethyl Perfluorooctanesulfonamidoacetic Acid (EtFOSAA)	2991-50-6		0.93	NG_L	U		TRG					20171116		0.45	0.45	5.1	70	0.93	5	4.63-16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	VC-AQ-EBCL-0918	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:12:20	C8H479B-FS	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.46	NG_L	U		TRG					20171116		0.12	0.12	5.1	70	0.46	5	4.63-16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	VC-AQ-EBCL-0918	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:12:20	C8H479B-FS	1	1			Perfluorohexanesulfonic acid (PFHxS)	355-46-4		0.37	NG_L	U		TRG					20171116		0.1	0.1	5.1	70	0.37	5	4.63-16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	VC-AQ-EBCL-0918	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:12:20	C8H479B-FS	1	1			Perfluorooctanesulfonic acid (PFOS)	1763-23-1		0.46	NG_L	U		TRG					20171116		0.18	0.18	5.1	70	0.46	5	4.63-16-0504	DP-16-0276
N6247016029000 4164			POINT_MUGU_NBVC	VC-AQ-EBCL-0918	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:12:20	C8H479B-FS	1	1			13C5-PFHxA													20171116													
N6247016029000 4164			POINT_MUGU_NBVC	VC-AQ-EBCL-0918	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:12:20	C8H479B-FS	1	1			13C4-PFHpA													20171116													
N6247016029000 4164			POINT_MUGU_NBVC	VC-AQ-EBCL-0918	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:12:20	C8H479B-FS	1	1			13C8-PFOA													20171116													
N6247016029000 4164			POINT_MUGU_NBVC	VC-AQ-EBCL-0918	NONS	SVOA	537_MOD	ORG	BMG_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180827 14:34	20180827			20180827	14:34:00	20181003	23:12:20	C8H479B-FS	1	1			13C4-PFBS												

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Contract_ID	DO_CTO_Number	Phase	Installation_ID	Sample_Name	CH2M_Code	Analysis_Group	Analytical_Method	PRC_Code	Lab_Code	Lab_Name	Leachate_Method	SAMPLE_BASIS	Extraction_Method	Result_Type	Lab_QC_type	SAMPLE_MEDIUM	QC_Level	DateTime_Collected	Date_Received	Leachate_Date	Leachate_Time	Extraction_Date	Extraction_Time	Analysis_Date	Analysis_Time	Lab_Sample_ID	Dilution	Run_Number	PERCENT_MOISTURE	PERCENT_LIPID	Chem_Name	Analyte_ID	Analyte_Value	Original_Analyte_Value	Result_Units	Lab_Qualifier	Validator_Qualifier	QC_Column_Type	Analysis_Result_Type	Result_Narrative	QC_Control_Limit_Code	QC_Accuracy_Upper	QC_Accuracy_Lower	Control_Limit_Date	QC_Narrative	MDL	Detection_Limit	QSM_Version	DL	LOD	LOQ	SDG	Analysis_Batch	Validator_Name	Val_Date
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM365-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 11:10	20180921			20180927	14:34:00	20181004	02:06:22	J8262-FS	1	1			N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA	2355-31-9	1.82	NG_L	U		TRG					20171116		0.51	0.51	5.1	70	1.82	4.55	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM365-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 11:10	20180921			20180927	14:34:00	20181004	02:06:22	J8262-FS	1	1			N-Ethyl Perfluorooctanesulfonamidoacetic Acid (EtFOSAA)	2991-50-6	0.91	NG_L	U		TRG					20171116		0.45	0.45	5.1	70	0.91	4.55	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM365-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 11:10	20180921			20180927	14:34:00	20181004	02:17:15	J8262-FS	333.33	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	3796.5	NG_L	D		TRG					20171116		39.38	39.39	5.1	70	151.52	1515.15	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM365-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 11:10	20180921			20180927	14:34:00	20181004	02:17:15	J8262-FS	333.33	1			Perfluorohexanesulfonic acid (PFHS)	355-46-4	14935.23	NG_L	D		TRG					20171116		33.33	33.33	5.1	70	121.21	1515.15	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM365-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 11:10	20180921			20180927	14:34:00	20181004	02:17:15	J8262-FS	333.33	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	4338.22	NG_L	D		TRG					20171116		57.58	57.58	5.1	70	151.52	1515.15	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM365-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 11:10	20180921			20180927	14:34:00	20181004	02:17:15	J8262-FS	333.33	1			13C5-PFHxA	BDO-2217	107	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM365-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 11:10	20180921			20180927	14:34:00	20181004	02:17:15	J8262-FS	333.33	1			13C4-PFHpA	BDO-2218	107	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM365-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 11:10	20180921			20180927	14:34:00	20181004	02:28:08	J8262-FS	25	1			13C8-PFOA	BDO-2219	114	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM365-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 11:10	20180921			20180927	14:34:00	20181004	02:28:08	J8262-FS	25	1			13C9-PFNA	BDO-2220	107	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM365-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 11:10	20180921			20180927	14:34:00	20181004	02:06:22	J8262-FS	1	1			13C6-PFDA	BDO-2221	95	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM365-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 11:10	20180921			20180927	14:34:00	20181004	02:06:22	J8262-FS	1	1			13C5-PFUnA	BDO-2223	100	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM365-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 11:10	20180921			20180927	14:34:00	20181004	02:06:22	J8262-FS	1	1			13C2-PFDoA	BDO-2224	106	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM365-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 11:10	20180921			20180927	14:34:00	20181004	02:06:22	J8262-FS	333.33	1			d3-MeFOSAA	BDO-1838	102	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM365-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 11:10	20180921			20180927	14:34:00	20181004	02:17:15	J8262-FS	333.33	1			d5-EtFOSAA	BDO-1839	114	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM365-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 11:10	20180921			20180927	14:34:00	20181004	02:17:15	J8262-FS	333.33	1			13C3-PFBS	BDO-2226	104	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM365-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 11:10	20180921			20180927	14:34:00	20181004	02:17:15	J8262-FS	333.33	1			13C3-HFPO-DA	BDO-2227	107	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM365-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:22:32	J8272-FS	20	1			Perfluoroheptanoic Acid (PFHpA)	375-85-9	307.24	430.22	NG_L	D		TRG					20171116		3.39	3.39	5.1	70	8.93	89.29	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:22:32	J8272-FS	20	1			Perfluorohexanoic Acid (PFHxA)	307-24-4	123.9	173.49	NG_L	D		TRG					20171116		2.86	2.86	5.1	70	8.93	89.29	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:22:32	J8272-FS	20	1			Perfluorooctanoic acid (PFOA)	335-67-1	1116.63	NG_L	D		TRG					20171116		3.21	3.21	5.1	70	8.93	89.29	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:11:39	J8272-FS	1	1			Perfluorononanoic acid (PFNA)	375-95-1	1.33	NG_L	J		TRG					20171116		0.23	0.23	5.1	70	0.89	4.46	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:11:39	J8272-FS	1	1			Perfluorodecanoic Acid (PFDA)	335-76-2	0.45	NG_L	U		TRG					20171116		0.14	0.14	5.1	70	0.45	4.46	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:11:39	J8272-FS	1	1			Perfluoroundecanoic Acid (PFUnA)	2058-94-8	0.89	NG_L	U		TRG					20171116		0.26	0.26	5.1	70	0.89	4.46	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:11:39	J8272-FS	1	1			Perfluorododecanoic Acid (PFDoA)	307-55-1	0.45	NG_L	U		TRG					20171116		0.16	0.16	5.1	70	0.45	4.46	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:11:39	J8272-FS	1	1			Perfluorotridecanoic Acid (PFTrDA)	72629-94-8	0.45	NG_L	U		TRG					20171116		0.13	0.13	5.1	70	0.45	4.46	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:11:39	J8272-FS	1	1			Perfluorotetradecanoic Acid (PFTeDA)	376-06-7	0.89	NG_L	U		TRG					20171116		0.22	0.22	5.1	70	0.89	4.46	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:11:39	J8272-FS	1	1			N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA	2355-31-9	1.79	NG_L	U		TRG					20171116		0.5	0.5	5.1	70	1.79	4.46	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:11:39	J8272-FS	1	1			N-Ethyl Perfluorooctanesulfonamidoacetic Acid (EtFOSAA)	2991-50-6	0.89	NG_L	U		TRG					20171116		0.44	0.44	5.1	70	0.89	4.46	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:22:32	J8272-FS	20	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	23.12	NG_L				TRG					20171116		0.12	0.12	5.1	70	0.45	4.46	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:22:32	J8272-FS	20	1			Perfluorohexanesulfonic acid (PFHS)	355-46-4	243.1	NG_L	D		TRG					20171116		1.96	1.96	5.1	70	7.14	89.29	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:11:39	J8272-FS	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	61.51	NG_L				TRG					20171116		0.17	0.17	5.1	70	0.45	4.46	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:22:32	J8272-FS	20	1			13C5-PFHxA	BDO-2217	126	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:22:32	J8272-FS	20	1			13C4-PFHpA	BDO-2218	127	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:22:32	J8272-FS	20	1			13C8-PFOA	BDO-2219	114	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:11:39	J8272-FS	1	1			13C9-PFNA	BDO-2221	96	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:11:39	J8272-FS	1	1			13C6-PFDA	BDO-2222	97	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:11:39	J8272-FS	1	1			13C5-PFUnA	BDO-2223	109	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:11:39	J8272-FS	1	1			13C2-PFDoA	BDO-2112	110	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:11:39	J8272-FS	1	1			13C2-PFDoA	BDO-2224	98	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:11:39	J8272-FS	1	1			d3-MeFOSAA	BDO-1838	81	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:11:39	J8272-FS	1	1			d5-EtFOSAA	BDO-1839	115	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:11:39	J8272-FS	1	1			13C3-PFBS	BDO-2226	72	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:22:32	J8272-FS	20	1			13C3-HFPO-DA	BDO-2227	90	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW01-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:30	20180921			20180927	14:34:00	20181004	03:11:39	J8272-FS	1	1			13C8-PFOS	BDO-2228	84	PCT_REC				SURR	SLSP		150		50 20171116							5.1				16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 14:45	20180921			20180927	14:34:00	20181004	03:44:37	J8273-FS	20	1			Perfluoroheptanoic Acid (PFHpA)	375-85-9	466.64	NG_L	D		TRG					20171116		3.33	3.33	5.1	70	8.77	87.72	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 14:45	20180921			20180927	14:34:00	20181004	03:44:37	J8273-FS	20	1			Perfluorohexanoic Acid (PFHxA)	307-24-4	170.94	NG_L	D		TRG					20171116		2.82	2.82	5.1	70	8.77	87.72	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 14:45	20180921			20180927	14:34:00	20181004	03:44:37	J8273-FS	20	1			Perfluorooctanoic acid (PFOA)	335-67-1	1140.5	NG_L	D		TRG					20171116		3.16	3.16	5.1	70	8.77	87.72	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:45	20180921			20180927	14:34:00	20181004	03:33:25	J8273-FS	1	1			Perfluorononanoic Acid (PFNA)	375-95-1	1.39	NG_L	J		TRG					20171116		0.25	0.25	5.1	70	0.96	4.39	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:45	20180921			20180927	14:34:00	20181004	03:33:25	J8273-FS	1	1			Perfluorodecanoic Acid (PFDA)	335-76-2	0.44	NG_L	U		TRG					20171116		0.14	0.14	5.1	70	0.44	4.39	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:45	20180921			20180927	14:34:00	20181004	03:33:25	J8273-FS	1	1			Perfluoroundecanoic Acid (PFUnA)	2058-94-8	0.88	NG_L	U		TRG					20171116		0.25	0.25	5.1	70	0.88	4.39	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:45	20180921			20180927	14:34:00	20181004	03:33:25	J8273-FS	1	1			Perfluorododecanoic Acid (PFDoA)	307-55-1	0.44	NG_L	U		TRG					20171116		0.16	0.16	5.1	70	0.44	4.39	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:45	20180921			20180927	14:34:00	20181004	03:33:25	J8273-FS	1	1			Perfluorotridecanoic Acid (PFTrDA)	72629-94-8	0.44	NG_L	U		TRG					20171116		0.13	0.13	5.1	70	0.44	4.39	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:45	20180921			20180927	14:34:00	20181004	03:33:25	J8273-FS	1	1			Perfluorotetradecanoic Acid (PFTeDA)	376-06-7	0.88	NG_L	U		TRG					20171116		0.22	0.22	5.1	70	0.88	4.39	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:45	20180921			20180927	14:34:00	20181004	03:33:25	J8273-FS	1	1			N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA	2355-31-9	1.75	NG_L	U		TRG					20171116		0.49	0.49	5.1	70	1.75	4.39	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	000	REG	W	4	20180919 14:45	20180921			20180927	14:34:00	20181004	03:33:25	J8273-FS	1	1			N-Ethyl Perfluorooctanesulfonamidoacetic Acid (EtFOSAA)	2991-50-6	0.88	NG_L	U		TRG					20171116		0.43	0.43	5.1	70	0.88	4.39	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NBVC	VC-PM353-DW03-0918	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE_NORWELL, MA	NULL	N	METHOD	DL1	REG	W	4	20180919 14:45	20180921			20180927	14:34:00	20181004	03:44:37	J8273-FS	20	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	19.16	NG_L				TRG					20171116		0.11	0.11	5.1	70	0.44	4.39	16-0506	DP-16-0276
N6247016029000	4164			POINT_MUGU_NB

ENVIRONMENTAL
Data Services, Inc.

DATA VALIDATION SUMMARY REPORT
NAVAL BASE VENTURA COUNTY, CALIFORNIA

Client: CH2M HILL, Inc., Corvallis, Oregon
SDG: 18-0568
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-AQ-FB01-0918	J8246-FS	Water
2	VC-AQ-EB01-0918	J8247-FS	Water
3	VP-PM365-DW01-0918	J8259-FS	Water
4	VP-PM365-DW02-0918	J8260-FS	Water
5	VP-PM365-DW02P-0918	J8261-FS	Water
6	VP-PM365-DW03-0918	J8262-FS	Water
7	VP-PM553-DW01-0918	J8272-FS	Water
8	VP-PM553-DW01P-0918	J8273-FS	Water
9	VP-PM553-DW02-0918	J8274-FS	Water
10	VP-PM553-DW03-0918	J8275-FS	Water
11	VP-SO-FB02-0918	J8276-FS	Water
12	VP-SO-EB02-0918	J8277-FS	Water

A full data validation was performed on the analytical data for eight water samples, two aqueous equipment blank samples, and two aqueous field blank 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	*Method References*
PFCs	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 14 days for water samples and analyzed within 28 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 exhibited the following contamination.

Blank ID	Compound	Conc. ng/L	Qualifier	Affected Samples
PB CR847PB-FS	PFOA	0.46	U	1, 2, 11, 12

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	Applies to samples in other data packages
	PFTrDA	0.31	None	
	PFTeDA	0.38	None	
	PFHxS	0.11	None	
	PFOS	8.59	None	
VC-AQ-FB01-0918	PFDoA	0.23	None	Applies to samples in other data packages
	PFTrDA	0.44	None	
	PFTeDA	0.53	None	
VC-SO-FB02-0918	PFDA	0.16	None	See EB02
	PFUnA	0.39	None	All Associated ND
	PFDoA	0.46	None	See EB02
	PFTrDA	0.74	None	All Associated ND
	PFTeDA	0.66	None	
VC-SO-EB02-0918	PFDA	0.21	U	4, 5, 6
	PFUnA	0.37	None	All Associated ND
	PFDoA	0.49	None	
	PFTrDA	0.69	None	
	PFTeDA	0.59	None	
	PFHxS	0.52	None	All Associated >10X
	PFOS	2.52	U	3

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- MS/MSD samples were not analyzed.

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 results are summarized below. The precision was unacceptable for PFOS in both field duplicate pairs. These results were qualified as estimated (J).

Compound	VC-PM365-DW02-0918 ng/L	VC-PM365-DW02P-0918 ng/L	RPD	Qualifier
PFHxA	3805.58	4035.00	6%	None
PFHpA	462.31	458.97	1%	
PFOA	1008.69	1132.31	12%	
PFNA	2.62	2.97	13%	
PFBS	1077.41	1083.52	1%	
PFHxS	9898.70	11515.55	15%	
PFOS	3001.26	4099.63	31%	J

Compound	VC-PM553-DW01-0918 ng/L	VC-PM553-DW01P-0918 ng/L	RPD	Qualifier
PFHxA	430.22	464.64	8%	None
PFHpA	161.90	170.95	5%	
PFOA	1116.63	1140.70	2%	
PFNA	1.33	1.09	20%	
PFBS	23.12	19.16	19%	
PFHxS	243.30	216.93	11%	
PFOS	61.51	29.47	70%	J

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed: Nancy Weaver Dated: 12/27/18

Nancy Weaver
Senior Chemist

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.

BATTELLE
It can be done

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

Client ID		VC-AQ-FB01-0918				
Battelle ID		J8246-FS				
Sample Type		SA				
Collection Date		09/18/2018				
Extraction Date		09/27/2018				
Analysis Date		10/03/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		AQ				
Sample Size		0.270				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	0.46	U	0.18	0.46	4.63
PFHpA	375-85-9	0.46	U	0.15	0.46	4.63
PFOA	335-67-1	0.74	U	0.17	0.46	4.63
PFNA	375-95-1	0.93	U	0.24	0.93	4.63
PFDA	335-76-2	0.46	U	0.15	0.46	4.63
PFUnA	2058-94-8	0.93	U	0.27	0.93	4.63
PFDoA	307-55-1	0.23	J	0.17	0.46	4.63
PFTrDA	72629-94-8	0.44	J	0.14	0.46	4.63
PFTeDA	376-06-7	0.53	J	0.23	0.93	4.63
NMeFOSAA	2355-31-9	1.85	U	0.52	1.85	4.63
NEtFOSAA	2991-50-6	0.93	U	0.45	0.93	4.63
PFBS	375-73-5	0.46	U	0.12	0.46	4.63
PFHxS	355-46-4	0.37	U	0.10	0.37	4.63
PFOS	1763-23-1	0.46	U	0.18	0.46	4.63

MBL

Surrogate Recoveries (%)

13C5-PFHxA	92
13C4-PFHpA	95
13C8-PFOA	101
13C9-PFNA	93
13C6-PFDA	97
13C7-PFUnA	110
13C2-PFDoA	97
13C2-PFTeDA	89
d3-MeFOSAA	90
d5-EtFOSAA	104
13C3-PFBS	92
13C3-PFHxS	96
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-AQ-EB01-0918			
Battelle ID		J8247-FS			
Sample Type		SA			
Collection Date		09/18/2018			
Extraction Date		09/27/2018			
Analysis Date		10/03/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		AQ			
Sample Size		0.265			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	0.47 U	0.18	0.47	4.72
PFHpA	375-85-9	0.47 U	0.15	0.47	4.72
PFOA	335-67-1	0.47 ~~0.44~~ J U	0.17	0.47	4.72
PFNA	375-95-1	0.94 U	0.25	0.94	4.72
PFDA	335-76-2	0.47 U	0.15	0.47	4.72
PFUnA	2058-94-8	0.94 U	0.27	0.94	4.72
PFDoA	307-55-1	0.19 J	0.17	0.47	4.72
PFTrDA	72629-94-8	0.31 J	0.14	0.47	4.72
PFTeDA	376-06-7	0.38 J	0.24	0.94	4.72
NMeFOSAA	2355-31-9	1.89 U	0.53	1.89	4.72
NEtFOSAA	2991-50-6	0.94 U	0.46	0.94	4.72
PFBS	375-73-5	0.47 U	0.12	0.47	4.72
PFHxS	355-46-4	0.11 J	0.10	0.38	4.72
PFOS	1763-23-1	8.59	0.18	0.47	4.72

MBL

Surrogate Recoveries (%)

13C5-PFHxA	91
13C4-PFHpA	99
13C8-PFOA	102
13C9-PFNA	100
13C6-PFDA	105
13C7-PFUnA	101
13C2-PFDoA	98
13C2-PFTeDA	102
d3-MeFOSAA	104
d5-EtFOSAA	100
13C3-PFBS	106
13C3-PFHxS	99
13C8-PFOS	97

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3

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

Client ID		VC-PM365-DW01-0918			
Battelle ID		J8259-FS			
Sample Type		SA			
Collection Date		09/19/2018			
Extraction Date		09/27/2018			
Analysis Date		10/03/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		GW			
Sample Size		0.260			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	1399.57 D	45.67	120.19	1201.92
PFHpA	375-85-9	601.72 D	7.69	24.04	240.38
PFOA	335-67-1	7715.10 D	43.27	120.19	1201.92
PFNA	375-95-1	0.96 U	0.25	0.96	4.81
PFDA	335-76-2	0.48 U	0.15	0.48	4.81
PFUnA	2058-94-8	0.96 U	0.28	0.96	4.81
PFDoA	307-55-1	0.48 U	0.17	0.48	4.81
PFTrDA	72629-94-8	0.48 U	0.14	0.48	4.81
PFTeDA	376-06-7	0.96 U	0.24	0.96	4.81
NMeFOSAA	2355-31-9	1.92 U	0.54	1.92	4.81
NEtFOSAA	2991-50-6	0.96 U	0.47	0.96	4.81
PFBS	375-73-5	244.83 D	1.25	4.81	48.08
PFHxS	355-46-4	1160.97 D	5.29	19.23	240.38
PFOS	1763-23-1	4.96 U	0.18	0.48	4.81

EBL

Surrogate Recoveries (%)

13C5-PFHxA	117 D
13C4-PFHpA	136 D
13C8-PFOA	115 D
13C9-PFNA	71 D
13C6-PFDA	121
13C7-PFUnA	124
13C2-PFDoA	129
13C2-PFTeDA	119
d3-MeFOSAA	111
d5-EtFOSAA	116
13C3-PFBS	127 D
13C3-PFHxS	110 D
13C8-PFOS	106

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4

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

Client ID		VC-PM365-DW02-0918				
Battelle ID		J8260-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/04/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.270				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ	
PFHxA	307-24-4	3805.58 D		29.32	77.16	771.61	
PFHpA	375-85-9	462.31 D		1.48	4.63	46.30	
PFOA	335-67-1	1008.69 D		27.78	77.16	771.61	
PFNA	375-95-1	2.62 J		0.24	0.93	4.63	
PFDA	335-76-2	0.46 ~~0.26~~ J	U	0.15	0.46	4.63	EBL
PFUnA	2058-94-8	0.93 U		0.27	0.93	4.63	
PFDoA	307-55-1	0.46 U		0.17	0.46	4.63	
PFTrDA	72629-94-8	0.46 U		0.14	0.46	4.63	
PFTeDA	376-06-7	0.93 U		0.23	0.93	4.63	
NMeFOSAA	2355-31-9	1.85 U		0.52	1.85	4.63	
NEtFOSAA	2991-50-6	0.93 U		0.45	0.93	4.63	
PFBS	375-73-5	1077.41 D		20.06	77.16	771.61	
PFHxS	355-46-4	9898.70 D		84.88	308.64	3858.02	
PFOS	1763-23-1	3001.26 D	J	29.32	77.16	771.61	FD
Surrogate Recoveries (%)							
13C5-PFHxA		115 D					
13C4-PFHpA		133 D					
13C8-PFOA		108 D					
13C9-PFNA		63					
13C6-PFDA		107					
13C7-PFUnA		111					
13C2-PFDoA		120					
13C2-PFTeDA		120					
d3-MeFOSAA		139					
d5-EtFOSAA		149					
13C3-PFBS		125 D					
13C3-PFHxS		122 D					
13C8-PFOS		130 D					

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Printed: 10/19/2018

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

Client ID		VC-PM365-DW02P-0918				
Battelle ID		J8261-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/04/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.270				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ	
PFHxA	307-24-4	4035.00 D		29.32	77.16	771.61	
PFHpA	375-85-9	458.97 D		1.48	4.63	46.30	
PFOA	335-67-1	1132.31 D		27.78	77.16	771.61	
PFNA	375-95-1	2.97 J		0.24	0.93	4.63	
PFDA	335-76-2	0.46 ~~0.20~~ U		0.15	0.46	4.63	EBL
PFUnA	2058-94-8	0.93 U		0.27	0.93	4.63	
PFDoA	307-55-1	0.46 U		0.17	0.46	4.63	
PFTrDA	72629-94-8	0.46 U		0.14	0.46	4.63	
PFTeDA	376-06-7	0.93 U		0.23	0.93	4.63	
NMeFOSAA	2355-31-9	1.85 U		0.52	1.85	4.63	
NEtFOSAA	2991-50-6	0.93 U		0.45	0.93	4.63	
PFBS	375-73-5	1083.52 D		20.06	77.16	771.61	
PFHxS	355-46-4	11515.55 D		84.88	308.64	3858.02	
PFOS	1763-23-1	4099.63 D	J	29.32	77.16	771.61	FD
Surrogate Recoveries (%)							
13C5-PFHxA		121 D					
13C4-PFHpA		128 D					
13C8-PFOA		113 D					
13C9-PFNA		61					
13C6-PFDA		94					
13C7-PFUnA		112					
13C2-PFDoA		118					
13C2-PFTeDA		110					
d3-MeFOSAA		131 D					
d5-EtFOSAA		124 D					
13C3-PFBS		149 D					
13C3-PFHxS		111 D					
13C8-PFOS		127 D					

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

Client ID		VC-PM365-DW03-0918			
Battelle ID		J8262-FS			
Sample Type		SA			
Collection Date		09/19/2018			
Extraction Date		09/27/2018			
Analysis Date		10/04/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		GW			
Sample Size		0.275			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	5595.98 D	57.58	151.52	1515.15
PFHpA	375-85-9	883.04 D	3.64	11.36	113.64
PFOA	335-67-1	737.85 D	4.09	11.36	113.64
PFNA	375-95-1	5.04	0.24	0.91	4.55
PFDA	335-76-2	0.45 ~~0.31 J~~ U	0.15	0.45	4.55
PFUnA	2058-94-8	0.91 U	0.26	0.91	4.55
PFDoA	307-55-1	0.45 U	0.16	0.45	4.55
PFTrDA	72629-94-8	0.45 U	0.14	0.45	4.55
PFTeDA	376-06-7	0.91 U	0.23	0.91	4.55
NMeFOSAA	2355-31-9	1.82 U	0.51	1.82	4.55
NEtFOSAA	2991-50-6	0.91 U	0.45	0.91	4.55
PFBS	375-73-5	3796.50 D	39.39	151.52	1515.15
PFHxS	355-46-4	14935.23 D	33.33	121.21	1515.15
PFOS	1763-23-1	4338.22 D	57.58	151.52	1515.15

EBL

Surrogate Recoveries (%)

13C5-PFHxA	109 D
13C4-PFHpA	117 D
13C8-PFOA	104 D
13C9-PFNA	63
13C6-PFDA	103
13C7-PFUnA	109
13C2-PFDoA	115
13C2-PFTeDA	106
d3-MeFOSAA	103 D
d5-EtFOSAA	114 D
13C3-PFBS	124 D
13C3-PFHxS	107 D
13C8-PFOS	127 D

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

Client ID		VC-PM553-DW01-0918				
Battelle ID		J8272-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/04/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.280				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	430.22	D	3.39	8.93	89.29
PFHpA	375-85-9	161.90	D	2.86	8.93	89.29
PFOA	335-67-1	1116.63	D	3.21	8.93	89.29
PFNA	375-95-1	1.33	J	0.23	0.89	4.46
PFDA	335-76-2	0.45	U	0.14	0.45	4.46
PFUnA	2058-94-8	0.89	U	0.26	0.89	4.46
PFDoA	307-55-1	0.45	U	0.16	0.45	4.46
PFTrDA	72629-94-8	0.45	U	0.13	0.45	4.46
PFTeDA	376-06-7	0.89	U	0.22	0.89	4.46
NMeFOSAA	2355-31-9	1.79	U	0.50	1.79	4.46
NEtFOSAA	2991-50-6	0.89	U	0.44	0.89	4.46
PFBS	375-73-5	23.12		0.12	0.45	4.46
PFHxS	355-46-4	243.30	D	1.96	7.14	89.29
PFOS	1763-23-1	61.51	J	0.17	0.45	4.46

FD

Surrogate Recoveries (%)

13C5-PFHxA	126	D
13C4-PFHpA	127	D
13C8-PFOA	114	D
13C9-PFNA	56	
13C6-PFDA	97	
13C7-PFUnA	109	
13C2-PFDoA	110	
13C2-PFTeDA	98	
d3-MeFOSAA	81	
d5-EtFOSAA	115	
13C3-PFBS	72	
13C3-PFHxS	90	D
13C8-PFOS	84	

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

Client ID		VC-PM553-DW01P-0918				
Battelle ID		J8273-FS				
Sample Type		SA				
Collection Date		09/19/2018				
Extraction Date		09/27/2018				
Analysis Date		10/04/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.285				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	464.64	D	3.33	8.77	87.72
PFHpA	375-85-9	170.95	D	2.81	8.77	87.72
PFOA	335-67-1	1140.70	D	3.16	8.77	87.72
PFNA	375-95-1	1.09	J	0.23	0.88	4.39
PFDA	335-76-2	0.44	U	0.14	0.44	4.39
PFUnA	2058-94-8	0.88	U	0.25	0.88	4.39
PFDoA	307-55-1	0.44	U	0.16	0.44	4.39
PFTrDA	72629-94-8	0.44	U	0.13	0.44	4.39
PFTeDA	376-06-7	0.88	U	0.22	0.88	4.39
NMeFOSAA	2355-31-9	1.75	U	0.49	1.75	4.39
NEtFOSAA	2991-50-6	0.88	U	0.43	0.88	4.39
PFBS	375-73-5	19.16		0.11	0.44	4.39
PFHxS	355-46-4	216.93	D	1.93	7.02	87.72
PFOS	1763-23-1	29.47	J	0.17	0.44	4.39

FD

Surrogate Recoveries (%)

13C5-PFHxA	117	D
13C4-PFHpA	126	D
13C8-PFOA	110	D
13C9-PFNA	53	
13C6-PFDA	97	
13C7-PFUnA	105	
13C2-PFDoA	111	
13C2-PFTeDA	101	
d3-MeFOSAA	101	
d5-EtFOSAA	138	
13C3-PFBS	82	
13C3-PFHxS	110	D
13C8-PFOS	99	

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9

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

Client ID		VC-PM553-DW02-0918			
Battelle ID		J8274-FS			
Sample Type		SA			
Collection Date		09/19/2018			
Extraction Date		09/27/2018			
Analysis Date		10/04/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		GW			
Sample Size		0.280			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	1432.20 D	18.85	49.60	496.03
PFHpA	375-85-9	4200.92 D	14.29	44.64	446.43
PFOA	335-67-1	2199.99 D	17.86	49.60	496.03
PFNA	375-95-1	2.39 J	0.23	0.89	4.46
PFDA	335-76-2	0.45 U	0.14	0.45	4.46
PFUnA	2058-94-8	0.89 U	0.26	0.89	4.46
PFDoA	307-55-1	0.45 U	0.16	0.45	4.46
PFTrDA	72629-94-8	0.45 U	0.13	0.45	4.46
PFTeDA	376-06-7	0.89 U	0.22	0.89	4.46
NMeFOSAA	2355-31-9	1.79 U	0.50	1.79	4.46
NEtFOSAA	2991-50-6	0.89 U	0.44	0.89	4.46
PFBS	375-73-5	558.01 D	11.61	44.64	446.43
PFHxS	355-46-4	5218.12 D	9.82	35.71	446.43
PFOS	1763-23-1	465.89 D	16.96	44.64	446.43
Surrogate Recoveries (%)					
13C5-PFHxA		127 D			
13C4-PFHpA		103 D			
13C8-PFOA		128 D			
13C9-PFNA		104 D			
13C6-PFDA		99			
13C7-PFUnA		99			
13C2-PFDoA		105			
13C2-PFTeDA		96			
d3-MeFOSAA		85			
d5-EtFOSAA		119			
13C3-PFBS		121 D			
13C3-PFHxS		97 D			
13C8-PFOS		108 D			

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

Client ID		VC-PM553-DW03-0918			
Battelle ID		J8275-FS			
Sample Type		SA			
Collection Date		09/19/2018			
Extraction Date		09/27/2018			
Analysis Date		10/04/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		GW			
Sample Size		0.275			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	5621.46 D	71.97	189.39	1893.94
PFHpA	375-85-9	9059.38 D	18.18	56.82	568.18
PFOA	335-67-1	4284.94 D	13.64	37.88	378.79
PFNA	375-95-1	8.92	0.24	0.91	4.55
PFDA	335-76-2	2.34 J	0.15	0.45	4.55
PFUnA	2058-94-8	0.91 U	0.26	0.91	4.55
PFDoA	307-55-1	0.45 U	0.16	0.45	4.55
PFTrDA	72629-94-8	0.45 U	0.14	0.45	4.55
PFTeDA	376-06-7	0.91 U	0.23	0.91	4.55
NMeFOSAA	2355-31-9	1.82 U	0.51	1.82	4.55
NEtFOSAA	2991-50-6	0.91 U	0.45	0.91	4.55
PFBS	375-73-5	684.48 D	14.77	56.82	568.18
PFHxS	355-46-4	2341.51 D	8.33	30.30	378.79
PFOS	1763-23-1	2602.77 D	21.59	56.82	568.18
Surrogate Recoveries (%)					
13C5-PFHxA		116 D			
13C4-PFHpA		101 D			
13C8-PFOA		108 D			
13C9-PFNA		110 D			
13C6-PFDA		108			
13C7-PFUnA		109			
13C2-PFDoA		110			
13C2-PFTeDA		101			
d3-MeFOSAA		134			
d5-EtFOSAA		137			
13C3-PFBS		106 D			
13C3-PFHxS		100 D			
13C8-PFOS		112 D			

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Printed: 10/19/2018

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

Client ID		VC-SO-FB02-0918			
Battelle ID		J8276-FS			
Sample Type		SA			
Collection Date		09/19/2018			
Extraction Date		09/27/2018			
Analysis Date		10/03/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		AQ			
Sample Size		0.260			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	0.48 U	0.18	0.48	4.81
PFHpA	375-85-9	0.48 U	0.15	0.48	4.81
PFOA	335-67-1	0.68 J U	0.17	0.48	4.81
PFNA	375-95-1	0.96 U	0.25	0.96	4.81
PFDA	335-76-2	0.16 J	0.15	0.48	4.81
PFUnA	2058-94-8	0.39 J	0.28	0.96	4.81
PFDoA	307-55-1	0.46 J	0.17	0.48	4.81
PFTrDA	72629-94-8	0.74 J	0.14	0.48	4.81
PFTeDA	376-06-7	0.66 J	0.24	0.96	4.81
NMeFOSAA	2355-31-9	1.92 U	0.54	1.92	4.81
NEtFOSAA	2991-50-6	0.96 U	0.47	0.96	4.81
PFBS	375-73-5	0.48 U	0.13	0.48	4.81
PFHxS	355-46-4	0.38 U	0.11	0.38	4.81
PFOS	1763-23-1	0.48 U	0.18	0.48	4.81

MBL

Surrogate Recoveries (%)

13C5-PFHxA	99
13C4-PFHpA	102
13C8-PFOA	103
13C9-PFNA	98
13C6-PFDA	104
13C7-PFUnA	99
13C2-PFDoA	94
13C2-PFTeDA	92
d3-MeFOSAA	94
d5-EtFOSAA	90
13C3-PFBS	96
13C3-PFHxS	93
13C8-PFOS	95

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Printed: 10/19/2018

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

Client ID		VC-SO-EB02-0918			
Battelle ID		J8277-FS			
Sample Type		SA			
Collection Date		09/19/2018			
Extraction Date		09/27/2018			
Analysis Date		10/03/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		AQ			
Sample Size		0.250			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	0.50 U	0.19	0.50	5.00
PFHpA	375-85-9	0.50 U	0.16	0.50	5.00
PFOA	335-67-1	0.86 J U	0.18	0.50	5.00
PFNA	375-95-1	1.00 U	0.26	1.00	5.00
PFDA	335-76-2	0.21 J	0.16	0.50	5.00
PFUnA	2058-94-8	0.37 J	0.29	1.00	5.00
PFDoA	307-55-1	0.49 J	0.18	0.50	5.00
PFTrDA	72629-94-8	0.69 J	0.15	0.50	5.00
PFTeDA	376-06-7	0.59 J	0.25	1.00	5.00
NMeFOSAA	2355-31-9	2.00 U	0.56	2.00	5.00
NEtFOSAA	2991-50-6	1.00 U	0.49	1.00	5.00
PFBS	375-73-5	0.50 U	0.13	0.50	5.00
PFHxS	355-46-4	0.52 J	0.11	0.40	5.00
PFOS	1763-23-1	2.52 J	0.19	0.50	5.00

MBL

Surrogate Recoveries (%)

13C5-PFHxA	109
13C4-PFHpA	106
13C8-PFOA	111
13C9-PFNA	103
13C6-PFDA	94
13C7-PFUnA	96
13C2-PFDoA	88
13C2-PFTeDA	100
d3-MeFOSAA	102
d5-EtFOSAA	112
13C3-PFBS	103
13C3-PFHxS	98
13C8-PFOS	101

MW 12/12/18

Analyzed by: Griffith, Lauren
Printed: 10/19/2018

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_NAS	DP	Direct Push/Geoprobe	18-0568	6222279.3	1866193.1	Perfluoroalkyl Compounds	VC-PM365-DW01-0918	WG	Ground water	19-Sep-18
		POINT_MUGU_NAS			18-0568			Perfluoroalkyl Compounds	VC-AQ-EB01-0918	WQ	Water for QC samples	18-Sep-18
		POINT_MUGU_NAS			18-0568			Perfluoroalkyl Compounds	VC-AQ-FB01-0918	WQ	Water for QC samples	18-Sep-18
		POINT_MUGU_NAS			18-0568			Perfluoroalkyl Compounds	VC-SO-EB02-0918	WQ	Water for QC samples	19-Sep-18
		POINT_MUGU_NAS			18-0568			Perfluoroalkyl Compounds	VC-SO-FB02-0918	WQ	Water for QC samples	19-Sep-18
VC-PM365-SO02	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0568	6222463.8	1866218.9	Perfluoroalkyl Compounds	VC-PM365-DW02-0918	WG	Ground water	19-Sep-18
VC-PM365-SO02	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0568	6222463.8	1866218.9	Perfluoroalkyl Compounds	VC-PM365-DW02P-0918	WG	Ground water	19-Sep-18
VC-PM365-SO03	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0568	6222439.4	1866116.9	Perfluoroalkyl Compounds	VC-PM365-DW03-0918	WG	Ground water	19-Sep-18
VC-PM553-SO01	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0568	6221698.7	1865631.5	Perfluoroalkyl Compounds	VC-PM553-DW01-0918	WG	Ground water	19-Sep-18
VC-PM553-SO01	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0568	6221698.7	1865631.5	Perfluoroalkyl Compounds	VC-PM553-DW01P-0918	WG	Ground water	19-Sep-18
VC-PM553-SO02	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0568	6221834.7	1865540.5	Perfluoroalkyl Compounds	VC-PM553-DW02-0918	WG	Ground water	19-Sep-18
VC-PM553-SO03	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0568	6222252	1865921.2	Perfluoroalkyl Compounds	VC-PM553-DW03-0918	WG	Ground water	19-Sep-18