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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 18-0609

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 18-0609

Package DP-18-0305

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 18-0609

Package DP-18-0305

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 2018.11.01 08:54:57 -04'00'

QC Chemist Approval: Digitally signed by devinec@battelle.org DN: cn=devinec@battelle.org Date: 2018.11.05 17:54:48 -05'00'

Project Manager Approval: Digitally signed by Jonathan Thorn Date: 2018.11.05 18:27:34 -05'00'

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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 18-0609

Package DP-18-0305

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3	***Tables*** Analytical Data Tables, Qualifier Definitions.	26

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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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Signature Page

Battelle 2018 (2 of 2)
Signature Page

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

Sample Summary

Client: CH2M
SDG: 18-0609
Project/Site: Naval Base Ventura County
CTO: 4164

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Receipt Date
CR986PB-FS	Procedural Blank	WATER	10/17/2018	10/17/2018
CR987LCS-FS	Laboratory Control Sample	WATER	10/17/2018	10/17/2018
J8667-FS	VC-CS12-DW01-1018	GW	10/6/2018	10/9/2018
J8668-FS	VC-CS12-DW01P-1018	GW	10/6/2018	10/9/2018
J8669-FS	VC-CS12-DW02-1018	GW	10/6/2018	10/9/2018
J8670-FS	VC-CS12-DW03-1018	GW	10/6/2018	10/9/2018
J8683-FS	VC-CS10-DW01-1018	GW	10/6/2018	10/9/2018
J8684-FS	VC-CS10-DW02-1018	GW	10/6/2018	10/9/2018
J8685-FS	VC-CS10-DW02P-1018	GW	10/6/2018	10/9/2018
J8686-FS	VC-CS10-DW03-1018	GW	10/6/2018	10/9/2018
J8687-FS	VC-CS10-DW04-1018	GW	10/6/2018	10/9/2018
J8688-FS	VC-CS18-DW01-1018	GW	10/6/2018	10/9/2018
J8714-FS	VC-FB11-10062018	AQ	10/6/2018	10/9/2018
J8715-FS	VC-EB11-10062018	AQ	10/6/2018	10/9/2018
J8716-FS	VC-CS00-DW01-1018	GW	10/6/2018	10/9/2018
J8717-FS	VC-CS00-DW02-1018	GW	10/6/2018	10/9/2018
J8718-FS	VC-CS00-DW02P-1018	GW	10/6/2018	10/9/2018
J8719-FS	VC-CS00-DW03-1018	GW	10/6/2018	10/9/2018
J8720-FS	VC-CS00-DW04-1018	GW	10/6/2018	10/9/2018
J8721-FS	VC-CS00-DW05-1018	GW	10/6/2018	10/9/2018
J8722-FS	VC-CS00-DW06-1018	GW	10/6/2018	10/9/2018

Miscellaneous Documentation

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QA/QC Summary
Batch 18-0609

Project:	CTO-4164 Naval Base Ventura County, California
Parameters:	PFAS
Laboratory:	Battelle, Norwell, MA
Matrix:	GW and AQ
Data Set:	DP-18-0305
Analytical SOP:	5-369
Method Reference:	PFAS to QSM 5.1 Table B-15

Sample Custody		
Collection Date	Receipt Date	Temp (°C)
10/6/2018	10/9/2018	0.9, 1.1, and 1.7
Corrective Actions	None.	
Sample Storage	The water samples were stored refrigerated until extraction.	
Related samples	NA	

	METHOD SUMMARIES
Sample Preparation	Water samples were spiked with surrogates in the original sample container from the field. The water was extracted using a weak ion exchange solid phase extraction (SPE) cartridge and eluted from the SPE with 0.4% NH_3 in methanol. Extracts were 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	All samples were pre-screened prior to initial extraction. Based on the concentrations detected in the pre-screening results and a discussion with the CH2M Project Chemist, the following samples used a reduced volume for extraction to avoid contamination of the laboratory and the instrument: J8667-FS (VC-CS12-DW01-1018) J8668-FS (VC-CS12-DW01P-1018) J8669-FS (VC-CS12-DW02-1018) Samples J8686-FS (VC-CS10-DW03-1018) and J8720-FS (VC-CS00-DW04-1018) had ion ratios for PFOA above 50% RPD. All samples, except the field blank and equipment blank, were centrifuged prior to extraction. Due to high levels of sedimentation present, all samples, except for J8685-FS (VC-CS10-DW02P-1018) and J8721-FS (VC-CS00-DW05-1018) were transferred to new bottles prior to extraction, the remaining sediment was archived. Samples J8685-FS (VC-CS10-DW02P-1018) and J8721-FS (VC-CS00-DW05-1018) both contained floating particulate matter. The SPE filter for J8685-FS (VC-CS10-DW02P-1018) clogged and the filter was popped in the cartridge to allow for complete extraction, the filter was left in the SPE cartridge during extraction. A small volume of sample J8683-FS (VC-CS10-DW01-1018) was spilled (1 to 2 mL) during transfer to SPE cartridge.

QA/QC Summary
Batch 18-0609

	Once concentrated to dryness, sample extracts J8717-FS (VC-CS00-DW02-1018), J8718-FS (VC-CS00-DW02P-1018), J8719-FS (VC-CS00-DW03-1018), J8721-FS (VC-CS00-DW05-1018), and J8722-FS (VC-CS00-DW06-1018) contained particulate matter. Sample was reconstituted with the particulate matter and transferred to analysis.
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	Samples analyzed on Sciex 5500 LC-MS/MS. When detected, PFHxS and PFOS contain both linear and branched isomers. In cases where 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. PFOS appears to exhibit a retention time shift because it is a branched analyte and the retention time is defined by whichever branched peak has the largest area, however, the retention time doesn't actually shift. The linear and branched peaks are picked in all cases. There are instances of extracted internal standards (surrogates) that would fall outside of the 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. The initial calibration curve used for the base and surrogate methods for the result files (quant methods) 18-0620_18-0621_18-0622 and 18-0609A are the same, the initial calibration is from result files starting with 18-0620_18-0621_18-0622.

Holding Times	Extraction Date(s)	Analysis Date(s)
	10/17/2018	10/17,25,26/2018

QA/QC Summary
Batch 18-0609

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	Two exceedances noted.
	PFOA was detected in two authentic samples, J8717-FS (VC-CS00-DW02-1018) and J8718-FS (VC-CS00-DW02P-1018), at less than 10 times the amount detected in the PB, and is B qualified in these samples. Note that the concentration of PFAS in the blank passes the criteria of ≤ ½ the LOQ at 1.09 ng/L.

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 not 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	NA
	None prepared with this batch.

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	Ten exceedances noted.
	The following extracted internal standards (EIS) were over-recovered: • J8717-FS (VC-CS00-DW02-1018): d3-MeFOSAA, d5-EtFOSAA • J8718-FS (VC-CS00-DW02P-1018): d3-MeFOSAA, d5-EtFOSAA • J8719-FS (VC-CS00-DW03-1018): 13C4-PFHpA • J8721-FS (VC-CS00-DW05-1018): 13C4-PFHpA, d3-MeFOSAA, d5-EtFOSAA, and 13C3-PFHxS • J8722-FS (VC-CS00-DW06-1018): d3-MeFOSAA A fresh aliquot of each sample extract was run to confirm the recoveries (see Unused Data Section). It is important to note that the area for each of the extracted internal standard analytes with exceedences is within +/- 50% of the area of the average of the same EIS analyte in the calibration curve, suggesting that the issue may be related to differences in ionization of the EIS as compared to the internal standard spiked prior to analysis. 13C4-PFHpA is quantified vs. 13C2-PFOA d3-MeFOSAA, d5-EtFOSAA, and 13C3-PFHxS are quantified vs. 13C4-PFOS

QA/QC Summary
Batch 18-0609

Internal Standard Analytes	Labelled analog compounds were added prior to analysis.
+/- 50% of the area of the L5 calibration point.	No exceedances noted.
	Sample extracts J8670-FS(0) and J8687-FS(0) exhibited high areas for internal standard 13C2-PFOA. Affected surrogates for these samples were reported from dilutions with acceptable internal standard areas. 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.

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

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

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

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

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Project Client: CH2M
Project Name: CTO-4164 Naval Base Ventura County, California
Project Number: 100110125-01
Preparation Batch: 18-0609
Data Set: DP-18-0305
Test Code: Master_369

QC Parameter:	Exceed:	Justification:
Procedural Blank	0	None
PB Measurement Quality Objective	2	PFOA was detected in two authentic samples at less than 10 times the amount detected in the PB, and is B qualified in these samples.
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)	10	There were ten exceedences for surrogates recovered above the upper limit in the authentic samples. Results were confirmed by re-aliquoting and reanalyzing the samples. The corresponding native compounds were not detected above the reporting limit in the affected samples.
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-18-0305
Project Number:	100110125-01	**Prep Batch Number:**	18-0609
Entered By:	Lauren Griffith	**Entered On:**	11/01/2018
Test Code (Matrix Type):	Master_369(L)		

Samples that were manually integrated are noted on the quant reports with the comment (TRUE).
LMG 11/01/18

KB79 was not used for d3-MeFOSAA for the SIS method. There is no impact on the data once this point is removed.
LMG 11/05/18

Samples J8686 and J8720 exhibited ion ratios outside of criteria for PFOA.
LMG 11/05/18

PFOS appears to exhibit a retention time shift because it is a branched analyte and the retention time is defined by whichever branched peak has the largest area. The entire branched peak is picked in all cases.
LMG 11/01/18

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 11/01/18

There are instances of extracted internal standards (surrogates) that would fall outside of the 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 11/01/18

Samples J8670-FS(0) and J8687-FS(0) exhibited high areas for internal standard 13C2-PFOA. Affected surrogates for these samples were reported from dilutions with acceptable internal standard areas. 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 11/01/18

Task Leader Approval:

SupervisorApproval:

PM Approval:



Digitally signed by Jonathan Thorn
Date: 2018.11.05 17:25:26 -05'00'

Project Client: CH2M
Project Name: CTO-4164 Naval Base Ventura County, California
Project No.: 100110125-01
Preparation Batch: 18-0609
Data Set: DP-18-0305

		CR986PB-FS (Procedural Blank)	CR987LCS-FS (Laboratory Control Sample)	J8667-FS (VC-CS12-DW01-1018)	J8668-FS (VC-CS12-DW01P-1018)	J8669-FS (VC-CS12-DW02-1018)	J8670-FS (VC-CS12-DW03-1018)
PFHxA	307-24-4	-	L	L	L	L	L
PFHpA	375-85-9	-	L	L	L	L	L
PFOA	335-67-1	-	L	L	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	L	L
PFHxS	355-46-4	-	L/Br	L/Br	L/Br	L/Br	L/Br
PFOS	1763-23-1	-	L/Br	L/Br	L/Br	L/Br	L/Br

"L" :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-

	J8683-FS (VC-CS10-DW01-1018)	J8684-FS (VC-CS10-DW02-1018)	J8685-FS (VC-CS10-DW02P-1018)	J8686-FS (VC-CS10-DW03-1018)	J8687-FS (VC-CS10-DW04-1018)	J8688-FS (VC-CS18-DW01-1018)	J8714-FS (VC-FB11-10062018)	J8715-FS (VC-EB11-10062018)
PFHxA	L	L	L	L	L	L	-	-
PFHpA	-	-	-	L	L	L	-	-
PFOA	L	L	L	L	L	L	-	-
PFNA	-	-	-	-	-	-	-	-
PFDA	-	-	-	-	-	-	-	-
PFUnA	-	-	-	-	-	-	-	-
PFDoA	-	-	-	-	-	-	-	-
PFTrDA	-	-	-	-	-	-	-	-
PFTeDA	-	-	-	-	-	-	-	-
NMeFOSAA	-	-	-	-	-	-	-	-
NEtFOSAA	-	-	-	-	-	-	-	-
PFBS	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

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-

	J8716-FS (VC-CS00-DW01-1018)	J8717-FS (VC-CS00-DW02-1018)	J8718-FS (VC-CS00-DW02P-1018)	J8719-FS (VC-CS00-DW03-1018)	J8720-FS (VC-CS00-DW04-1018)	J8721-FS (VC-CS00-DW05-1018)	J8722-FS (VC-CS00-DW06-1018)
PFHxA	L	-	-	-	L	-	L
PFHpA	L	-	-	-	L	-	L
PFOA	L	-	-	-	L	-	L
PFNA	-	-	-	-	L	-	-
PFDA	-	-	-	-	-	-	-
PFUnA	-	-	-	-	-	-	-
PFDoA	-	-	-	-	-	-	-
PFTrDA	-	-	-	-	-	-	-
PFTeDA	-	-	-	-	-	-	-
NMeFOSAA	-	-	-	-	-	-	-
NEtFOSAA	-	-	-	-	-	-	-
PFBS	L	-	-	-	L	-	L
PFHxS	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-181009-01

Battelle Project No:0110125-01

Sample Receipt Form

Approved: ☐ Authorized ☐

Project Number: 695803 **Client:** CH2M

Received by: Schumitz, Matt **Date/Time Received:** Tuesday, October 09, 2018 10:15 AM

No. of Shipping Containers: 3

SHIPMENT

Method of Delivery: Commercial Carrier **Tracking Number:** Fed Ex

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	7831 4550 2170	Custody Seals	Intact	Intact	Therm_1	0.9	14
2 of 3	Cooler	7831 4550 2180	Custody Seals	Intact	Intact	Therm_1	1.1	39
3 of 3	Cooler	7831 4550 2191	Custody Seals	Intact	Intact	Therm_1	1.7	12

Samples

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

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

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

Temperature upon receipt (°C): 1.7 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:** J8658 - J8722

Samples logged in by: Schumitz, Matt **Date/Time:** 10/09/2018 10:15 AM

Approved By: **Approved On:**

Authorized By: **Authorized On:**

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ShpNo SHP-181009-01

Battelle Project No:)110125-01

Sample Receipt Form Details

Approved: ☐ Authorized ☐

Project Number: 695803 **Client:** CH2M

Received by: Schumitz, Matt **Date/Time Received:** Tuesday, October 09, 2018 10:15 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:
J8658	VC-CS12-SS01-000H	10/06/18 8:25	10/09/18 14:33	1	SS	1.7	NA	NA	NA	R0119 (NA)			
J8659	VC-CS12-SB01-0102	10/06/18 8:26	10/09/18 14:33	1	SB	1.7	NA	NA	NA	R0119 (NA)			
J8660	VC-CS12-SB01-0506	10/06/18 8:34	10/09/18 14:34	1	SB	1.7	NA	NA	NA	R0119 (NA)			
J8661	VC-CS12-SS02-000H	10/06/18 11:07	10/09/18 14:34	1	SS	1.7	NA	NA	NA	R0119 (NA)			
J8662	VC-CS12-SB02-0102	10/06/18 11:09	10/09/18 14:34	1	SB	1.7	NA	NA	NA	R0119 (NA)			
J8663	VC-CS12-SB02-0506	10/06/18 11:13	10/09/18 14:35	1	SB	1.7	NA	NA	NA	R0119 (NA)			
J8664	VC-CS12-SS03-000H	10/06/18 10:06	10/09/18 14:35	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8665	VC-CS12-SB03-0102	10/06/18 10:07	10/09/18 14:35	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8666	VC-CS12-SB03-0506	10/06/18 10:12	10/09/18 14:36	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8667	VC-CS12-DW01-1018	10/06/18 8:44	10/09/18 14:36	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8668	VC-CS12-DW01P-1018	10/06/18 8:48	10/09/18 14:37	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8669	VC-CS12-DW02-1018	10/06/18 11:22	10/09/18 14:37	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8670	VC-CS12-DW03-1018	10/06/18 10:30	10/09/18 14:38	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8671	VC-CS10-SS01-000H	10/06/18 13:02	10/09/18 14:39	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8672	VC-CS10-SB01-0102	10/06/18 13:04	10/09/18 14:40	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8673	VC-CS10-SB01-0506	10/06/18 13:10	10/09/18 14:41	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8674	VC-CS10-SS02-000H	10/06/18 9:55	10/09/18 14:41	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8675	VC-CS10-SB02-0102	10/06/18 9:58	10/09/18 14:41	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8676	VC-CS10-SB02-0506	10/06/18 10:06	10/09/18 14:42	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8677	VC-CS10-SS03-000H	10/06/18 11:31	10/09/18 14:43	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8678	VC-CS10-SB03-0102	10/06/18 11:33	10/09/18 14:43	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8679	VC-CS10-SB03-0506	10/06/18 11:37	10/09/18 14:43	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8680	VC-CS10-SS04-000H	10/06/18 10:35	10/09/18 14:43	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8681	VC-CS10-SB04-0102	10/06/18 10:38	10/09/18 14:44	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8682	VC-CS10-SB04-0506	10/06/18 10:41	10/09/18 14:44	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8683	VC-CS10-DW01-1018	10/06/18 13:38	10/09/18 14:45	2	GW	1.7	NA	NA	NA	R0119 (NA)			
J8684	VC-CS10-DW02-1018	10/06/18 10:30	10/09/18 14:46	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8685	VC-CS10-DW02P-1018	10/06/18 10:40	10/09/18 14:46	2	GW	0.9	NA	NA	NA	R0119 (NA)			

BATTELLE
It can be done

ShpNo SHP-181009-01

Battelle Project No:)110125-01

Sample Receipt Form Details

Approved: ☐ Authorized ☐

Project Number: 695803 **Client:** CH2M

Received by: Schumitz, Matt **Date/Time Received:** Tuesday, October 09, 2018 10:15 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:
J8686	VC-CS10-DW03-1018	10/06/18 12:07	10/09/18 14:46	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8687	VC-CS10-DW04-1018	10/06/18 10:55	10/09/18 14:46	2	GW	1.7	NA	NA	NA	R0119 (NA)			
J8688	VC-CS18-DW01-1018	10/06/18 15:18	10/09/18 14:47	2	GW	1.7	NA	NA	NA	R0119 (NA)			
J8689	VC-CS10-SD01-000H	10/06/18 13:28	10/09/18 14:48	1	SD	0.9	NA	NA	NA	R0119 (NA)			
J8690	VC-CS10-SD01-0102	10/06/18 13:30	10/09/18 14:48	1	SD	0.9	NA	NA	NA	R0119 (NA)			
J8691	VC-CS18-SS01-000H	10/06/18 13:52	10/09/18 14:49	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8692	VC-CS18-SB01-0102	10/06/18 13:54	10/09/18 14:49	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8693	VC-CS18-SB01-0506	10/06/18 14:00	10/09/18 14:50	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8694	VC-CS00-SS01-000H	10/06/18 14:05	10/09/18 14:52	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8695	VC-CS00-SB01-0102	10/06/18 14:07	10/09/18 14:53	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8696	VC-CS00-SB01-0506	10/06/18 14:10	10/09/18 14:58	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8697	VC-CS00-SS02-000H	10/06/18 15:22	10/09/18 14:59	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8698	VC-CS00-SB02-0102	10/06/18 15:23	10/09/18 14:59	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8699	VC-CS00-SB02-0506	10/06/18 15:27	10/09/18 15:00	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8700	VC-CS00-SS03-000H	10/06/18 16:15	10/09/18 15:00	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8701	VC-CS00-SB03-0102	10/06/18 16:18	10/09/18 15:06	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8702	VC-CS00-SB03-0506	10/06/18 16:25	10/09/18 15:07	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8703	VC-CS00-SS04-000H	10/06/18 13:13	10/09/18 15:07	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8704	VC-CS00-SB04-0102	10/06/18 13:15	10/09/18 15:07	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8705	VC-CS00-SB04-0506	10/06/18 13:20	10/09/18 15:07	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8706	VC-CS00-SS05-000H	10/06/18 17:17	10/09/18 15:08	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8707	VC-CS00-SB05-0102	10/06/18 17:19	10/09/18 15:09	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8708	VC-CS00-SB05-0506	10/06/18 17:24	10/09/18 15:09	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8709	VC-CS00-SS06-000H	10/06/18 17:05	10/09/18 15:09	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8710	VC-CS00-SB06-0102	10/06/18 17:07	10/09/18 15:10	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8711	VC-CS00-SB06-0506	10/06/18 17:10	10/09/18 15:10	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8712	VC-CS00-SB06-0506-MS	10/06/18 17:10	10/09/18 15:10	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8713	VC-CS00-SB06-0506-MSD	10/06/18 17:10	10/09/18 15:11	1	SB	1.1	NA	NA	NA	R0119 (NA)			

BATTELLE
It can be done

ShpNo SHP-181009-01

Battelle Project No:)110125-01

Sample Receipt Form Details

Approved: ☐ Authorized ☐

Project Number: 695803 **Client:** CH2M

Received by: Schumitz, Matt **Date/Time Received:** Tuesday, October 09, 2018 10:15 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:
J8714	VC-FB11-10062018	10/06/18 18:34	10/09/18 15:11	2	AQ	0.9	NA	NA	NA	R0119 (NA)			
J8715	VC-EB11-10062018	10/06/18 18:36	10/09/18 15:11	2	AQ	0.9	NA	NA	NA	R0119 (NA)			
J8716	VC-CS00-DW01-1018	10/06/18 14:32	10/09/18 15:12	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8717	VC-CS00-DW02-1018	10/06/18 16:25	10/09/18 15:12	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8718	VC-CS00-DW02P-1018	10/06/18 16:27	10/09/18 15:14	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8719	VC-CS00-DW03-1018	10/06/18 17:05	10/09/18 15:14	2	GW	1.1	NA	NA	NA	R0119 (NA)			
J8720	VC-CS00-DW04-1018	10/06/18 13:30	10/09/18 15:15	2	GW	1.7	NA	NA	NA	R0119 (NA)			
J8721	VC-CS00-DW05-1018	10/06/18 18:02	10/09/18 15:15	2	GW	1.7	NA	NA	NA	R0119 (NA)			
J8722	VC-CS00-DW06-1018	10/06/18 17:40	10/09/18 15:15	2	GW	1.7	NA	NA	NA	R0119 (NA)			

Total Samples: 65

BATTELLE It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: PM CS12	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): V. Kilbert Phone: 724.977-3628 Email: Victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 06
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 1 of 8

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod	
VC-CS12-SS01-000H	10/6/18	0825	Grab	SS	1	X	J8658
VC-CS12-SB01-0102	10/6/18	0826	Grab	SB	1	X	59
VC-CS12-SB01-0506	10/6/18	0834	Grab	SB	1	X	60
VC-CS12-SS02-000H	10/6/18	1107	Grab	SS	1	X	61
VC-CS12-SB02-0102	10/6/18	1109	Grab	SB	1	X	62
VC-CS12-SB02-0506	10/6/18	1113	Grab	SB	1	X	63
VC-CS12-SS03-000H	10/6/18	1006	Grab	SS	1	X	64
VC-CS12-SB03-0102	10/6/18	1007	Grab	SB	1	X	65
VC-CS12-SB03-0506	10/6/18	1012	Grab	SB	1	X	J8666
~~VC-CS12-SB03-~~			Grab	SB	1	X	
~~VC-CS12-S-MS~~			Grab			X	
~~VC-CS12-S-SD~~			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:
V. Kilbert	Jacobs	10/8/18 0800		Battelle	10-9-18 1015
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 CS12	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): V. Kilbert Phone: 724-977-3628 Email: Victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 06
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 2 of 8

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod	
VC-CS12-DW01-1018	10/6/18	0844	Grab	GW	2	X	J8667
VC-CS12-DW01P-1018	10/6/18	0848	Grab	GW	2	X	J8668
VC-CS12-DW02-1018	10/6/18	1122	Grab	GW	2	X	J8669
VC-CS12-DW03-1018	10/6/18	1030	Grab	GW	2	X	J8670
~~FDT-AQ-FB-~~			~~Grab~~	~~AQ~~		~~X~~	
~~FDT-AQ-EB-~~			~~Grab~~	~~AQ~~		~~X~~	

VH

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:
V. Kilbert	Jacobs	10/8/18 0800		Battelle	10-9-18 1015
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 CS10 ~~CS15~~	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): J. Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC #: 06
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page#: 3 of 8

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod	
VC-CS10-SS01-000H	10/6/18	1802	Grab	SS	1	X	J8671
VC-CS10-SB01-0102	10/6/18	1304	Grab	SB	1	X	72
VC-CS10-SB01-0506	10/6/18	1310	Grab	SB	1	X	73
VC-CS10-SS02-000H	10/6/18	0955	Grab	SS	1	X	74
VC-CS10-SB02-0102	10/6/18	0958	Grab	SB	1	X	75
VC-CS10-SB02-0506	10/6/18	1006	Grab	SB	1	X	76
VC-CS10-SS03-000H	10/6/18	1131	Grab	SS	1	X	77
VC-CS10-SB03-0102	10/6/18	1133	Grab	SB	1	X	78
VC-CS10-SB03-0506	10/6/18	1137	Grab	SB	1	X	79
VC-CS10-SS04-000H	10/6/18	1035	Grab	SS	1	X	80
VC-CS10-SB04-0102	10/6/18	1038	Grab	SB	1	X	81
VC-CS10-SB04-0506	10/6/18	1041	Grab	SB	1	X	J8682

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
V. Kilbert	Jacobs	10/8/18 0800		Battelle	10-9-18 1015
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 CS10 & CS18	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): V. Kilbert Phone: (724) 977.3628 Email: Victoria.Kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 06
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 4 of 8

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod	
VC-CS10-DW01-1018	10/6/18	1338	Grab	GW	2	X	J8683
VC-CS10-DW02-1018	10/6/18	1030	Grab	GW	2	X	J8684
VC-CS10-DW02P-1018	10/6/18	1040	Grab	GW	2	X	J8685
VC-CS10-DW03-1018	10/6/18	1207	Grab	GW	2	X	J8686
VC-CS10-DW04-1018	10/6/18	1055	Grab	GW	2	X	J8687
~~FDT-AQ-FB~~			~~Grab~~	~~AQ~~		X	
~~FDT-AQ-EB~~			~~Grab~~	~~AQ~~		X	
VC-CS18-DW01-1018	10/6/18	1518	Grab	GW	2	X	J8688

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:
V. Kilbert	Jacobs	10/8/18 0808		Battelle	10-9-18 1015
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:	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): V. Kilbert Phone: (724) 977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	PM CS10 & CS18	COC # 06
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST		Page# 5 of 8

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	Preservative: NA	Analysis: PFAS by Method 537 Mod	
VC-CS10-SD01-000H	10/6/18	1328	Grab	SD	1		X	J8689
VC-CS10-SD01-0102	10/6/18	1330	Grab	SD	1		X	J8690
~~VC-CS10-S-MS~~			~~Grab~~				~~X~~	
~~VC-CS10-S-SD~~			~~Grab~~				~~X~~	
~~FDT-SO-EB~~			~~Grab~~	~~AQ~~			~~X~~	
~~FDT-SO-EB~~			~~Grab~~	~~AQ~~			~~X~~	
VC-CS18-SS01-000H	10/6/18	1352	Grab	SS	1		X	J8691
VC-CS18-SB01-0102	10/6/18	1354	Grab	SB	1		X	J8692
VC-CS18-SB01-0506	10/6/18	1400	Grab	SB	1		X	J8693

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:
Victoria Kilbert	Jacobs	10/8/18 0800		Battelle	10-9-18 1015
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 CS00	Site Information:
Tiffany Hill 1100 NE Circle Blvd. Suite 300 Corvallis, OR 97330	Sampler Information (print name): V Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC #: 06
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page#: 6 of 8

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod	
VC-CS00-SS01-000H	10/6/18	1405	Grab	SS	1	X	J8694
VC-CS00-SB01-0102	10/6/18	1407	Grab	SB	1	X	95
VC-CS00-SB01-0506	10/6/18	1410	Grab	SB	1	X	96
VC-CS00-SS02-000H	10/6/18	1522	Grab	SS	1	X	97
VC-CS00-SB02-0102	10/6/18	1523	Grab	SB	1	X	98
VC-CS00-SB02-0506	10/6/18	1527	Grab	SB	1	X	99
VC-CS00-SS03-000H	10/6/18	1615	Grab	SS	1	X	J8700
VC-CS00-SB03-0102	10/6/18	1618	Grab	SB	1	X	01
VC-CS00-SB03-0506	10/6/18	1625	Grab	SB	1	X	02
VC-CS00-SS04-000H	10/6/18	1313	Grab	SS	1	X	03
VC-CS00-SB04-0102	10/6/18	1315	Grab	SB	1	X	04
VC-CS00-SB04-0506	10/6/18	1320	Grab	SB	1	X	J8705

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
V. Kilbert	Jacobs	10/8/18 0800		Battelle	10-9-18 1015
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 CS00	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): V. Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC #: 06
Project Name: NBVC Basewide SI Project No.: 695803	Normal ☒ Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page#: 7 of 8

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.		
VC-CS00-SS05-000H	10/6/18	1717	Grab	SS	1	X	J8706
VC-CS00-SB05-0102	10/6/18	1719	Grab	SB	1	X	07
VC-CS00-SB05-0506	10/6/18	1724	Grab	SB	1	X	08
VC-CS00-SS06-000H	10/6/18	1705	Grab	SS	1	X	09
VC-CS00-SB06-0102	10/6/18	1707	Grab	SB	1	X	10
VC-CS00-SB06-0506	10/6/18	1710	Grab	SB	1	X	11
VC-~~CS94-S~~ CS00-SB06-0506-MS	10/6/18	1710	Grab	SB	1	X	MS 12
VC-~~CS94-S~~ CS00-SB06-0506-MSD	10/6/18	1710	Grab	SB	1	X	MSD 13
VC-~~FDT~~SO-FB11-10062018	10/6/18	1834	Grab	AQ	2	X	14
VC-~~FDT~~SO-EB11-10062018	10/6/18	1836	Grab	AQ	2	X	on bowl J8715
							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:
V. Kilbert	Jacobs	10/8/18 0850		Battelle	10-9-18 1015
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 CS00	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): V. Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC #: 06
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page#: 8 of 8

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod	
VC-CS00-DW01-1018	10/6/18	1432	Grab	GW	2	X	J8716
VC-CS00-DW02-1018	10/6/18	1625	Grab	GW	2	X	J8717
VC-CS00-DW02P-1018	10/6/18	1627	Grab	GW	2	X	J8718
VC-CS00-DW03-1018	10/6/18	1705	Grab	GW	2	X	(1) ~~J78~~ J8719
VC-CS00-DW04-1018	10/6/18	1330	Grab	GW	2	X	J8720
VC-CS00-DW05-1018	10/6/18	1802	Grab	GW	2	X	J8721
VC-CS00-DW06-1018	10/6/18	1740	Grab	GW	2	X	J8722
~~FDT-AQ-FB~~			Grab	AQ		X	
~~FDT-AQ-EB~~			Grab	AQ		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:
V. Kilbert	Jacobs	10/8/18 0800		Battelle	10-9-18 1015
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:

(1) MDS Wrong Number 10-9-18



RA (724) 977-3628
BERT
Y STE 1450
92101
US

SHIP DATE: 08OCT18
ACTWGT: 53.90 LB
CAD: 6997666/SSF01922
DIMS: 26x13x14 IN
BILL THIRD PARTY

AN THORN
LE
IGWATER DR. STE 202
LL MA 02061
REF:
DEPT:

0.9° TB
10-9-18 Therm
10:15

FedI
Exp
E
REL#
37853

f 3
4550 2170
##
XPUA
TUE – 09 OCT 10:
PRIORITY OVERNIG
020
MA–US B

RT 246 1 10:30 B

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

SHIP DATE: 08OCT18
ACTWGT: 66.50 LB
CAD: 6997666/SSF01922
DIMS: 26x14x14 IN
BILL THIRD PARTY

TO JONATHAN THORN
BATTELLE
141 LONGWATER DR. STE 202
NORWELL MA 02061
(781) 681-5565
INV:
PO:
REF:
DEPT:

1.1°
10-9-18
10:15
TB
Therm
1

FedEx
Express
E
REL#
3785346

2 of 3
MPS# 0263 7831 4550 2180
Mstr# 7831 4550 2170
0201
NB XPUA
TUE – 09 OCT 10:30A
PRIORITY OVERNIGHT
02061
MA–US BOS

RT 246 1 10:30 B
ST 4.3
2180
10.09

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

SHIP DATE: 08OCT1
ACTWGT: 51.60 LB
CAD: 6997666/SSFO
DIMS: 23x15x16 IN
BILL THIRD PARTY

TO JONATHAN THORN
BATTELLE
141 LONGWATER DR. STE 202
NORWELL MA 02061
(781) 681-5565
INV:
PO:
REF:
DEPT:

1.7°
10-9-18 T
10:15

Fed
E
REL#
37853

3 of 3
MPS# 0263 7831 4550 2191
Mstr# 7831 4550 2170
0201
NB XPUA
TUE – 09 OCT 10:
PRIORITY OVERNIG
020
MA–US BO

RT 246 1 10:30 B
ST 4.3
2191
10.09

Data Tables

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

Client ID		VC-CS12-DW01-1018				
Battelle ID		J8667-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/25/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.030				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	1207.13	D	15.83	41.67	416.67
PFHpA	375-85-9	355.01		1.33	4.17	41.67
PFOA	335-67-1	1297.19	D	15.00	41.67	416.67
PFNA	375-95-1	8.79	J	2.17	8.33	41.67
PFDA	335-76-2	1.38	J	1.33	4.17	41.67
PFUnA	2058-94-8	8.33	U	2.42	8.33	41.67
PFDoA	307-55-1	4.17	U	1.50	4.17	41.67
PFTrDA	72629-94-8	4.17	U	1.25	4.17	41.67
PFTeDA	376-06-7	8.33	U	2.08	8.33	41.67
NMeFOSAA	2355-31-9	16.67	U	4.67	16.67	41.67
NEtFOSAA	2991-50-6	8.33	U	4.08	8.33	41.67
PFBS	375-73-5	248.43		1.08	4.17	41.67
PFHxS	355-46-4	2909.86	D	45.83	166.67	2083.33
PFOS	1763-23-1	4058.91	D	79.17	208.33	2083.33
Surrogate Recoveries (%)						
13C5-PFHxA		109	D			
13C4-PFHpA		116				
13C8-PFOA		103	D			
13C9-PFNA		73				
13C6-PFDA		97				
13C7-PFUnA		101				
13C2-PFDoA		107				
13C2-PFTeDA		115				
d3-MeFOSAA		123				
d5-EtFOSAA		119				
13C3-PFBS		109	D			
13C3-PFHxS		102	D			
13C8-PFOS		99	D			

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

Client ID		VC-CS12-DW01P-1018				
Battelle ID		J8668-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/25/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.031				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	1332.07	D	15.32	40.32	403.23
PFHpA	375-85-9	325.87		1.29	4.03	40.32
PFOA	335-67-1	1237.97	D	14.52	40.32	403.23
PFNA	375-95-1	7.60	J	2.10	8.06	40.32
PFDA	335-76-2	4.03	U	1.29	4.03	40.32
PFUnA	2058-94-8	8.06	U	2.34	8.06	40.32
PFDoA	307-55-1	4.03	U	1.45	4.03	40.32
PFTrDA	72629-94-8	4.03	U	1.21	4.03	40.32
PFTeDA	376-06-7	8.06	U	2.02	8.06	40.32
NMeFOSAA	2355-31-9	16.13	U	4.52	16.13	40.32
NEtFOSAA	2991-50-6	8.06	U	3.95	8.06	40.32
PFBS	375-73-5	234.26		1.05	4.03	40.32
PFHxS	355-46-4	3125.32	D	8.87	32.26	403.23
PFOS	1763-23-1	4955.55	D	15.32	40.32	403.23
Surrogate Recoveries (%)						
13C5-PFHxA		118	D			
13C4-PFHpA		130				
13C8-PFOA		113	D			
13C9-PFNA		81				
13C6-PFDA		98				
13C7-PFUnA		105				
13C2-PFDoA		111				
13C2-PFTeDA		114				
d3-MeFOSAA		141				
d5-EtFOSAA		129				
13C3-PFBS		143	D			
13C3-PFHxS		113	D			
13C8-PFOS		113	D			

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

Client ID		VC-CS12-DW02-1018				
Battelle ID		J8669-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/25/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.031				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	626.41	D	15.32	40.32	403.23
PFHpA	375-85-9	185.73		1.29	4.03	40.32
PFOA	335-67-1	2039.45	D	14.52	40.32	403.23
PFNA	375-95-1	8.06	U	2.10	8.06	40.32
PFDA	335-76-2	4.03	U	1.29	4.03	40.32
PFUnA	2058-94-8	8.06	U	2.34	8.06	40.32
PFDoA	307-55-1	4.03	U	1.45	4.03	40.32
PFTrDA	72629-94-8	4.03	U	1.21	4.03	40.32
PFTeDA	376-06-7	8.06	U	2.02	8.06	40.32
NMeFOSAA	2355-31-9	16.13	U	4.52	16.13	40.32
NEtFOSAA	2991-50-6	8.06	U	3.95	8.06	40.32
PFBS	375-73-5	50.40		1.05	4.03	40.32
PFHxS	355-46-4	617.31	D	8.87	32.26	403.23
PFOS	1763-23-1	2923.23	D	15.32	40.32	403.23
Surrogate Recoveries (%)						
13C5-PFHxA		113	D			
13C4-PFHpA		120				
13C8-PFOA		116	D			
13C9-PFNA		77				
13C6-PFDA		103				
13C7-PFUnA		120				
13C2-PFDoA		119				
13C2-PFTeDA		119				
d3-MeFOSAA		146				
d5-EtFOSAA		120				
13C3-PFBS		113	D			
13C3-PFHxS		134	D			
13C8-PFOS		114	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-CS12-DW03-1018				
Battelle ID		J8670-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/25/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.240				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	462.97	D	1.98	5.21	52.08
PFHpA	375-85-9	150.85	D	1.67	5.21	52.08
PFOA	335-67-1	1113.87	D	4.69	13.02	130.21
PFNA	375-95-1	1.31	J	0.27	1.04	5.21
PFDA	335-76-2	0.52	U	0.17	0.52	5.21
PFUnA	2058-94-8	1.04	U	0.30	1.04	5.21
PFDoA	307-55-1	0.52	U	0.19	0.52	5.21
PFTrDA	72629-94-8	0.52	U	0.16	0.52	5.21
PFTeDA	376-06-7	1.04	U	0.26	1.04	5.21
NMeFOSAA	2355-31-9	2.08	U	0.58	2.08	5.21
NEtFOSAA	2991-50-6	1.04	U	0.51	1.04	5.21
PFBS	375-73-5	78.18		0.14	0.52	5.21
PFHxS	355-46-4	827.76	D	2.86	10.42	130.21
PFOS	1763-23-1	233.85	D	1.98	5.21	52.08
Surrogate Recoveries (%)						
13C5-PFHxA		116	D			
13C4-PFHpA		122	D			
13C8-PFOA		93	D			
13C9-PFNA		86	D			
13C6-PFDA		102				
13C7-PFUnA		113				
13C2-PFDoA		102				
13C2-PFTeDA		83				
d3-MeFOSAA		110	D			
d5-EtFOSAA		110	D			
13C3-PFBS		127				
13C3-PFHxS		99	D			
13C8-PFOS		113	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-CS10-DW01-1018				
Battelle ID		J8683-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/25/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.295				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	4.41		0.16	0.42	4.24
PFHpA	375-85-9	1.29	J	0.14	0.42	4.24
PFOA	335-67-1	75.01	D	0.76	2.12	21.19
PFNA	375-95-1	0.85	U	0.22	0.85	4.24
PFDA	335-76-2	0.42	U	0.14	0.42	4.24
PFUnA	2058-94-8	0.85	U	0.25	0.85	4.24
PFDoA	307-55-1	0.42	U	0.15	0.42	4.24
PFTrDA	72629-94-8	0.42	U	0.13	0.42	4.24
PFTeDA	376-06-7	0.85	U	0.21	0.85	4.24
NMeFOSAA	2355-31-9	1.69	U	0.47	1.69	4.24
NEtFOSAA	2991-50-6	0.85	U	0.42	0.85	4.24
PFBS	375-73-5	6.75		0.11	0.42	4.24
PFHxS	355-46-4	13.22		0.09	0.34	4.24
PFOS	1763-23-1	12.95		0.16	0.42	4.24

Surrogate Recoveries (%)

13C5-PFHxA	129	
13C4-PFHpA	137	
13C8-PFOA	111	D
13C9-PFNA	85	
13C6-PFDA	110	
13C7-PFUnA	120	
13C2-PFDoA	119	
13C2-PFTeDA	101	
d3-MeFOSAA	136	D
d5-EtFOSAA	147	
13C3-PFBS	144	
13C3-PFHxS	127	
13C8-PFOS	96	

BATTELLE
It can be done

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

Client ID		VC-CS10-DW02-1018			
Battelle ID		J8684-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/25/2018			
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	9.25	0.18	0.46	4.63
PFHpA	375-85-9	2.22 J	0.15	0.46	4.63
PFOA	335-67-1	30.04	0.17	0.46	4.63
PFNA	375-95-1	0.52 J	0.24	0.93	4.63
PFDA	335-76-2	0.35 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	5.68	0.12	0.46	4.63
PFHxS	355-46-4	20.52	0.10	0.37	4.63
PFOS	1763-23-1	33.60	0.18	0.46	4.63

Surrogate Recoveries (%)

13C5-PFHxA	126
13C4-PFHpA	142
13C8-PFOA	93
13C9-PFNA	79
13C6-PFDA	96
13C7-PFUnA	108
13C2-PFDoA	98
13C2-PFTeDA	94
d3-MeFOSAA	121 D
d5-EtFOSAA	118 D
13C3-PFBS	140 D
13C3-PFHxS	143
13C8-PFOS	117

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

Client ID		VC-CS10-DW02P-1018				
Battelle ID		J8685-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/25/2018				
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	5.60		0.17	0.45	4.55
PFHpA	375-85-9	1.77	J	0.15	0.45	4.55
PFOA	335-67-1	29.52		0.16	0.45	4.55
PFNA	375-95-1	0.91	U	0.24	0.91	4.55
PFDA	335-76-2	0.45	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	4.45	J	0.12	0.45	4.55
PFHxS	355-46-4	13.98		0.10	0.36	4.55
PFOS	1763-23-1	6.54		0.17	0.45	4.55

Surrogate Recoveries (%)

13C5-PFHxA	136
13C4-PFHpA	143
13C8-PFOA	105
13C9-PFNA	84
13C6-PFDA	100
13C7-PFUnA	103
13C2-PFDoA	103
13C2-PFTeDA	104
d3-MeFOSAA	126
d5-EtFOSAA	140
13C3-PFBS	148
13C3-PFHxS	141
13C8-PFOS	112

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

Client ID		VC-CS10-DW03-1018				
Battelle ID		J8686-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/25/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.265				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	21.25		0.18	0.47	4.72
PFHpA	375-85-9	7.86		0.15	0.47	4.72
PFOA	335-67-1	316.23	D	1.70	4.72	47.17
PFNA	375-95-1	0.28	J	0.25	0.94	4.72
PFDA	335-76-2	0.17	J	0.15	0.47	4.72
PFUnA	2058-94-8	0.94	U	0.27	0.94	4.72
PFDoA	307-55-1	0.47	U	0.17	0.47	4.72
PFTrDA	72629-94-8	0.47	U	0.14	0.47	4.72
PFTeDA	376-06-7	0.94	U	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	8.46		0.12	0.47	4.72
PFHxS	355-46-4	33.00		0.10	0.38	4.72
PFOS	1763-23-1	17.45		0.18	0.47	4.72

Surrogate Recoveries (%)

13C5-PFHxA	119	
13C4-PFHpA	120	
13C8-PFOA	105	D
13C9-PFNA	73	
13C6-PFDA	103	
13C7-PFUnA	124	
13C2-PFDoA	115	
13C2-PFTeDA	90	
d3-MeFOSAA	125	D
d5-EtFOSAA	123	D
13C3-PFBS	148	
13C3-PFHxS	139	
13C8-PFOS	120	

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

Client ID		VC-CS10-DW04-1018				
Battelle ID		J8687-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/25/2018				
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	38.45		0.18	0.46	4.63
PFHpA	375-85-9	13.69		0.15	0.46	4.63
PFOA	335-67-1	1996.27	D	20.83	57.87	578.70
PFNA	375-95-1	1.57	J	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	0.46	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	3.84	J	0.12	0.46	4.63
PFHxS	355-46-4	15.07		0.10	0.37	4.63
PFOS	1763-23-1	4.88		0.18	0.46	4.63

Surrogate Recoveries (%)

13C5-PFHxA	110	D
13C4-PFHpA	109	D
13C8-PFOA	105	D
13C9-PFNA	91	D
13C6-PFDA	104	
13C7-PFUnA	116	
13C2-PFDoA	107	
13C2-PFTeDA	63	
d3-MeFOSAA	115	
d5-EtFOSAA	117	
13C3-PFBS	124	
13C3-PFHxS	112	
13C8-PFOS	92	

BATTELLE
It can be done

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

Client ID		VC-CS18-DW01-1018				
Battelle ID		J8688-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
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	53.22		0.17	0.45	4.55
PFHpA	375-85-9	27.73		0.15	0.45	4.55
PFOA	335-67-1	106.43	D	0.82	2.27	22.73
PFNA	375-95-1	0.52	J	0.24	0.91	4.55
PFDA	335-76-2	0.45	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	8.12		0.12	0.45	4.55
PFHxS	355-46-4	138.81	D	0.50	1.82	22.73
PFOS	1763-23-1	32.25		0.17	0.45	4.55

Surrogate Recoveries (%)

13C5-PFHxA	125	D
13C4-PFHpA	132	D
13C8-PFOA	100	D
13C9-PFNA	127	
13C6-PFDA	103	
13C7-PFUnA	136	D
13C2-PFDoA	137	D
13C2-PFTeDA	149	D
d3-MeFOSAA	130	D
d5-EtFOSAA	141	
13C3-PFBS	144	D
13C3-PFHxS	101	D
13C8-PFOS	107	

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

Client ID		VC-FB11-10062018				
Battelle ID		J8714-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		AQ				
Sample Size		0.295				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	0.42	U	0.16	0.42	4.24
PFHpA	375-85-9	0.42	U	0.14	0.42	4.24
PFOA	335-67-1	1.31	J	0.15	0.42	4.24
PFNA	375-95-1	0.85	U	0.22	0.85	4.24
PFDA	335-76-2	0.42	U	0.14	0.42	4.24
PFUnA	2058-94-8	0.85	U	0.25	0.85	4.24
PFDoA	307-55-1	0.42	U	0.15	0.42	4.24
PFTrDA	72629-94-8	0.42	U	0.13	0.42	4.24
PFTeDA	376-06-7	0.85	U	0.21	0.85	4.24
NMeFOSAA	2355-31-9	1.69	U	0.47	1.69	4.24
NEtFOSAA	2991-50-6	0.85	U	0.42	0.85	4.24
PFBS	375-73-5	0.42	U	0.11	0.42	4.24
PFHxS	355-46-4	0.33	J	0.09	0.34	4.24
PFOS	1763-23-1	0.42	U	0.16	0.42	4.24

Surrogate Recoveries (%)

13C5-PFHxA	129
13C4-PFHpA	125
13C8-PFOA	119
13C9-PFNA	108
13C6-PFDA	115
13C7-PFUnA	131
13C2-PFDoA	123
13C2-PFTeDA	130
d3-MeFOSAA	147
d5-EtFOSAA	146
13C3-PFBS	142
13C3-PFHxS	122
13C8-PFOS	129

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

Client ID		VC-EB11-10062018				
Battelle ID		J8715-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		AQ				
Sample Size		0.275				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	0.23	J	0.17	0.45	4.55
PFHpA	375-85-9	0.45	U	0.15	0.45	4.55
PFOA	335-67-1	1.09	J	0.16	0.45	4.55
PFNA	375-95-1	0.91	U	0.24	0.91	4.55
PFDA	335-76-2	0.45	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	0.45	U	0.12	0.45	4.55
PFHxS	355-46-4	0.36	U	0.10	0.36	4.55
PFOS	1763-23-1	0.45	U	0.17	0.45	4.55

Surrogate Recoveries (%)

13C5-PFHxA	109
13C4-PFHpA	103
13C8-PFOA	107
13C9-PFNA	95
13C6-PFDA	121
13C7-PFUnA	129
13C2-PFDoA	130
13C2-PFTeDA	135
d3-MeFOSAA	132
d5-EtFOSAA	129
13C3-PFBS	126
13C3-PFHxS	106
13C8-PFOS	110

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

Client ID		VC-CS00-DW01-1018				
Battelle ID		J8716-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.290				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	26.05		0.16	0.43	4.31
PFHpA	375-85-9	7.83		0.14	0.43	4.31
PFOA	335-67-1	21.89		0.16	0.43	4.31
PFNA	375-95-1	3.06	J	0.22	0.86	4.31
PFDA	335-76-2	1.23	J	0.14	0.43	4.31
PFUnA	2058-94-8	0.46	J	0.25	0.86	4.31
PFDoA	307-55-1	0.43	U	0.16	0.43	4.31
PFTrDA	72629-94-8	0.43	U	0.13	0.43	4.31
PFTeDA	376-06-7	0.86	U	0.22	0.86	4.31
NMeFOSAA	2355-31-9	1.72	U	0.48	1.72	4.31
NEtFOSAA	2991-50-6	0.86	U	0.42	0.86	4.31
PFBS	375-73-5	9.30		0.11	0.43	4.31
PFHxS	355-46-4	113.80	D	0.95	3.45	43.10
PFOS	1763-23-1	868.44	D	8.19	21.55	215.52

Surrogate Recoveries (%)

13C5-PFHxA	92	D
13C4-PFHpA	148	
13C8-PFOA	104	
13C9-PFNA	69	
13C6-PFDA	95	
13C7-PFUnA	112	
13C2-PFDoA	112	
13C2-PFTeDA	120	
d3-MeFOSAA	126	D
d5-EtFOSAA	110	D
13C3-PFBS	106	D
13C3-PFHxS	124	D
13C8-PFOS	102	D

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

Client ID		VC-CS00-DW02-1018			
Battelle ID		J8717-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/26/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		GW			
Sample Size		0.265			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	4.57 J	0.18	0.47	4.72
PFHpA	375-85-9	1.03 J	0.15	0.47	4.72
PFOA	335-67-1	6.98 B	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	0.47 U	0.17	0.47	4.72
PFTrDA	72629-94-8	0.47 U	0.14	0.47	4.72
PFTeDA	376-06-7	0.94 U	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	1.29 J	0.12	0.47	4.72
PFHxS	355-46-4	9.65	0.10	0.38	4.72
PFOS	1763-23-1	67.95	0.18	0.47	4.72

Surrogate Recoveries (%)

13C5-PFHxA	127
13C4-PFHpA	143
13C8-PFOA	113
13C9-PFNA	100
13C6-PFDA	108
13C7-PFUnA	129
13C2-PFDoA	116
13C2-PFTeDA	100
d3-MeFOSAA	166 N
d5-EtFOSAA	187 N
13C3-PFBS	96
13C3-PFHxS	140
13C8-PFOS	105

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

Client ID		VC-CS00-DW02P-1018				
Battelle ID		J8718-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.290				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	4.09	J	0.16	0.43	4.31
PFHpA	375-85-9	0.96	J	0.14	0.43	4.31
PFOA	335-67-1	4.97	B	0.16	0.43	4.31
PFNA	375-95-1	0.86	U	0.22	0.86	4.31
PFDA	335-76-2	0.43	U	0.14	0.43	4.31
PFUnA	2058-94-8	0.86	U	0.25	0.86	4.31
PFDoA	307-55-1	0.43	U	0.16	0.43	4.31
PFTrDA	72629-94-8	0.43	U	0.13	0.43	4.31
PFTeDA	376-06-7	0.86	U	0.22	0.86	4.31
NMeFOSAA	2355-31-9	1.72	U	0.48	1.72	4.31
NEtFOSAA	2991-50-6	0.86	U	0.42	0.86	4.31
PFBS	375-73-5	0.95	J	0.11	0.43	4.31
PFHxS	355-46-4	6.21		0.09	0.34	4.31
PFOS	1763-23-1	40.40		0.16	0.43	4.31

Surrogate Recoveries (%)

13C5-PFHxA	117	
13C4-PFHpA	146	
13C8-PFOA	100	
13C9-PFNA	95	
13C6-PFDA	113	
13C7-PFUnA	128	
13C2-PFDoA	110	
13C2-PFTeDA	93	
d3-MeFOSAA	163	N
d5-EtFOSAA	173	N
13C3-PFBS	102	
13C3-PFHxS	147	
13C8-PFOS	110	

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

Client ID		VC-CS00-DW03-1018				
Battelle ID		J8719-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
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	1.28	J	0.18	0.46	4.63
PFHpA	375-85-9	0.31	J	0.15	0.46	4.63
PFOA	335-67-1	1.67	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	0.46	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	0.46	U	0.12	0.46	4.63
PFHxS	355-46-4	0.50	J	0.10	0.37	4.63
PFOS	1763-23-1	3.38	J	0.18	0.46	4.63

Surrogate Recoveries (%)

13C5-PFHxA	131	
13C4-PFHpA	152	N
13C8-PFOA	118	
13C9-PFNA	111	
13C6-PFDA	99	
13C7-PFUnA	122	
13C2-PFDoA	99	
13C2-PFTeDA	102	
d3-MeFOSAA	150	
d5-EtFOSAA	133	
13C3-PFBS	86	
13C3-PFHxS	132	
13C8-PFOS	105	

BATTELLE
It can be done

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

Client ID		VC-CS00-DW04-1018				
Battelle ID		J8720-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
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	817.90	D	5.86	15.43	154.32
PFHpA	375-85-9	119.20	D	1.48	4.63	46.30
PFOA	335-67-1	212.96	D	1.67	4.63	46.30
PFNA	375-95-1	7.93		0.24	0.93	4.63
PFDA	335-76-2	0.81	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	508.92	D	1.20	4.63	46.30
PFHxS	355-46-4	3178.96	D	16.98	61.73	771.61
PFOS	1763-23-1	3576.80	D	29.32	77.16	771.61
Surrogate Recoveries (%)						
13C5-PFHxA		116	D			
13C4-PFHpA		122	D			
13C8-PFOA		91	D			
13C9-PFNA		55				
13C6-PFDA		97				
13C7-PFUnA		107				
13C2-PFDoA		115				
13C2-PFTeDA		110				
d3-MeFOSAA		141	D			
d5-EtFOSAA		150	D			
13C3-PFBS		135	D			
13C3-PFHxS		111	D			
13C8-PFOS		111	D			

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

Client ID		VC-CS00-DW05-1018				
Battelle ID		J8721-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
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	3.78	J	0.18	0.46	4.63
PFHpA	375-85-9	0.45	J	0.15	0.46	4.63
PFOA	335-67-1	1.61	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	0.46	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	0.99	J	0.12	0.46	4.63
PFHxS	355-46-4	2.56	J	0.10	0.37	4.63
PFOS	1763-23-1	6.07		0.18	0.46	4.63

Surrogate Recoveries (%)

13C5-PFHxA	146	
13C4-PFHpA	162	N
13C8-PFOA	118	
13C9-PFNA	102	
13C6-PFDA	104	
13C7-PFUnA	145	
13C2-PFDoA	138	
13C2-PFTeDA	118	
d3-MeFOSAA	184	N
d5-EtFOSAA	188	N
13C3-PFBS	136	
13C3-PFHxS	153	N
13C8-PFOS	114	

BATTELLE
It can be done

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

Client ID		VC-CS00-DW06-1018				
Battelle ID		J8722-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
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	36.51		0.18	0.46	4.63
PFHpA	375-85-9	8.11		0.15	0.46	4.63
PFOA	335-67-1	29.21		0.17	0.46	4.63
PFNA	375-95-1	1.80	J	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	0.46	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	4.91		0.12	0.46	4.63
PFHxS	355-46-4	127.35	D	1.02	3.70	46.30
PFOS	1763-23-1	548.32	D	1.76	4.63	46.30

Surrogate Recoveries (%)

13C5-PFHxA	120	
13C4-PFHpA	139	
13C8-PFOA	107	
13C9-PFNA	92	
13C6-PFDA	115	
13C7-PFUnA	118	
13C2-PFDoA	104	
13C2-PFTeDA	63	
d3-MeFOSAA	159	ND
d5-EtFOSAA	145	D
13C3-PFBS	90	
13C3-PFHxS	123	D
13C8-PFOS	120	D

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

Client ID		KB80 IB			
Battelle ID		KB80 IB_10/17/2018			
Sample Type		IB			
Collection Date		NA			
Extraction Date		NA			
Analysis Date		10/17/2018			
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	0.50 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	98
13C4-PFHpA	98
13C8-PFOA	101
13C9-PFNA	100
13C6-PFDA	103
13C7-PFUnA	102
13C2-PFDoA	98
13C2-PFTeDA	93
d3-MeFOSAA	104
d5-EtFOSAA	96
13C3-PFBS	95
13C3-PFHxS	103
13C8-PFOS	96

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

Client ID		KB80 IB			
Battelle ID		KB80 IB_10/25/2018			
Sample Type		IB			
Collection Date		NA			
Extraction Date		NA			
Analysis Date		10/25/2018			
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	0.50 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	98
13C4-PFHpA	110
13C8-PFOA	97
13C9-PFNA	88
13C6-PFDA	98
13C7-PFUnA	106
13C2-PFDoA	103
13C2-PFTeDA	102
d3-MeFOSAA	132
d5-EtFOSAA	120
13C3-PFBS	113
13C3-PFHxS	105
13C8-PFOS	120

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

Client ID		KB80 IB			
Battelle ID		KB80 IB_10/26/2018			
Sample Type		IB			
Collection Date		NA			
Extraction Date		NA			
Analysis Date		10/26/2018			
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	0.50 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	95
13C4-PFHpA	102
13C8-PFOA	103
13C9-PFNA	92
13C6-PFDA	91
13C7-PFUnA	91
13C2-PFDoA	98
13C2-PFTeDA	107
d3-MeFOSAA	92
d5-EtFOSAA	107
13C3-PFBS	89
13C3-PFHxS	86
13C8-PFOS	93

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

Client ID		Procedural Blank			
Battelle ID		CR986PB-FS			
Sample Type		PB			
Collection Date		10/17/2018			
Extraction Date		10/17/2018			
Analysis Date		10/25/2018			
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	1.09 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	114
13C4-PFHpA	114
13C8-PFOA	124
13C9-PFNA	101
13C6-PFDA	101
13C7-PFUnA	98
13C2-PFDoA	104
13C2-PFTeDA	103
d3-MeFOSAA	125
d5-EtFOSAA	130
13C3-PFBS	121
13C3-PFHxS	110
13C8-PFOS	104

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

Client ID		Laboratory Control Sample					
Battelle ID		CR987LCS-FS					
Sample Type		LCS					
Collection Date		10/17/2018					
Extraction Date		10/17/2018					
Analysis Date		10/26/2018					
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	19.77	20.20	98		51	137
PFHpA	375-85-9	20.24	20.00	101		48	136
PFOA	335-67-1	23.42	20.00	117		49	141
PFNA	375-95-1	23.53	20.00	118		58	122
PFDA	335-76-2	20.09	20.00	100		59	135
PFUnA	2058-94-8	20.55	20.00	103		64	134
PFDoA	307-55-1	20.16	20.00	101		75	131
PFTrDA	72629-94-8	21.47	20.00	107		42	148
PFTeDA	376-06-7	20.66	20.00	103		42	158
NMeFOSAA	2355-31-9	21.34	20.00	107		50	146
NEtFOSAA	2991-50-6	22.15	20.00	111		51	131
PFBS	375-73-5	19.38	20.20	96		56	134
PFHxS	355-46-4	20.46	20.20	101		52	128
PFOS	1763-23-1	20.11	20.00	101		40	144
Surrogate Recoveries (%)							
13C5-PFHxA		130					
13C4-PFHpA		115					
13C8-PFOA		107					
13C9-PFNA		100					
13C6-PFDA		107					
13C7-PFUnA		117					
13C2-PFDoA		120					
13C2-PFTeDA		125					
d3-MeFOSAA		149					
d5-EtFOSAA		133					
13C3-PFBS		142					
13C3-PFHxS		122					
13C8-PFOS		110					

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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

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

AQ, GW

Batch 18-0609

Package DP-18-0305

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 18-0609

Package DP-18-0305

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 2018.11.01 08:54:57 -04'00'

QC Chemist Approval: Digitally signed by devinec@battelle.org DN: cn=devinec@battelle.org Date: 2018.11.05 17:54:48 -05'00'

Project Manager Approval: Digitally signed by Jonathan Thorn Date: 2018.11.05 18:27:34 -05'00'

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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 18-0609

Package DP-18-0305

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.	29
3	***Miscellaneous Documentation*** Case Narrative, Miscellaneous Documentation Form, Quality Control Summary, Example Calculations, Internal Standard Recovery Report, Retention Time Window Report.	55
4	***Sample Preparation Records*** Sample Preparation Records, Dilution Worksheets, Standard Preparation Records, Certificates Of Analysis, GPC Check Report.	207
5	***Analytical Calibrations*** Analytical Sequence, Analytical Method, Tune Report, Initial Calibration, Pesticide Degradation Report, RF Summary, Calibration Verifications, Independent Calibration Verification Check.	230
6	***Analytical Data*** Raw Data Quantification Reports.	389
7	***Chromatograms*** Sample And Standard Chromatograms.	600
8	***Unused Data***	901

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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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Signature Page

Battelle 2018 (2 of 2)
Signature Page

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

Sample Summary

Client: CH2M
SDG: 18-0609
Project/Site: Naval Base Ventura County
CTO: 4164

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Receipt Date
CR986PB-FS	Procedural Blank	WATER	10/17/2018	10/17/2018
CR987LCS-FS	Laboratory Control Sample	WATER	10/17/2018	10/17/2018
J8667-FS	VC-CS12-DW01-1018	GW	10/6/2018	10/9/2018
J8668-FS	VC-CS12-DW01P-1018	GW	10/6/2018	10/9/2018
J8669-FS	VC-CS12-DW02-1018	GW	10/6/2018	10/9/2018
J8670-FS	VC-CS12-DW03-1018	GW	10/6/2018	10/9/2018
J8683-FS	VC-CS10-DW01-1018	GW	10/6/2018	10/9/2018
J8684-FS	VC-CS10-DW02-1018	GW	10/6/2018	10/9/2018
J8685-FS	VC-CS10-DW02P-1018	GW	10/6/2018	10/9/2018
J8686-FS	VC-CS10-DW03-1018	GW	10/6/2018	10/9/2018
J8687-FS	VC-CS10-DW04-1018	GW	10/6/2018	10/9/2018
J8688-FS	VC-CS18-DW01-1018	GW	10/6/2018	10/9/2018
J8714-FS	VC-SO-FB11-10062018	AQ	10/6/2018	10/9/2018
J8715-FS	VC-SO-EB11-10062018	AQ	10/6/2018	10/9/2018
J8716-FS	VC-CS00-DW01-1018	GW	10/6/2018	10/9/2018
J8717-FS	VC-CS00-DW02-1018	GW	10/6/2018	10/9/2018
J8718-FS	VC-CS00-DW02P-1018	GW	10/6/2018	10/9/2018
J8719-FS	VC-CS00-DW03-1018	GW	10/6/2018	10/9/2018
J8720-FS	VC-CS00-DW04-1018	GW	10/6/2018	10/9/2018
J8721-FS	VC-CS00-DW05-1018	GW	10/6/2018	10/9/2018
J8722-FS	VC-CS00-DW06-1018	GW	10/6/2018	10/9/2018

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	VC-AQ-FB01-0918	09/18/2018 1:30 pm	AQ	R0119 (NA)		
15	J8247	VC-AQ-EB01-0918	09/18/2018 1:40 pm	AQ	R0119 (NA)		
16	J8259	VC-PM365-DW01-0918	09/19/2018 11:10 am	GW	R0119 (NA)		
17	J8260	VC-PM365-DW02-0918	09/19/2018 12:10 pm	GW	R0119 (NA)		
18	J8261	VC-PM365-DW02P-0918	09/19/2018 12:18 pm	GW	R0119 (NA)		
19	J8262	VC-PM365-DW03-0918	09/19/2018 11:10 am	GW	R0119 (NA)		
20	J8272	VC-PM553-DW01-0918	09/19/2018 2:30 pm	GW	R0119 (NA)		
21	J8273	VC-PM553-DW01P-0918	09/19/2018 2:45 pm	GW	R0119 (NA)		
22	J8274	VC-PM553-DW02-0918	09/19/2018 3:15 pm	GW	R0119 (NA)		
23	J8275	VC-PM553-DW03-0918	09/19/2018 12:06 pm	GW	R0119 (NA)		
24	J8276	VC-SO-FB02-0918	09/19/2018 2:35 pm	AQ	R0119 (NA)		
25	J8277	VC-SO-EB02-0918	09/19/2018 2:30 pm	AQ	R0119 (NA)		

Shipment: **SHP-180925-02**

Status: Approved

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	VC-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: Approved

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	VC-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	VC-AQ-FB03-092018	09/20/2018 8:00 am	AQ	R0119 (NA)			
14	J8324	VC-AQ-EB03-092018	09/20/2018 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)			

Shipment: **SHP-180927-02**

Status: Approved

Description: NBVC Basewide SI

Range: J8358-J8400

Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
1	J8358	VC-PM323-DW01-0918	09/24/2018 10:21 am	GW	R0119 (NA)			
2	J8359	VC-PM323-DW03-0918	09/24/2018 11:10 am	GW	R0119 (NA)			
3	J8368	VC-SO-FB05-092418	09/24/2018 1:30 pm	AQ	R0119 (NA)			
4	J8369	VC-SO-EB05-092418	09/24/2018 1:30 pm	AQ	R0119 (NA)			
5	J8370	VC-PM324-DW01-0918	09/24/2018 1:45 pm	GW	R0119 (NA)			
6	J8371	VC-PM324-DW01P-0918	09/24/2018 2:02 pm	GW	R0119 (NA)			
7	J8372	VC-PM324-DW03-0918	09/24/2018 11:15 am	GW	R0119 (NA)			
8	J8382	VC-PM64B-DW01-0918	09/24/2018 3:00 pm	GW	R0119 (NA)			
9	J8383	VC-PM64B-DW02-0918	09/24/2018 3:31 pm	GW	R0119 (NA)			
10	J8384	VC-PM64B-DW03-0918	09/24/2018 2:28 pm	GW	R0119 (NA)			
11	J8385	VC-PM64B-DW03P-0918	09/24/2018 2:35 pm	GW	R0119 (NA)			
12	J8395	VC-HS09-DW01-0918	09/25/2018 2:25 pm	GW	R0119 (NA)			
13	J8396	VC-HS09-DW02-0918	09/25/2018 3:03 pm	GW	R0119 (NA)			
14	J8397	VC-HS09-DW03-0918	09/25/2018 1:19 pm	GW	R0119 (NA)			
15	J8398	VC-AQ-FB-092518	09/25/2018 2:35 pm	AQ	R0119 (NA)			
16	J8399	VC-AQ-EB-092518	09/25/2018 2:30 pm	AQ	R0119 (NA)			
17	J8400	VC-HS09-DW03P-0918	09/25/2018 1:56 pm	GW	R0119 (NA)			

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WORK/QUALITY ASSURANCE PROJECT PLAN

Shipment: **SHP-180928-03**

Status: Pending

Description: NBVC Basewide SI

Range: J8455-J8483

Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
1	J8455	VC-SO-FB07-09262018	09/26/2018 11:43 am	AQ	R0118 (NA)			
2	J8456	VC-SO-EB07-09262018	09/26/2018 11:45 am	AQ	R0118 (NA)			
3	J8457	VC-MS09-DW01-0918	09/26/2018 10:16 am	GW	R0118 (NA)			
4	J8458	VC-MS09-DW02-0918	09/26/2018 10:05 am	GW	R0118 (NA)			
5	J8459	VC-MS09-DW03-0918	09/26/2018 11:10 am	GW	R0118 (NA)			
6	J8460	VC-MS09-DW04-0918	09/26/2018 12:22 pm	GW	R0118 (NA)			
7	J8461	VC-MS09-DW04P-0918	09/26/2018 12:20 pm	GW	R0118 (NA)			
8	J8462	VC-MS09-DW05-0918	09/26/2018 11:35 am	GW	R0118 (NA)			
9	J8477	VC-PM367-DW01-0918	09/27/2018 10:36 am	GW	R0119 (NA)			
10	J8478	VC-PM367-DW02-0918	09/27/2018 9:50 am	GW	R0119 (NA)			
11	J8479	VC-PM367-DW03-0918	09/27/2018 10:43 am	GW	R0119 (NA)			
12	J8480	VC-PM367-DW03P-0918	09/27/2018 10:46 am	GW	R0119 (NA)			
13	J8481	VC-PM367-DW04-0918	09/27/2018 10:04 am	GW	R0119 (NA)			
14	J8482	VC-AQ-FB08-09272018	09/27/2018 10:00 am	AQ	R0119 (NA)			
15	J8483	VC-AQ-EB08-09272018	09/27/2018 12:00 pm	AQ	R0119 (NA)			

Shipment: **SHP-181005-03**

Status: Approved

Description: NBVC Basewide SI

Range: J8613-J8628

Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
1	J8613	VC-PM553-GW0601A-1018	10/01/2018 11:47 am	GW	R0119 (NA)			
2	J8614	VC-AQ-FB09-10012018	10/01/2018 3:57 pm	AQ	R0119 (NA)			
3	J8615	VC-AQ-EB09-10012018	10/01/2018 4:00 pm	AQ	R0119 (NA)			
4	J8616	VC-PM13-GW21-1018	10/01/2018 2:33 pm	GW	R0119 (NA)			
5	J8617	VC-KCHA16-GW01-1018	10/02/2018 11:50 am	GW	R0119 (NA)			
6	J8618	VC-KCHA16-GW01P-1018	10/02/2018 11:54 am	GW	R0119 (NA)			
7	J8619	VC-KCHA16-GW02-1018	10/02/2018 10:15 am	GW	R0119 (NA)			
8	J8620	VC-KCHA16-GW03-1018	10/02/2018 1:18 pm	GW	R0119 (NA)			
9	J8621	VC-AQ-FB10-10022018	10/02/2018 4:00 pm	AQ	R0119 (NA)			
10	J8622	VC-AQ-EB10-10022018	10/02/2018 4:10 pm	AQ	R0119 (NA)			
11	J8623	VC-S09GW01-1018	10/03/2018 12:22 pm	GW	R0119 (NA)			
12	J8624	VC-S09GW04-1018	10/02/2018 4:25 pm	GW	R0119 (NA)			
13	J8625	VC-S09GW04P-1018	10/02/2018 4:29 pm	GW	R0119 (NA)			
14	J8626	VC-S09GW06-1018	10/03/2018 11:22 am	GW	R0119 (NA)			
15	J8627	VC-S14GW01-1018	10/03/2018 2:39 pm	GW	R0119 (NA)			
16	J8628	VC-S14GW03-1018	10/03/2018 3:35 pm	GW	R0119 (NA)			

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WORK/QUALITY ASSURANCE PROJECT PLAN

Shipment: **SHP-181009-01**

Status: Pending

Description: NBVC Basewide SI

Range: J8667-J8722

Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
1	J8667	VC-CS12-DW01-1018	10/06/2018 8:44 am	GW	R0119 (NA)			
2	J8668	VC-CS12-DW01P-1018	10/06/2018 8:48 am	GW	R0119 (NA)			
3	J8669	VC-CS12-DW02-1018	10/06/2018 11:22 am	GW	R0119 (NA)			
4	J8670	VC-CS12-DW03-1018	10/06/2018 10:30 am	GW	R0119 (NA)			
5	J8683	VC-CS10-DW01-1018	10/06/2018 1:38 pm	GW	R0119 (NA)			
6	J8684	VC-CS10-DW02-1018	10/06/2018 10:30 am	GW	R0119 (NA)			
7	J8685	VC-CS10-DW02P-1018	10/06/2018 10:40 am	GW	R0119 (NA)			
8	J8686	VC-CS10-DW03-1018	10/06/2018 12:07 pm	GW	R0119 (NA)			
9	J8687	VC-CS10-DW04-1018	10/06/2018 10:55 am	GW	R0119 (NA)			
10	J8688	VC-CS18-DW01-1018	10/06/2018 3:18 pm	GW	R0119 (NA)			
11	J8714	VC-SO-FB11-10062018	10/06/2018 6:34 pm	AQ	R0119 (NA)			
12	J8715	VC-SO-EB11-10062018	10/06/2018 6:36 pm	AQ	R0119 (NA)			
13	J8716	VC-CS00-DW01-1018	10/06/2018 2:32 pm	GW	R0119 (NA)			
14	J8717	VC-CS00-DW02-1018	10/06/2018 4:25 pm	GW	R0119 (NA)			
15	J8718	VC-CS00-DW02P-1018	10/06/2018 4:27 pm	GW	R0119 (NA)			
16	J8719	VC-CS00-DW03-1018	10/06/2018 5:05 pm	GW	R0119 (NA)			
17	J8720	VC-CS00-DW04-1018	10/06/2018 1:30 pm	GW	R0119 (NA)			
18	J8721	VC-CS00-DW05-1018	10/06/2018 6:02 pm	GW	R0119 (NA)			
19	J8722	VC-CS00-DW06-1018	10/06/2018 5:40 pm	GW	R0119 (NA)			

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WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

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

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

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

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WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

Project Test Code Name: Master_369

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

Total Analytes: 27

Subtract Peaks:

None

Sum Peaks:

None

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WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 2: Test Codes

Project Test Code Name: Master_369

ICAL Acceptance Criteria:

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

Continuing Calibration Verification Criteria:

CCV Name: 5-369

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

Independent Calibration Verification:

ICC Name: 5-369

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

Mass Discrimination Criteria:

None

Degredation Check Criteria:

None

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WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 3: Method Quality Objectives

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

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WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 3: Method Quality Objectives

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

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ShpNo SHP-181009-01

Battelle Project No: 0110125-01

Sample Receipt Form

Approved: ☐ **Authorized** ☐

Project Number: 695803 **Client:** CH2M

Received by: Schumitz, Matt **Date/Time Received:** Tuesday, October 09, 2018 10:15 AM

No. of Shipping Containers: 3

SHIPMENT

Method of Delivery: Commercial Carrier **Tracking Number:** Fed Ex

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	7831 4550 2170	Custody Seals	Intact	Intact	Therm_1	0.9	14
2 of 3	Cooler	7831 4550 2180	Custody Seals	Intact	Intact	Therm_1	1.1	39
3 of 3	Cooler	7831 4550 2191	Custody Seals	Intact	Intact	Therm_1	1.7	12

Samples

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

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

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

Temperature upon receipt (°C): 1.7 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:** J8658 - J8722

Samples logged in by: Schumitz, Matt **Date/Time:** 10/09/2018 10:15 AM

Approved By: **Approved On:**

Authorized By: **Authorized On:**

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ShpNo SHP-181009-01

Battelle Project No: 0110125-01

Sample Receipt Form Details

Approved: ☑ **Authorized** ☐

Project Number: 695803 **Client:** CH2M

Received by: Schumitz, Matt **Date/Time Received:** Tuesday, October 09, 2018 10:15 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:
J8658	VC-CS12-SS01-000H	10/06/18 8:25	10/09/18 14:33	1	SS	1.7	NA	NA	NA	R0119 (NA)			
J8659	VC-CS12-SB01-0102	10/06/18 8:26	10/09/18 14:33	1	SB	1.7	NA	NA	NA	R0119 (NA)			
J8660	VC-CS12-SB01-0506	10/06/18 8:34	10/09/18 14:34	1	SB	1.7	NA	NA	NA	R0119 (NA)			
J8661	VC-CS12-SS02-000H	10/06/18 11:07	10/09/18 14:34	1	SS	1.7	NA	NA	NA	R0119 (NA)			
J8662	VC-CS12-SB02-0102	10/06/18 11:09	10/09/18 14:34	1	SB	1.7	NA	NA	NA	R0119 (NA)			
J8663	VC-CS12-SB02-0506	10/06/18 11:13	10/09/18 14:35	1	SB	1.7	NA	NA	NA	R0119 (NA)			
J8664	VC-CS12-SS03-000H	10/06/18 10:06	10/09/18 14:35	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8665	VC-CS12-SB03-0102	10/06/18 10:07	10/09/18 14:35	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8666	VC-CS12-SB03-0506	10/06/18 10:12	10/09/18 14:36	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8667	VC-CS12-DW01-1018	10/06/18 8:44	10/09/18 14:36	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8668	VC-CS12-DW01P-1018	10/06/18 8:48	10/09/18 14:37	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8669	VC-CS12-DW02-1018	10/06/18 11:22	10/09/18 14:37	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8670	VC-CS12-DW03-1018	10/06/18 10:30	10/09/18 14:38	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8671	VC-CS10-SS01-000H	10/06/18 13:02	10/09/18 14:39	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8672	VC-CS10-SB01-0102	10/06/18 13:04	10/09/18 14:40	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8673	VC-CS10-SB01-0506	10/06/18 13:10	10/09/18 14:41	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8674	VC-CS10-SS02-000H	10/06/18 9:55	10/09/18 14:41	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8675	VC-CS10-SB02-0102	10/06/18 9:58	10/09/18 14:41	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8676	VC-CS10-SB02-0506	10/06/18 10:06	10/09/18 14:42	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8677	VC-CS10-SS03-000H	10/06/18 11:31	10/09/18 14:43	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8678	VC-CS10-SB03-0102	10/06/18 11:33	10/09/18 14:43	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8679	VC-CS10-SB03-0506	10/06/18 11:37	10/09/18 14:43	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8680	VC-CS10-SS04-000H	10/06/18 10:35	10/09/18 14:43	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8681	VC-CS10-SB04-0102	10/06/18 10:38	10/09/18 14:44	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8682	VC-CS10-SB04-0506	10/06/18 10:41	10/09/18 14:44	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8683	VC-CS10-DW01-1018	10/06/18 13:38	10/09/18 14:45	2	GW	1.7	NA	NA	NA	R0119 (NA)			
J8684	VC-CS10-DW02-1018	10/06/18 10:30	10/09/18 14:46	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8685	VC-CS10-DW02P-1018	10/06/18 10:40	10/09/18 14:46	2	GW	0.9	NA	NA	NA	R0119 (NA)			

BATTELLE
It can be done

ShpNo SHP-181009-01

Battelle Project No: 0110125-01

Sample Receipt Form Details

Approved: ☑ **Authorized** ☐

Project Number: 695803 **Client:** CH2M

Received by: Schumitz, Matt **Date/Time Received:** Tuesday, October 09, 2018 10:15 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:
J8686	VC-CS10-DW03-1018	10/06/18 12:07	10/09/18 14:46	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8687	VC-CS10-DW04-1018	10/06/18 10:55	10/09/18 14:46	2	GW	1.7	NA	NA	NA	R0119 (NA)			
J8688	VC-CS18-DW01-1018	10/06/18 15:18	10/09/18 14:47	2	GW	1.7	NA	NA	NA	R0119 (NA)			
J8689	VC-CS10-SD01-000H	10/06/18 13:28	10/09/18 14:48	1	SD	0.9	NA	NA	NA	R0119 (NA)			
J8690	VC-CS10-SD01-0102	10/06/18 13:30	10/09/18 14:48	1	SD	0.9	NA	NA	NA	R0119 (NA)			
J8691	VC-CS18-SS01-000H	10/06/18 13:52	10/09/18 14:49	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8692	VC-CS18-SB01-0102	10/06/18 13:54	10/09/18 14:49	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8693	VC-CS18-SB01-0506	10/06/18 14:00	10/09/18 14:50	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8694	VC-CS00-SS01-000H	10/06/18 14:05	10/09/18 14:52	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8695	VC-CS00-SB01-0102	10/06/18 14:07	10/09/18 14:53	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8696	VC-CS00-SB01-0506	10/06/18 14:10	10/09/18 14:58	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8697	VC-CS00-SS02-000H	10/06/18 15:22	10/09/18 14:59	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8698	VC-CS00-SB02-0102	10/06/18 15:23	10/09/18 14:59	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8699	VC-CS00-SB02-0506	10/06/18 15:27	10/09/18 15:00	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8700	VC-CS00-SS03-000H	10/06/18 16:15	10/09/18 15:00	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8701	VC-CS00-SB03-0102	10/06/18 16:18	10/09/18 15:06	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8702	VC-CS00-SB03-0506	10/06/18 16:25	10/09/18 15:07	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8703	VC-CS00-SS04-000H	10/06/18 13:13	10/09/18 15:07	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8704	VC-CS00-SB04-0102	10/06/18 13:15	10/09/18 15:07	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8705	VC-CS00-SB04-0506	10/06/18 13:20	10/09/18 15:07	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8706	VC-CS00-SS05-000H	10/06/18 17:17	10/09/18 15:08	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8707	VC-CS00-SB05-0102	10/06/18 17:19	10/09/18 15:09	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8708	VC-CS00-SB05-0506	10/06/18 17:24	10/09/18 15:09	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8709	VC-CS00-SS06-000H	10/06/18 17:05	10/09/18 15:09	1	SS	1.1	NA	NA	NA	R0119 (NA)			
J8710	VC-CS00-SB06-0102	10/06/18 17:07	10/09/18 15:10	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8711	VC-CS00-SB06-0506	10/06/18 17:10	10/09/18 15:10	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8712	VC-CS00-SB06-0506-MS	10/06/18 17:10	10/09/18 15:10	1	SB	1.1	NA	NA	NA	R0119 (NA)			
J8713	VC-CS00-SB06-0506-MSD	10/06/18 17:10	10/09/18 15:11	1	SB	1.1	NA	NA	NA	R0119 (NA)			

BATTELLE
It can be done

ShpNo SHP-181009-01

Battelle Project No: 0110125-01

Sample Receipt Form Details

Approved: ☑ **Authorized** ☐

Project Number: 695803 **Client:** CH2M

Received by: Schumitz, Matt **Date/Time Received:** Tuesday, October 09, 2018 10:15 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:
J8714	VC-SO-FB11-10062018	10/06/18 18:34	10/09/18 15:11	2	AQ	0.9	NA	NA	NA	R0119 (NA)			
J8715	VC-SO-EB11-10062018	10/06/18 18:36	10/09/18 15:11	2	AQ	0.9	NA	NA	NA	R0119 (NA)			
J8716	VC-CS00-DW01-1018	10/06/18 14:32	10/09/18 15:12	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8717	VC-CS00-DW02-1018	10/06/18 16:25	10/09/18 15:12	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8718	VC-CS00-DW02P-1018	10/06/18 16:27	10/09/18 15:14	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J8719	VC-CS00-DW03-1018	10/06/18 17:05	10/09/18 15:14	2	GW	1.1	NA	NA	NA	R0119 (NA)			
J8720	VC-CS00-DW04-1018	10/06/18 13:30	10/09/18 15:15	2	GW	1.7	NA	NA	NA	R0119 (NA)			
J8721	VC-CS00-DW05-1018	10/06/18 18:02	10/09/18 15:15	2	GW	1.7	NA	NA	NA	R0119 (NA)			
J8722	VC-CS00-DW06-1018	10/06/18 17:40	10/09/18 15:15	2	GW	1.7	NA	NA	NA	R0119 (NA)			

Total Samples: 65

BATTELLE It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: PM CS12	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): V. Kilbert Phone: 724.977-3628 Email: Victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 06
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 1 of 8

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod	
VC-CS12-SS01-000H	10/6/18	0825	Grab	SS	1	X	J8658
VC-CS12-SB01-0102	10/6/18	0826	Grab	SB	1	X	59
VC-CS12-SB01-0506	10/6/18	0834	Grab	SB	1	X	60
VC-CS12-SS02-000H	10/6/18	1107	Grab	SS	1	X	61
VC-CS12-SB02-0102	10/6/18	1109	Grab	SB	1	X	62
VC-CS12-SB02-0506	10/6/18	1113	Grab	SB	1	X	63
VC-CS12-SS03-000H	10/6/18	1006	Grab	SS	1	X	64
VC-CS12-SB03-0102	10/6/18	1007	Grab	SB	1	X	65
VC-CS12-SB03-0506	10/6/18	1012	Grab	SB	1	X	J8666
~~VC-CS12-SB03-~~			Grab	SB	1	X	
~~VC-CS12-S-MS~~			Grab			X	
~~VC-CS12-S-SD~~			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:
V. Kilbert	Jacobs	10/8/18 0800		Battelle	10-9-18 1015
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 CS12	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): V. Kilbert Phone: 724-977-3628 Email: Victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 06
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 2 of 8

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod	
VC-CS12-DW01-1018	10/6/18	0844	Grab	GW	2	X	J8667
VC-CS12-DW01P-1018	10/6/18	0848	Grab	GW	2	X	J8668
VC-CS12-DW02-1018	10/6/18	1122	Grab	GW	2	X	J8669
VC-CS12-DW03-1018	10/6/18	1030	Grab	GW	2	X	J8670
~~FDT-AQ-FB-~~			~~Grab~~	~~AQ~~		X	
~~FDT-AQ-EB-~~			~~Grab~~	~~AQ~~		X	

VH

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:
V. Kilbert	Jacobs	10/8/18 0800		Battelle	10-9-18 1015
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 CS10 ~~CS15~~	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): J. Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:		
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST		

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	Preservative: NA	Analysis: PFAS by Method 537 Mod	COC # 06	Page# 3 of 8
VC-CS10-SS01-000H	10/6/18	1302	Grab	SS	1		X		J8671
VC-CS10-SB01-0102	10/6/18	1304	Grab	SB	1		X		72
VC-CS10-SB01-0506	10/6/18	1310	Grab	SB	1		X		73
VC-CS10-SS02-000H	10/6/18	0955	Grab	SS	1		X		74
VC-CS10-SB02-0102	10/6/18	0958	Grab	SB	1		X		75
VC-CS10-SB02-0506	10/6/18	1006	Grab	SB	1		X		76
VC-CS10-SS03-000H	10/6/18	1131	Grab	SS	1		X		77
VC-CS10-SB03-0102	10/6/18	1133	Grab	SB	1		X		78
VC-CS10-SB03-0506	10/6/18	1137	Grab	SB	1		X		79
VC-CS10-SS04-000H	10/6/18	1035	Grab	SS	1		X		80
VC-CS10-SB04-0102	10/6/18	1038	Grab	SB	1		X		81
VC-CS10-SB04-0506	10/6/18	1041	Grab	SB	1		X		J8682

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:
V. Kilbert	Jacobs	10/8/18 0800		Battelle	10-9-18 1015
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 CS10 & CS18	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): V. Kilbert Phone: (724) 977-3628 Email: Victoria.Kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 06
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 4 of 8

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod	
VC-CS10-DW01-1018	10/6/18	1338	Grab	GW	2	X	J8683
VC-CS10-DW02-1018	10/6/18	1030	Grab	GW	2	X	J8684
VC-CS10-DW02P-1018	10/6/18	1040	Grab	GW	2	X	J8685
VC-CS10-DW03-1018	10/6/18	1207	Grab	GW	2	X	J8686
VC-CS10-DW04-1018	10/6/18	1055	Grab	GW	2	X	J8687
~~FDT-AQ-FB~~			~~Grab~~	~~AQ~~		X	
~~FDT-AQ-EB~~			~~Grab~~	~~AQ~~		X	
VC-CS18-DW01-1018	10/6/18	1518	Grab	GW	2	X	J8688

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:
V. Kilbert	Jacobs	10/8/18 0808		Battelle	10-9-18 1015
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:	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): V. Kilbert Phone: (724) 977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	PM CS10 & CS18	COC # 06
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST		Page# 5 of 8

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	Preservative: NA	Analysis: PFAS by Method 537 Mod	
VC-CS10-SD01-000H	10/6/18	1328	Grab	SD	1		X	J8689
VC-CS10-SD01-0102	10/6/18	1330	Grab	SD	1		X	J8690
~~VC-CS10-S-MS~~			~~Grab~~				~~X~~	
~~VC-CS10-S-SD~~			~~Grab~~				~~X~~	
~~FDT-SO-EB~~			~~Grab~~	~~AQ~~			~~X~~	
~~FDT-SO-EB~~			~~Grab~~	~~AQ~~			~~X~~	
VC-CS18-SS01-000H	10/6/18	1352	Grab	SS	1		X	J8691
VC-CS18-SB01-0102	10/6/18	1354	Grab	SB	1		X	J8692
VC-CS18-SB01-0506	10/6/18	1400	Grab	SB	1		X	J8693

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:
Victoria Kilbert	Jacobs	10/8/18 0800		Battelle	10-9-18 1015
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 CS00	Site Information:
Tiffany Hill 1100 NE Circle Blvd. Suite 300 Corvallis, OR 97330	Sampler Information (print name): V Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC #: 06
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page#: 6 of 8

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.		
VC-CS00-SS01-000H	10/6/18	1405	Grab	SS	1	X	J8694
VC-CS00-SB01-0102	10/6/18	1407	Grab	SB	1	X	95
VC-CS00-SB01-0506	10/6/18	1410	Grab	SB	1	X	96
VC-CS00-SS02-000H	10/6/18	1522	Grab	SS	1	X	97
VC-CS00-SB02-0102	10/6/18	1523	Grab	SB	1	X	98
VC-CS00-SB02-0506	10/6/18	1527	Grab	SB	1	X	99
VC-CS00-SS03-000H	10/6/18	1615	Grab	SS	1	X	J8700
VC-CS00-SB03-0102	10/6/18	1618	Grab	SB	1	X	01
VC-CS00-SB03-0506	10/6/18	1625	Grab	SB	1	X	02
VC-CS00-SS04-000H	10/6/18	1313	Grab	SS	1	X	03
VC-CS00-SB04-0102	10/6/18	1315	Grab	SB	1	X	04
VC-CS00-SB04-0506	10/6/18	1320	Grab	SB	1	X	J8705

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
V. Kilbert	Jacobs	10/8/18 0800		Battelle	10-9-18 1015
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 CS00	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): V. Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC #: 06
Project Name: NBVC Basewide SI Project No.: 695803	Normal ☒ Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page#: 7 of 8

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.		
VC-CS00-SS05-000H	10/6/18	1717	Grab	SS	1	X	J8706
VC-CS00-SB05-0102	10/6/18	1719	Grab	SB	1	X	07
VC-CS00-SB05-0506	10/6/18	1724	Grab	SB	1	X	08
VC-CS00-SS06-000H	10/6/18	1705	Grab	SS	1	X	09
VC-CS00-SB06-0102	10/6/18	1707	Grab	SB	1	X	10
VC-CS00-SB06-0506	10/6/18	1710	Grab	SB	1	X	11
VC-~~CS94-S~~ CS00-SB06-0506-MS	10/6/18	1710	Grab	SB	1	X	MS 12
VC-~~CS94-S~~ CS00-SB06-0506-MSD	10/6/18	1710	Grab	SB	1	X	MSD 13
VC-~~FDT~~SO-FB11-10062018	10/6/18	1834	Grab	AQ	2	X	14
VC-~~FDT~~SO-EB11-10062018	10/6/18	1836	Grab	AQ	2	X	on bowl J8715
							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:
V. Kilbert	Jacobs	10/8/18 0850		Battelle	10-9-18 1015
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 CS00	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): V. Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC #: 06
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page#: 8 of 8

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.		
VC-CS00-DW01-1018	10/6/18	1432	Grab	GW	2	X	J8716
VC-CS00-DW02-1018	10/6/18	1625	Grab	GW	2	X	J8717
VC-CS00-DW02P-1018	10/6/18	1627	Grab	GW	2	X	J8718
VC-CS00-DW03-1018	10/6/18	1705	Grab	GW	2	X	(1) ~~J78~~ J8719
VC-CS00-DW04-1018	10/6/18	1330	Grab	GW	2	X	J8720
VC-CS00-DW05-1018	10/6/18	1802	Grab	GW	2	X	J8721
VC-CS00-DW06-1018	10/6/18	1740	Grab	GW	2	X	J8722
~~FDT-AQ-FB~~			Grab	AQ		X	
~~FDT-AQ-EB~~			Grab	AQ		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:
V. Kilbert	Jacobs	10/8/18 0800		Battelle	10-9-18 1015
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:

(1) MDS Wrong Number
10-9-18



(724) 977-3628
SHIP DATE: 08OCT18
ACTWGT: 53.90 LB
CAD: 6997666/SSF01922
DIMS: 26x13x14 IN
BILL THIRD PARTY
AN THORN
LE
IGWATER DR. STE 202
LL MA 02061
REF:
DEPT:
0.9° TB
10-9-18 Therm
10:15
FedEx Express
REL# 37853
f 3
4550 2170
##
XPUA
TUE – 09 OCT 10:
PRIORITY OVERNIG
020
MA-US B

ORIGIN ID:OXRA (724) 977-3628
VICTORIA KILBERT
PO 695803
402 W BROADWAY STE 1450
SAN DIEGO, CA 92101
UNITED STATES US
SHIP DATE: 08OCT18
ACTWGT: 66.50 LB
CAD: 6997666/SSF01922
DIMS: 26x14x14 IN
BILL THIRD PARTY
TO JONATHAN THORN
BATTELLE
141 LONGWATER DR. STE 202
NORWELL MA 02061
(781) 681-5666
INV:
PO:
REF:
DEPT:
1.1° TB
10-9-18 Therm
10:15
FedEx Express
REL# 3785346
2 of 3
MPS# 0263 7831 4550 2180
Mstr# 7831 4550 2170
0201
TUE – 09 OCT 10:30A
PRIORITY OVERNIGHT
NB XPUA
02061
MA-US BOS
RT 246 1
ST 4.3
10:30 B
2180
10.09

ORIGIN ID:OXRA (724) 977-3628
VICTORIA KILBERT
PO 695803
402 W BROADWAY STE 1450
SAN DIEGO, CA 92101
UNITED STATES US
SHIP DATE: 08OCT1
ACTWGT: 51.60 LB
CAD: 6997666/SSFO
DIMS: 23x15x16 IN
BILL THIRD PARTY
TO JONATHAN THORN
BATTELLE
141 LONGWATER DR. STE 202
NORWELL MA 02061
(781) 681-5666
INV:
PO:
REF:
DEPT:
1.7°
10-9-18 T
10:15
Fe
REL# 3785
3 of 3
MPS# 0263 7831 4550 2191
Mstr# 7831 4550 2170
0201
TUE – 09 OCT 10:
PRIORITY OVERNIG
NB XPUA
020
MA-US BO
RT 246 1
ST 4.3
10:30 B
2191
10.09

RT 246 1
10:30 B

Data Tables

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

Client ID		VC-CS12-DW01-1018				
Battelle ID		J8667-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/25/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.030				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	1207.13	D	15.83	41.67	416.67
PFHpA	375-85-9	355.01		1.33	4.17	41.67
PFOA	335-67-1	1297.19	D	15.00	41.67	416.67
PFNA	375-95-1	8.79	J	2.17	8.33	41.67
PFDA	335-76-2	1.38	J	1.33	4.17	41.67
PFUnA	2058-94-8	8.33	U	2.42	8.33	41.67
PFDoA	307-55-1	4.17	U	1.50	4.17	41.67
PFTrDA	72629-94-8	4.17	U	1.25	4.17	41.67
PFTeDA	376-06-7	8.33	U	2.08	8.33	41.67
NMeFOSAA	2355-31-9	16.67	U	4.67	16.67	41.67
NEtFOSAA	2991-50-6	8.33	U	4.08	8.33	41.67
PFBS	375-73-5	248.43		1.08	4.17	41.67
PFHxS	355-46-4	2909.86	D	45.83	166.67	2083.33
PFOS	1763-23-1	4058.91	D	79.17	208.33	2083.33
Surrogate Recoveries (%)						
13C5-PFHxA		109	D			
13C4-PFHpA		116				
13C8-PFOA		103	D			
13C9-PFNA		73				
13C6-PFDA		97				
13C7-PFUnA		101				
13C2-PFDoA		107				
13C2-PFTeDA		115				
d3-MeFOSAA		123				
d5-EtFOSAA		119				
13C3-PFBS		109	D			
13C3-PFHxS		102	D			
13C8-PFOS		99	D			

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

Client ID		VC-CS12-DW01P-1018				
Battelle ID		J8668-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/25/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.031				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	1332.07	D	15.32	40.32	403.23
PFHpA	375-85-9	325.87		1.29	4.03	40.32
PFOA	335-67-1	1237.97	D	14.52	40.32	403.23
PFNA	375-95-1	7.60	J	2.10	8.06	40.32
PFDA	335-76-2	4.03	U	1.29	4.03	40.32
PFUnA	2058-94-8	8.06	U	2.34	8.06	40.32
PFDoA	307-55-1	4.03	U	1.45	4.03	40.32
PFTrDA	72629-94-8	4.03	U	1.21	4.03	40.32
PFTeDA	376-06-7	8.06	U	2.02	8.06	40.32
NMeFOSAA	2355-31-9	16.13	U	4.52	16.13	40.32
NEtFOSAA	2991-50-6	8.06	U	3.95	8.06	40.32
PFBS	375-73-5	234.26		1.05	4.03	40.32
PFHxS	355-46-4	3125.32	D	8.87	32.26	403.23
PFOS	1763-23-1	4955.55	D	15.32	40.32	403.23
Surrogate Recoveries (%)						
13C5-PFHxA		118	D			
13C4-PFHpA		130				
13C8-PFOA		113	D			
13C9-PFNA		81				
13C6-PFDA		98				
13C7-PFUnA		105				
13C2-PFDoA		111				
13C2-PFTeDA		114				
d3-MeFOSAA		141				
d5-EtFOSAA		129				
13C3-PFBS		143	D			
13C3-PFHxS		113	D			
13C8-PFOS		113	D			

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

Client ID		VC-CS12-DW02-1018				
Battelle ID		J8669-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/25/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.031				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	626.41	D	15.32	40.32	403.23
PFHpA	375-85-9	185.73		1.29	4.03	40.32
PFOA	335-67-1	2039.45	D	14.52	40.32	403.23
PFNA	375-95-1	8.06	U	2.10	8.06	40.32
PFDA	335-76-2	4.03	U	1.29	4.03	40.32
PFUnA	2058-94-8	8.06	U	2.34	8.06	40.32
PFDoA	307-55-1	4.03	U	1.45	4.03	40.32
PFTrDA	72629-94-8	4.03	U	1.21	4.03	40.32
PFTeDA	376-06-7	8.06	U	2.02	8.06	40.32
NMeFOSAA	2355-31-9	16.13	U	4.52	16.13	40.32
NEtFOSAA	2991-50-6	8.06	U	3.95	8.06	40.32
PFBS	375-73-5	50.40		1.05	4.03	40.32
PFHxS	355-46-4	617.31	D	8.87	32.26	403.23
PFOS	1763-23-1	2923.23	D	15.32	40.32	403.23
Surrogate Recoveries (%)						
13C5-PFHxA		113	D			
13C4-PFHpA		120				
13C8-PFOA		116	D			
13C9-PFNA		77				
13C6-PFDA		103				
13C7-PFUnA		120				
13C2-PFDoA		119				
13C2-PFTeDA		119				
d3-MeFOSAA		146				
d5-EtFOSAA		120				
13C3-PFBS		113	D			
13C3-PFHxS		134	D			
13C8-PFOS		114	D			

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

Client ID		VC-CS12-DW03-1018				
Battelle ID		J8670-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/25/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.240				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	462.97	D	1.98	5.21	52.08
PFHpA	375-85-9	150.85	D	1.67	5.21	52.08
PFOA	335-67-1	1113.87	D	4.69	13.02	130.21
PFNA	375-95-1	1.31	J	0.27	1.04	5.21
PFDA	335-76-2	0.52	U	0.17	0.52	5.21
PFUnA	2058-94-8	1.04	U	0.30	1.04	5.21
PFDoA	307-55-1	0.52	U	0.19	0.52	5.21
PFTrDA	72629-94-8	0.52	U	0.16	0.52	5.21
PFTeDA	376-06-7	1.04	U	0.26	1.04	5.21
NMeFOSAA	2355-31-9	2.08	U	0.58	2.08	5.21
NEtFOSAA	2991-50-6	1.04	U	0.51	1.04	5.21
PFBS	375-73-5	78.18		0.14	0.52	5.21
PFHxS	355-46-4	827.76	D	2.86	10.42	130.21
PFOS	1763-23-1	233.85	D	1.98	5.21	52.08
Surrogate Recoveries (%)						
13C5-PFHxA		116	D			
13C4-PFHpA		122	D			
13C8-PFOA		93	D			
13C9-PFNA		86	D			
13C6-PFDA		102				
13C7-PFUnA		113				
13C2-PFDoA		102				
13C2-PFTeDA		83				
d3-MeFOSAA		110	D			
d5-EtFOSAA		110	D			
13C3-PFBS		127				
13C3-PFHxS		99	D			
13C8-PFOS		113	D			

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

Client ID		VC-CS10-DW01-1018				
Battelle ID		J8683-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/25/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.295				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	4.41		0.16	0.42	4.24
PFHpA	375-85-9	1.29	J	0.14	0.42	4.24
PFOA	335-67-1	75.01	D	0.76	2.12	21.19
PFNA	375-95-1	0.85	U	0.22	0.85	4.24
PFDA	335-76-2	0.42	U	0.14	0.42	4.24
PFUnA	2058-94-8	0.85	U	0.25	0.85	4.24
PFDoA	307-55-1	0.42	U	0.15	0.42	4.24
PFTrDA	72629-94-8	0.42	U	0.13	0.42	4.24
PFTeDA	376-06-7	0.85	U	0.21	0.85	4.24
NMeFOSAA	2355-31-9	1.69	U	0.47	1.69	4.24
NEtFOSAA	2991-50-6	0.85	U	0.42	0.85	4.24
PFBS	375-73-5	6.75		0.11	0.42	4.24
PFHxS	355-46-4	13.22		0.09	0.34	4.24
PFOS	1763-23-1	12.95		0.16	0.42	4.24

Surrogate Recoveries (%)

13C5-PFHxA	129	
13C4-PFHpA	137	
13C8-PFOA	111	D
13C9-PFNA	85	
13C6-PFDA	110	
13C7-PFUnA	120	
13C2-PFDoA	119	
13C2-PFTeDA	101	
d3-MeFOSAA	136	D
d5-EtFOSAA	147	
13C3-PFBS	144	
13C3-PFHxS	127	
13C8-PFOS	96	

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

Client ID		VC-CS10-DW02-1018			
Battelle ID		J8684-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/25/2018			
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	9.25	0.18	0.46	4.63
PFHpA	375-85-9	2.22 J	0.15	0.46	4.63
PFOA	335-67-1	30.04	0.17	0.46	4.63
PFNA	375-95-1	0.52 J	0.24	0.93	4.63
PFDA	335-76-2	0.35 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	5.68	0.12	0.46	4.63
PFHxS	355-46-4	20.52	0.10	0.37	4.63
PFOS	1763-23-1	33.60	0.18	0.46	4.63

Surrogate Recoveries (%)

13C5-PFHxA	126
13C4-PFHpA	142
13C8-PFOA	93
13C9-PFNA	79
13C6-PFDA	96
13C7-PFUnA	108
13C2-PFDoA	98
13C2-PFTeDA	94
d3-MeFOSAA	121 D
d5-EtFOSAA	118 D
13C3-PFBS	140 D
13C3-PFHxS	143
13C8-PFOS	117

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

Client ID		VC-CS10-DW02P-1018			
Battelle ID		J8685-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/25/2018			
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	5.60	0.17	0.45	4.55
PFHpA	375-85-9	1.77 J	0.15	0.45	4.55
PFOA	335-67-1	29.52	0.16	0.45	4.55
PFNA	375-95-1	0.91 U	0.24	0.91	4.55
PFDA	335-76-2	0.45 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	4.45 J	0.12	0.45	4.55
PFHxS	355-46-4	13.98	0.10	0.36	4.55
PFOS	1763-23-1	6.54	0.17	0.45	4.55

Surrogate Recoveries (%)

13C5-PFHxA	136
13C4-PFHpA	143
13C8-PFOA	105
13C9-PFNA	84
13C6-PFDA	100
13C7-PFUnA	103
13C2-PFDoA	103
13C2-PFTeDA	104
d3-MeFOSAA	126
d5-EtFOSAA	140
13C3-PFBS	148
13C3-PFHxS	141
13C8-PFOS	112

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

Client ID		VC-CS10-DW03-1018				
Battelle ID		J8686-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/25/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.265				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	21.25		0.18	0.47	4.72
PFHpA	375-85-9	7.86		0.15	0.47	4.72
PFOA	335-67-1	316.23	D	1.70	4.72	47.17
PFNA	375-95-1	0.28	J	0.25	0.94	4.72
PFDA	335-76-2	0.17	J	0.15	0.47	4.72
PFUnA	2058-94-8	0.94	U	0.27	0.94	4.72
PFDoA	307-55-1	0.47	U	0.17	0.47	4.72
PFTrDA	72629-94-8	0.47	U	0.14	0.47	4.72
PFTeDA	376-06-7	0.94	U	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	8.46		0.12	0.47	4.72
PFHxS	355-46-4	33.00		0.10	0.38	4.72
PFOS	1763-23-1	17.45		0.18	0.47	4.72

Surrogate Recoveries (%)

13C5-PFHxA	119	
13C4-PFHpA	120	
13C8-PFOA	105	D
13C9-PFNA	73	
13C6-PFDA	103	
13C7-PFUnA	124	
13C2-PFDoA	115	
13C2-PFTeDA	90	
d3-MeFOSAA	125	D
d5-EtFOSAA	123	D
13C3-PFBS	148	
13C3-PFHxS	139	
13C8-PFOS	120	

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

Client ID		VC-CS10-DW04-1018				
Battelle ID		J8687-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/25/2018				
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	38.45		0.18	0.46	4.63
PFHpA	375-85-9	13.69		0.15	0.46	4.63
PFOA	335-67-1	1996.27	D	20.83	57.87	578.70
PFNA	375-95-1	1.57	J	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	0.46	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	3.84	J	0.12	0.46	4.63
PFHxS	355-46-4	15.07		0.10	0.37	4.63
PFOS	1763-23-1	4.88		0.18	0.46	4.63
Surrogate Recoveries (%)						
13C5-PFHxA		110	D			
13C4-PFHpA		109	D			
13C8-PFOA		105	D			
13C9-PFNA		91	D			
13C6-PFDA		104				
13C7-PFUnA		116				
13C2-PFDoA		107				
13C2-PFTeDA		63				
d3-MeFOSAA		115				
d5-EtFOSAA		117				
13C3-PFBS		124				
13C3-PFHxS		112				
13C8-PFOS		92				

BATTELLE
It can be done

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

Client ID		VC-CS18-DW01-1018				
Battelle ID		J8688-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
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	53.22		0.17	0.45	4.55
PFHpA	375-85-9	27.73		0.15	0.45	4.55
PFOA	335-67-1	106.43	D	0.82	2.27	22.73
PFNA	375-95-1	0.52	J	0.24	0.91	4.55
PFDA	335-76-2	0.45	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	8.12		0.12	0.45	4.55
PFHxS	355-46-4	138.81	D	0.50	1.82	22.73
PFOS	1763-23-1	32.25		0.17	0.45	4.55
Surrogate Recoveries (%)						
13C5-PFHxA		125	D			
13C4-PFHpA		132	D			
13C8-PFOA		100	D			
13C9-PFNA		127				
13C6-PFDA		103				
13C7-PFUnA		136	D			
13C2-PFDoA		137	D			
13C2-PFTeDA		149	D			
d3-MeFOSAA		130	D			
d5-EtFOSAA		141				
13C3-PFBS		144	D			
13C3-PFHxS		101	D			
13C8-PFOS		107				

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

Client ID		VC-SO-FB11-10062018			
Battelle ID		J8714-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/26/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		AQ			
Sample Size		0.295			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	0.42 U	0.16	0.42	4.24
PFHpA	375-85-9	0.42 U	0.14	0.42	4.24
PFOA	335-67-1	1.31 J	0.15	0.42	4.24
PFNA	375-95-1	0.85 U	0.22	0.85	4.24
PFDA	335-76-2	0.42 U	0.14	0.42	4.24
PFUnA	2058-94-8	0.85 U	0.25	0.85	4.24
PFDoA	307-55-1	0.42 U	0.15	0.42	4.24
PFTrDA	72629-94-8	0.42 U	0.13	0.42	4.24
PFTeDA	376-06-7	0.85 U	0.21	0.85	4.24
NMeFOSAA	2355-31-9	1.69 U	0.47	1.69	4.24
NEtFOSAA	2991-50-6	0.85 U	0.42	0.85	4.24
PFBS	375-73-5	0.42 U	0.11	0.42	4.24
PFHxS	355-46-4	0.33 J	0.09	0.34	4.24
PFOS	1763-23-1	0.42 U	0.16	0.42	4.24

Surrogate Recoveries (%)

13C5-PFHxA	129
13C4-PFHpA	125
13C8-PFOA	119
13C9-PFNA	108
13C6-PFDA	115
13C7-PFUnA	131
13C2-PFDoA	123
13C2-PFTeDA	130
d3-MeFOSAA	147
d5-EtFOSAA	146
13C3-PFBS	142
13C3-PFHxS	122
13C8-PFOS	129

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-EB11-10062018			
Battelle ID		J8715-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/26/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		AQ			
Sample Size		0.275			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	0.23 J	0.17	0.45	4.55
PFHpA	375-85-9	0.45 U	0.15	0.45	4.55
PFOA	335-67-1	1.09 J	0.16	0.45	4.55
PFNA	375-95-1	0.91 U	0.24	0.91	4.55
PFDA	335-76-2	0.45 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	0.45 U	0.12	0.45	4.55
PFHxS	355-46-4	0.36 U	0.10	0.36	4.55
PFOS	1763-23-1	0.45 U	0.17	0.45	4.55

Surrogate Recoveries (%)

13C5-PFHxA	109
13C4-PFHpA	103
13C8-PFOA	107
13C9-PFNA	95
13C6-PFDA	121
13C7-PFUnA	129
13C2-PFDoA	130
13C2-PFTeDA	135
d3-MeFOSAA	132
d5-EtFOSAA	129
13C3-PFBS	126
13C3-PFHxS	106
13C8-PFOS	110

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

Client ID		VC-CS00-DW01-1018				
Battelle ID		J8716-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.290				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	26.05		0.16	0.43	4.31
PFHpA	375-85-9	7.83		0.14	0.43	4.31
PFOA	335-67-1	21.89		0.16	0.43	4.31
PFNA	375-95-1	3.06	J	0.22	0.86	4.31
PFDA	335-76-2	1.23	J	0.14	0.43	4.31
PFUnA	2058-94-8	0.46	J	0.25	0.86	4.31
PFDoA	307-55-1	0.43	U	0.16	0.43	4.31
PFTrDA	72629-94-8	0.43	U	0.13	0.43	4.31
PFTeDA	376-06-7	0.86	U	0.22	0.86	4.31
NMeFOSAA	2355-31-9	1.72	U	0.48	1.72	4.31
NEtFOSAA	2991-50-6	0.86	U	0.42	0.86	4.31
PFBS	375-73-5	9.30		0.11	0.43	4.31
PFHxS	355-46-4	113.80	D	0.95	3.45	43.10
PFOS	1763-23-1	868.44	D	8.19	21.55	215.52

Surrogate Recoveries (%)

13C5-PFHxA	92	D
13C4-PFHpA	148	
13C8-PFOA	104	
13C9-PFNA	69	
13C6-PFDA	95	
13C7-PFUnA	112	
13C2-PFDoA	112	
13C2-PFTeDA	120	
d3-MeFOSAA	126	D
d5-EtFOSAA	110	D
13C3-PFBS	106	D
13C3-PFHxS	124	D
13C8-PFOS	102	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-CS00-DW02-1018			
Battelle ID		J8717-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/26/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		GW			
Sample Size		0.265			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	4.57 J	0.18	0.47	4.72
PFHpA	375-85-9	1.03 J	0.15	0.47	4.72
PFOA	335-67-1	6.98 B	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	0.47 U	0.17	0.47	4.72
PFTrDA	72629-94-8	0.47 U	0.14	0.47	4.72
PFTeDA	376-06-7	0.94 U	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	1.29 J	0.12	0.47	4.72
PFHxS	355-46-4	9.65	0.10	0.38	4.72
PFOS	1763-23-1	67.95	0.18	0.47	4.72

Surrogate Recoveries (%)

13C5-PFHxA	127	
13C4-PFHpA	143	
13C8-PFOA	113	
13C9-PFNA	100	
13C6-PFDA	108	
13C7-PFUnA	129	
13C2-PFDoA	116	
13C2-PFTeDA	100	
d3-MeFOSAA	166 N	
d5-EtFOSAA	187 N	
13C3-PFBS	96	
13C3-PFHxS	140	
13C8-PFOS	105	

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

Client ID		VC-CS00-DW02P-1018				
Battelle ID		J8718-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.290				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ
PFHxA	307-24-4	4.09	J	0.16	0.43	4.31
PFHpA	375-85-9	0.96	J	0.14	0.43	4.31
PFOA	335-67-1	4.97	B	0.16	0.43	4.31
PFNA	375-95-1	0.86	U	0.22	0.86	4.31
PFDA	335-76-2	0.43	U	0.14	0.43	4.31
PFUnA	2058-94-8	0.86	U	0.25	0.86	4.31
PFDoA	307-55-1	0.43	U	0.16	0.43	4.31
PFTrDA	72629-94-8	0.43	U	0.13	0.43	4.31
PFTeDA	376-06-7	0.86	U	0.22	0.86	4.31
NMeFOSAA	2355-31-9	1.72	U	0.48	1.72	4.31
NEtFOSAA	2991-50-6	0.86	U	0.42	0.86	4.31
PFBS	375-73-5	0.95	J	0.11	0.43	4.31
PFHxS	355-46-4	6.21		0.09	0.34	4.31
PFOS	1763-23-1	40.40		0.16	0.43	4.31

Surrogate Recoveries (%)

13C5-PFHxA	117	
13C4-PFHpA	146	
13C8-PFOA	100	
13C9-PFNA	95	
13C6-PFDA	113	
13C7-PFUnA	128	
13C2-PFDoA	110	
13C2-PFTeDA	93	
d3-MeFOSAA	163	N
d5-EtFOSAA	173	N
13C3-PFBS	102	
13C3-PFHxS	147	
13C8-PFOS	110	

BATTELLE
It can be done

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

Client ID		VC-CS00-DW03-1018				
Battelle ID		J8719-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
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	1.28	J	0.18	0.46	4.63
PFHpA	375-85-9	0.31	J	0.15	0.46	4.63
PFOA	335-67-1	1.67	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	0.46	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	0.46	U	0.12	0.46	4.63
PFHxS	355-46-4	0.50	J	0.10	0.37	4.63
PFOS	1763-23-1	3.38	J	0.18	0.46	4.63

Surrogate Recoveries (%)

13C5-PFHxA	131	
13C4-PFHpA	152	N
13C8-PFOA	118	
13C9-PFNA	111	
13C6-PFDA	99	
13C7-PFUnA	122	
13C2-PFDoA	99	
13C2-PFTeDA	102	
d3-MeFOSAA	150	
d5-EtFOSAA	133	
13C3-PFBS	86	
13C3-PFHxS	132	
13C8-PFOS	105	

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

Client ID		VC-CS00-DW04-1018				
Battelle ID		J8720-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
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	817.90	D	5.86	15.43	154.32
PFHpA	375-85-9	119.20	D	1.48	4.63	46.30
PFOA	335-67-1	212.96	D	1.67	4.63	46.30
PFNA	375-95-1	7.93		0.24	0.93	4.63
PFDA	335-76-2	0.81	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	508.92	D	1.20	4.63	46.30
PFHxS	355-46-4	3178.96	D	16.98	61.73	771.61
PFOS	1763-23-1	3576.80	D	29.32	77.16	771.61
Surrogate Recoveries (%)						
13C5-PFHxA		116	D			
13C4-PFHpA		122	D			
13C8-PFOA		91	D			
13C9-PFNA		55				
13C6-PFDA		97				
13C7-PFUnA		107				
13C2-PFDoA		115				
13C2-PFTeDA		110				
d3-MeFOSAA		141	D			
d5-EtFOSAA		150	D			
13C3-PFBS		135	D			
13C3-PFHxS		111	D			
13C8-PFOS		111	D			

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

Client ID		VC-CS00-DW05-1018				
Battelle ID		J8721-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
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	3.78	J	0.18	0.46	4.63
PFHpA	375-85-9	0.45	J	0.15	0.46	4.63
PFOA	335-67-1	1.61	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	0.46	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	0.99	J	0.12	0.46	4.63
PFHxS	355-46-4	2.56	J	0.10	0.37	4.63
PFOS	1763-23-1	6.07		0.18	0.46	4.63

Surrogate Recoveries (%)

13C5-PFHxA	146	
13C4-PFHpA	162	N
13C8-PFOA	118	
13C9-PFNA	102	
13C6-PFDA	104	
13C7-PFUnA	145	
13C2-PFDoA	138	
13C2-PFTeDA	118	
d3-MeFOSAA	184	N
d5-EtFOSAA	188	N
13C3-PFBS	136	
13C3-PFHxS	153	N
13C8-PFOS	114	

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

Client ID		VC-CS00-DW06-1018				
Battelle ID		J8722-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
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	36.51		0.18	0.46	4.63
PFHpA	375-85-9	8.11		0.15	0.46	4.63
PFOA	335-67-1	29.21		0.17	0.46	4.63
PFNA	375-95-1	1.80	J	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	0.46	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	4.91		0.12	0.46	4.63
PFHxS	355-46-4	127.35	D	1.02	3.70	46.30
PFOS	1763-23-1	548.32	D	1.76	4.63	46.30

Surrogate Recoveries (%)

13C5-PFHxA	120	
13C4-PFHpA	139	
13C8-PFOA	107	
13C9-PFNA	92	
13C6-PFDA	115	
13C7-PFUnA	118	
13C2-PFDoA	104	
13C2-PFTeDA	63	
d3-MeFOSAA	159	ND
d5-EtFOSAA	145	D
13C3-PFBS	90	
13C3-PFHxS	123	D
13C8-PFOS	120	D

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

Client ID		KB80 IB				
Battelle ID		KB80 IB_10/17/2018				
Sample Type		IB				
Collection Date		NA				
Extraction Date		NA				
Analysis Date		10/17/2018				
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	0.50	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	98
13C4-PFHpA	98
13C8-PFOA	101
13C9-PFNA	100
13C6-PFDA	103
13C7-PFUnA	102
13C2-PFDoA	98
13C2-PFTeDA	93
d3-MeFOSAA	104
d5-EtFOSAA	96
13C3-PFBS	95
13C3-PFHxS	103
13C8-PFOS	96

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

Client ID		KB80 IB				
Battelle ID		KB80 IB_10/25/2018				
Sample Type		IB				
Collection Date		NA				
Extraction Date		NA				
Analysis Date		10/25/2018				
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	0.50	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	98
13C4-PFHpA	110
13C8-PFOA	97
13C9-PFNA	88
13C6-PFDA	98
13C7-PFUnA	106
13C2-PFDoA	103
13C2-PFTeDA	102
d3-MeFOSAA	132
d5-EtFOSAA	120
13C3-PFBS	113
13C3-PFHxS	105
13C8-PFOS	120

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

Client ID		KB80 IB			
Battelle ID		KB80 IB_10/26/2018			
Sample Type		IB			
Collection Date		NA			
Extraction Date		NA			
Analysis Date		10/26/2018			
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	0.50 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	95
13C4-PFHpA	102
13C8-PFOA	103
13C9-PFNA	92
13C6-PFDA	91
13C7-PFUnA	91
13C2-PFDoA	98
13C2-PFTeDA	107
d3-MeFOSAA	92
d5-EtFOSAA	107
13C3-PFBS	89
13C3-PFHxS	86
13C8-PFOS	93

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

Client ID		Procedural Blank			
Battelle ID		CR986PB-FS			
Sample Type		PB			
Collection Date		10/17/2018			
Extraction Date		10/17/2018			
Analysis Date		10/25/2018			
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	1.09 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	114
13C4-PFHpA	114
13C8-PFOA	124
13C9-PFNA	101
13C6-PFDA	101
13C7-PFUnA	98
13C2-PFDoA	104
13C2-PFTeDA	103
d3-MeFOSAA	125
d5-EtFOSAA	130
13C3-PFBS	121
13C3-PFHxS	110
13C8-PFOS	104

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

Client ID		Laboratory Control Sample					
Battelle ID		CR987LCS-FS					
Sample Type		LCS					
Collection Date		10/17/2018					
Extraction Date		10/17/2018					
Analysis Date		10/26/2018					
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	19.77	20.20	98		51	137
PFHpA	375-85-9	20.24	20.00	101		48	136
PFOA	335-67-1	23.42	20.00	117		49	141
PFNA	375-95-1	23.53	20.00	118		58	122
PFDA	335-76-2	20.09	20.00	100		59	135
PFUnA	2058-94-8	20.55	20.00	103		64	134
PFDoA	307-55-1	20.16	20.00	101		75	131
PFTrDA	72629-94-8	21.47	20.00	107		42	148
PFTeDA	376-06-7	20.66	20.00	103		42	158
NMeFOSAA	2355-31-9	21.34	20.00	107		50	146
NEtFOSAA	2991-50-6	22.15	20.00	111		51	131
PFBS	375-73-5	19.38	20.20	96		56	134
PFHxS	355-46-4	20.46	20.20	101		52	128
PFOS	1763-23-1	20.11	20.00	101		40	144
Surrogate Recoveries (%)							
13C5-PFHxA		130					
13C4-PFHpA		115					
13C8-PFOA		107					
13C9-PFNA		100					
13C6-PFDA		107					
13C7-PFUnA		117					
13C2-PFDoA		120					
13C2-PFTeDA		125					
d3-MeFOSAA		149					
d5-EtFOSAA		133					
13C3-PFBS		142					
13C3-PFHxS		122					
13C8-PFOS		110					

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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 18-0609

Project:	CTO-4164 Naval Base Ventura County, California
Parameters:	PFAS
Laboratory:	Battelle, Norwell, MA
Matrix:	GW and AQ
Data Set:	DP-18-0305
Analytical SOP:	5-369
Method Reference:	PFAS to QSM 5.1 Table B-15

Sample Custody		
Collection Date	Receipt Date	Temp (°C)
10/6/2018	10/9/2018	0.9, 1.1, and 1.7
Corrective Actions	None.	
Sample Storage	The water samples were stored refrigerated until extraction.	
Related samples	NA	

	METHOD SUMMARIES
Sample Preparation	Water samples were spiked with surrogates in the original sample container from the field. The water was extracted using a weak ion exchange solid phase extraction (SPE) cartridge and eluted from the SPE with 0.4% NH_3 in methanol. Extracts were 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	All samples were pre-screened prior to initial extraction. Based on the concentrations detected in the pre-screening results and a discussion with the CH2M Project Chemist, the following samples used a reduced volume for extraction to avoid contamination of the laboratory and the instrument: J8667-FS (VC-CS12-DW01-1018) J8668-FS (VC-CS12-DW01P-1018) J8669-FS (VC-CS12-DW02-1018) Samples J8686-FS (VC-CS10-DW03-1018) and J8720-FS (VC-CS00-DW04-1018) had ion ratios for PFOA above 50% RPD. All samples, except the field blank and equipment blank, were centrifuged prior to extraction. Due to high levels of sedimentation present, all samples, except for J8685-FS (VC-CS10-DW02P-1018) and J8721-FS (VC-CS00-DW05-1018) were transferred to new bottles prior to extraction, the remaining sediment was archived. Samples J8685-FS (VC-CS10-DW02P-1018) and J8721-FS (VC-CS00-DW05-1018) both contained floating particulate matter. The SPE filter for J8685-FS (VC-CS10-DW02P-1018) clogged and the filter was popped in the cartridge to allow for complete extraction, the filter was left in the SPE cartridge during extraction. A small volume of sample J8683-FS (VC-CS10-DW01-1018) was spilled (1 to 2 mL) during transfer to SPE cartridge.

QA/QC Summary
Batch 18-0609

	Once concentrated to dryness, sample extracts J8717-FS (VC-CS00-DW02-1018), J8718-FS (VC-CS00-DW02P-1018), J8719-FS (VC-CS00-DW03-1018), J8721-FS (VC-CS00-DW05-1018), and J8722-FS (VC-CS00-DW06-1018) contained particulate matter. Sample was reconstituted with the particulate matter and transferred to analysis.
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	Samples analyzed on Sciex 5500 LC-MS/MS. When detected, PFHxS and PFOS contain both linear and branched isomers. In cases where 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. PFOS appears to exhibit a retention time shift because it is a branched analyte and the retention time is defined by whichever branched peak has the largest area, however, the retention time doesn't actually shift. The linear and branched peaks are picked in all cases. There are instances of extracted internal standards (surrogates) that would fall outside of the 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. The initial calibration curve used for the base and surrogate methods for the result files (quant methods) 18-0620_18-0621_18-0622 and 18-0609A are the same, the initial calibration is from result files starting with 18-0620_18-0621_18-0622.

Holding Times	Extraction Date(s)	Analysis Date(s)
	10/17/2018	10/17,25,26/2018

QA/QC Summary
Batch 18-0609

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	Two exceedances noted.
	PFOA was detected in two authentic samples, J8717-FS (VC-CS00-DW02-1018) and J8718-FS (VC-CS00-DW02P-1018), at less than 10 times the amount detected in the PB, and is B qualified in these samples. Note that the concentration of PFAS in the blank passes the criteria of ≤ ½ the LOQ at 1.09 ng/L.

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 not 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	NA
	None prepared with this batch.

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	Ten exceedances noted.
	The following extracted internal standards (EIS) were over-recovered: • J8717-FS (VC-CS00-DW02-1018): d3-MeFOSAA, d5-EtFOSAA • J8718-FS (VC-CS00-DW02P-1018): d3-MeFOSAA, d5-EtFOSAA • J8719-FS (VC-CS00-DW03-1018): 13C4-PFHpA • J8721-FS (VC-CS00-DW05-1018): 13C4-PFHpA, d3-MeFOSAA, d5-EtFOSAA, and 13C3-PFHxS • J8722-FS (VC-CS00-DW06-1018): d3-MeFOSAA A fresh aliquot of each sample extract was run to confirm the recoveries (see Unused Data Section). It is important to note that the area for each of the extracted internal standard analytes with exceedences is within +/- 50% of the area of the average of the same EIS analyte in the calibration curve, suggesting that the issue may be related to differences in ionization of the EIS as compared to the internal standard spiked prior to analysis. 13C4-PFHpA is quantified vs. 13C2-PFOA d3-MeFOSAA, d5-EtFOSAA, and 13C3-PFHxS are quantified vs. 13C4-PFOS

QA/QC Summary
Batch 18-0609

Internal Standard Analytes	Labelled analog compounds were added prior to analysis.
+/- 50% of the area of the L5 calibration point.	No exceedances noted.
	Sample extracts J8670-FS(0) and J8687-FS(0) exhibited high areas for internal standard 13C2-PFOA. Affected surrogates for these samples were reported from dilutions with acceptable internal standard areas. 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.

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

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

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

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

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Project Client: CH2M
Project Name: CTO-4164 Naval Base Ventura County, California
Project Number: 100110125-01
Preparation Batch: 18-0609
Data Set: DP-18-0305
Test Code: Master_369

QC Parameter:	Exceed:	Justification:
Procedural Blank	0	None
PB Measurement Quality Objective	2	PFOA was detected in two authentic samples at less than 10 times the amount detected in the PB, and is B qualified in these samples.
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)	10	There were ten exceedences for surrogates recovered above the upper limit in the authentic samples. Results were confirmed by re-aliquoting and reanalyzing the samples. The corresponding native compounds were not detected above the reporting limit in the affected samples.
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-18-0305
Project Number:	100110125-01	**Prep Batch Number:**	18-0609
Entered By:	Lauren Griffith	**Entered On:**	11/01/2018
Test Code (Matrix Type):	Master_369(L)		

Samples that were manually integrated are noted on the quant reports with the comment (TRUE).
LMG 11/01/18

KB79 was not used for d3-MeFOSAA for the SIS method. There is no impact on the data once this point is removed.
LMG 11/05/18

Samples J8686 and J8720 exhibited ion ratios outside of criteria for PFOA.
LMG 11/05/18

PFOS appears to exhibit a retention time shift because it is a branched analyte and the retention time is defined by whichever branched peak has the largest area. The entire branched peak is picked in all cases.
LMG 11/01/18

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 11/01/18

There are instances of extracted internal standards (surrogates) that would fall outside of the 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 11/01/18

Samples J8670-FS(0) and J8687-FS(0) exhibited high areas for internal standard 13C2-PFOA. Affected surrogates for these samples were reported from dilutions with acceptable internal standard areas. 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 11/01/18

Task Leader Approval:

SupervisorApproval:

PM Approval:

Digitally signed by Jonathan Thorn
Date: 2018.11.05 17:25:26 -05'00'

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:	J8687-FS-D(7)
Client Sample ID:	VC-CS10-DW04-1018
Sample Size:	0.27
Units:	L
Dilution Factor:	125.000
PIV (L):	0.001
Target Analyte:	PFOA
MRM Transition:	413.0 / 369.0
Data file:	Data18-0590_18-01588_18-0589 (calibration curve) 18-0609 (calibration curve) and 18-0609A (sample)
Result table:	18-0620_18-0621_18-0622_BASE(calibration curve) and AC_10262018_369.wiff (sample)
Area:	1,513,772.43
IS Name:	13C8-PFOA
IS Area:	87,215.24
IS Amount (ng/L):	250
y-intercept:	0.0608
slope:	1.00279

$$\text{Concentration} = \frac{[(1513772.43/87215.24) - 0.0608]}{1.00279} * 250 * 0.001 * 125 / 0.27$$

ng/L = 1,996.28

*Final concentration may vary based on rounding.

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Project Client: CH2M
Project Name: CTO-4164 Naval Base Ventura County, California
Project No.: 100110125-01
Preparation Batch: 18-0609
Data Set: DP-18-0305

		CR986PB-FS (Procedural Blank)	CR987LCS-FS (Laboratory Control Sample)	J8667-FS (VC-CS12-DW01-1018)	J8668-FS (VC-CS12-DW01P-1018)	J8669-FS (VC-CS12-DW02-1018)	J8670-FS (VC-CS12-DW03-1018)
PFHxA	307-24-4	-	L	L	L	L	L
PFHpA	375-85-9	-	L	L	L	L	L
PFOA	335-67-1	-	L	L	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	L	L
PFHxS	355-46-4	-	L/Br	L/Br	L/Br	L/Br	L/Br
PFOS	1763-23-1	-	L/Br	L/Br	L/Br	L/Br	L/Br

"L" :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-

	J8683-FS (VC-CS10-DW01-1018)	J8684-FS (VC-CS10-DW02-1018)	J8685-FS (VC-CS10-DW02P-1018)	J8686-FS (VC-CS10-DW03-1018)	J8687-FS (VC-CS10-DW04-1018)	J8688-FS (VC-CS18-DW01-1018)	J8714-FS (VC-SO-FB11-10062018)	J8715-FS (VC-SO-EB11-10062018)
PFHxA	L	L	L	L	L	L	-	-
PFHpA	-	-	-	L	L	L	-	-
PFOA	L	L	L	L	L	L	-	-
PFNA	-	-	-	-	-	-	-	-
PFDA	-	-	-	-	-	-	-	-
PFUnA	-	-	-	-	-	-	-	-
PFDoA	-	-	-	-	-	-	-	-
PFTrDA	-	-	-	-	-	-	-	-
PFTeDA	-	-	-	-	-	-	-	-
NMeFOSAA	-	-	-	-	-	-	-	-
NEtFOSAA	-	-	-	-	-	-	-	-
PFBS	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
Preparation Batch
Data Set: DP-18-

	J8716-FS (VC-CS00-DW01-1018)	J8717-FS (VC-CS00-DW02-1018)	J8718-FS (VC-CS00-DW02P-1018)	J8719-FS (VC-CS00-DW03-1018)	J8720-FS (VC-CS00-DW04-1018)	J8721-FS (VC-CS00-DW05-1018)	J8722-FS (VC-CS00-DW06-1018)
PFHxA	L	-	-	-	L	-	L
PFHpA	L	-	-	-	L	-	L
PFOA	L	-	-	-	L	-	L
PFNA	-	-	-	-	L	-	-
PFDA	-	-	-	-	-	-	-
PFUnA	-	-	-	-	-	-	-
PFDoA	-	-	-	-	-	-	-
PFTrDA	-	-	-	-	-	-	-
PFTeDA	-	-	-	-	-	-	-
NMeFOSAA	-	-	-	-	-	-	-
NEtFOSAA	-	-	-	-	-	-	-
PFBS	L	-	-	-	L	-	L
PFHxS	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

BATTELLE
It can be done

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
KB77	L5	10/17/18 20:30	13C2-PFOA	80,369.12	40,184.56	120,553.68

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
KB73	L1	10/17/18 19:46	13C2-PFOA	79,095.63	40,184.56	120,553.68	
KB74	L2	10/17/18 19:57	13C2-PFOA	89,971.31	40,184.56	120,553.68	
KB75	L3	10/17/18 20:08	13C2-PFOA	87,799.30	40,184.56	120,553.68	
KB76	L4	10/17/18 20:19	13C2-PFOA	84,567.91	40,184.56	120,553.68	
KB77	L5	10/17/18 20:30	13C2-PFOA	80,369.12	40,184.56	120,553.68	
KB78	L6	10/17/18 20:41	13C2-PFOA	85,964.25	40,184.56	120,553.68	
KB79	L7	10/17/18 20:52	13C2-PFOA	86,636.81	40,184.56	120,553.68	
KB80 IB	IB	10/17/18 21:02	13C2-PFOA	85,730.94	40,184.56	120,553.68	
KB81 ICC	ICC	10/17/18 21:13	13C2-PFOA	85,242.44	40,184.56	120,553.68	
KB75 ISC	ISC	10/25/18 16:26	13C2-PFOA	74,227.28	40,184.56	120,553.68	
KB80 IB	IB	10/25/18 16:37	13C2-PFOA	82,086.71	40,184.56	120,553.68	
KB76	L4	10/25/18 18:27	13C2-PFOA	83,095.99	40,184.56	120,553.68	
CR986PB-FS(0)	Procedural Blank	10/25/18 18:48	13C2-PFOA	77,926.31	40,184.56	120,553.68	
~~CR987LCS-FS(0)~~	~~Laboratory Control Sample~~	~~10/25/18 18:59~~	~~13C2-PFOA~~	~~10,110.28~~	~~40,184.56~~	~~120,553.68~~	~~N~~ (1)
J8667-FS(0)	VC-CS12-DW01-1018	10/25/18 19:10	13C2-PFOA	95,628.65	40,184.56	120,553.68	
~~J8667-FS-D(3)~~	~~VC-CS12-DW01-1018~~	~~10/25/18 19:21~~	~~13C2-PFOA~~	~~26,551.89~~	~~40,184.56~~	~~120,553.68~~	~~N~~ (1)
J8667-FS-D(5)	VC-CS12-DW01-1018	10/25/18 19:32	13C2-PFOA	87,461.37	40,184.56	120,553.68	
J8667-FS-D(7)	VC-CS12-DW01-1018	10/25/18 19:43	13C2-PFOA	84,309.21	40,184.56	120,553.68	
J8668-FS(0)	VC-CS12-DW01P-1018	10/25/18 19:54	13C2-PFOA	90,446.52	40,184.56	120,553.68	
J8668-FS-D(3)	VC-CS12-DW01P-1018	10/25/18 20:04	13C2-PFOA	83,263.48	40,184.56	120,553.68	
J8668-FS-D(5)	VC-CS12-DW01P-1018	10/25/18 20:15	13C2-PFOA	81,443.81	40,184.56	120,553.68	
KB77	L5	10/25/18 20:37	13C2-PFOA	90,138.33	40,184.56	120,553.68	
J8669-FS(0)	VC-CS12-DW02-1018	10/25/18 20:48	13C2-PFOA	95,244.92	40,184.56	120,553.68	
J8669-FS-D(3)	VC-CS12-DW02-1018	10/25/18 20:59	13C2-PFOA	78,766.56	40,184.56	120,553.68	
J8669-FS-D(5)	VC-CS12-DW02-1018	10/25/18 21:10	13C2-PFOA	91,198.79	40,184.56	120,553.68	
~~J8670-FS(0)~~	~~VC-CS12-DW03-1018~~	~~10/25/18 21:21~~	~~13C2-PFOA~~	~~128,821.90~~	~~40,184.56~~	~~120,553.68~~	~~N~~ (2)
J8670-FS-D(3)	VC-CS12-DW03-1018	10/25/18 21:31	13C2-PFOA	85,660.87	40,184.56	120,553.68	
J8670-FS-D(5)	VC-CS12-DW03-1018	10/25/18 21:42	13C2-PFOA	92,332.51	40,184.56	120,553.68	
J8683-FS(0)	VC-CS10-DW01-1018	10/25/18 21:53	13C2-PFOA	86,008.03	40,184.56	120,553.68	
J8683-FS-D(3)	VC-CS10-DW01-1018	10/25/18 22:04	13C2-PFOA	79,711.43	40,184.56	120,553.68	
KB76	L4	10/25/18 22:26	13C2-PFOA	74,960.09	40,184.56	120,553.68	
J8684-FS(0)	VC-CS10-DW02-1018	10/25/18 22:37	13C2-PFOA	81,128.01	40,184.56	120,553.68	
J8684-FS-D(3)	VC-CS10-DW02-1018	10/25/18 22:47	13C2-PFOA	82,077.90	40,184.56	120,553.68	
J8685-FS(0)	VC-CS10-DW02P-1018	10/25/18 22:58	13C2-PFOA	81,441.06	40,184.56	120,553.68	
J8686-FS(0)	VC-CS10-DW03-1018	10/25/18 23:09	13C2-PFOA	91,019.31	40,184.56	120,553.68	
J8686-FS-D(3)	VC-CS10-DW03-1018	10/25/18 23:20	13C2-PFOA	79,863.91	40,184.56	120,553.68	
~~J8687-FS(0)~~	~~VC-CS10-DW04-1018~~	~~10/25/18 23:31~~	~~13C2-PFOA~~	~~164,540.51~~	~~40,184.56~~	~~120,553.68~~	~~N~~ (2)
J8687-FS-D(3)	VC-CS10-DW04-1018	10/25/18 23:42	13C2-PFOA	98,892.42	40,184.56	120,553.68	
J8687-FS-D(5)	VC-CS10-DW04-1018	10/25/18 23:53	13C2-PFOA	85,476.11	40,184.56	120,553.68	
KB77	L5	10/26/18 0:14	13C2-PFOA	86,538.52	40,184.56	120,553.68	
J8688-FS(0)	VC-CS18-DW01-1018	10/26/18 0:25	13C2-PFOA	55,861.20	40,184.56	120,553.68	
J8714-FS(0)	VC-SO-FB11-10062018	10/26/18 0:36	13C2-PFOA	79,910.05	40,184.56	120,553.68	
J8715-FS(0)	VC-SO-EB11-10062018	10/26/18 0:47	13C2-PFOA	94,738.72	40,184.56	120,553.68	
J8716-FS(0)	VC-CS00-DW01-1018	10/26/18 0:58	13C2-PFOA	89,132.88	40,184.56	120,553.68	
J8716-FS-D(3)	VC-CS00-DW01-1018	10/26/18 1:09	13C2-PFOA	85,513.19	40,184.56	120,553.68	
J8717-FS(0)	VC-CS00-DW02-1018	10/26/18 1:20	13C2-PFOA	74,059.72	40,184.56	120,553.68	
J8718-FS(0)	VC-CS00-DW02P-1018	10/26/18 1:30	13C2-PFOA	66,384.05	40,184.56	120,553.68	
J8719-FS(0)	VC-CS00-DW03-1018	10/26/18 1:41	13C2-PFOA	65,550.76	40,184.56	120,553.68	
KB76	L4	10/26/18 2:03	13C2-PFOA	90,852.08	40,184.56	120,553.68	
J8720-FS(0)	VC-CS00-DW04-1018	10/26/18 2:14	13C2-PFOA	85,276.79	40,184.56	120,553.68	

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	10/17/18 20:30	13C2-PFOA	80,369.12	40,184.56	120,553.68

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
J8720-FS-D(3)	VC-CS00-DW04-1018	10/26/18 2:25	13C2-PFOA	84,661.40	40,184.56	120,553.68	
J8720-FS-D(5)	VC-CS00-DW04-1018	10/26/18 2:36	13C2-PFOA	79,521.12	40,184.56	120,553.68	
J8721-FS(0)	VC-CS00-DW05-1018	10/26/18 2:46	13C2-PFOA	77,671.60	40,184.56	120,553.68	
J8722-FS(0)	VC-CS00-DW06-1018	10/26/18 2:57	13C2-PFOA	84,197.52	40,184.56	120,553.68	
KB77	L5	10/26/18 3:19	13C2-PFOA	86,927.09	40,184.56	120,553.68	

(1) - Please see sequence report for details LMG 11/1/18
(2) - Please misc doc report for details LMG 11/1/18

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	10/17/18 20:30	13C2-PFDA	90,129.70	45,064.85	135,194.55

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
KB73	L1	10/17/18 19:46	13C2-PFDA	100,139.46	45,064.85	135,194.55	
KB74	L2	10/17/18 19:57	13C2-PFDA	103,883.83	45,064.85	135,194.55	
KB75	L3	10/17/18 20:08	13C2-PFDA	98,052.33	45,064.85	135,194.55	
KB76	L4	10/17/18 20:19	13C2-PFDA	99,978.99	45,064.85	135,194.55	
KB77	L5	10/17/18 20:30	13C2-PFDA	90,129.70	45,064.85	135,194.55	
KB78	L6	10/17/18 20:41	13C2-PFDA	104,169.70	45,064.85	135,194.55	
KB79	L7	10/17/18 20:52	13C2-PFDA	100,765.46	45,064.85	135,194.55	
KB80 IB	IB	10/17/18 21:02	13C2-PFDA	96,280.28	45,064.85	135,194.55	
KB81 ICC	ICC	10/17/18 21:13	13C2-PFDA	103,402.36	45,064.85	135,194.55	
KB75 ISC	ISC	10/25/18 16:26	13C2-PFDA	96,318.27	45,064.85	135,194.55	
KB80 IB	IB	10/25/18 16:37	13C2-PFDA	98,812.53	45,064.85	135,194.55	
KB76	L4	10/25/18 18:27	13C2-PFDA	97,126.87	45,064.85	135,194.55	
CR986PB-FS(0)	Procedural Blank	10/25/18 18:48	13C2-PFDA	98,250.23	45,064.85	135,194.55	
~~CR987LCS-FS(0)~~	~~Laboratory Control Sample~~	~~10/25/18 18:59~~	~~13C2-PFDA~~	~~14,134.45~~	~~45,064.85~~	~~135,194.55~~	~~N~~ (1)
J8667-FS(0)	VC-CS12-DW01-1018	10/25/18 19:10	13C2-PFDA	102,793.69	45,064.85	135,194.55	
~~J8667-FS-D(3)~~	~~VC-CS12-DW01-1018~~	~~10/25/18 19:21~~	~~13C2-PFDA~~	~~27,849.55~~	~~45,064.85~~	~~135,194.55~~	~~N~~ (1)
J8667-FS-D(5)	VC-CS12-DW01-1018	10/25/18 19:32	13C2-PFDA	95,148.62	45,064.85	135,194.55	
J8667-FS-D(7)	VC-CS12-DW01-1018	10/25/18 19:43	13C2-PFDA	103,649.40	45,064.85	135,194.55	
J8668-FS(0)	VC-CS12-DW01P-1018	10/25/18 19:54	13C2-PFDA	100,623.61	45,064.85	135,194.55	
J8668-FS-D(3)	VC-CS12-DW01P-1018	10/25/18 20:04	13C2-PFDA	104,800.67	45,064.85	135,194.55	
J8668-FS-D(5)	VC-CS12-DW01P-1018	10/25/18 20:15	13C2-PFDA	97,231.88	45,064.85	135,194.55	
KB77	L5	10/25/18 20:37	13C2-PFDA	103,546.22	45,064.85	135,194.55	
J8669-FS(0)	VC-CS12-DW02-1018	10/25/18 20:48	13C2-PFDA	94,182.94	45,064.85	135,194.55	
J8669-FS-D(3)	VC-CS12-DW02-1018	10/25/18 20:59	13C2-PFDA	93,980.25	45,064.85	135,194.55	
J8669-FS-D(5)	VC-CS12-DW02-1018	10/25/18 21:10	13C2-PFDA	110,780.53	45,064.85	135,194.55	
J8670-FS(0)	VC-CS12-DW03-1018	10/25/18 21:21	13C2-PFDA	94,674.10	45,064.85	135,194.55	
J8670-FS-D(3)	VC-CS12-DW03-1018	10/25/18 21:31	13C2-PFDA	102,031.00	45,064.85	135,194.55	
J8670-FS-D(5)	VC-CS12-DW03-1018	10/25/18 21:42	13C2-PFDA	103,045.28	45,064.85	135,194.55	
J8683-FS(0)	VC-CS10-DW01-1018	10/25/18 21:53	13C2-PFDA	92,078.25	45,064.85	135,194.55	
J8683-FS-D(3)	VC-CS10-DW01-1018	10/25/18 22:04	13C2-PFDA	91,907.84	45,064.85	135,194.55	
KB76	L4	10/25/18 22:26	13C2-PFDA	95,645.72	45,064.85	135,194.55	
J8684-FS(0)	VC-CS10-DW02-1018	10/25/18 22:37	13C2-PFDA	97,575.48	45,064.85	135,194.55	
J8684-FS-D(3)	VC-CS10-DW02-1018	10/25/18 22:47	13C2-PFDA	96,965.55	45,064.85	135,194.55	
J8685-FS(0)	VC-CS10-DW02P-1018	10/25/18 22:58	13C2-PFDA	102,373.21	45,064.85	135,194.55	
J8686-FS(0)	VC-CS10-DW03-1018	10/25/18 23:09	13C2-PFDA	86,667.02	45,064.85	135,194.55	
J8686-FS-D(3)	VC-CS10-DW03-1018	10/25/18 23:20	13C2-PFDA	94,642.73	45,064.85	135,194.55	
J8687-FS(0)	VC-CS10-DW04-1018	10/25/18 23:31	13C2-PFDA	99,245.94	45,064.85	135,194.55	
J8687-FS-D(3)	VC-CS10-DW04-1018	10/25/18 23:42	13C2-PFDA	92,332.88	45,064.85	135,194.55	
J8687-FS-D(5)	VC-CS10-DW04-1018	10/25/18 23:53	13C2-PFDA	98,837.22	45,064.85	135,194.55	
KB77	L5	10/26/18 0:14	13C2-PFDA	87,285.19	45,064.85	135,194.55	
J8688-FS(0)	VC-CS18-DW01-1018	10/26/18 0:25	13C2-PFDA	53,720.88	45,064.85	135,194.55	
J8714-FS(0)	VC-SO-FB11-10062018	10/26/18 0:36	13C2-PFDA	94,002.61	45,064.85	135,194.55	
J8715-FS(0)	VC-SO-EB11-10062018	10/26/18 0:47	13C2-PFDA	99,149.71	45,064.85	135,194.55	
J8716-FS(0)	VC-CS00-DW01-1018	10/26/18 0:58	13C2-PFDA	112,012.49	45,064.85	135,194.55	
J8716-FS-D(3)	VC-CS00-DW01-1018	10/26/18 1:09	13C2-PFDA	98,500.69	45,064.85	135,194.55	
J8717-FS(0)	VC-CS00-DW02-1018	10/26/18 1:20	13C2-PFDA	94,849.07	45,064.85	135,194.55	
J8718-FS(0)	VC-CS00-DW02P-1018	10/26/18 1:30	13C2-PFDA	83,088.63	45,064.85	135,194.55	
J8719-FS(0)	VC-CS00-DW03-1018	10/26/18 1:41	13C2-PFDA	93,613.55	45,064.85	135,194.55	
KB76	L4	10/26/18 2:03	13C2-PFDA	97,172.81	45,064.85	135,194.55	
J8720-FS(0)	VC-CS00-DW04-1018	10/26/18 2:14	13C2-PFDA	102,367.94	45,064.85	135,194.55	

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	10/17/18 20:30	13C2-PFDA	90,129.70	45,064.85	135,194.55

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
J8720-FS-D(3)	VC-CS00-DW04-1018	10/26/18 2:25	13C2-PFDA	105,263.71	45,064.85	135,194.55	
J8720-FS-D(5)	VC-CS00-DW04-1018	10/26/18 2:36	13C2-PFDA	102,403.01	45,064.85	135,194.55	
J8721-FS(0)	VC-CS00-DW05-1018	10/26/18 2:46	13C2-PFDA	90,145.34	45,064.85	135,194.55	
J8722-FS(0)	VC-CS00-DW06-1018	10/26/18 2:57	13C2-PFDA	106,977.21	45,064.85	135,194.55	
KB77	L5	10/26/18 3:19	13C2-PFDA	93,125.66	45,064.85	135,194.55	

(1) - Please see sequence report for details LMG 11/1/18

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	10/17/18 20:30	13C4-PFOS	31,518.26	15,759.13	47,277.39

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
KB73	L1	10/17/18 19:46	13C4-PFOS	29,846.55	15,759.13	47,277.39	
KB74	L2	10/17/18 19:57	13C4-PFOS	34,856.85	15,759.13	47,277.39	
KB75	L3	10/17/18 20:08	13C4-PFOS	30,684.77	15,759.13	47,277.39	
KB76	L4	10/17/18 20:19	13C4-PFOS	30,962.75	15,759.13	47,277.39	
KB77	L5	10/17/18 20:30	13C4-PFOS	31,518.26	15,759.13	47,277.39	
KB78	L6	10/17/18 20:41	13C4-PFOS	29,589.19	15,759.13	47,277.39	
KB79	L7	10/17/18 20:52	13C4-PFOS	26,984.04	15,759.13	47,277.39	
KB80 IB	IB	10/17/18 21:02	13C4-PFOS	29,371.12	15,759.13	47,277.39	
KB81 ICC	ICC	10/17/18 21:13	13C4-PFOS	33,690.55	15,759.13	47,277.39	
KB75 ISC	ISC	10/25/18 16:26	13C4-PFOS	28,184.95	15,759.13	47,277.39	
KB80 IB	IB	10/25/18 16:37	13C4-PFOS	24,821.18	15,759.13	47,277.39	
KB76	L4	10/25/18 18:27	13C4-PFOS	30,895.81	15,759.13	47,277.39	
CR986PB-FS(0)	Procedural Blank	10/25/18 18:48	13C4-PFOS	25,589.78	15,759.13	47,277.39	
~~CR987LCS-FS(0)~~	~~Laboratory Control Sample~~	~~10/25/18 18:59~~	~~13C4-PFOS~~	~~4,324.29~~	~~15,759.13~~	~~47,277.39~~	~~N~~ (1)
J8667-FS(0)	VC-CS12-DW01-1018	10/25/18 19:10	13C4-PFOS	25,132.67	15,759.13	47,277.39	
~~J8667-FS-D(3)~~	~~VC-CS12-DW01-1018~~	~~10/25/18 19:21~~	~~13C4-PFOS~~	~~8,917.40~~	~~15,759.13~~	~~47,277.39~~	~~N~~ (1)
J8667-FS-D(5)	VC-CS12-DW01-1018	10/25/18 19:32	13C4-PFOS	28,867.58	15,759.13	47,277.39	
J8667-FS-D(7)	VC-CS12-DW01-1018	10/25/18 19:43	13C4-PFOS	29,382.70	15,759.13	47,277.39	
J8668-FS(0)	VC-CS12-DW01P-1018	10/25/18 19:54	13C4-PFOS	24,892.66	15,759.13	47,277.39	
J8668-FS-D(3)	VC-CS12-DW01P-1018	10/25/18 20:04	13C4-PFOS	25,606.86	15,759.13	47,277.39	
J8668-FS-D(5)	VC-CS12-DW01P-1018	10/25/18 20:15	13C4-PFOS	28,496.83	15,759.13	47,277.39	
KB77	L5	10/25/18 20:37	13C4-PFOS	28,284.73	15,759.13	47,277.39	
J8669-FS(0)	VC-CS12-DW02-1018	10/25/18 20:48	13C4-PFOS	24,024.78	15,759.13	47,277.39	
J8669-FS-D(3)	VC-CS12-DW02-1018	10/25/18 20:59	13C4-PFOS	24,822.63	15,759.13	47,277.39	
J8669-FS-D(5)	VC-CS12-DW02-1018	10/25/18 21:10	13C4-PFOS	29,999.71	15,759.13	47,277.39	
J8670-FS(0)	VC-CS12-DW03-1018	10/25/18 21:21	13C4-PFOS	20,480.75	15,759.13	47,277.39	
J8670-FS-D(3)	VC-CS12-DW03-1018	10/25/18 21:31	13C4-PFOS	26,275.98	15,759.13	47,277.39	
J8670-FS-D(5)	VC-CS12-DW03-1018	10/25/18 21:42	13C4-PFOS	30,935.12	15,759.13	47,277.39	
J8683-FS(0)	VC-CS10-DW01-1018	10/25/18 21:53	13C4-PFOS	24,213.24	15,759.13	47,277.39	
J8683-FS-D(3)	VC-CS10-DW01-1018	10/25/18 22:04	13C4-PFOS	25,938.74	15,759.13	47,277.39	
KB76	L4	10/25/18 22:26	13C4-PFOS	27,149.34	15,759.13	47,277.39	
J8684-FS(0)	VC-CS10-DW02-1018	10/25/18 22:37	13C4-PFOS	21,649.80	15,759.13	47,277.39	
J8684-FS-D(3)	VC-CS10-DW02-1018	10/25/18 22:47	13C4-PFOS	28,290.32	15,759.13	47,277.39	
J8685-FS(0)	VC-CS10-DW02P-1018	10/25/18 22:58	13C4-PFOS	24,494.03	15,759.13	47,277.39	
J8686-FS(0)	VC-CS10-DW03-1018	10/25/18 23:09	13C4-PFOS	22,278.56	15,759.13	47,277.39	
J8686-FS-D(3)	VC-CS10-DW03-1018	10/25/18 23:20	13C4-PFOS	29,039.63	15,759.13	47,277.39	
J8687-FS(0)	VC-CS10-DW04-1018	10/25/18 23:31	13C4-PFOS	27,936.79	15,759.13	47,277.39	
J8687-FS-D(3)	VC-CS10-DW04-1018	10/25/18 23:42	13C4-PFOS	29,199.01	15,759.13	47,277.39	
J8687-FS-D(5)	VC-CS10-DW04-1018	10/25/18 23:53	13C4-PFOS	28,526.58	15,759.13	47,277.39	
KB77	L5	10/26/18 0:14	13C4-PFOS	26,662.47	15,759.13	47,277.39	
J8688-FS(0)	VC-CS18-DW01-1018	10/26/18 0:25	13C4-PFOS	23,716.16	15,759.13	47,277.39	
J8714-FS(0)	VC-SO-FB11-10062018	10/26/18 0:36	13C4-PFOS	25,215.02	15,759.13	47,277.39	
J8715-FS(0)	VC-SO-EB11-10062018	10/26/18 0:47	13C4-PFOS	29,006.20	15,759.13	47,277.39	
J8716-FS(0)	VC-CS00-DW01-1018	10/26/18 0:58	13C4-PFOS	18,603.20	15,759.13	47,277.39	
J8716-FS-D(3)	VC-CS00-DW01-1018	10/26/18 1:09	13C4-PFOS	24,553.25	15,759.13	47,277.39	
J8717-FS(0)	VC-CS00-DW02-1018	10/26/18 1:20	13C4-PFOS	22,036.01	15,759.13	47,277.39	
J8718-FS(0)	VC-CS00-DW02P-1018	10/26/18 1:30	13C4-PFOS	19,036.09	15,759.13	47,277.39	
J8719-FS(0)	VC-CS00-DW03-1018	10/26/18 1:41	13C4-PFOS	23,213.05	15,759.13	47,277.39	
KB76	L4	10/26/18 2:03	13C4-PFOS	32,948.41	15,759.13	47,277.39	
J8720-FS(0)	VC-CS00-DW04-1018	10/26/18 2:14	13C4-PFOS	17,587.65	15,759.13	47,277.39	

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	10/17/18 20:30	13C4-PFOS	31,518.26	15,759.13	47,277.39

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
J8720-FS-D(3)	VC-CS00-DW04-1018	10/26/18 2:25	13C4-PFOS	21,575.77	15,759.13	47,277.39	
J8720-FS-D(5)	VC-CS00-DW04-1018	10/26/18 2:36	13C4-PFOS	23,706.91	15,759.13	47,277.39	
J8721-FS(0)	VC-CS00-DW05-1018	10/26/18 2:46	13C4-PFOS	23,359.62	15,759.13	47,277.39	
J8722-FS(0)	VC-CS00-DW06-1018	10/26/18 2:57	13C4-PFOS	24,155.51	15,759.13	47,277.39	
KB77	L5	10/26/18 3:19	13C4-PFOS	27,007.09	15,759.13	47,277.39	

(1) - Please see sequence report for details LMG 11/1/18

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	10/17/18 20:30	13C2-PFOA	80,369.12	40,184.56	120,553.68

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
KB73	L1	10/17/18 19:46	13C2-PFOA	79,095.63	40,184.56	120,553.68	
KB74	L2	10/17/18 19:57	13C2-PFOA	89,971.31	40,184.56	120,553.68	
KB75	L3	10/17/18 20:08	13C2-PFOA	87,799.30	40,184.56	120,553.68	
KB76	L4	10/17/18 20:19	13C2-PFOA	84,567.91	40,184.56	120,553.68	
KB77	L5	10/17/18 20:30	13C2-PFOA	80,369.12	40,184.56	120,553.68	
KB78	L6	10/17/18 20:41	13C2-PFOA	85,964.25	40,184.56	120,553.68	
KB79	L7	10/17/18 20:52	13C2-PFOA	86,636.81	40,184.56	120,553.68	
KB80 IB	IB	10/17/18 21:02	13C2-PFOA	85,730.94	40,184.56	120,553.68	
KB81 ICC	ICC	10/17/18 21:13	13C2-PFOA	85,242.44	40,184.56	120,553.68	
KB75 ISC	ISC	10/26/18 11:41	13C2-PFOA	91,531.93	40,184.56	120,553.68	
KB80 IB	IB	10/26/18 11:52	13C2-PFOA	90,918.23	40,184.56	120,553.68	
J8722-FS-D(3)	VC-CS00-DW06-1018	10/26/18 12:35	13C2-PFOA	86,553.69	40,184.56	120,553.68	
J8720-FS-D(7)	VC-CS00-DW04-1018	10/26/18 12:46	13C2-PFOA	88,536.92	40,184.56	120,553.68	
J8716-FS-D(5)	VC-CS00-DW01-1018	10/26/18 12:57	13C2-PFOA	97,807.22	40,184.56	120,553.68	
J8688-FS-D(3)	VC-CS18-DW01-1018	10/26/18 13:08	13C2-PFOA	83,158.33	40,184.56	120,553.68	
J8687-FS-D(7)	VC-CS10-DW04-1018	10/26/18 13:19	13C2-PFOA	80,854.27	40,184.56	120,553.68	
KB76	L4	10/26/18 13:40	13C2-PFOA	78,409.93	40,184.56	120,553.68	
CR987LCS-FS(0)	Laboratory Control Sample	10/26/18 13:51	13C2-PFOA	86,265.82	40,184.56	120,553.68	
J8667-FS-D(3)	VC-CS12-DW01-1018	10/26/18 14:02	13C2-PFOA	90,421.57	40,184.56	120,553.68	
~~J8717-FS(0)~~	~~VC-CS00-DW02-1018~~	~~10/26/18 14:13~~	~~13C2-PFOA~~	~~73,776.97~~	~~40,184.56~~	~~120,553.68~~	
~~J8718-FS(0)~~	~~VC-CS00-DW02P-1018~~	~~10/26/18 14:24~~	~~13C2-PFOA~~	~~68,789.05~~	~~40,184.56~~	~~120,553.68~~	
~~J8719-FS(0)~~	~~VC-CS00-DW03-1018~~	~~10/26/18 14:35~~	~~13C2-PFOA~~	~~71,031.30~~	~~40,184.56~~	~~120,553.68~~	
~~J8721-FS(0)~~	~~VC-CS00-DW05-1018~~	~~10/26/18 14:46~~	~~13C2-PFOA~~	~~81,791.88~~	~~40,184.56~~	~~120,553.68~~	
~~J8722-FS(0)~~	~~VC-CS00-DW06-1018~~	~~10/26/18 14:56~~	~~13C2-PFOA~~	~~73,901.59~~	~~40,184.56~~	~~120,553.68~~	
KB77	L5	10/26/18 15:07	13C2-PFOA	80,380.91	40,184.56	120,553.68	

Crossed out samples are not reported

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	10/17/18 20:30	13C2-PFDA	90,129.70	45,064.85	135,194.55

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
KB73	L1	10/17/18 19:46	13C2-PFDA	100,139.46	45,064.85	135,194.55	
KB74	L2	10/17/18 19:57	13C2-PFDA	103,883.83	45,064.85	135,194.55	
KB75	L3	10/17/18 20:08	13C2-PFDA	98,052.33	45,064.85	135,194.55	
KB76	L4	10/17/18 20:19	13C2-PFDA	99,978.99	45,064.85	135,194.55	
KB77	L5	10/17/18 20:30	13C2-PFDA	90,129.70	45,064.85	135,194.55	
KB78	L6	10/17/18 20:41	13C2-PFDA	104,169.70	45,064.85	135,194.55	
KB79	L7	10/17/18 20:52	13C2-PFDA	100,765.46	45,064.85	135,194.55	
KB80 IB	IB	10/17/18 21:02	13C2-PFDA	96,280.28	45,064.85	135,194.55	
KB81 ICC	ICC	10/17/18 21:13	13C2-PFDA	103,402.36	45,064.85	135,194.55	
KB75 ISC	ISC	10/26/18 11:41	13C2-PFDA	108,915.80	45,064.85	135,194.55	
KB80 IB	IB	10/26/18 11:52	13C2-PFDA	106,505.03	45,064.85	135,194.55	
J8722-FS-D(3)	VC-CS00-DW06-1018	10/26/18 12:35	13C2-PFDA	92,941.83	45,064.85	135,194.55	
J8720-FS-D(7)	VC-CS00-DW04-1018	10/26/18 12:46	13C2-PFDA	97,310.66	45,064.85	135,194.55	
J8716-FS-D(5)	VC-CS00-DW01-1018	10/26/18 12:57	13C2-PFDA	103,742.12	45,064.85	135,194.55	
J8688-FS-D(3)	VC-CS18-DW01-1018	10/26/18 13:08	13C2-PFDA	82,563.53	45,064.85	135,194.55	
J8687-FS-D(7)	VC-CS10-DW04-1018	10/26/18 13:19	13C2-PFDA	93,789.59	45,064.85	135,194.55	
KB76	L4	10/26/18 13:40	13C2-PFDA	97,659.44	45,064.85	135,194.55	
CR987LCS-FS(0)	Laboratory Control Sample	10/26/18 13:51	13C2-PFDA	101,162.79	45,064.85	135,194.55	
J8667-FS-D(3)	VC-CS12-DW01-1018	10/26/18 14:02	13C2-PFDA	107,203.42	45,064.85	135,194.55	
~~J8717-FS(0)~~	~~VC-CS00-DW02-1018~~	~~10/26/18 14:13~~	~~13C2-PFDA~~	~~95,008.65~~	~~45,064.85~~	~~135,194.55~~	
~~J8718-FS(0)~~	~~VC-CS00-DW02P-1018~~	~~10/26/18 14:24~~	~~13C2-PFDA~~	~~96,692.59~~	~~45,064.85~~	~~135,194.55~~	
~~J8719-FS(0)~~	~~VC-CS00-DW03-1018~~	~~10/26/18 14:35~~	~~13C2-PFDA~~	~~97,195.76~~	~~45,064.85~~	~~135,194.55~~	
~~J8721-FS(0)~~	~~VC-CS00-DW05-1018~~	~~10/26/18 14:46~~	~~13C2-PFDA~~	~~91,334.35~~	~~45,064.85~~	~~135,194.55~~	
~~J8722-FS(0)~~	~~VC-CS00-DW06-1018~~	~~10/26/18 14:56~~	~~13C2-PFDA~~	~~101,463.01~~	~~45,064.85~~	~~135,194.55~~	
KB77	L5	10/26/18 15:07	13C2-PFDA	95,092.50	45,064.85	135,194.55	

Crossed out samples are not reported

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	10/17/18 20:30	13C4-PFOS	31,518.26	15,759.13	47,277.39

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
KB73	L1	10/17/18 19:46	13C4-PFOS	29,846.55	15,759.13	47,277.39	
KB74	L2	10/17/18 19:57	13C4-PFOS	34,856.85	15,759.13	47,277.39	
KB75	L3	10/17/18 20:08	13C4-PFOS	30,684.77	15,759.13	47,277.39	
KB76	L4	10/17/18 20:19	13C4-PFOS	30,962.75	15,759.13	47,277.39	
KB77	L5	10/17/18 20:30	13C4-PFOS	31,518.26	15,759.13	47,277.39	
KB78	L6	10/17/18 20:41	13C4-PFOS	29,589.19	15,759.13	47,277.39	
KB79	L7	10/17/18 20:52	13C4-PFOS	26,984.04	15,759.13	47,277.39	
KB80 IB	IB	10/17/18 21:02	13C4-PFOS	29,371.12	15,759.13	47,277.39	
KB81 ICC	ICC	10/17/18 21:13	13C4-PFOS	33,690.55	15,759.13	47,277.39	
KB75 ISC	ISC	10/26/18 11:41	13C4-PFOS	32,528.73	15,759.13	47,277.39	
KB80 IB	IB	10/26/18 11:52	13C4-PFOS	33,682.77	15,759.13	47,277.39	
J8722-FS-D(3)	VC-CS00-DW06-1018	10/26/18 12:35	13C4-PFOS	26,906.17	15,759.13	47,277.39	
J8720-FS-D(7)	VC-CS00-DW04-1018	10/26/18 12:46	13C4-PFOS	26,709.36	15,759.13	47,277.39	
J8716-FS-D(5)	VC-CS00-DW01-1018	10/26/18 12:57	13C4-PFOS	30,732.99	15,759.13	47,277.39	
J8688-FS-D(3)	VC-CS18-DW01-1018	10/26/18 13:08	13C4-PFOS	30,126.32	15,759.13	47,277.39	
J8687-FS-D(7)	VC-CS10-DW04-1018	10/26/18 13:19	13C4-PFOS	26,791.93	15,759.13	47,277.39	
KB76	L4	10/26/18 13:40	13C4-PFOS	27,243.12	15,759.13	47,277.39	
CR987LCS-FS(0)	Laboratory Control Sample	10/26/18 13:51	13C4-PFOS	27,694.51	15,759.13	47,277.39	
J8667-FS-D(3)	VC-CS12-DW01-1018	10/26/18 14:02	13C4-PFOS	29,273.96	15,759.13	47,277.39	
~~J8717-FS(0)~~	~~VC-CS00-DW02-1018~~	~~10/26/18 14:13~~	~~13C4-PFOS~~	~~22,421.70~~	~~15,759.13~~	~~47,277.39~~	
~~J8718-FS(0)~~	~~VC-CS00-DW02P-1018~~	~~10/26/18 14:24~~	~~13C4-PFOS~~	~~23,617.52~~	~~15,759.13~~	~~47,277.39~~	
~~J8719-FS(0)~~	~~VC-CS00-DW03-1018~~	~~10/26/18 14:35~~	~~13C4-PFOS~~	~~20,172.57~~	~~15,759.13~~	~~47,277.39~~	
~~J8721-FS(0)~~	~~VC-CS00-DW05-1018~~	~~10/26/18 14:46~~	~~13C4-PFOS~~	~~25,428.26~~	~~15,759.13~~	~~47,277.39~~	
~~J8722-FS(0)~~	~~VC-CS00-DW06-1018~~	~~10/26/18 14:56~~	~~13C4-PFOS~~	~~22,931.28~~	~~15,759.13~~	~~47,277.39~~	
KB77	L5	10/26/18 15:07	13C4-PFOS	26,955.60	15,759.13	47,277.39	

Crossed out samples are not reported

Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 8:52:06 PM	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
PFBS_1	298.9 / 80.0	1.56	22	>10
PFBS_2	298.9 / 99.0	1.56	22	>10
PFHxA_1	313.0 / 269.0	1.89	21	>10
PFHxA_2	313.0 / 119.0	1.88	22	>10
PFHpA_1	363.0 / 319.0	2.29	30	>10
PFHpA_2	363.0 / 169.0	2.30	23	>10
PFHxS_1	399.0 / 80.0	2.32	33	>10
PFHxS_2	399.0 / 99.0	2.32	35	>10
PFOA_1	413.0 / 369.0	2.71	32	>10
PFOA_2	413.0 / 169.0	2.71	30	>10
PFNA_1	463.0 / 419.0	3.11	29	>10
PFNA_2	463.0 / 219.0	3.11	27	>10
PFOS_1	499.0 / 80.0	3.10	43	>10
PFOS_2	499.0 / 99.0	3.10	45	>10
PFDA_1	513.0 / 469.0	3.47	31	>10
PFDA_2	513.0 / 219.0	3.47	34	>10
PFUnA_1	563.0 / 519.0	3.79	30	>10
PFUnA_2	563.0 / 269.0	3.79	43	>10
PFDoA_1	613.0 / 569.0	4.07	39	>10
PFDoA_2	613.0 / 319.0	4.07	46	>10
PFTrDA_1	663.0 / 619.0	4.32	56	>10
PFTrDA_2	663.0 / 169.0	4.32	40	>10
PFTeDA_1	713.0 / 669.0	4.54	59	>10
PFTeDA_2	713.0 / 169.0	4.54	64	>10
NMeFOSAA_1	570.0 / 419.0	3.62	29	>10
NMeFOSAA_2	570.0 / 512.0	3.62	39	>10
NEtFOSAA_1	584.0 / 419.0	3.78	31	>10
NEtFOSAA_2	584.0 / 483.0	3.78	19	>10

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Mass Spectral Acquisition Rate Report

Created with Analyst Reporter
Printed: 30/10/2018 3:36:12 PM

Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 8:52:06 PM	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
13C2-PFDoA	615.0 / 570.0	4.07	23	>10
d3-MeFOSAA	573.0 / 419.0	3.62	18	>10
d5-EtFOSAA	589.0 / 419.0	3.78	27	>10
13C5-PFHxA	318.0 / 273.0	1.87	23	>10
13C4-PFHpA	367.0 / 322.0	2.28	26	>10
13C8-PFOA	421.0 / 376.0	2.70	47	>10
13C9-PFNA	472.0 / 427.0	3.09	24	>10
13C6-PFDA	519.0 / 474.0	3.45	29	>10
13C7-PFUnA	570.0 / 525.0	3.78	36	>10
13C2-PFTeDA	715.0 / 670.0	4.54	38	>10
13C3-PFBS	302.0 / 99.0	1.54	24	>10
13C3-PFHxS	402.0 / 99.0	2.31	27	>10
13C8-PFOS	507.0 / 99.0	3.09	33	>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	10.16	1.46	2.92	41
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	10.06	1.36	2.72	39
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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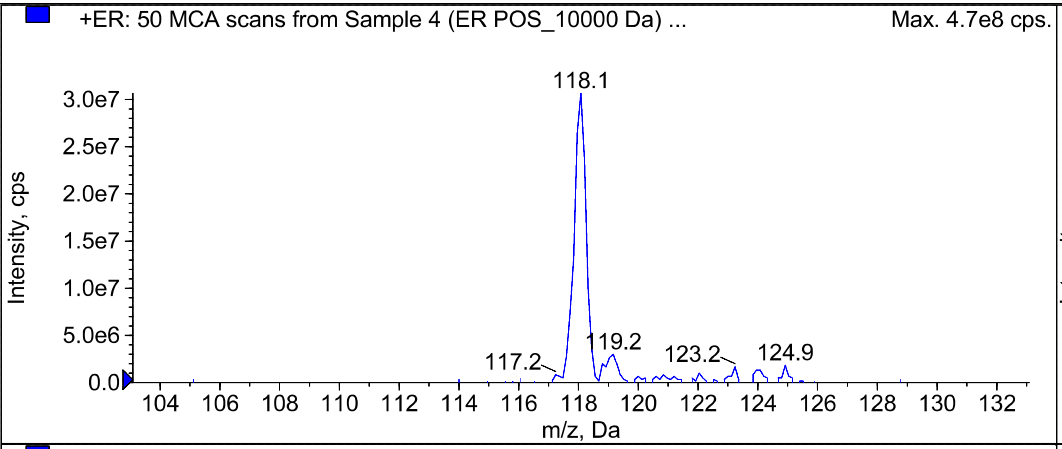
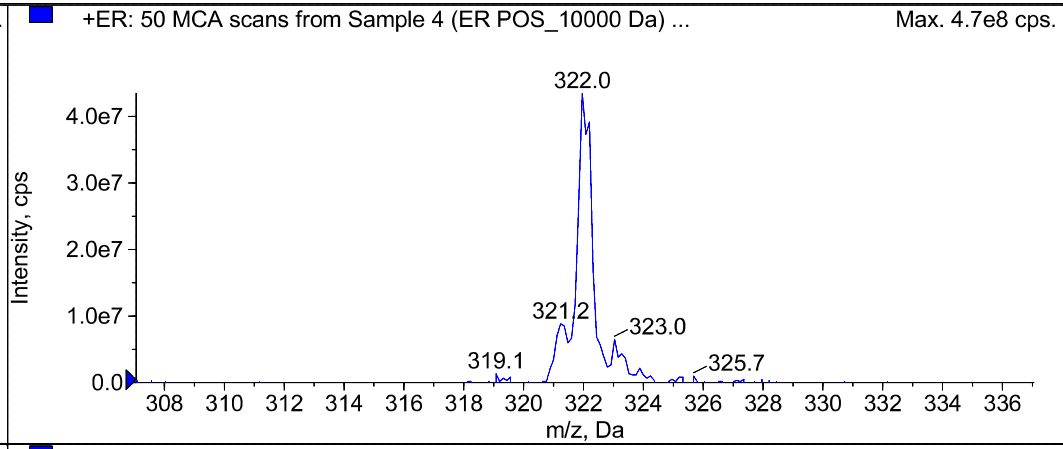
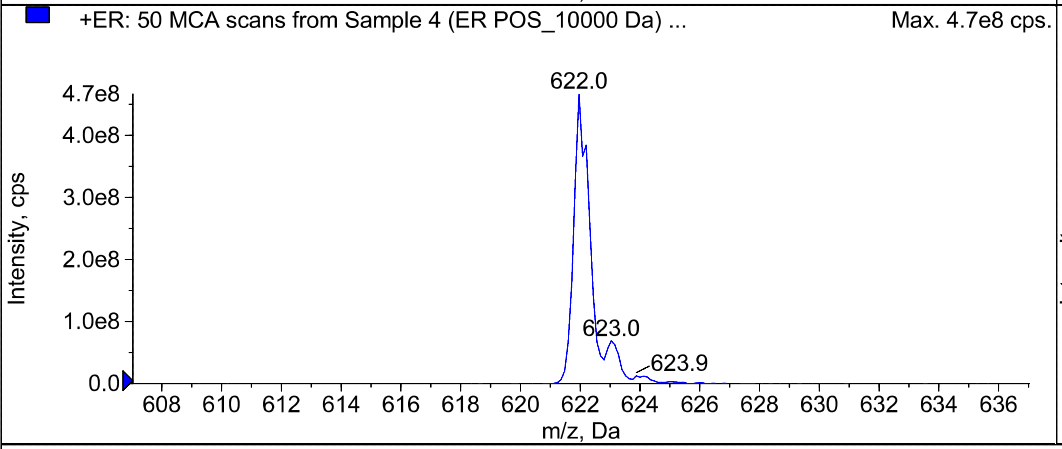
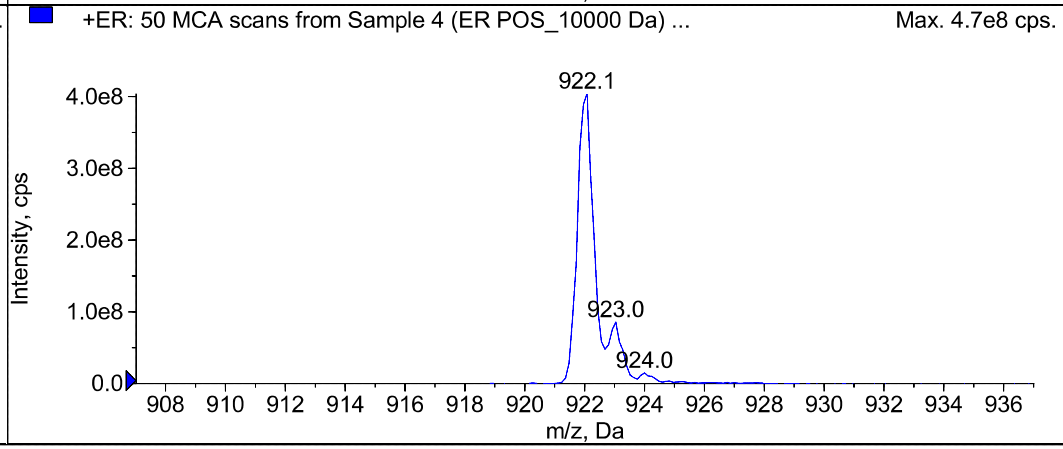








Peak List for " +ER: 50 MCA scans from Sample 4 (ER POS_10000 Da) of TRAP ER with NEW Pulse Manifold.wiff (Turbo Spray)"

	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)
KC19	PFAS - DoD Low Level Labelled Extracted Internal Standard (SIS)	KB71	180726-05
KB72	PFAS - DoD Low Level Labelled Extracted Internal Standard (SIS)	KB71	180726-05
JZ88	PFAS - DoD Second Source LCS/MS Solution	-	170724-01
KC52	PFAS - DoD Internal Standard Spiking Solution	JY25	180726-04
KB73	PFAS - DoD Calibration L1	KB71	180726-05
KB73	PFAS - DoD Calibration L1	JY25	180726-04
KB73	PFAS - DoD Calibration L1	JY23	180705-02
KB74	PFAS - DoD Calibration L2	JY25	180726-04
KB74	PFAS - DoD Calibration L2	KB71	180726-05
KB74	PFAS - DoD Calibration L2	JY23	180705-02
KB75	PFAS - DoD Calibration L3	KB71	180726-05
KB75	PFAS - DoD Calibration L3	JY25	180726-04
KB75	PFAS - DoD Calibration L3	KB70	180705-02
KB76	PFAS - DoD Calibration L4	KB70	180705-02
KB76	PFAS - DoD Calibration L4	JY25	180726-04
KB76	PFAS - DoD Calibration L4	KB71	180726-05
KB77	PFAS - DoD Calibration L5	KB71	180726-05
KB77	PFAS - DoD Calibration L5	KB70	180705-02
KB77	PFAS - DoD Calibration L5	JY25	180726-04
KB78	PFAS - DoD Calibraiton L6	JY25	180726-04
KB78	PFAS - DoD Calibraiton L6	KB70	180705-02
KB78	PFAS - DoD Calibraiton L6	KB71	180726-05
KB79	PFAS - DoD Calibration L7	KB71	180726-05
KB79	PFAS - DoD Calibration L7	KB70	180705-02
KB79	PFAS - DoD Calibration L7	JY25	180726-04
KB80	PFAS - DoD Instrument Blank	JY25	180726-04
KB80	PFAS - DoD Instrument Blank	KB71	180726-05
KB81	PFAS - DoD ICC	KB82	170724-01
KB81	PFAS - DoD ICC	KB71	180726-05
KB81	PFAS - DoD ICC	JY25	180726-04
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: **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: **KB72**

Description: PFAS - DoD Low Level Labelled Extracted Internal Standard (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)
KB71	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	10/01/19	---	---	2500 uL	1	25	~0.0000

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: KB72

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

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	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:** 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: KB72

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

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

Syringes/Pipettes:

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

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **KC19**

Description: PFAS - DoD Low Level Labelled Extracted Internal Standard (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)
KB71	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	10/01/19	---	---	2500 uL	1	25	~0.0000

Solution Prepared By: Schultz, Stephanie		**Date Prepared:**	10/16/2018	**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:** 10/18/2018 11:55:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KC19

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

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	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:** 10/16/2018 **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:** 10/18/2018 11:55:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: **KC19**

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

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
KB71	Pipette	OU16914

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 10/16/2018 **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:** 10/18/2018 11:55:00 AM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **KC52**

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:**	10/19/2018	**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: Schumitz, Denise **Date:** 10/23/2018 8:56:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KC52

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:** 10/19/2018 **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: Schumitz, Denise **Date:** 10/23/2018 8:56:00 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	**Solvent(s):**	**Lot#**	
Expiration Date:	032222	Methanol (1 mM KOH)	031317	(98%)
Recommended Storage:	Freezer (0 °C)	2-Propanol	23214	(2%)
Nominal Concentration (µg/mL):	1.0			
NIST Test ID#:	822-275872-11	5E-05	Balance Uncertainty	
Volume(s) shown below were combined and diluted to (mL):	50.0	0.007	Flask Uncertainty	

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

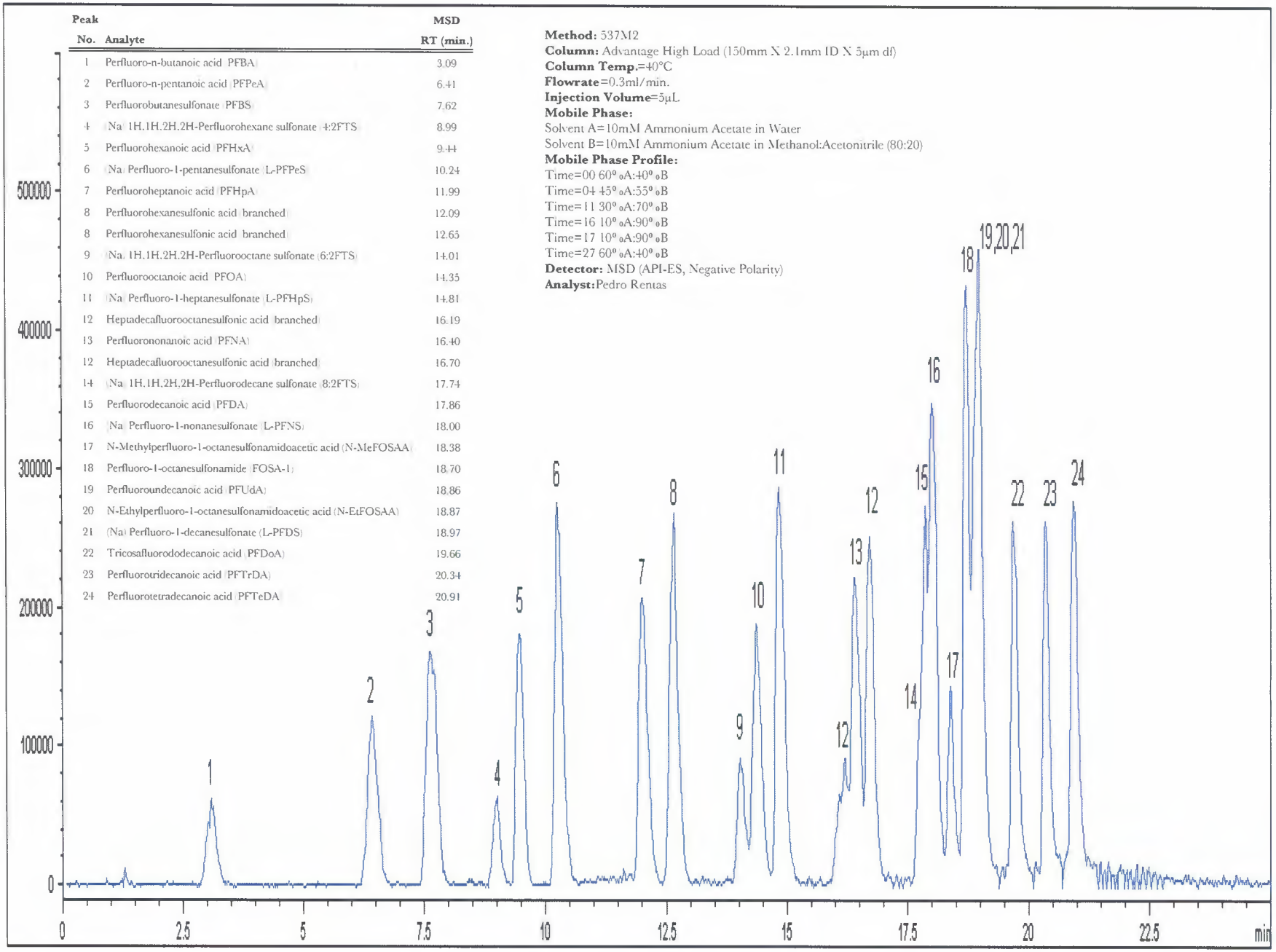
Note: All assigned values are anion concentrations.

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 $x_1, x_2, \ldots x_n$ 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 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)***

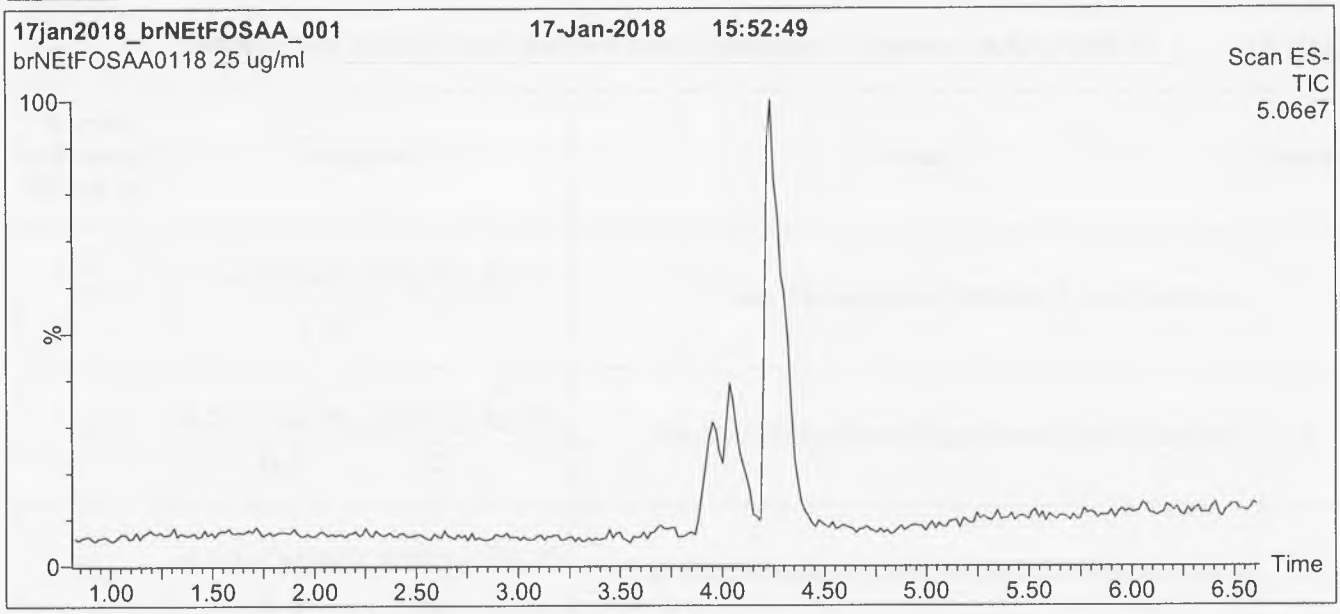
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	N-ethylperfluoro-1-octanesulfonamidoacetic acid	$CF_3(CF_2)_7SO_2N(C_2H_5)CH_2CO_2H$	77.5
2	N-ethylperfluoro-3-methylheptanesulfonamidoacetic acid	$CF_3(CF_2)_3CF(CF_3)(CF_2)_2SO_2N(C_2H_5)CH_2CO_2H$	2.3
3	N-ethylperfluoro-4-methylheptanesulfonamidoacetic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

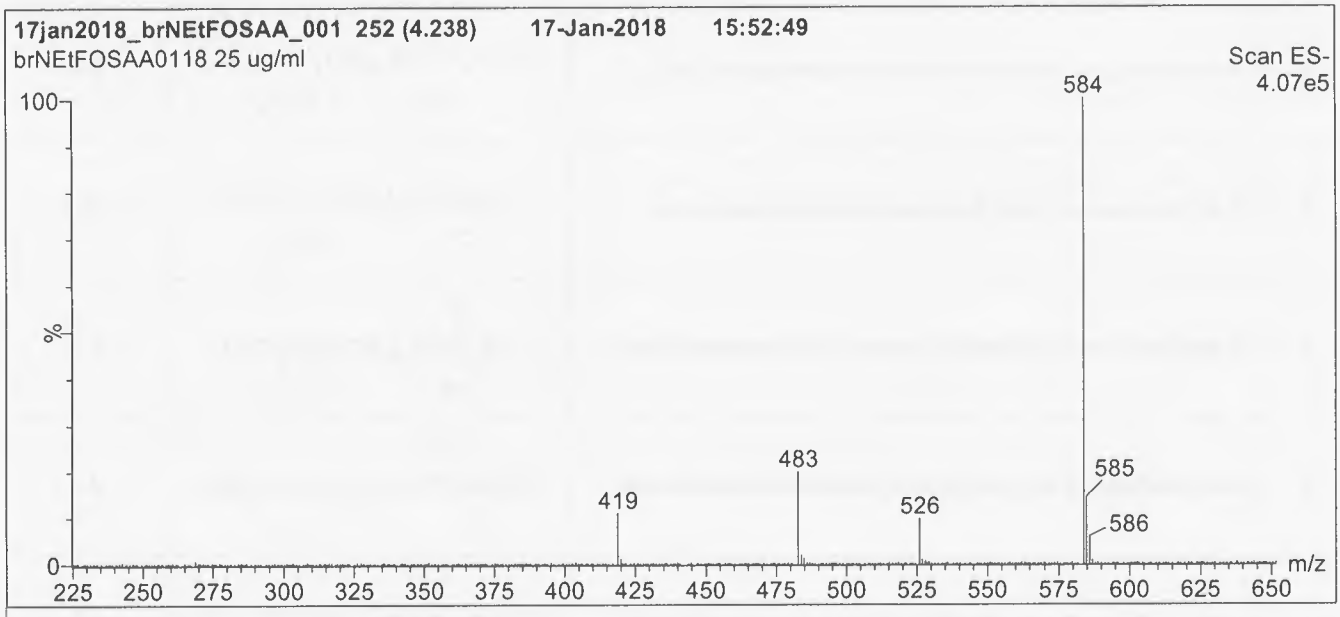
* Percent of total N-ethylperfluorooctanesulfonamidoacetic acid isomers only.

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

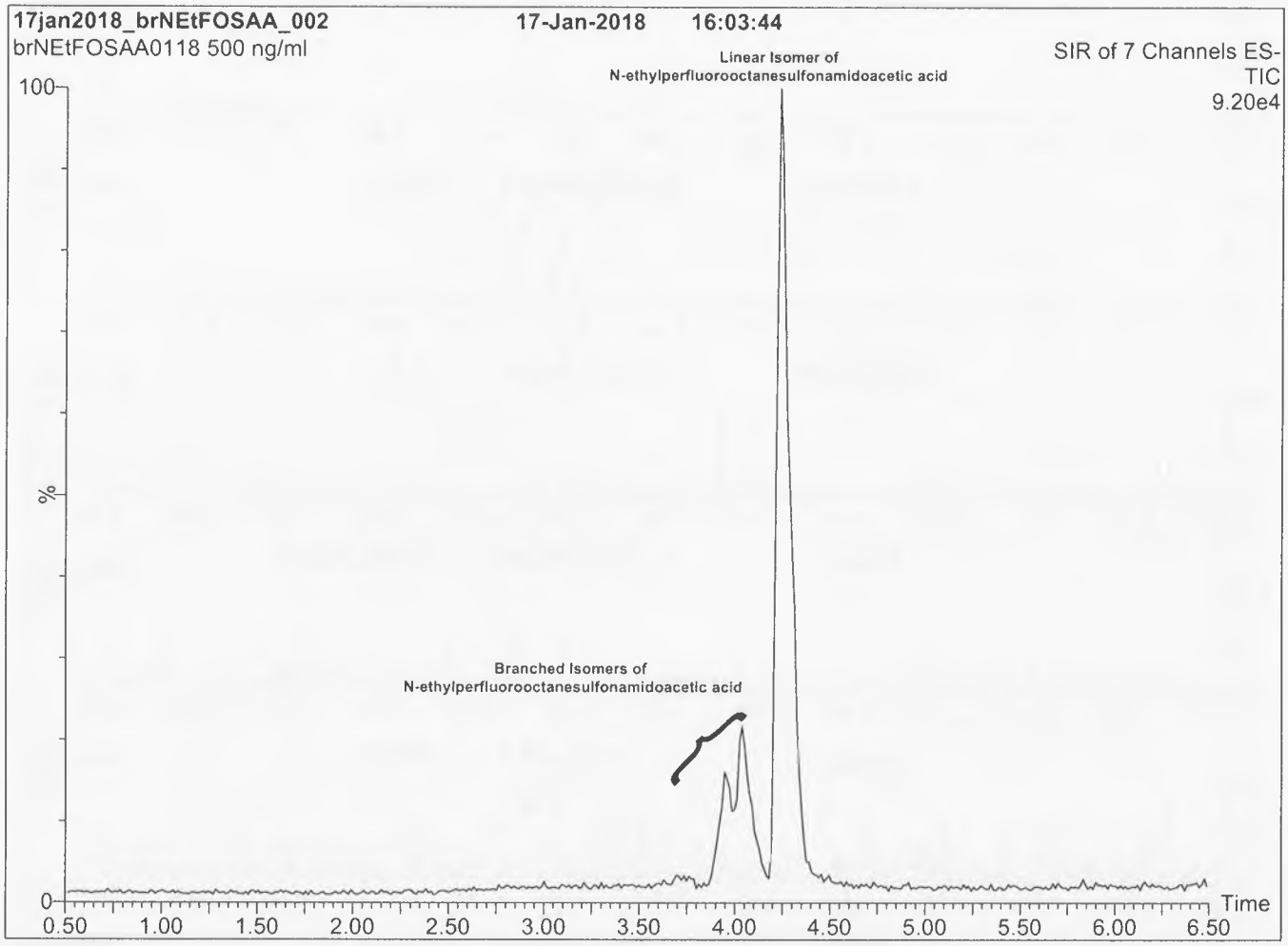
Flow: 300 µl/min

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

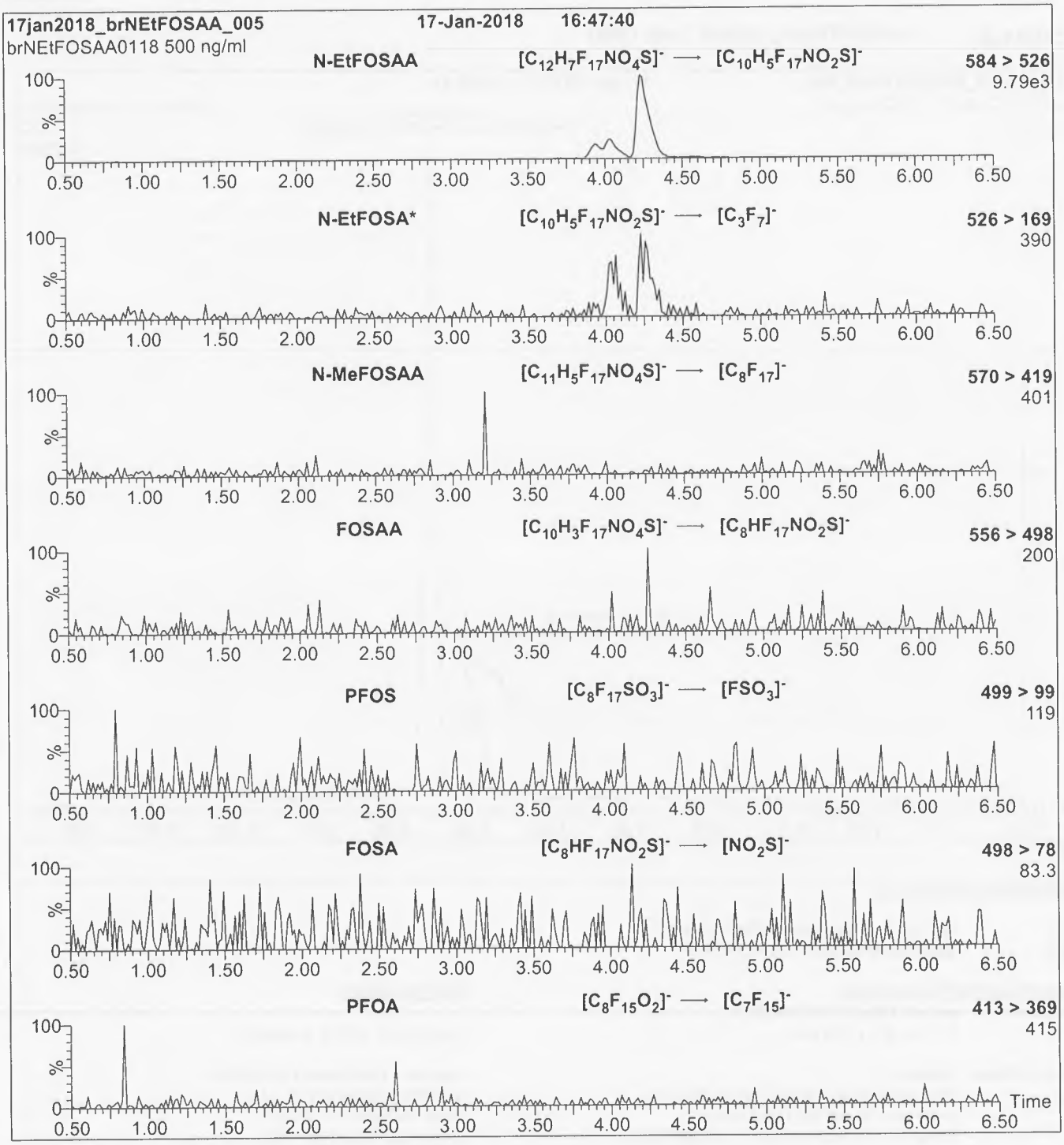
Flow: 300 µl/min

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)***

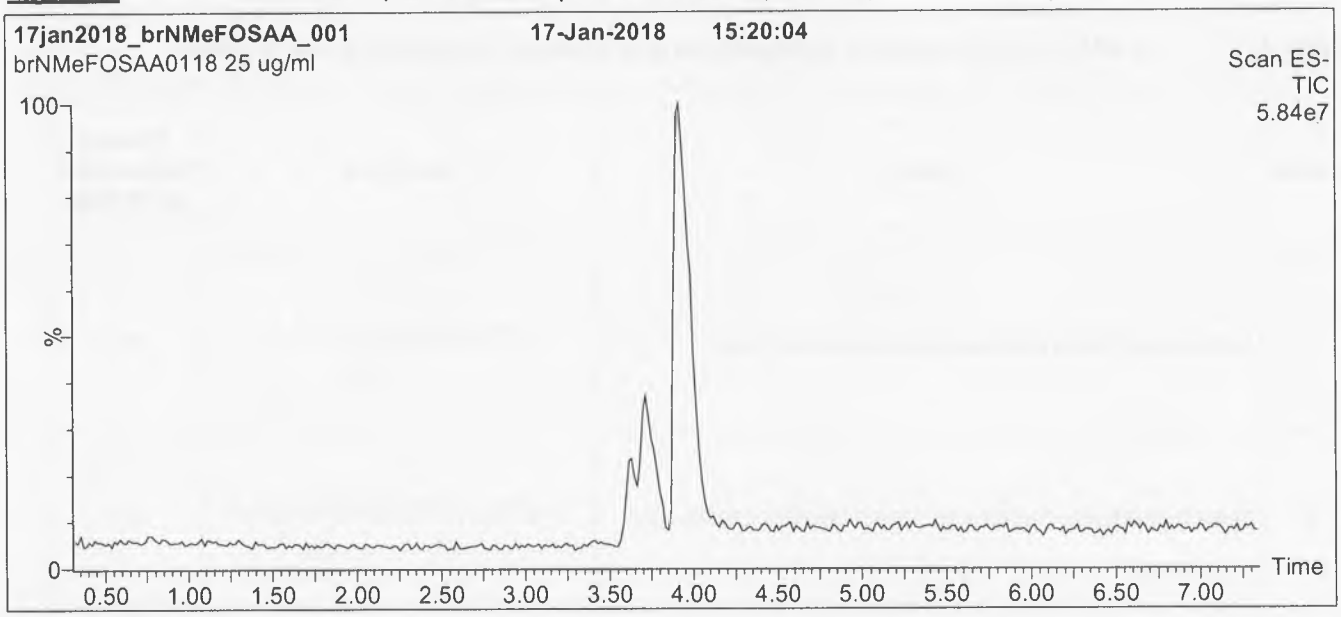
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	N-methylperfluoro-1-octanesulfonamidoacetic acid	$CF_3(CF_2)_7SO_2N(CH_3)CH_2CO_2H$	76.0
2	N-methylperfluoro-3-methylheptanesulfonamidoacetic acid	$CF_3(CF_2)_3CF(CF_3)(CF_2)_2SO_2N(CH_3)CH_2CO_2H$	0.7
3	N-methylperfluoro-4-methylheptanesulfonamidoacetic 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

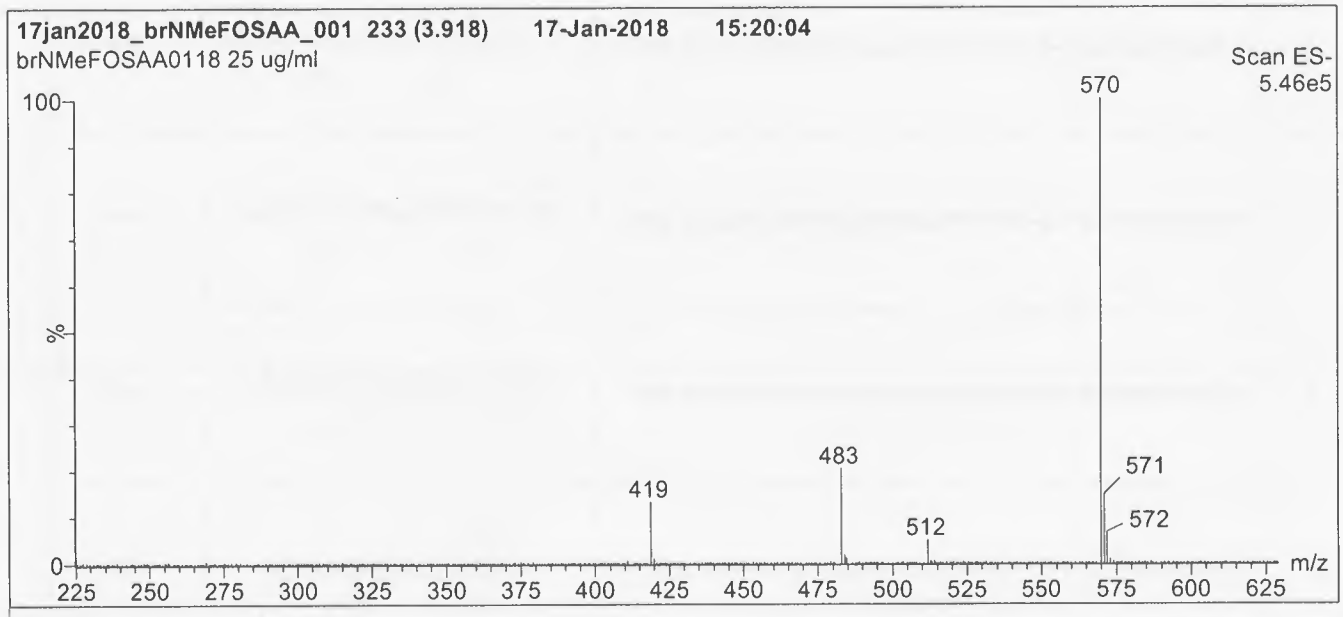
* Percent of total N-methylperfluorooctanesulfonamidoacetic acid isomers only.

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

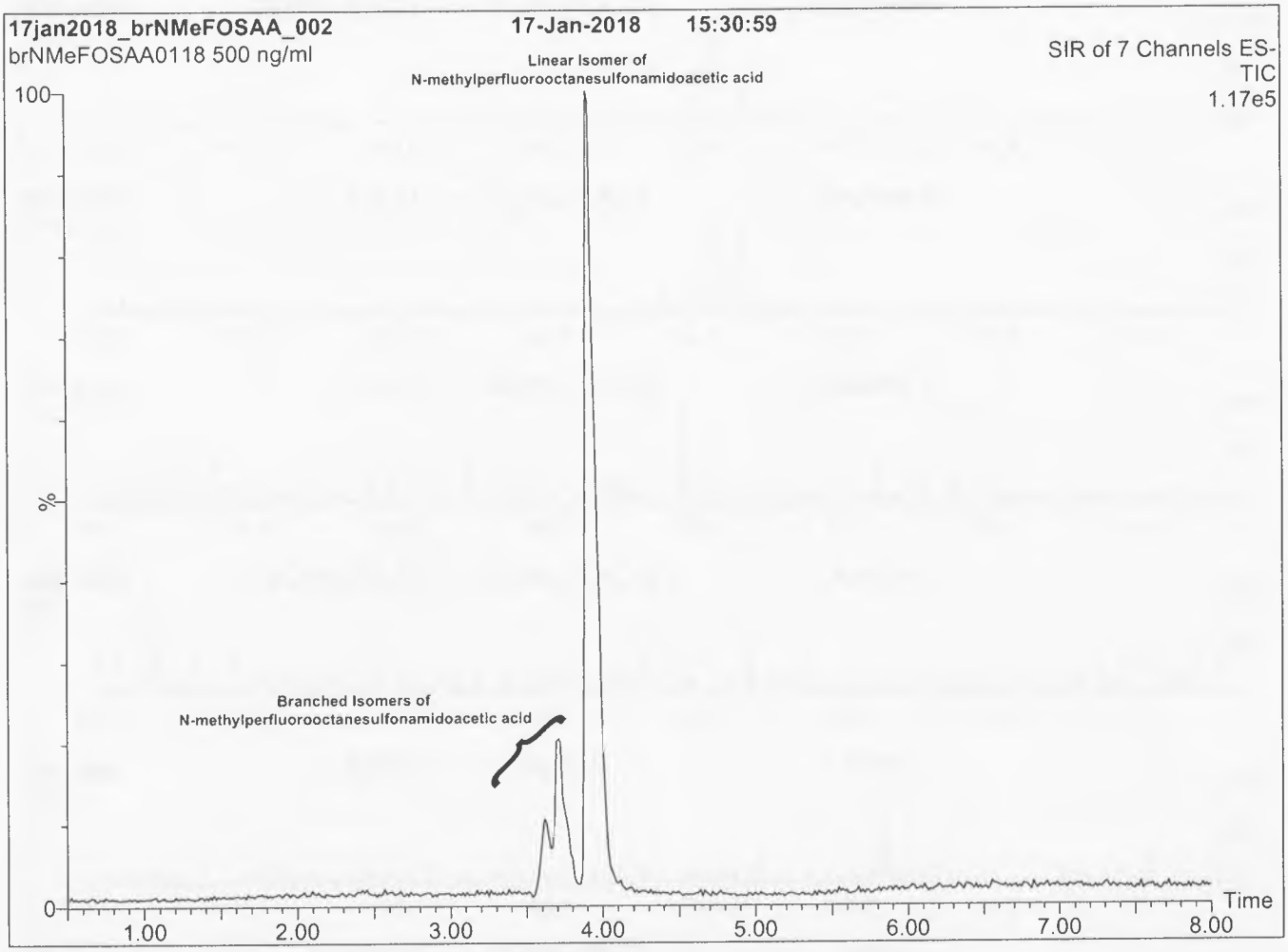
Flow: 300 µl/min

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

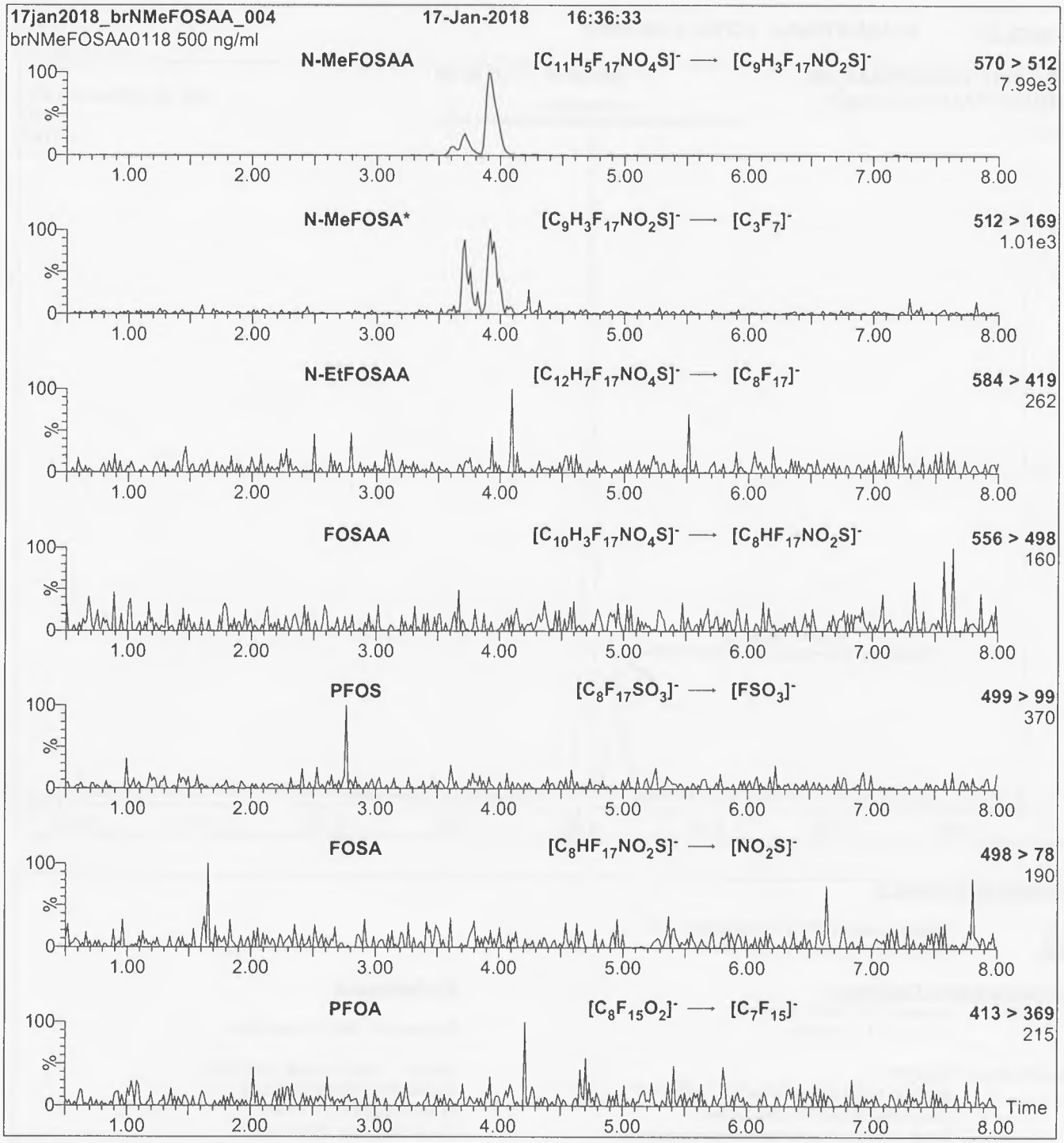
Flow: 300 µl/min

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

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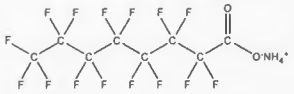
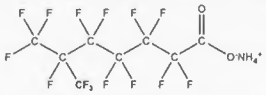
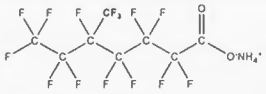
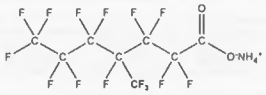
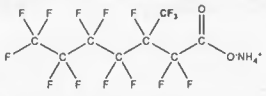
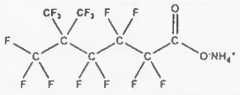
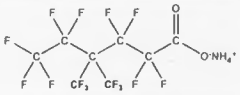
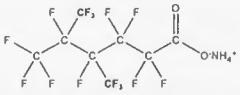
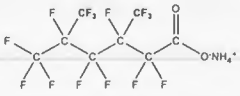
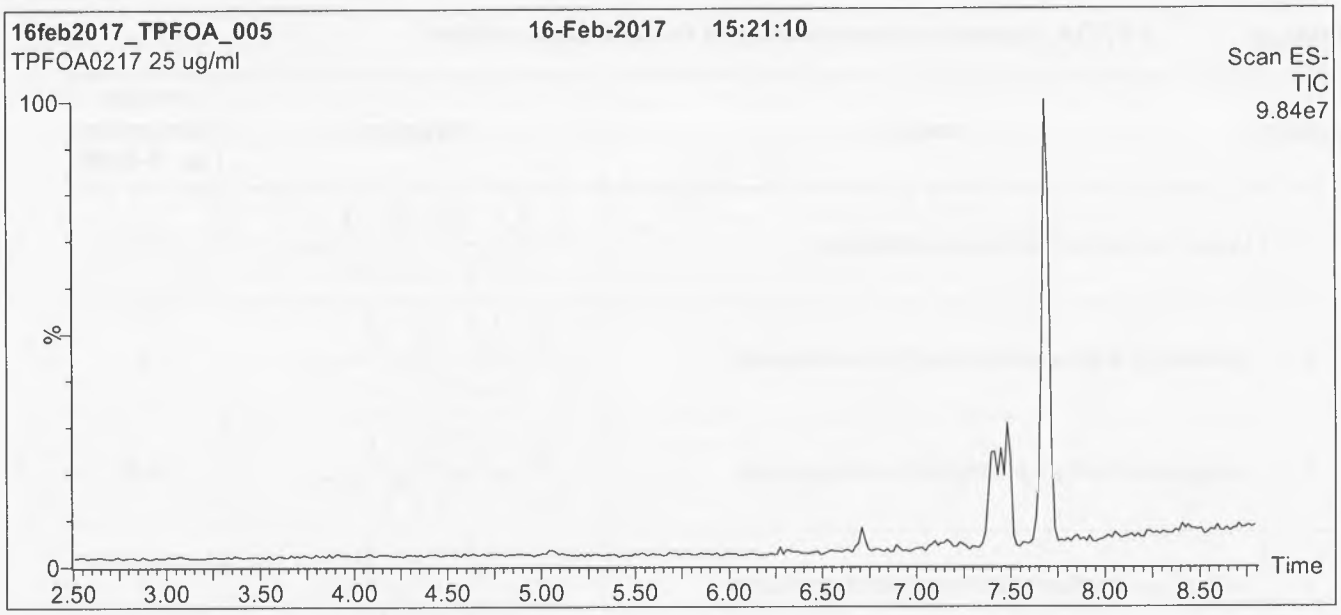
Table A: **T-PFOA; Isomeric Components and Percent Composition***

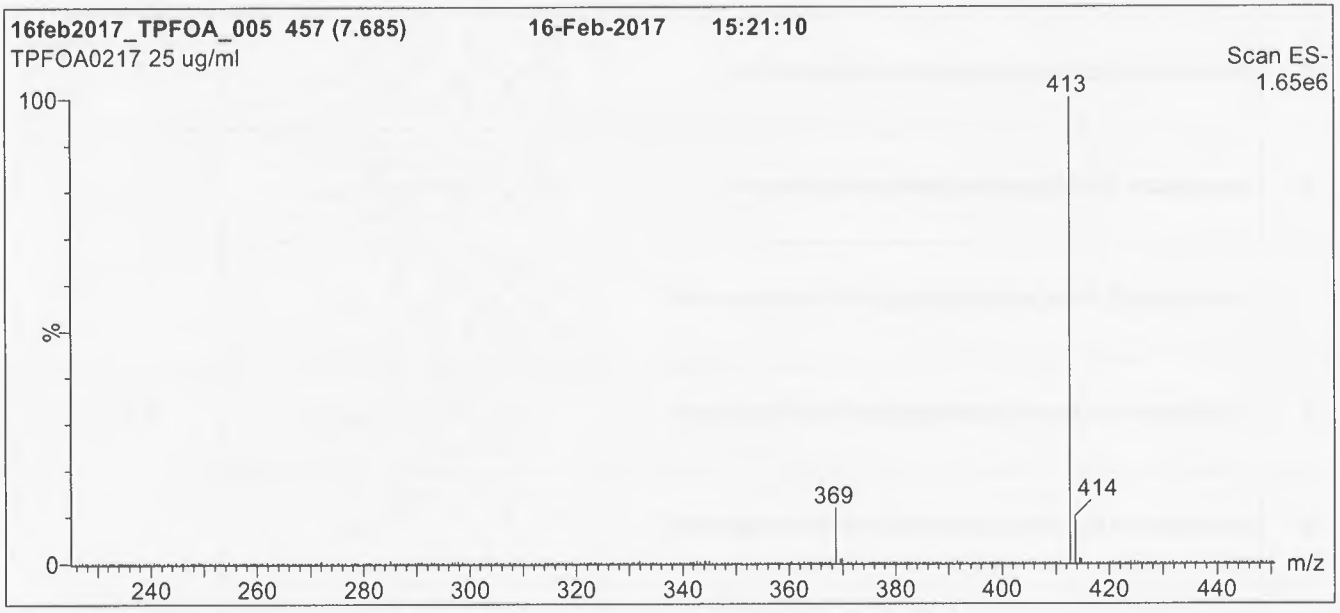
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	Linear ammonium perfluoro-n-octanoate		79
2	Ammonium 6-trifluoromethylperfluoroheptanoate		9
3	Ammonium 5-trifluoromethylperfluoroheptanoate		4.5
4	Ammonium 4-trifluoromethylperfluoroheptanoate		4
5	Ammonium 3-trifluoromethylperfluoroheptanoate		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

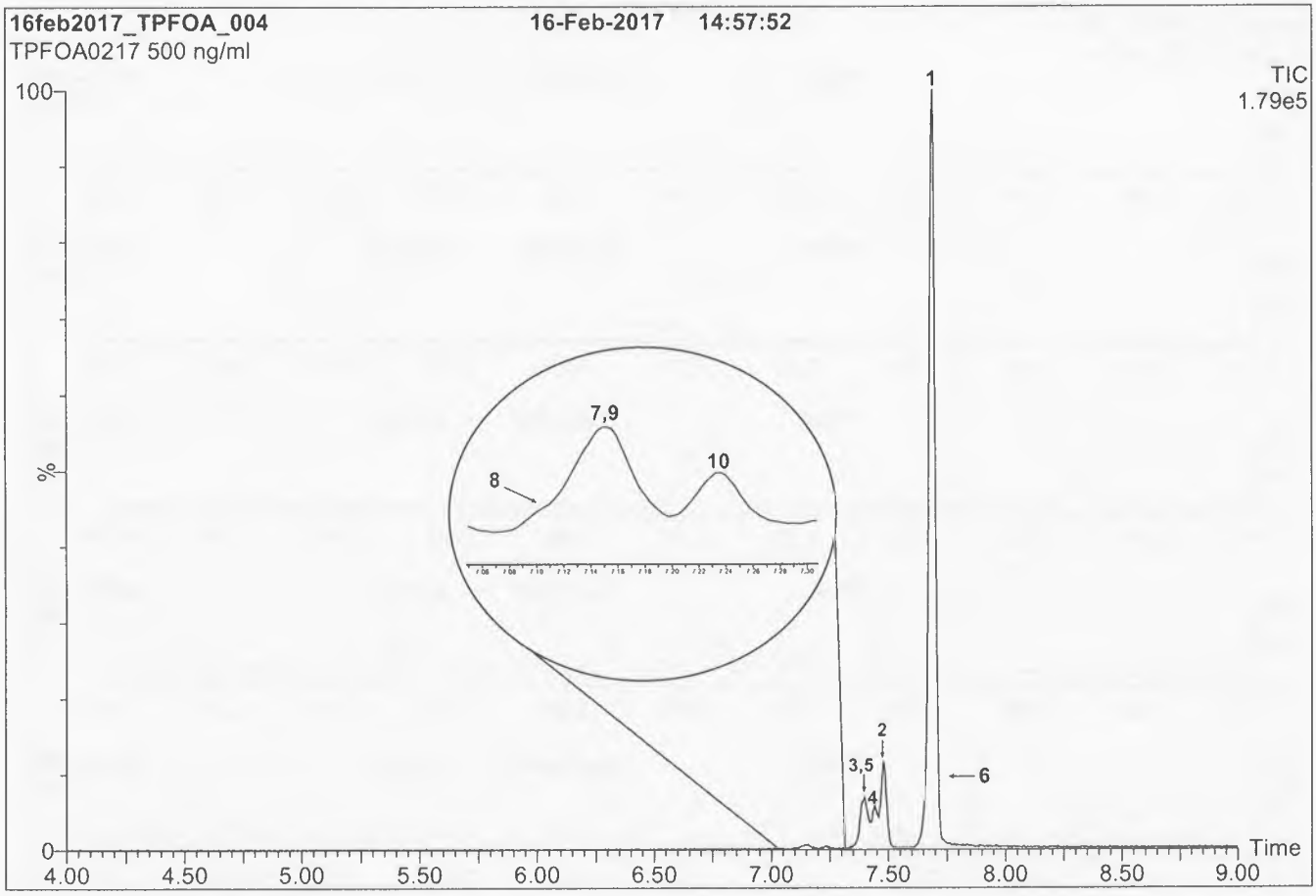
Flow: 1.0 ml/min

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

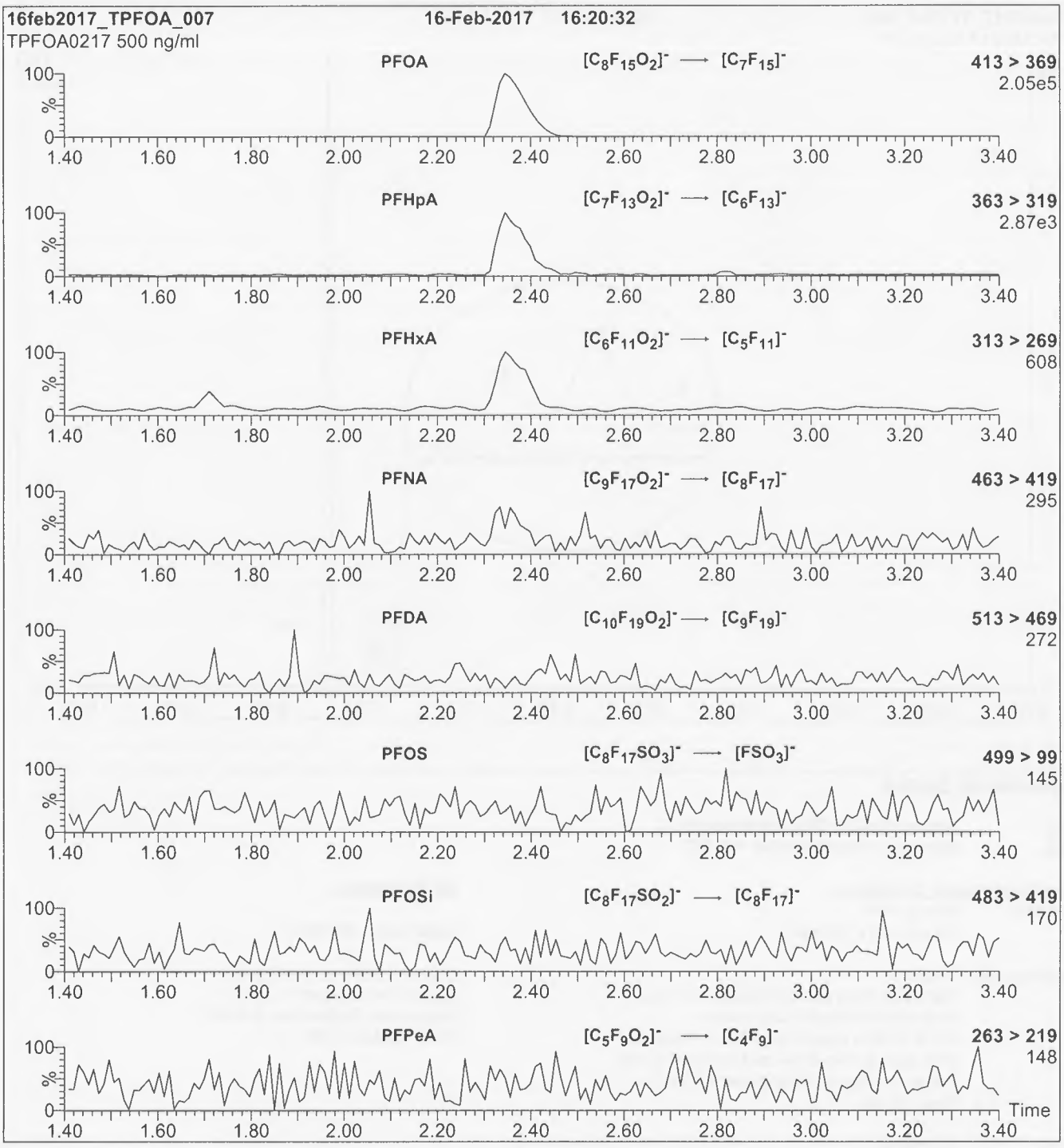
Flow: 1.0 ml/min

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)

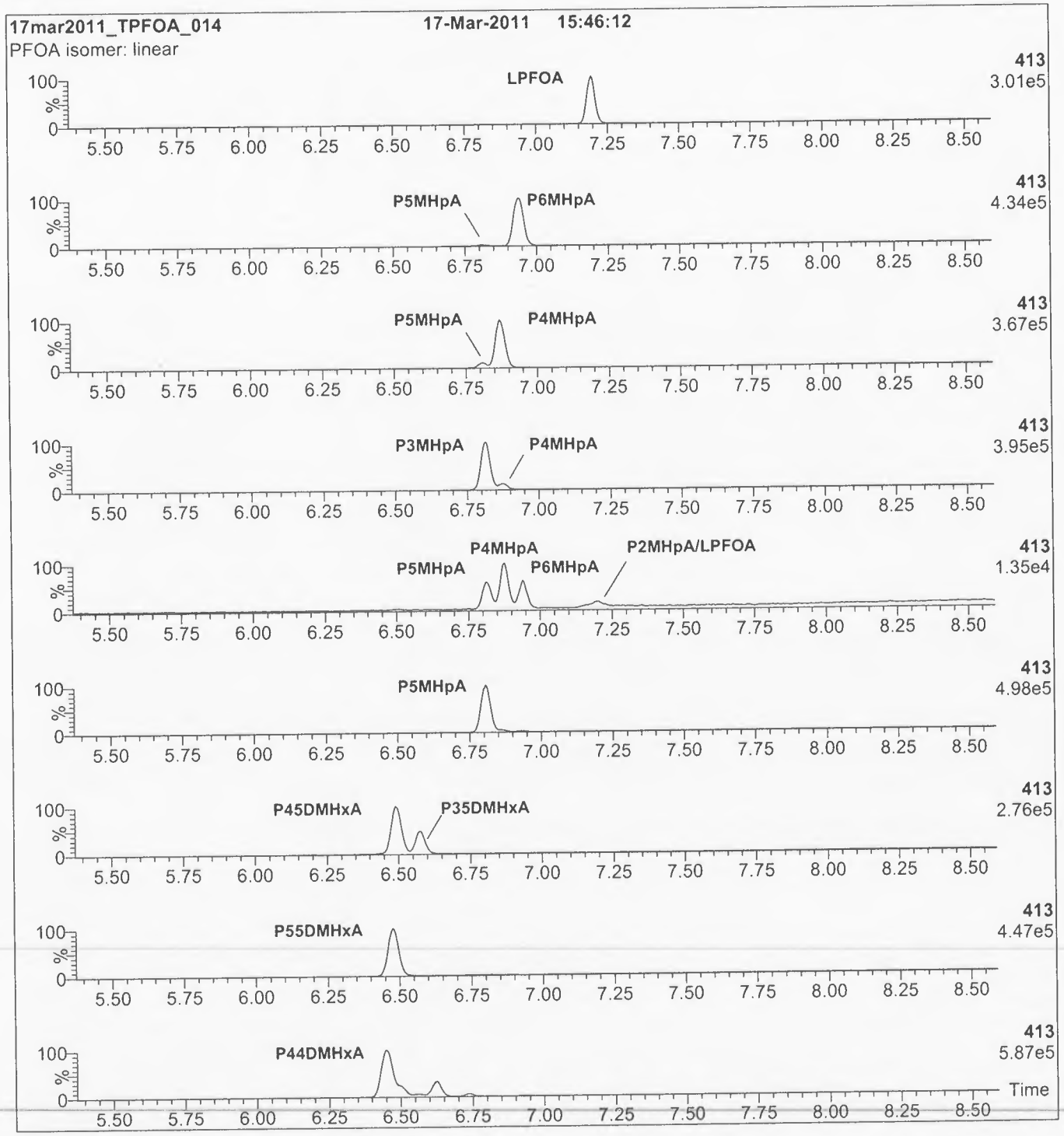
Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O
(both with 10 mM NH_4OAc buffer)

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 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

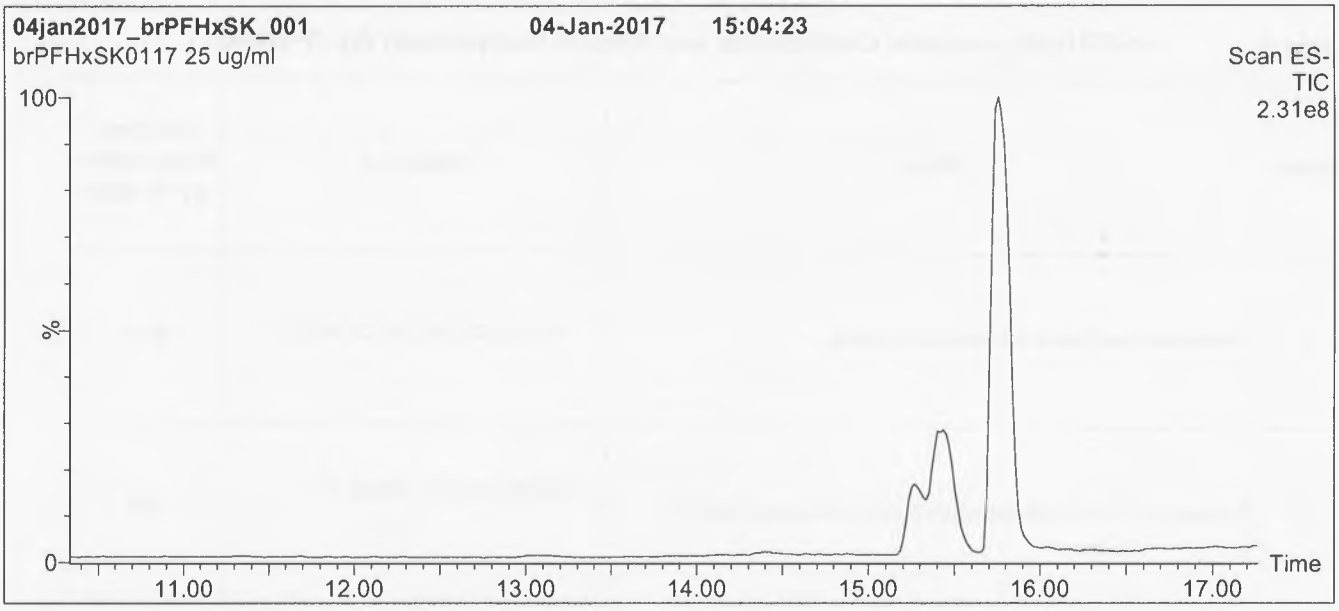
Table A: **br-PFHxSK; Isomeric Components and Percent Composition (by ^{19}F-NMR)***

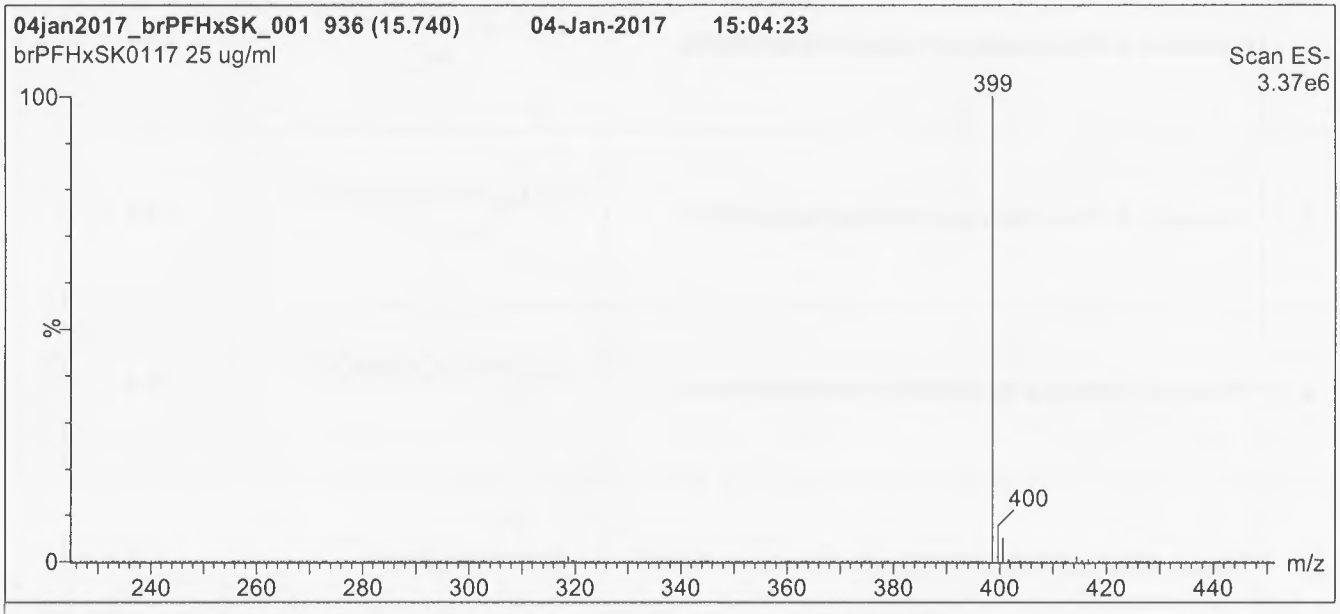
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	Potassium perfluoro-1-hexanesulfonate	$CF_3CF_2CF_2CF_2CF_2CF_2SO_3^-K^+$	81.1
2	Potassium 1-trifluoromethylperfluoropentanesulfonate**	$CF_3CF_2CF_2CF_2CF(CF_3)SO_3^-K^+$	2.9
3	Potassium 2-trifluoromethylperfluoropentanesulfonate	$CF_3CF_2CF_2CF(CF_3)CF_2SO_3^-K^+$	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

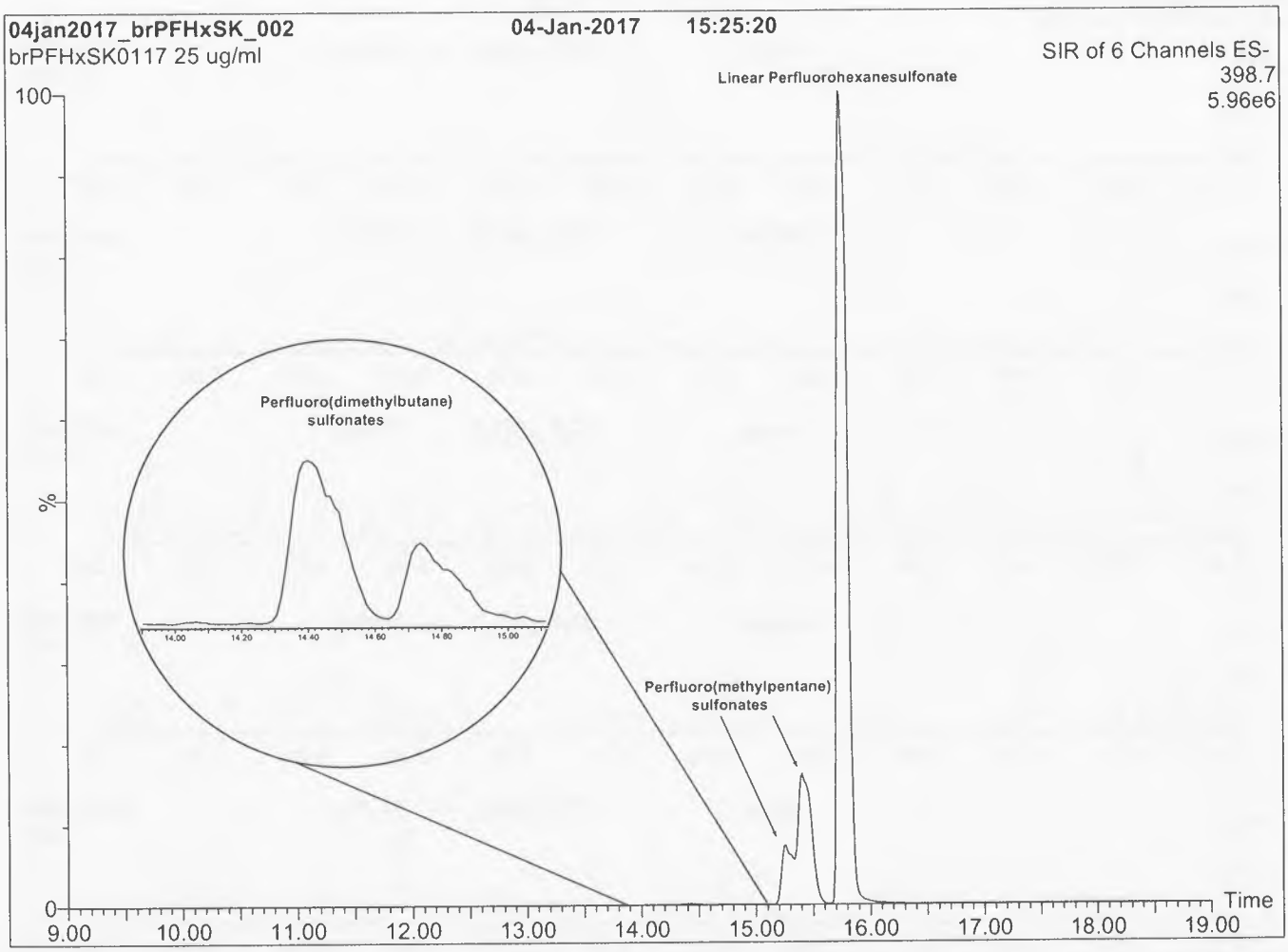
Flow: 300 µl/min

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

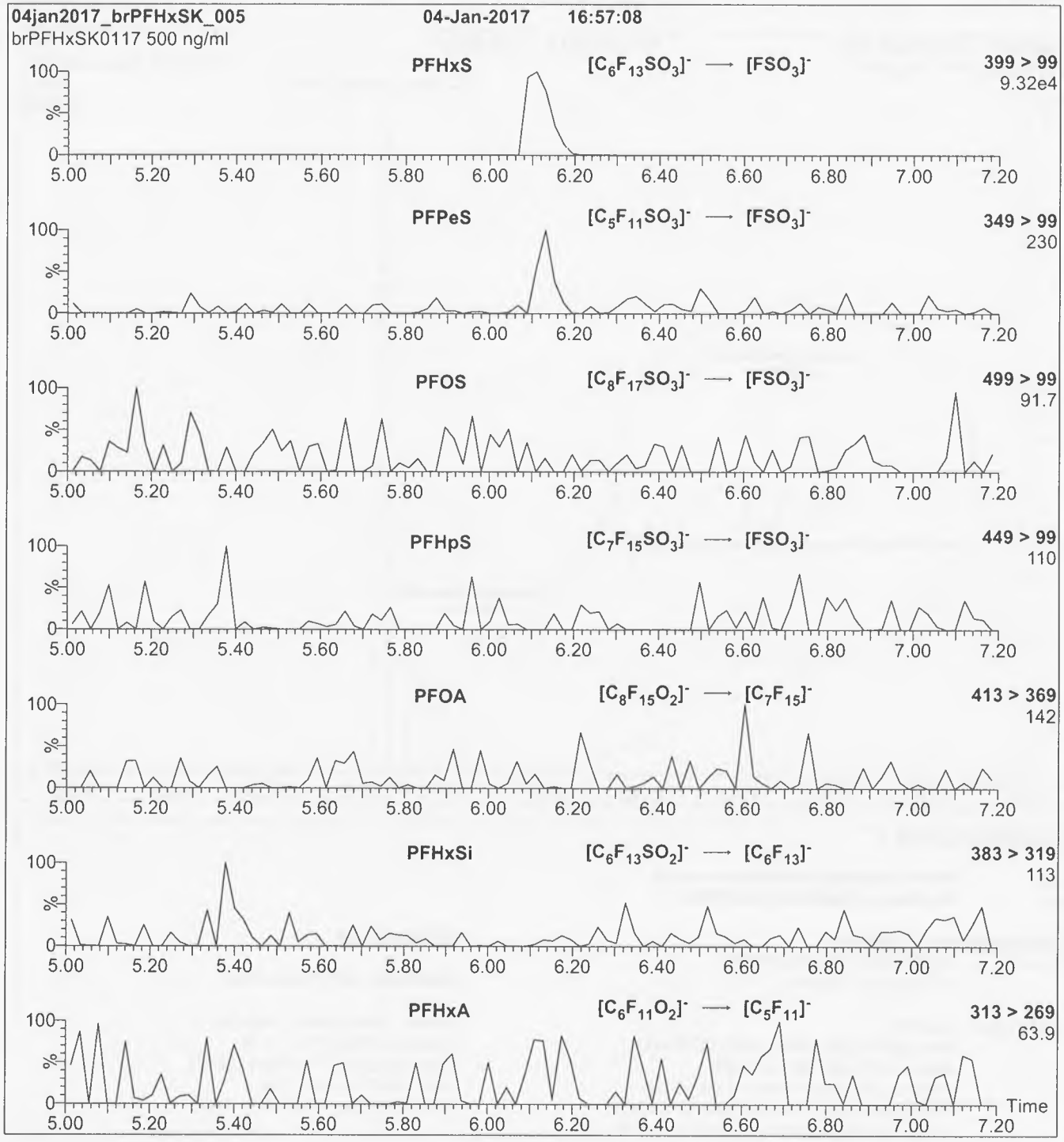
Flow: 300 µl/min

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

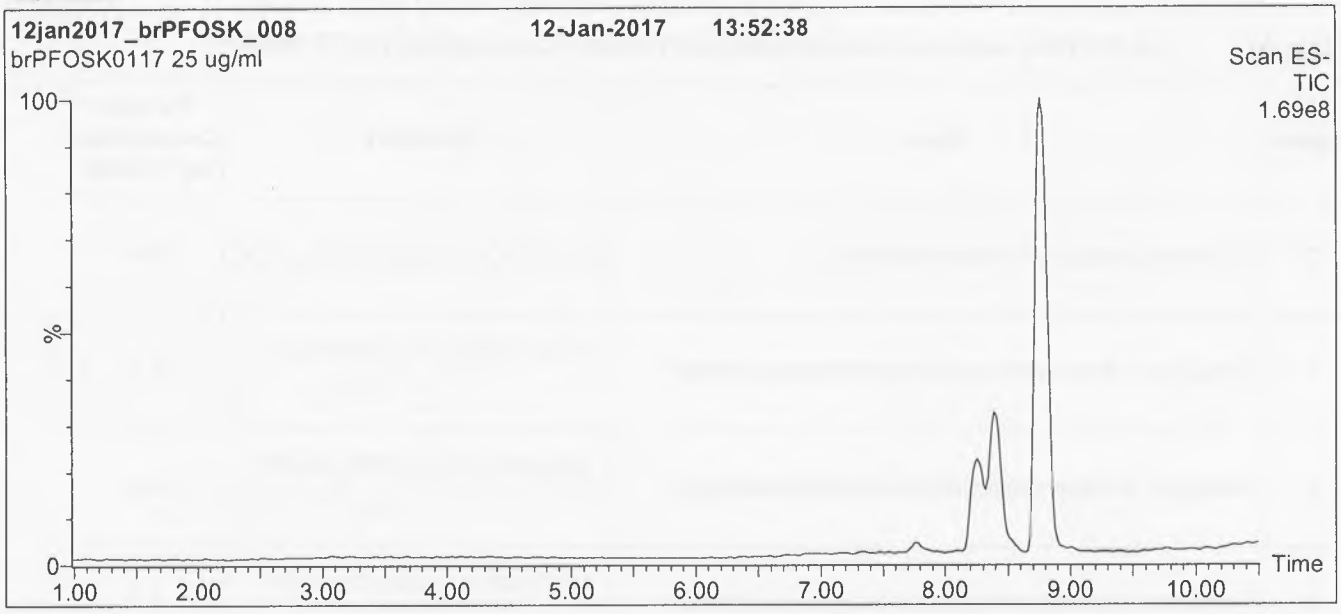
Table A: **br-PFOSK; Isomeric Components and Percent Composition (by ^{19}F-NMR)***

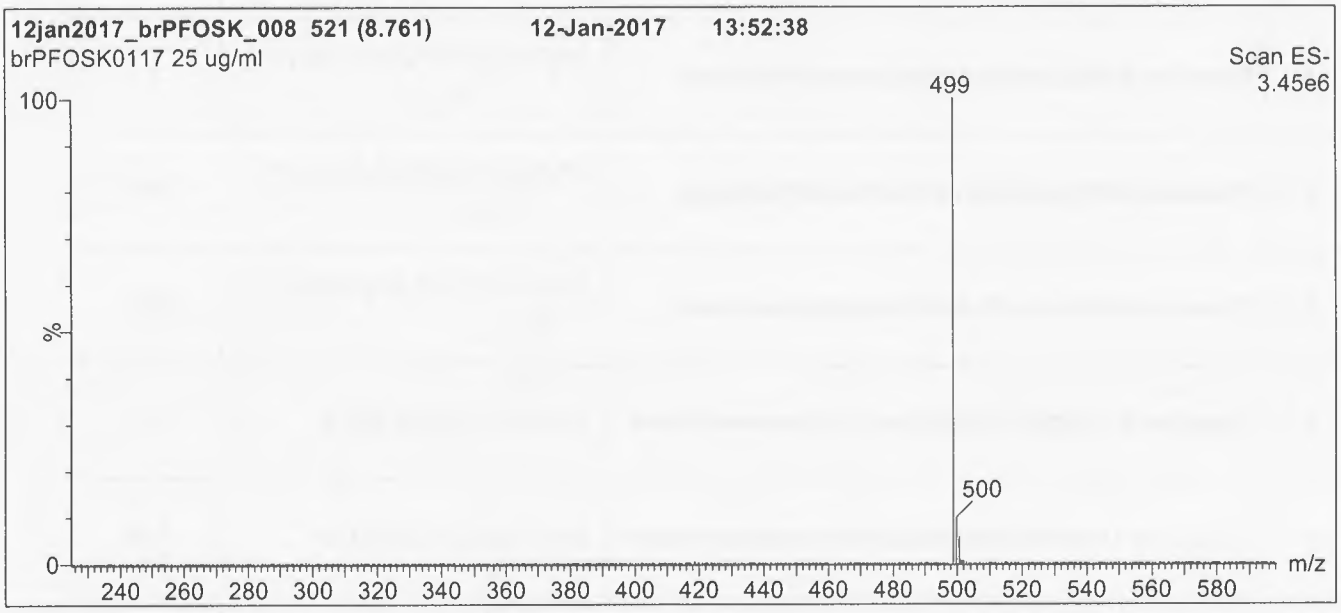
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	Potassium perfluoro-1-octanesulfonate	$CF_3CF_2CF_2CF_2CF_2CF_2CF_2CF_2SO_3^-K^+$	78.8
2	Potassium 1-trifluoromethylperfluoroheptanesulfonate**	$CF_3CF_2CF_2CF_2CF_2CF_2CF(CF_3)SO_3^-K^+$	1.2
3	Potassium 2-trifluoromethylperfluoroheptanesulfonate	$CF_3CF_2CF_2CF_2CF_2CF(CF_3)CF_2SO_3^-K^+$	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	$CF_3CF(CF_3)CF_2CF(CF_3)CF_2CF_2SO_3^-K^+$	0.07

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

Certified By: _____ **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

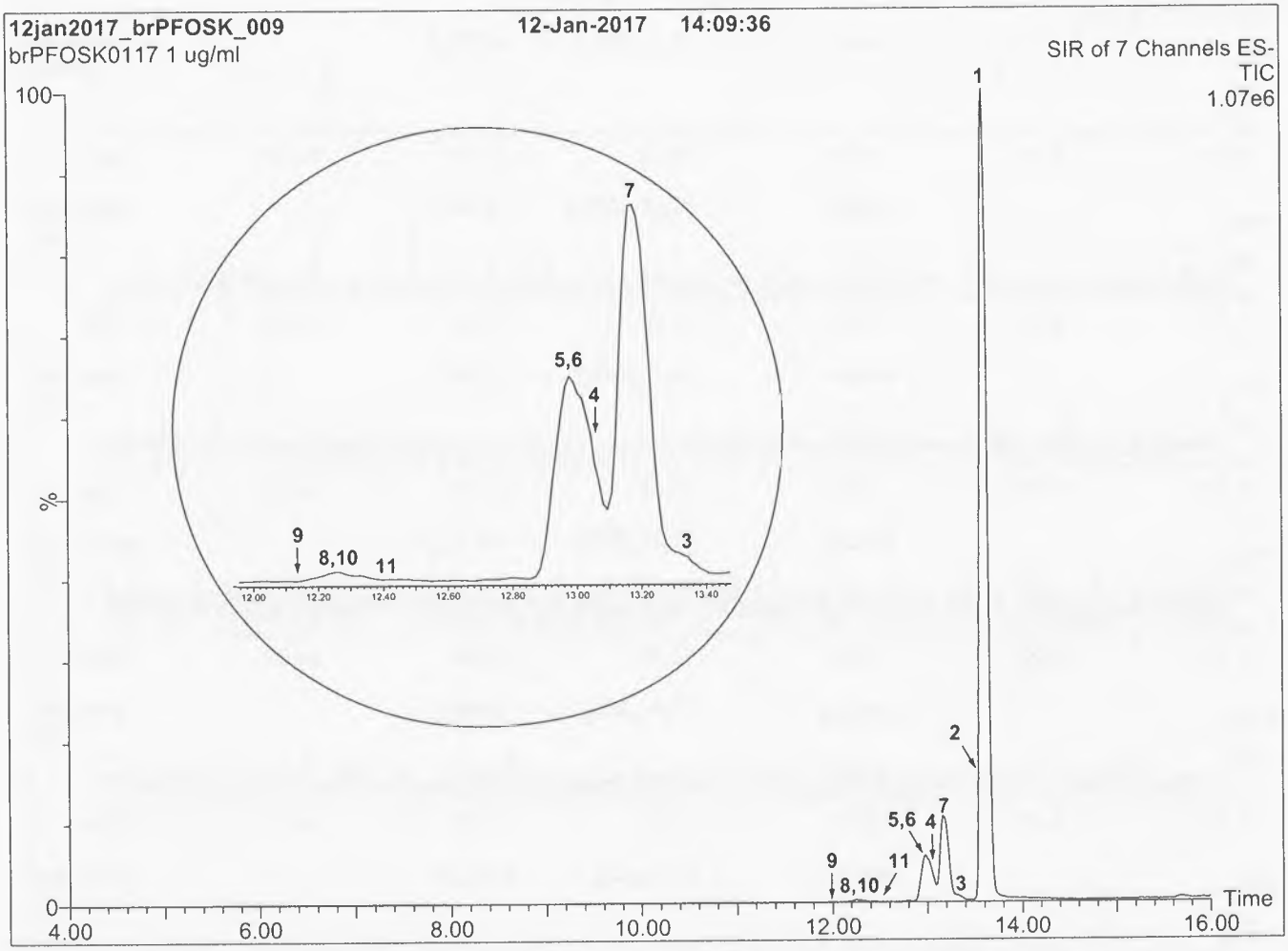
Flow: 300 µl/min

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**

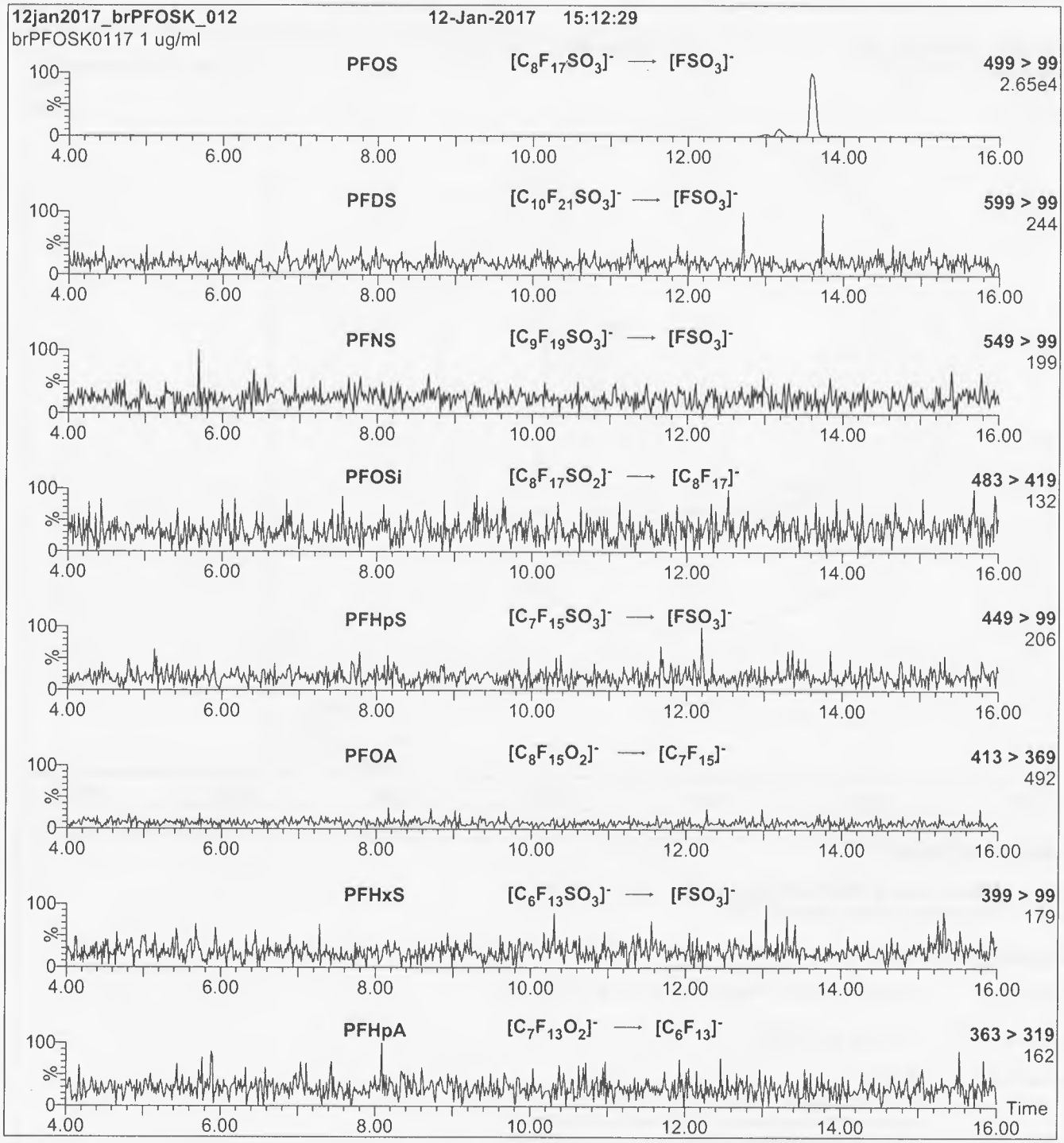
Chromatographic Conditions:

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

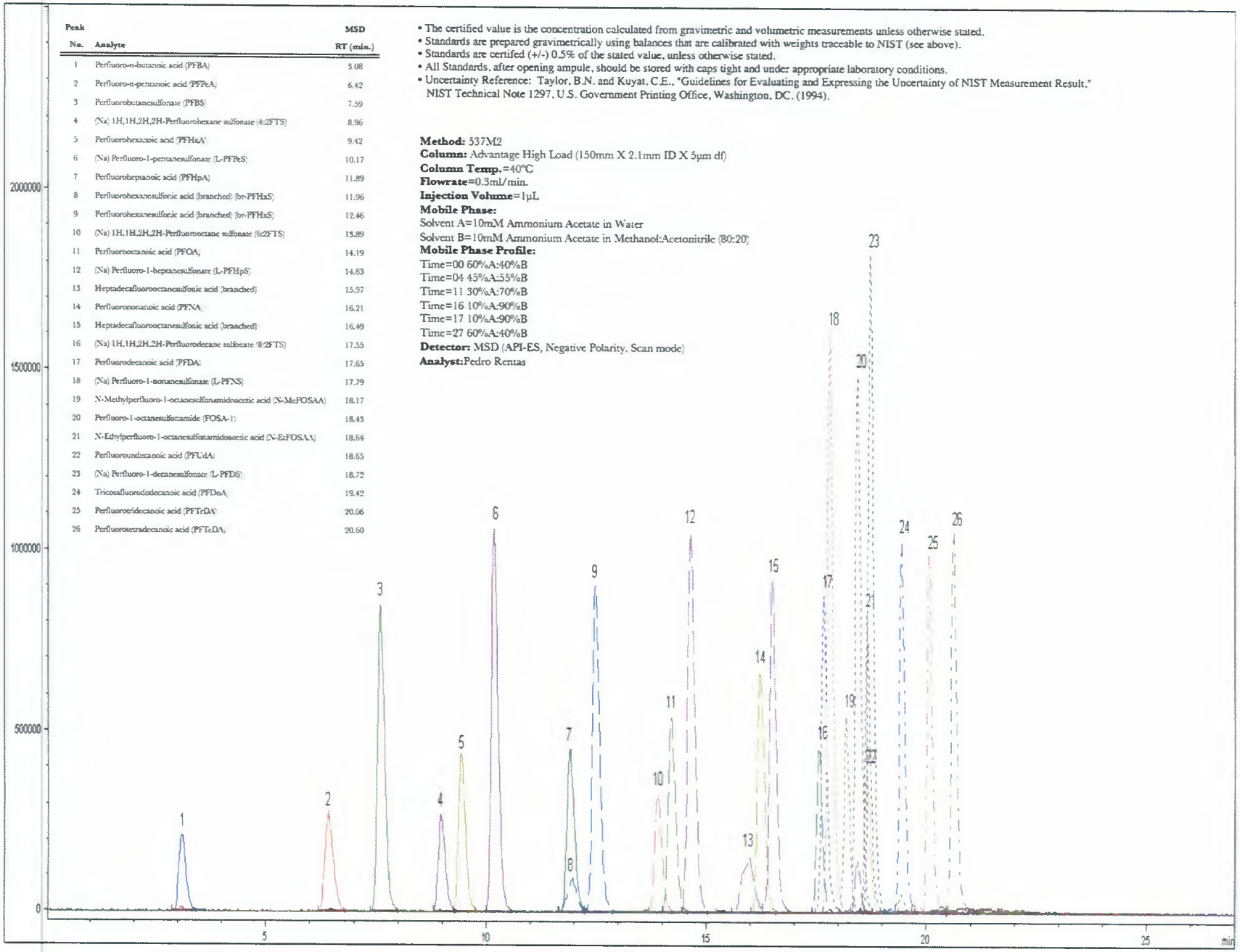
Note: All assigned values are anion concentrations.

	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

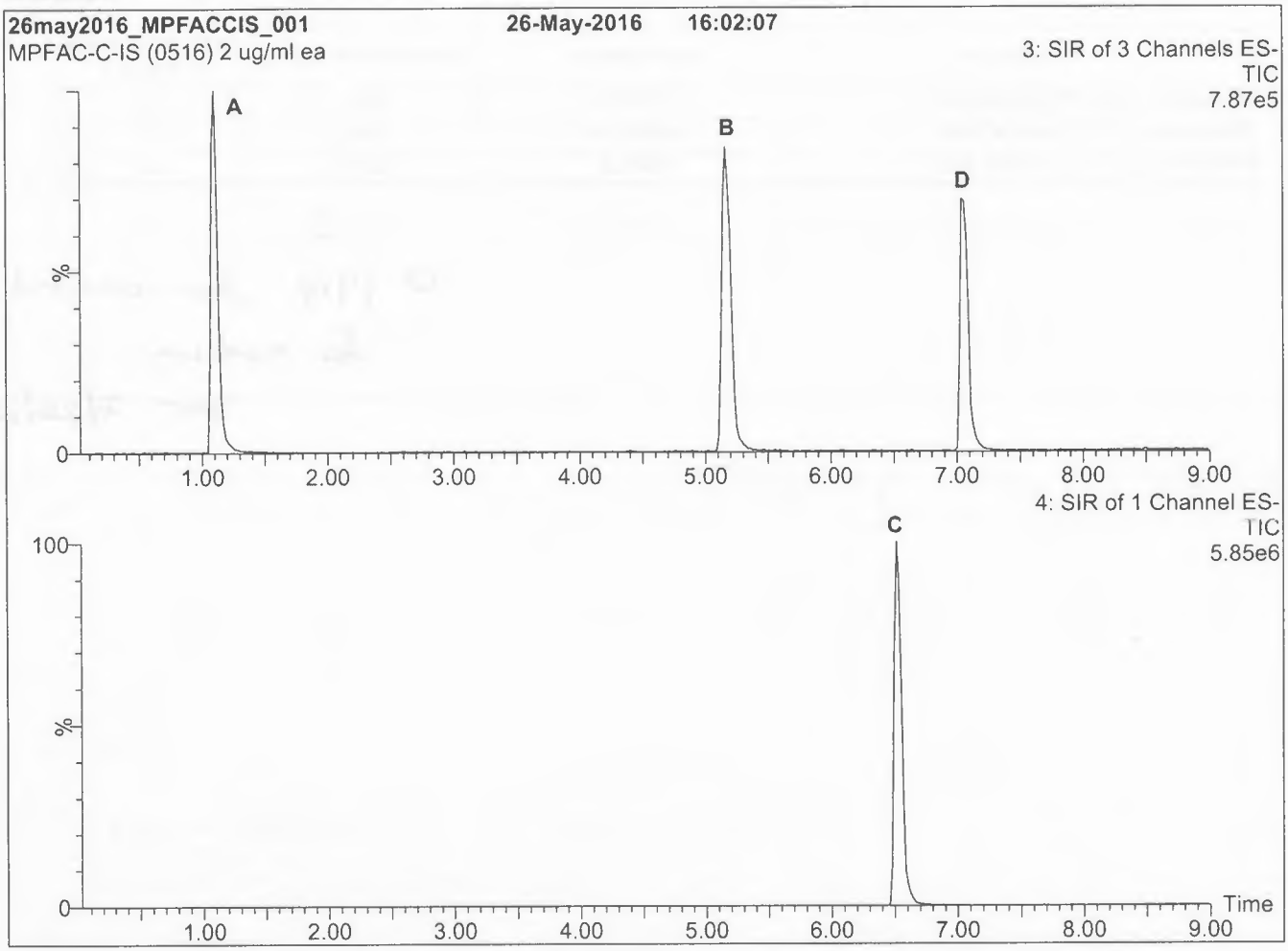
Table A: **MPFAC-C-IS; Components and Concentrations (ng/ml; ± 5% in Methanol / Water (<1%))**

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
JMT 7/26/2017

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

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



Conditions for Figure 1:

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

Chromatographic Conditions

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

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

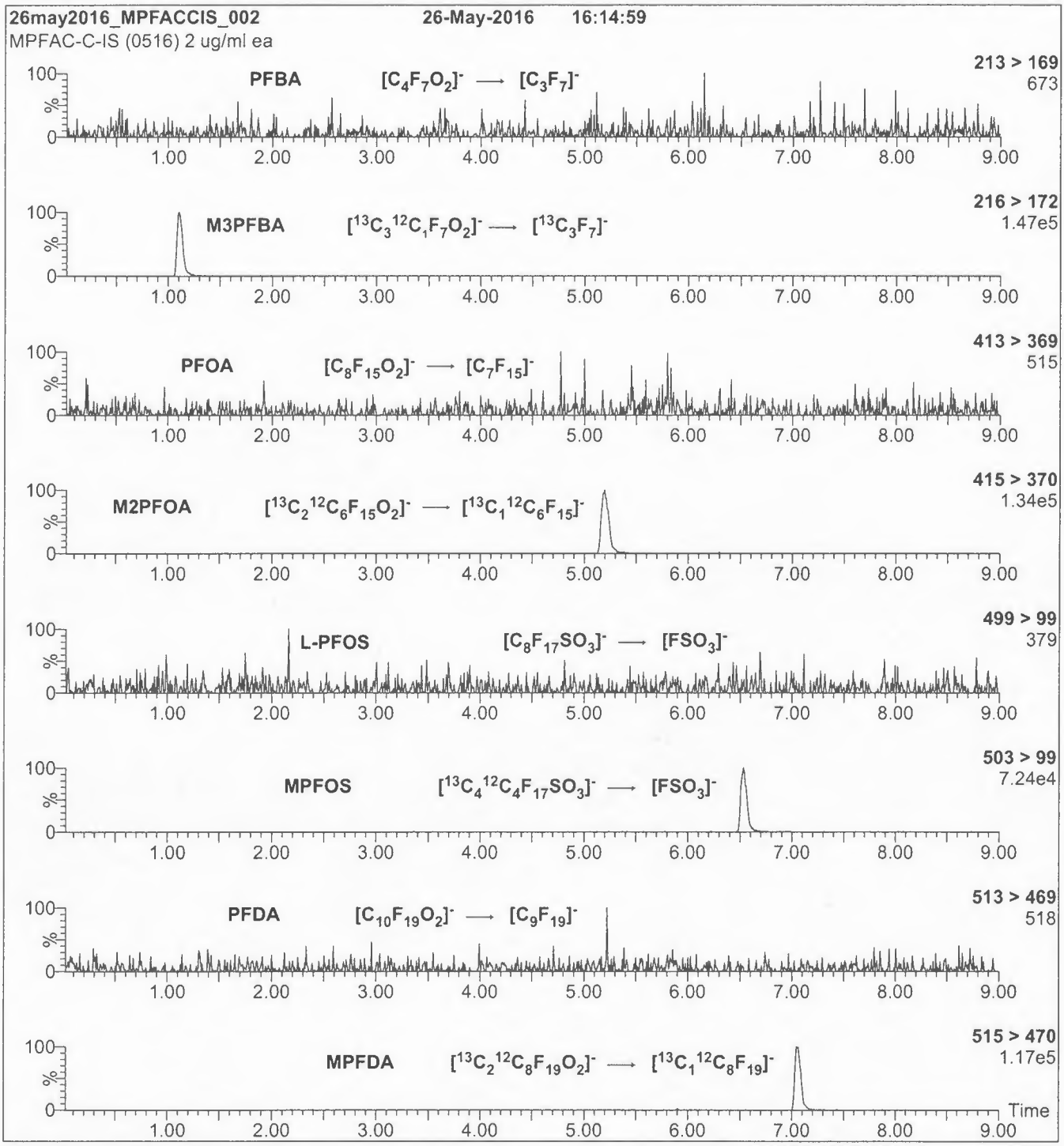
Flow: 300 µl/min

MS Parameters

Experiment: SIR

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

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



Conditions for Figure 2:

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

Mobile phase: Same as Figure 1

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.50e-3

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

BATTELLE

It can be done

BDO Id: 180726-05

Reagent Receipt Report

Approved: ☑ Authorized ☐

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

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

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

Total Analytes: 19

Notes:

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

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

MPFAC-24ES

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

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

DESCRIPTION:

MPFAC-24ES is a solution/mixture of ten mass-labelled (^{13}C) perfluoroalkylcarboxylic acids (C_4-C_{12} and C_{14}), three mass-labelled (^{13}C) perfluoroalkylsulfonates (C_4, C_6, and C_8), three mass-labelled (^{13}C) telomer sulfonates (4:2, 6:2, and 8:2), two mass-labelled (^2H) 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

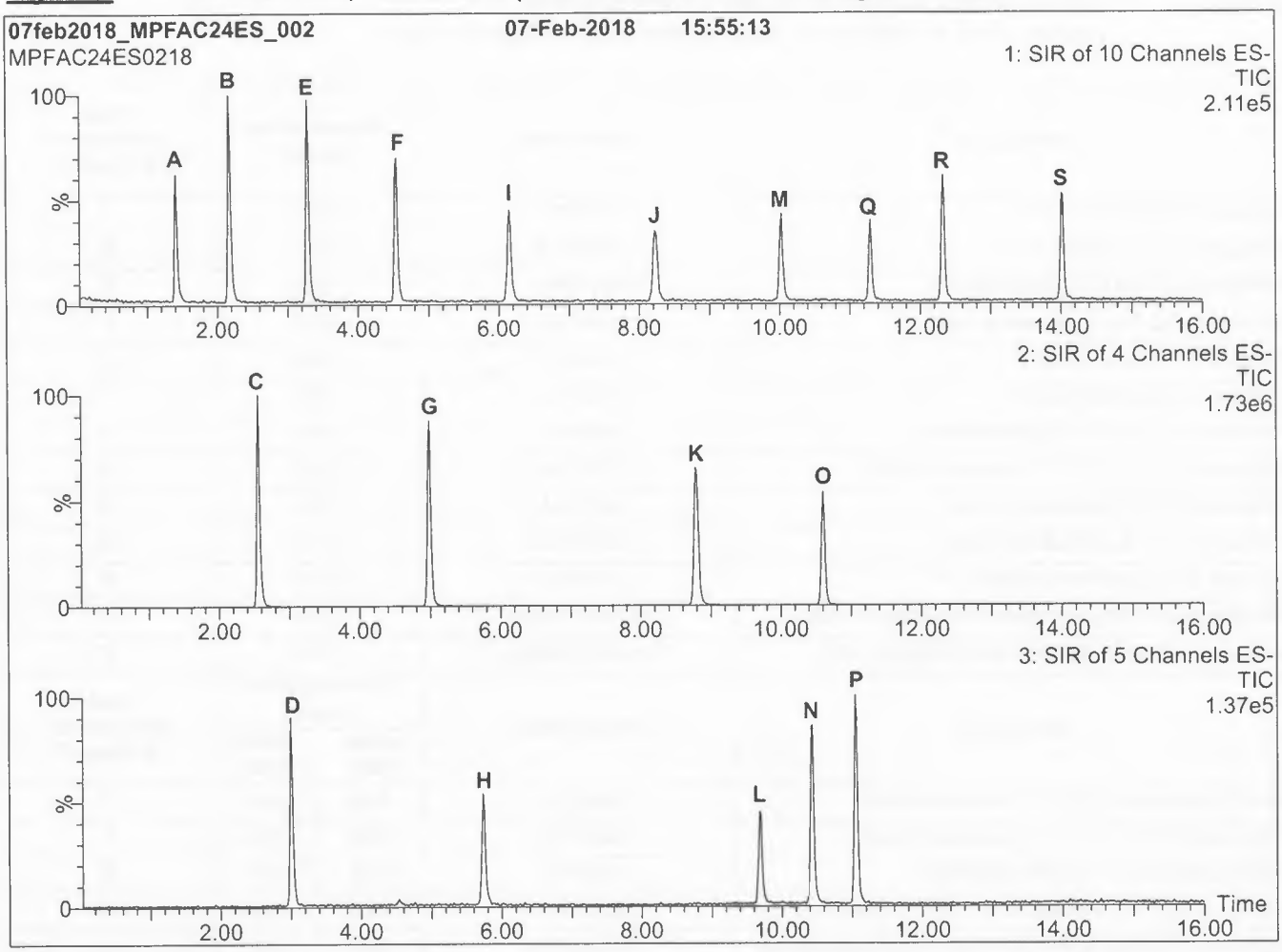
Table A: **MPFAC-24ES; Components and Concentrations (ng/ml, ± 5% in Methanol / Isopropanol (2%) / Water (<1%))**

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)**

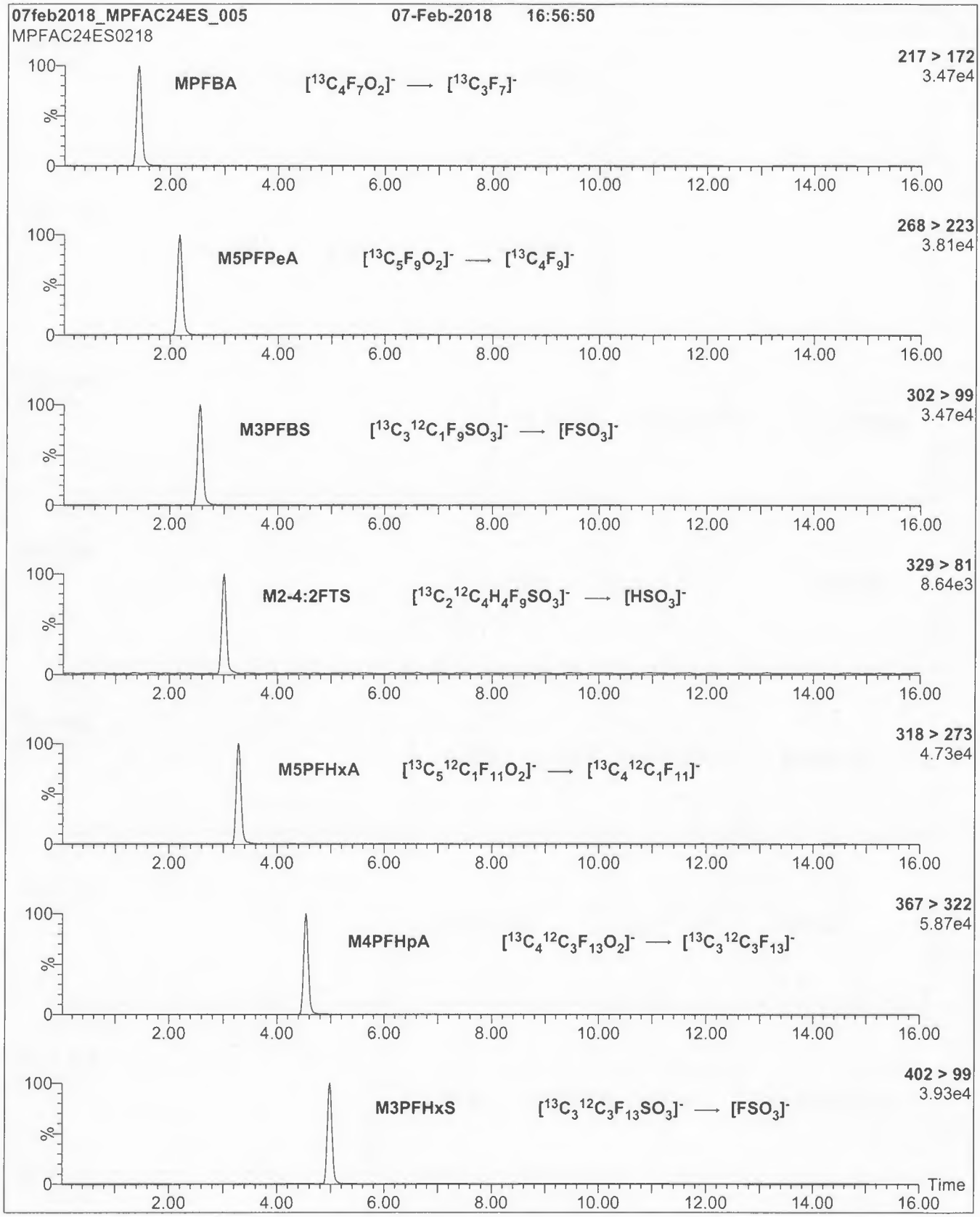


Figure 2: **MPFAC-24ES; LC/MS/MS Data (Selected MRM Transitions)**

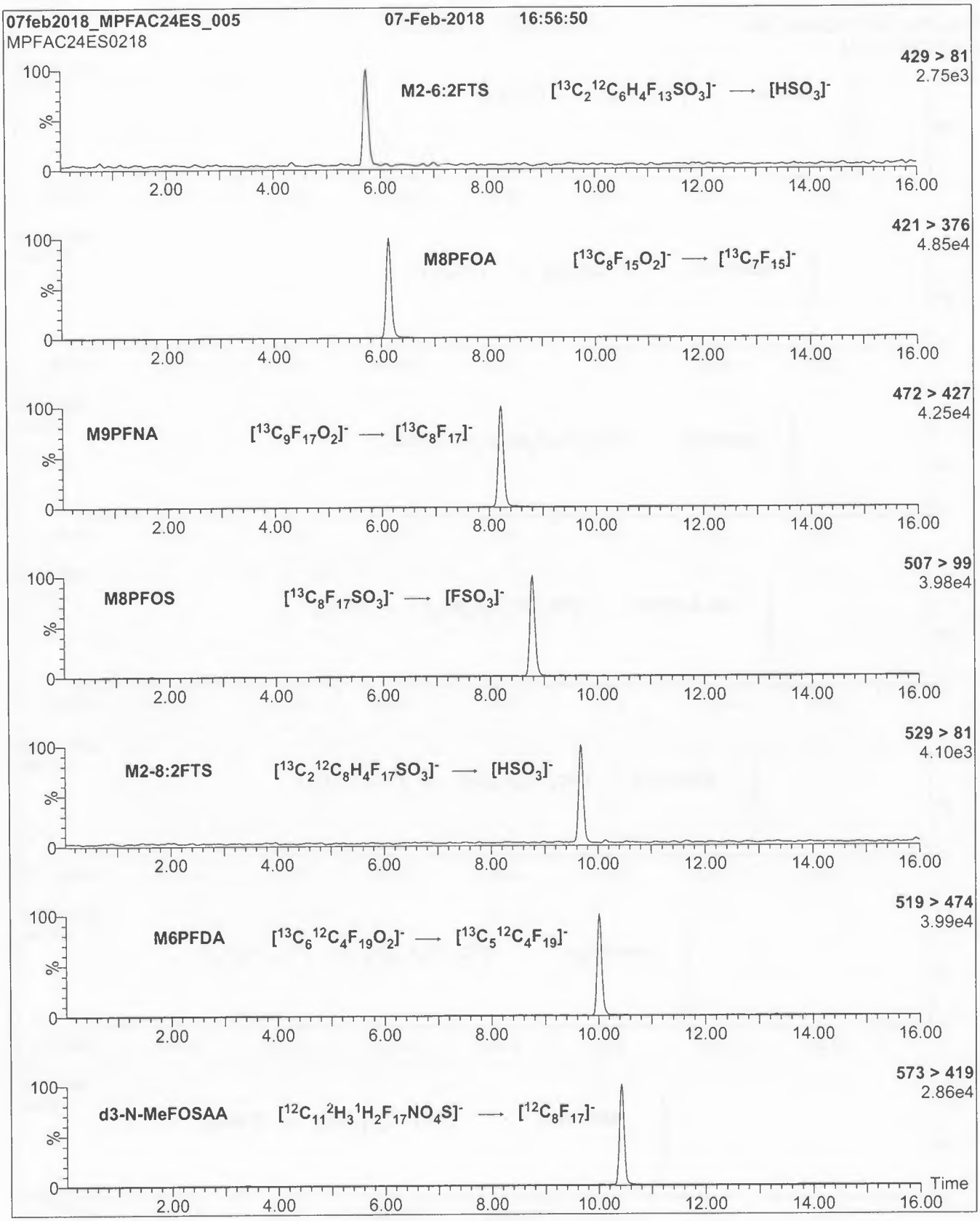
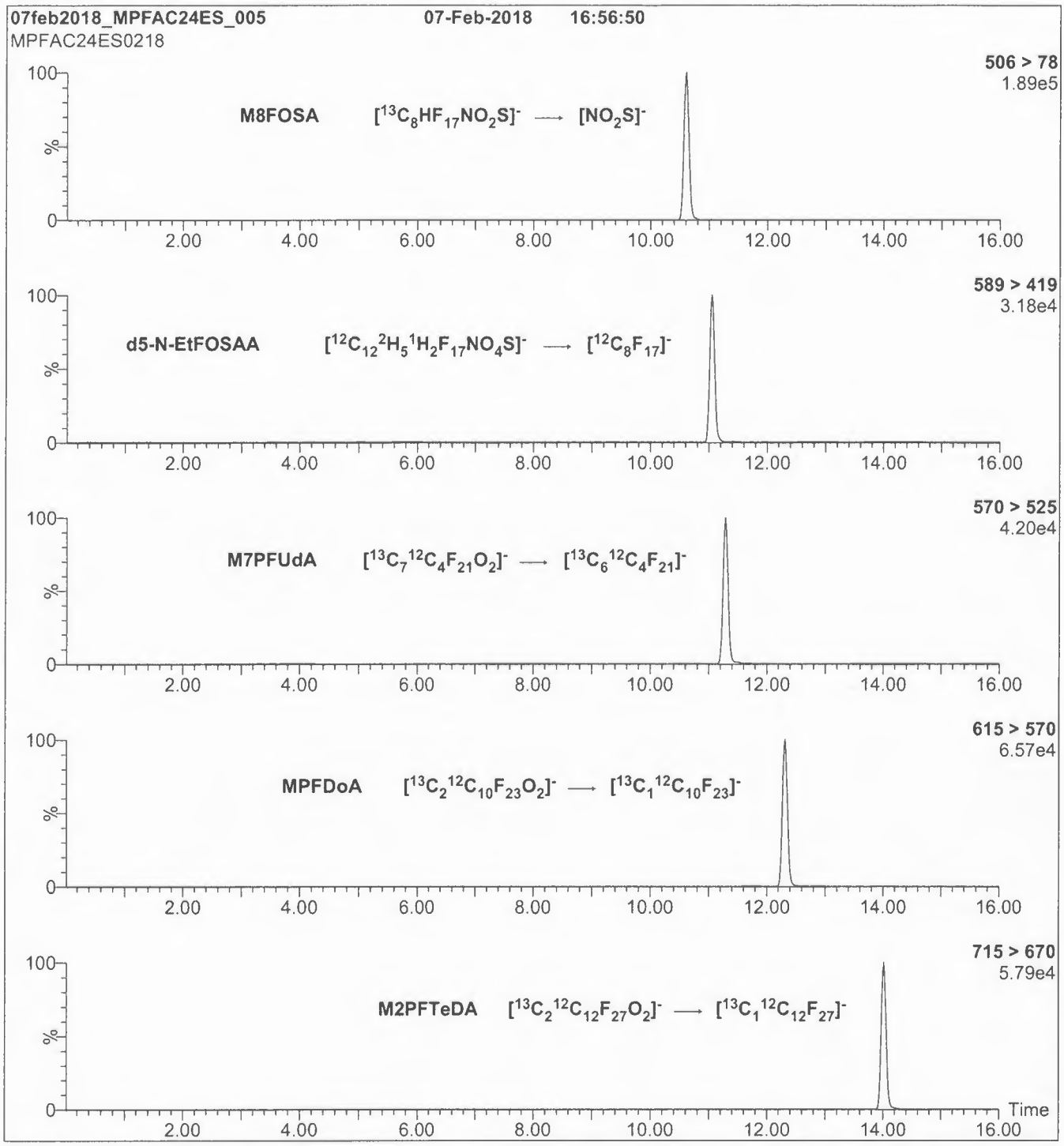


Figure 2: **MPFAC-24ES; LC/MS/MS Data (Selected MRM Transitions)**



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
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BATTELLE - NORWELL OPERATIONS
SAMPLE PREPARATION RECORDS

Project Title(s)	**Project No.(s)**
CTO-4164 Naval Base Ventura County, California	100110125-01

18-0609

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:			
CR986PB-FS	J8683-FS	J8714-FS	J8720-FS
CR987LCS-FS	J8684-FS	J8715-FS	J8721-FS
J8667-FS	J8685-FS	J8716-FS	J8722-FS
J8668-FS	J8686-FS	J8717-FS	
J8669-FS	J8687-FS	J8718-FS	
J8670-FS	J8688-FS	J8719-FS	

Laboratory Preparation Records

COMPLETE AND VALIDATED

Prep Task Leader: Stephanie Schultz

Approved By:	Date	Initials
Jordan Tower	11/02/2018	JCT

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BATTELLE - NORWELL OPERATIONS
SAMPLE IDENTIFICATION PAGE

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0609

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Sample ID	Description
CR986PB-FS	Procedural Blank
CR987LCS-FS	Laboratory Control Sample
J8667-FS	VC-CS12-DW01-1018
J8668-FS	VC-CS12-DW01P-1018
J8669-FS	VC-CS12-DW02-1018
J8670-FS	VC-CS12-DW03-1018
J8683-FS	VC-CS10-DW01-1018
J8684-FS	VC-CS10-DW02-1018
J8685-FS	VC-CS10-DW02P-1018
J8686-FS	VC-CS10-DW03-1018
J8687-FS	VC-CS10-DW04-1018
J8688-FS	VC-CS18-DW01-1018
J8714-FS	VC-SO-FB11-10062018
J8715-FS	VC-SO-EB11-10062018
J8716-FS	VC-CS00-DW01-1018
J8717-FS	VC-CS00-DW02-1018
J8718-FS	VC-CS00-DW02P-1018
J8719-FS	VC-CS00-DW03-1018
J8720-FS	VC-CS00-DW04-1018
J8721-FS	VC-CS00-DW05-1018
J8722-FS	VC-CS00-DW06-1018

Samples Assigned By: Jonathan Thorn Date : October 9, 2018

Comments:

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
SAMPLE CUSTODY LOG

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0609

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Requested On/By:	10/17/2018 SAS	**Purpose:**	Sample Preparation
Relinquished On/By:	10/17/2018 MDS	**Last Activity:**	Return

Accepted On/By:	10/17/2018 SAS	**Returned On/To:**	10/17/2018 MDS
Stored In Facility:	Sample Preparation	**Returned To Facility:**	Custody: NA
Stored Until	10/17/2018		
Stored Comment:	NA	**Returned Comment:**	NA

No.	BDO-ID:	Ctrs	*	Condition:	Custody Comment:
1	J8667	1	--	Intact	NA
2	J8668	1	--	Intact	NA
3	J8669	1	--	Intact	NA
4	J8670	1	C	Consumed	NA
5	J8683	1	C	Consumed	NA
6	J8684	1	C	Consumed	NA
7	J8685	1	C	Consumed	NA
8	J8686	1	C	Consumed	NA
9	J8687	1	C	Consumed	NA
10	J8688	1	C	Consumed	NA
11	J8714	1	C	Consumed	NA
12	J8715	1	C	Consumed	NA
13	J8716	1	C	Consumed	NA
14	J8717	1	C	Consumed	NA
15	J8718	1	C	Consumed	NA
16	J8719	1	C	Consumed	NA
17	J8720	1	C	Consumed	NA
18	J8721	1	C	Consumed	NA
19	J8722	1	C	Consumed	NA

Total Samples 19 * "C" = Consumed Container

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BATTELLE - NORWELL OPERATIONS
LIQUID SAMPLE ID FORM

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0609

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Sample ID	Description	Volume (mL)	Bottles	*	Date Initials
CR986PB-FS	Procedural Blank	250.0	NA	--	10/17/18 SAS
CR987LCS-FS	Laboratory Control Sample	250.0	NA	--	10/17/18 SAS
J8667-FS	VC-CS12-DW01-1018	30.0	1	--	10/17/18 KB
J8668-FS	VC-CS12-DW01P-1018	31.0	1	--	10/17/18 KB
J8669-FS	VC-CS12-DW02-1018	31.0	1	--	10/17/18 KB
J8670-FS	VC-CS12-DW03-1018	240.0	1	C	10/17/18 KB
J8683-FS	VC-CS10-DW01-1018	295.0	1	C	10/17/18 KB
J8684-FS	VC-CS10-DW02-1018	270.0	1	C	10/17/18 KB
J8685-FS	VC-CS10-DW02P-1018	275.0	1	C	10/17/18 KB
J8686-FS	VC-CS10-DW03-1018	265.0	1	C	10/17/18 KB
J8687-FS	VC-CS10-DW04-1018	270.0	1	C	10/17/18 KB
J8688-FS	VC-CS18-DW01-1018	275.0	1	C	10/17/18 KB
J8714-FS	VC-SO-FB11-10062018	295.0	1	C	10/17/18 KB
J8715-FS	VC-SO-EB11-10062018	275.0	1	C	10/17/18 KB
J8716-FS	VC-CS00-DW01-1018	290.0	1	C	10/17/18 KB
J8717-FS	VC-CS00-DW02-1018	265.0	1	C	10/17/18 KB
J8718-FS	VC-CS00-DW02P-1018	290.0	1	C	10/17/18 KB
J8719-FS	VC-CS00-DW03-1018	270.0	1	C	10/17/18 KB
J8720-FS	VC-CS00-DW04-1018	270.0	1	C	10/17/18 KB
J8721-FS	VC-CS00-DW05-1018	270.0	1	C	10/17/18 KB
J8722-FS	VC-CS00-DW06-1018	270.0	1	C	10/17/18 KB

Comments:

Samples Assigned By Jonathan Thorn Date : October 9, 2018

* - "C" = Sample is Consumed

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BATTELLE - NORWELL OPERATIONS
SURROGATE SPIKE FORM

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0609

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
CR986PB-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
CR987LCS-FS	JZ88	LCS/MS	1	100	10/17/18 SAS	KB	NA
CR987LCS-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8667-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8668-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8669-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8670-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8683-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8684-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8685-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8686-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8687-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8688-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8714-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8715-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8716-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8717-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8718-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8719-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8720-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8721-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA
J8722-FS	KB72	SIS	1	50	10/17/18 SAS	KB	NA

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BATTELLE - NORWELL OPERATIONS
SURROGATE SPIKE FORM

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0609

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

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
JZ88	Pipette	B814659662
KB72	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

18-0609

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
CR986PB-FS	10/17/18 SAS	NA	NA	NA	NA	NA	NA	NA
CR987LCS-FS	10/17/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8667-FS	10/17/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8668-FS	10/17/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8669-FS	10/17/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8670-FS	10/17/18 KB	NA	NA	NA	NA	NA	NA	NA
J8683-FS	10/17/18 KB	NA	NA	NA	NA	NA	NA	NA
J8684-FS	10/17/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8685-FS	10/17/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8686-FS	10/17/18 KB	NA	NA	NA	NA	NA	NA	NA
J8687-FS	10/17/18 KB	NA	NA	NA	NA	NA	NA	NA
J8688-FS	10/17/18 KB	NA	NA	NA	NA	NA	NA	NA
J8714-FS	10/17/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8715-FS	10/17/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8716-FS	10/17/18 KB	NA	NA	NA	NA	NA	NA	NA
J8717-FS	10/17/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8718-FS	10/17/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8719-FS	10/17/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8720-FS	10/17/18 KB	NA	NA	NA	NA	NA	NA	NA
J8721-FS	10/17/18 SAS	NA	NA	NA	NA	NA	NA	NA
J8722-FS	10/17/18 KB	NA	NA	NA	NA	NA	NA	NA

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
SAMPLE EXTRACTION FORM

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0609

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

Solvents/Reagent Preparations:

Name	ID	Expires	Lot No	Procedure	Comments
0.4% NH3 in Methanol	RP-181017-1	10/17/18	183857	Per 100 mL, 3.5 mL ammonia solution brought to 100 mL with methanol	
0.4% NH3 in Methanol	RP-181017-1	10/17/18	SHBJ0412	Per 100 mL, 3.5 mL ammonia solution brought to 100 mL with methanol	
Pre-packed SPE Column	RP-181017-6	10/17/18	003537250A/ 0035	Pre-packed SPE Column	

Solvents/Reagents:

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INTERNAL STANDARD SPIKING FORM

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0609

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
CR986PB-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
CR987LCS-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8667-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8667-FS-D(3)	955	45	KC52	50	1	1000	10.000	10/24/18 SAS	KB
J8667-FS-D(5)	960	40	KC52	50	1	1000	50.000	10/24/18 SAS	KB
J8667-FS-D(7)	970	30	KC52	50	1	1000	125.000	10/24/18 SAS	KB
J8668-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8668-FS-D(3)	955	45	KC52	50	1	1000	10.000	10/24/18 SAS	KB
J8668-FS-D(5)	955	45	KC52	50	1	1000	100.000	10/24/18 SAS	KB
J8669-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8669-FS-D(3)	955	45	KC52	50	1	1000	10.000	10/24/18 SAS	KB
J8669-FS-D(5)	955	45	KC52	50	1	1000	100.000	10/24/18 SAS	KB
J8670-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8670-FS-D(3)	955	45	KC52	50	1	1000	10.000	10/24/18 SAS	KB
J8670-FS-D(5)	970	30	KC52	50	1	1000	25.000	10/24/18 SAS	KB
J8683-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8683-FS-D(3)	960	40	KC52	50	1	1000	5.000	10/24/18 SAS	KB
J8684-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8684-FS-D(3)	960	40	KC52	50	1	1000	5.000	10/24/18 SAS	KB

* - 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

18-0609

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
J8685-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8686-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8686-FS-D(3)	955	45	KC52	50	1	1000	10.000	10/24/18 SAS	KB
J8687-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8687-FS-D(3)	960	40	KC52	50	1	1000	5.000	10/24/18 SAS	KB
J8687-FS-D(5)	960	40	KC52	50	1	1000	25.000	10/24/18 SAS	KB
J8687-FS-D(7)	960	40	KC52	50	1	1000	125.000	10/26/18 SAS	KB
J8688-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8688-FS-D(3)	960	40	KC52	50	1	1000	5.000	10/26/18 SAS	KB
J8714-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8715-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8716-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8716-FS-D(3)	955	45	KC52	50	1	1000	10.000	10/24/18 SAS	KB
J8716-FS-D(5)	960	40	KC52	50	1	1000	50.000	10/26/18 SAS	KB
J8717-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8718-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8719-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8720-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8720-FS-D(3)	955	45	KC52	50	1	1000	10.000	10/24/18 SAS	KB

* - 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

18-0609

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
J8720-FS-D(5)	965	35	KC52	50	1	1000	33.333	10/24/18 SAS	KB
J8720-FS-D(7)	960	40	KC52	50	1	1000	166.667	10/26/18 SAS	KB
J8721-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8722-FS(0)	950	50	KC52	50	1	1000	1.000	10/23/18 SAS	KB
J8722-FS-D(3)	955	45	KC52	50	1	1000	10.000	10/26/18 SAS	KB

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
KC19	Pipette	B814659662
KC52	Pipette	B814659662

* - Final Dilution is any HPLC, dilutions, or other manipulation

^ - Pre Injection Volume (PIV) includes any RIS spikes.

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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

18-0609

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
J8667-FS-D(3)	10	KC19	SIS	1	45	0	0	10/24/18 SAS	KB
J8667-FS-D(5)	50	KC19	SIS	1	40	0	0	10/24/18 SAS	KB
J8667-FS-D(7)	125	KC19	SIS	1	30	0	0	10/24/18 SAS	KB
J8668-FS-D(3)	10	KC19	SIS	1	45	0	0	10/24/18 SAS	KB
J8668-FS-D(5)	100	KC19	SIS	1	45	0	0	10/24/18 SAS	KB
J8669-FS-D(3)	10	KC19	SIS	1	45	0	0	10/24/18 SAS	KB
J8669-FS-D(5)	100	KC19	SIS	1	45	0	0	10/24/18 SAS	KB
J8670-FS-D(3)	10	KC19	SIS	1	45	0	0	10/24/18 SAS	KB
J8670-FS-D(5)	25	KC19	SIS	1	30	0	0	10/24/18 SAS	KB
J8683-FS-D(3)	5	KC19	SIS	1	40	0	0	10/24/18 SAS	KB
J8684-FS-D(3)	5	KC19	SIS	1	40	0	0	10/24/18 SAS	KB
J8686-FS-D(3)	10	KC19	SIS	1	45	0	0	10/24/18 SAS	KB
J8687-FS-D(3)	5	KC19	SIS	1	40	0	0	10/24/18 SAS	KB
J8687-FS-D(5)	25	KC19	SIS	1	40	0	0	10/24/18 SAS	KB
J8687-FS-D(7)	125	KC19	SIS	1	40	0	0	10/26/18 SAS	KB
J8688-FS-D(3)	5	KC19	SIS	1	40	0	0	10/26/18 SAS	KB
J8716-FS-D(3)	10	KC19	SIS	1	45	0	0	10/24/18 SAS	KB
J8716-FS-D(5)	50	KC19	SIS	1	40	0	0	10/26/18 SAS	KB
J8720-FS-D(3)	10	KC19	SIS	1	45	0	0	10/24/18 SAS	KB
J8720-FS-D(5)	33.333	KC19	SIS	1	35	0	0	10/24/18 SAS	KB
J8720-FS-D(7)	166.667	KC19	SIS	1	40	0	0	10/26/18 SAS	KB
J8722-FS-D(3)	10	KC19	SIS	1	45	0	0	10/26/18 SAS	KB

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EXTRACT SPIKE FORM

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0609

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

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
KC19	Pipette	B814659662
KC52	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

18-0609

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	#					
CR986PB-FS	0	--	10/17/2018 10:41:00 AM	NA		NA	NA	1.000	1.000	10/17/18 SAS
CR987LCS-FS	0	--	10/17/2018 10:41:00 AM	NA		NA	NA	1.000	1.000	10/17/18 SAS
J8667-FS	0	C	10/17/2018 2:09:00 PM	NA		NA	NA	1.000	1.000	10/17/18 SAS
J8667-FS	2	--	10/19/2018 11:39:00 AM	J8667-FS	0	1000	900	1.111	1.111	10/19/18 SAS
J8667-FS-D	3	C	10/19/2018 11:39:00 AM	J8667-FS	0	1000	100	10.000	10.000	10/19/18 SAS
J8667-FS-D	4	--	10/19/2018 1:14:00 PM	J8667-FS-D	3	1000	800	1.250	12.500	10/19/18 SAS
J8667-FS-D	5	C	10/19/2018 1:14:00 PM	J8667-FS-D	3	1000	200	5.000	50.000	10/19/18 SAS
J8667-FS-D	6	--	10/19/2018 1:15:00 PM	J8667-FS-D	5	1000	600	1.667	83.333	10/19/18 SAS
J8667-FS-D	7	--	10/19/2018 1:15:00 PM	J8667-FS-D	5	1000	400	2.500	125.000	10/19/18 SAS
J8668-FS	0	C	10/17/2018 2:09:00 PM	NA		NA	NA	1.000	1.000	10/17/18 SAS
J8668-FS	2	--	10/19/2018 1:16:00 PM	J8668-FS	0	1000	900	1.111	1.111	10/19/18 SAS
J8668-FS-D	3	C	10/19/2018 1:16:00 PM	J8668-FS	0	1000	100	10.000	10.000	10/19/18 SAS
J8668-FS-D	4	--	10/19/2018 1:17:00 PM	J8668-FS-D	3	1000	900	1.111	11.111	10/19/18 SAS
J8668-FS-D	5	--	10/19/2018 1:17:00 PM	J8668-FS-D	3	1000	100	10.000	100.000	10/19/18 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

18-0609

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	#					
J8669-FS	0	C	10/17/2018 2:09:00 PM	NA		NA	NA	1.000	1.000	10/17/18 SAS
J8669-FS	2	--	10/19/2018 1:18:00 PM	J8669-FS	0	1000	900	1.111	1.111	10/19/18 SAS
J8669-FS-D	3	C	10/19/2018 1:18:00 PM	J8669-FS	0	1000	100	10.000	10.000	10/19/18 SAS
J8669-FS-D	4	--	10/19/2018 1:21:00 PM	J8669-FS-D	3	1000	900	1.111	11.111	10/19/18 SAS
J8669-FS-D	5	--	10/19/2018 1:21:00 PM	J8669-FS-D	3	1000	100	10.000	100.000	10/19/18 SAS
J8670-FS	0	C	10/17/2018 10:41:00 AM	NA		NA	NA	1.000	1.000	10/17/18 KB
J8670-FS	2	--	10/24/2018 1:57:00 PM	J8670-FS	0	1000	900	1.111	1.111	10/24/18 SAS
J8670-FS-D	3	C	10/24/2018 1:57:00 PM	J8670-FS	0	1000	100	10.000	10.000	10/24/18 SAS
J8670-FS-D	4	--	10/24/2018 1:57:00 PM	J8670-FS-D	3	1000	600	1.667	16.667	10/24/18 SAS
J8670-FS-D	5	--	10/24/2018 1:57:00 PM	J8670-FS-D	3	1000	400	2.500	25.000	10/24/18 SAS
J8683-FS	0	C	10/17/2018 10:41:00 AM	NA		NA	NA	1.000	1.000	10/17/18 KB
J8683-FS	2	--	10/24/2018 2:00:00 PM	J8683-FS	0	1000	800	1.250	1.250	10/24/18 SAS
J8683-FS-D	3	--	10/24/2018 2:00:00 PM	J8683-FS	0	1000	200	5.000	5.000	10/24/18 SAS
J8684-FS	0	C	10/17/2018 10:41:00 AM	NA		NA	NA	1.000	1.000	10/17/18 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

18-0609

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	#					
J8684-FS	2	--	10/24/2018 2:00:00 PM	J8684-FS	0	1000	800	1.250	1.250	10/24/18 SAS
J8684-FS-D	3	--	10/24/2018 2:00:00 PM	J8684-FS	0	1000	200	5.000	5.000	10/24/18 SAS
J8685-FS	0	--	10/17/2018 10:41:00 AM	NA		NA	NA	1.000	1.000	10/17/18 SAS
J8686-FS	0	C	10/17/2018 10:41:00 AM	NA		NA	NA	1.000	1.000	10/17/18 KB
J8686-FS	2	--	10/24/2018 2:04:00 PM	J8686-FS	0	1000	900	1.111	1.111	10/24/18 SAS
J8686-FS-D	3	--	10/24/2018 2:04:00 PM	J8686-FS	0	1000	100	10.000	10.000	10/24/18 SAS
J8687-FS	0	C	10/17/2018 10:41:00 AM	NA		NA	NA	1.000	1.000	10/17/18 KB
J8687-FS	2	--	10/24/2018 2:05:00 PM	J8687-FS	0	1000	800	1.250	1.250	10/24/18 SAS
J8687-FS-D	3	C	10/24/2018 2:05:00 PM	J8687-FS	0	1000	200	5.000	5.000	10/24/18 SAS
J8687-FS-D	4	--	10/24/2018 2:07:00 PM	J8687-FS-D	3	1000	800	1.250	6.250	10/24/18 SAS
J8687-FS-D	5	C	10/24/2018 2:07:00 PM	J8687-FS-D	3	1000	200	5.000	25.000	10/24/18 SAS
J8687-FS-D	6	--	10/26/2018 10:26:00 AM	J8687-FS-D	5	1000	800	1.250	31.250	10/26/18 SAS
J8687-FS-D	7	--	10/26/2018 10:26:00 AM	J8687-FS-D	5	1000	200	5.000	125.000	10/26/18 SAS
J8688-FS	0	C	10/17/2018 10:41:00 AM	NA		NA	NA	1.000	1.000	10/17/18 KB

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

18-0609

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	#					
J8688-FS	2	--	10/26/2018 10:20:00 AM	J8688-FS	0	1000	800	1.250	1.250	10/26/18 SAS
J8688-FS-D	3	--	10/26/2018 10:20:00 AM	J8688-FS	0	1000	200	5.000	5.000	10/26/18 SAS
J8714-FS	0	--	10/17/2018 10:41:00 AM	NA		NA	NA	1.000	1.000	10/17/18 SAS
J8715-FS	0	--	10/17/2018 10:41:00 AM	NA		NA	NA	1.000	1.000	10/17/18 SAS
J8716-FS	0	C	10/17/2018 10:41:00 AM	NA		NA	NA	1.000	1.000	10/17/18 KB
J8716-FS	2	--	10/24/2018 2:17:00 PM	J8716-FS	0	1000	900	1.111	1.111	10/24/18 SAS
J8716-FS-D	3	C	10/24/2018 2:17:00 PM	J8716-FS	0	1000	100	10.000	10.000	10/24/18 SAS
J8716-FS-D	4	--	10/26/2018 10:24:00 AM	J8716-FS-D	3	1000	800	1.250	12.500	10/26/18 SAS
J8716-FS-D	5	--	10/26/2018 10:24:00 AM	J8716-FS-D	3	1000	200	5.000	50.000	10/26/18 SAS
J8717-FS	0	--	10/17/2018 10:41:00 AM	NA		NA	NA	1.000	1.000	10/17/18 SAS
J8718-FS	0	--	10/17/2018 10:41:00 AM	NA		NA	NA	1.000	1.000	10/17/18 SAS
J8719-FS	0	--	10/17/2018 10:41:00 AM	NA		NA	NA	1.000	1.000	10/17/18 SAS
J8720-FS	0	C	10/17/2018 10:41:00 AM	NA		NA	NA	1.000	1.000	10/17/18 KB
J8720-FS	2	--	10/24/2018 2:20:00 PM	J8720-FS	0	1000	900	1.111	1.111	10/24/18 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

18-0609

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	#					
J8720-FS-D	3	C	10/24/2018 2:20:00 PM	J8720-FS	0	1000	100	10.000	10.000	10/24/18 SAS
J8720-FS-D	4	--	10/24/2018 2:21:00 PM	J8720-FS-D	3	1000	700	1.429	14.286	10/24/18 SAS
J8720-FS-D	5	C	10/24/2018 2:21:00 PM	J8720-FS-D	3	1000	300	3.333	33.333	10/24/18 SAS
J8720-FS-D	6	--	10/26/2018 10:23:00 AM	J8720-FS-D	5	1000	800	1.250	41.667	10/26/18 SAS
J8720-FS-D	7	--	10/26/2018 10:23:00 AM	J8720-FS-D	5	1000	200	5.000	166.667	10/26/18 SAS
J8721-FS	0	--	10/17/2018 10:41:00 AM	NA		NA	NA	1.000	1.000	10/17/18 SAS
J8722-FS	0	C	10/17/2018 10:41:00 AM	NA		NA	NA	1.000	1.000	10/17/18 KB
J8722-FS	2	--	10/26/2018 10:27:00 AM	J8722-FS	0	1000	900	1.111	1.111	10/26/18 SAS
J8722-FS-D	3	--	10/26/2018 10:27:00 AM	J8722-FS	0	1000	100	10.000	10.000	10/26/18 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]
Dilution Factor = [Sample Volume (uL) / Aliqot Volume (uL))] * Prior Dilution Factor
* - "C" = Extract is Consumed

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BATTELLE - NORWELL OPERATIONS
EXTRACT - INSTRUMENT FACILITY CUSTODY PAGE

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0609

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Purpose:	LC-MS/MS TRANSFER	**Last Activity:**	Prep->Inst
Relinquished On/By:	Oct 25 2018 4:22PM SAS	**Received On/By:**	Oct 25 2018 4:22PM 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	CR986PB-FS(0)	1000	1	Intact	NA
2	CR987LCS-FS(0)	1000	1	Intact	NA
3	J8667-FS(0)	1000	1	Intact	NA
4	J8667-FS-D(3)	1000	10	Intact	NA
5	J8667-FS-D(5)	1000	50	Intact	NA
6	J8667-FS-D(7)	1000	125	Intact	NA
7	J8668-FS(0)	1000	1	Intact	NA
8	J8668-FS-D(3)	1000	10	Intact	NA
9	J8668-FS-D(5)	1000	100	Intact	NA
10	J8669-FS(0)	1000	1	Intact	NA
11	J8669-FS-D(3)	1000	10	Intact	NA
12	J8669-FS-D(5)	1000	100	Intact	NA
13	J8670-FS(0)	1000	1	Intact	NA
14	J8670-FS-D(3)	1000	10	Intact	NA
15	J8670-FS-D(5)	1000	25	Intact	NA
16	J8683-FS(0)	1000	1	Intact	NA
17	J8683-FS-D(3)	1000	5	Intact	NA
18	J8684-FS(0)	1000	1	Intact	NA
19	J8684-FS-D(3)	1000	5	Intact	NA
20	J8685-FS(0)	1000	1	Intact	NA
21	J8686-FS(0)	1000	1	Intact	NA
22	J8686-FS-D(3)	1000	10	Intact	NA
23	J8687-FS(0)	1000	1	Intact	NA
24	J8687-FS-D(3)	1000	5	Intact	NA
25	J8687-FS-D(5)	1000	25	Intact	NA
26	J8688-FS(0)	1000	1	Intact	NA
27	J8714-FS(0)	1000	1	Intact	NA
28	J8715-FS(0)	1000	1	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

18-0609

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

29	J8716-FS(0)	1000	1	Intact	NA
30	J8716-FS-D(3)	1000	10	Intact	NA
31	J8717-FS(0)	1000	1	Intact	NA
32	J8718-FS(0)	1000	1	Intact	NA
33	J8719-FS(0)	1000	1	Intact	NA
34	J8720-FS(0)	1000	1	Intact	NA
35	J8720-FS-D(3)	1000	10	Intact	NA
36	J8720-FS-D(5)	1000	33.333	Intact	NA
37	J8721-FS(0)	1000	1	Intact	NA
38	J8722-FS(0)	1000	1	Intact	NA

Total Extracts: 38

Purpose: LC-MS/MS TRANSFER

Last Activity: Prep->Inst

Relinquished On/By: Oct 26 2018 11:08AM SAS

Relinquished From: Sample Preparation: NA

Relinquish Comment: NA

Received On/By: Oct 26 2018 12:55PM DMS

Received Location: LC Laboratory: NA

Received Comment: NA

No.	BDO-ID:	PIV:	DF:	Condition:	Custody Comment:
1	CR987LCS-FS(0)	1000	1	Intact	NA
2	J8687-FS-D(7)	1000	125	Intact	NA
3	J8688-FS-D(3)	1000	5	Intact	NA
4	J8716-FS-D(5)	1000	50	Intact	NA
5	J8717-FS(0)	1000	1	Intact	NA
6	J8718-FS(0)	1000	1	Intact	NA
7	J8719-FS(0)	1000	1	Intact	NA
8	J8720-FS-D(7)	1000	166.667	Intact	NA
9	J8721-FS(0)	1000	1	Intact	NA
10	J8722-FS(0)	1000	1	Intact	NA
11	J8722-FS-D(3)	1000	10	Intact	NA

Total Extracts: 11

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BATTELLE - NORWELL OPERATIONS
SAMPLE SPECIFIC COMMENTS

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0609

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Sample ID:	Comment:	Date/Initials:
CR986PB-FS	Extraction started 10:41am, extraction block 1, ended at 11:43am	10/17/18 SAS
CR987LCS-FS	Extraction started 10:41am, extraction block 1, ended at 11:43am	10/17/18 SAS
J8667-FS	Extraction started 2:09pm, extraction block 2, ended at 2:17pm	10/17/18 SAS
J8668-FS	Extraction started 2:09pm, extraction block 2, ended at 2:17pm	10/17/18 SAS
J8669-FS	Extraction started 2:09pm, extraction block 2, ended at 2:18pm	10/17/18 SAS
J8670-FS	Extraction started 10:41am, extraction block 2, ended at 11:44am	10/17/18 KB
J8683-FS	Extraction started 10:41am, extraction block 2, ended at 12:15pm	10/17/18 KB
J8683-FS	A very small amount of sample (~1-2 mL) spilled during extraction.	10/17/18 KB
J8684-FS	Extraction started 10:41am, extraction block 1, ended at 12:09pm	10/17/18 SAS
J8685-FS	Extraction started 10:41am, extraction block 1, ended at 12:35pm	10/17/18 SAS
J8685-FS	Sample contained some floating particulates, due to the amount of particulates, the filter was clogged and popped on the SPE.	10/17/18 SAS
J8686-FS	Extraction started 10:41am, extraction block 2, ended at 12:11pm	10/17/18 KB
J8687-FS	Extraction started 10:41am, extraction block 2, ended at 12:23pm	10/17/18 KB
J8688-FS	Extraction started 10:41am, extraction block 2, ended at 12:00pm	10/17/18 KB
J8714-FS	Extraction started 10:41am, extraction block 1, ended at 11:42am	10/17/18 SAS
J8715-FS	Extraction started 10:41am, extraction block 1, ended at 11:44am	10/17/18 SAS
J8716-FS	Extraction started 10:41am, extraction block 2, ended at 11:48am	10/17/18 KB
J8717-FS	Extraction started 10:41am, extraction block 1, ended at 11:51am	10/17/18 SAS
J8717-FS	After blowing the sample to dryness, sample had a lot of particulates at the bottom.	10/26/18 SAS
J8718-FS	Extraction started 10:41am, extraction block 1, ended at 12:12pm	10/17/18 SAS
J8718-FS	After blowing the sample to dryness, sample had a lot of particulates at the bottom.	10/26/18 SAS
J8719-FS	Extraction started 10:41am, extraction block 1, ended at 12:01pm	10/17/18 SAS
J8719-FS	After blowing the sample to dryness, sample had a lot of particulates at the bottom.	10/26/18 SAS
J8720-FS	Extraction started 10:41am, extraction block 2, ended at 11:39 am	10/17/18 KB
J8721-FS	Extraction started 10:41am, extraction block 1, ended at 12:10pm	10/17/18 SAS
J8721-FS	Sample contained some floating particulates.	10/17/18 SAS
J8721-FS	After blowing the sample to dryness, sample had a lot of particulates at the bottom.	10/26/18 SAS
J8722-FS	Extraction started 10:41am, extraction block 2, ended at 11:58am	10/17/18 KB
J8722-FS	After blowing the sample to dryness, sample had a lot of particulates at the bottom.	10/26/18 SAS

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BATTELLE - NORWELL OPERATIONS
MISCELLANEOUS DOCUMENTATION FORM

Project Title(s)
CTO-4164 Naval Base Ventura County, California

Project No.(s)
100110125-01

18-0609

CTO-4164: Analysis of Non-Potable Waters

AQ, GW

Entered By:	Stephanie Schultz	**On:**	10/17/2018

Due to high levels of sedimentation in the sample bottles, all samples (with the exception of the equipment blank and field blank) were centrifuged. All samples, with the exception of J8685 and J8721, were transferred to new bottles. The sediment in the remaining original bottle was stored with the remaining bottle of water.

Task Leader Approval:	Stephanie Schultz	**On:**	10/17/2018
SupervisorApproval:	Denise Schumitz	**On:**	10/26/2018
PM Approval:	Jonathan Thorn	**On:**	11/01/2018

Analytical Calibrations

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Sequence Report

Created with Analyst Reporter
Printed: 31/10/2018 8:12:09 AM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
1	MeOH		10/17/2018 7:36:00 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
2	KB73	L1	10/17/2018 7:46:52 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
3	KB74	L2	10/17/2018 7:57:45 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
4	KB75	L3	10/17/2018 8:08:39 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
5	KB76	L4	10/17/2018 8:19:32 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
6	KB77	L5	10/17/2018 8:30:23 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
7	KB78	L6	10/17/2018 8:41:14 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
8	KB79	L7	10/17/2018 8:52:06 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
9	KB80 IB	IB	10/17/2018 9:02:57 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
10	KB81 ICC	ICC	10/17/2018 9:13:49 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
11	KB89 Branch	BRANCH	10/17/2018 9:24:41 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff

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Sequence Report

Created with Analyst Reporter
Printed: 01/11/2018 7:28:07 AM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File	
1	KB75 ISC	ISC	10/25/2018 4:26:43 PM	5-0369.dam	AC_10252018_05-0369.wiff	
2	KB80 IB	IB	10/25/2018 4:37:35 PM	5-0369.dam	AC_10252018_05-0369.wiff	
11	KB76	CCV	10/25/2018 6:27:08 PM	5-0369.dam	AC_10252018_05-0369.wiff	
13	CR986PB-FS(0)	Procedural Blank	10/25/2018 6:48:52 PM	5-0369.dam	AC_10252018_05-0369.wiff	
~~14~~	~~CR987LCS-FS(0)~~	Laboratory Control Sample	10/25/2018 6:59:43 PM	~~5-0369.dam~~	AC_10252018_05-0369.wiff	(1)
15	J8667-FS(0)	VC-CS12-DW01-1018	10/25/2018 7:10:37 PM	5-0369.dam	AC_10252018_05-0369.wiff	
~~16~~	~~J8667-FS-D(3)~~	~~VC-CS12-DW01-1018~~	10/25/2018 7:21:29 PM	~~5-0369.dam~~	AC_10252018_05-0369.wiff	(1)
17	J8667-FS-D(5)	VC-CS12-DW01-1018	10/25/2018 7:32:22 PM	5-0369.dam	AC_10252018_05-0369.wiff	
~~18~~	~~J8667-FS-D(7)~~	~~VC-CS12-DW01-1018~~	10/25/2018 7:43:13 PM	~~5-0369.dam~~	AC_10252018_05-0369.wiff	(2)
19	J8668-FS(0)	VC-CS12-DW01P-1018	10/25/2018 7:54:05 PM	5-0369.dam	AC_10252018_05-0369.wiff	
20	J8668-FS-D(3)	VC-CS12-DW01P-1018	10/25/2018 8:04:57 PM	5-0369.dam	AC_10252018_05-0369.wiff	
~~21~~	~~J8668-FS-D(5)~~	VC-CS12-DW01P-1018	10/25/2018 8:15:52 PM	~~5-0369.dam~~	AC_10252018_05-0369.wiff	(2)
23	KB77	CCV	10/25/2018 8:37:35 PM	5-0369.dam	AC_10252018_05-0369.wiff	
24	J8669-FS(0)	VC-CS12-DW02-1018	10/25/2018 8:48:27 PM	5-0369.dam	AC_10252018_05-0369.wiff	
25	J8669-FS-D(3)	VC-CS12-DW02-1018	10/25/2018 8:59:18 PM	5-0369.dam	AC_10252018_05-0369.wiff	
26	J8669-FS-D(5)	VC-CS12-DW02-1018	10/25/2018 9:10:10 PM	5-0369.dam	AC_10252018_05-0369.wiff	
27	J8670-FS(0)	VC-CS12-DW03-1018	10/25/2018 9:21:03 PM	5-0369.dam	AC_10252018_05-0369.wiff	
28	J8670-FS-D(3)	VC-CS12-DW03-1018	10/25/2018 9:31:54 PM	5-0369.dam	AC_10252018_05-0369.wiff	
29	J8670-FS-D(5)	VC-CS12-DW03-1018	10/25/2018 9:42:46 PM	5-0369.dam	AC_10252018_05-0369.wiff	
30	J8683-FS(0)	VC-CS10-DW01-1018	10/25/2018 9:53:38 PM	5-0369.dam	AC_10252018_05-0369.wiff	
31	J8683-FS-D(3)	VC-CS10-DW01-1018	10/25/2018 10:04:29 PM	5-0369.dam	AC_10252018_05-0369.wiff	
33	KB76	CCV	10/25/2018 10:26:13 PM	5-0369.dam	AC_10252018_05-0369.wiff	
34	J8684-FS(0)	VC-CS10-DW02-1018	10/25/2018 10:37:05 PM	5-0369.dam	AC_10252018_05-0369.wiff	
35	J8684-FS-D(3)	VC-CS10-DW02-1018	10/25/2018 10:47:57 PM	5-0369.dam	AC_10252018_05-0369.wiff	
36	J8685-FS(0)	VC-CS10-DW02P-1018	10/25/2018 10:58:48 PM	5-0369.dam	AC_10252018_05-0369.wiff	
37	J8686-FS(0)	VC-CS10-DW03-1018	10/25/2018 11:09:39 PM	5-0369.dam	AC_10252018_05-0369.wiff	
38	J8686-FS-D(3)	VC-CS10-DW03-1018	10/25/2018 11:20:32	5-0369.dam	AC_10252018_05-	

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Sequence Report

Created with Analyst Reporter
Printed: 01/11/2018 7:28:07 AM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File	
			PM		0369.wiff	
39	J8687-FS(0)	VC-CS10-DW04-1018	10/25/2018 11:31:23 PM	5-0369.dam	AC_10252018_05-0369.wiff	
40	~~J8687-FS-D(3)~~	~~VC-CS10-DW04-1018~~	~~10/25/2018 11:42:15 PM~~	~~5-0369.dam~~	~~AC_10252018_05-0369.wiff~~	(2)
41	~~J8687-FS-D(5)~~	~~VC-CS10-DW04-1018~~	~~10/25/2018 11:53:06 PM~~	~~5-0369.dam~~	~~AC_10252018_05-0369.wiff~~	(2)
43	KB77	CCV	10/26/2018 12:14:50 AM	5-0369.dam	AC_10252018_05-0369.wiff	
44	J8688-FS(0)	VC-CS18-DW01-1018	10/26/2018 12:25:42 AM	5-0369.dam	AC_10252018_05-0369.wiff	
45	J8714-FS(0)	VC-SO-FB11-10062018	10/26/2018 12:36:33 AM	5-0369.dam	AC_10252018_05-0369.wiff	
46	J8715-FS(0)	VC-SO-EB11-10062018	10/26/2018 12:47:24 AM	5-0369.dam	AC_10252018_05-0369.wiff	
47	J8716-FS(0)	VC-CS00-DW01-1018	10/26/2018 12:58:16 AM	5-0369.dam	AC_10252018_05-0369.wiff	
48	J8716-FS-D(3)	VC-CS00-DW01-1018	10/26/2018 1:09:09 AM	5-0369.dam	AC_10252018_05-0369.wiff	
49	J8717-FS(0)	VC-CS00-DW02-1018	10/26/2018 1:20:02 AM	5-0369.dam	AC_10252018_05-0369.wiff	
50	J8718-FS(0)	VC-CS00-DW02P-1018	10/26/2018 1:30:53 AM	5-0369.dam	AC_10252018_05-0369.wiff	
51	J8719-FS(0)	VC-CS00-DW03-1018	10/26/2018 1:41:45 AM	5-0369.dam	AC_10252018_05-0369.wiff	
52	KB76	CCV	10/26/2018 2:03:28 AM	5-0369.dam	AC_10252018_05-0369.wiff	
53	J8720-FS(0)	VC-CS00-DW04-1018	10/26/2018 2:14:19 AM	5-0369.dam	AC_10252018_05-0369.wiff	
54	J8720-FS-D(3)	VC-CS00-DW04-1018	10/26/2018 2:25:10 AM	5-0369.dam	AC_10252018_05-0369.wiff	
1	J8720-FS-D(5)	VC-CS00-DW04-1018	10/26/2018 2:36:01 AM	5-0369.dam	AC_10252018_05-0369.wiff	
2	J8721-FS(0)	VC-CS00-DW05-1018	10/26/2018 2:46:54 AM	5-0369.dam	AC_10252018_05-0369.wiff	
3	J8722-FS(0)	VC-CS00-DW06-1018	10/26/2018 2:57:47 AM	5-0369.dam	AC_10252018_05-0369.wiff	
5	KB77	CCV	10/26/2018 3:19:32 AM	5-0369.dam	AC_10252018_05-0369.wiff	

(1) Samples were re-aliquoted and reanalyzed due to bad injections. LMG 11/01/18

(2) Dilutions were not needed and not reported, LMG 11/01/18

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Sequence Report

Created with Analyst Reporter
Printed: 01/11/2018 7:29:01 AM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File	
2	KB75 ISC	ISC	10/26/2018 11:41:21 AM	5-0369.dam	AC_10262018_369.wiff	
3	KB80 IB	IB	10/26/2018 11:52:13 AM	5-0369.dam	AC_10262018_369.wiff	
4	J8803-FS(0)		10/26/2018 12:03:07 PM	5-0369.dam	AC_10262018_369.wiff	
5	J8807MS-FS(0)		10/26/2018 12:14:00 PM	5-0369.dam	AC_10262018_369.wiff	(1)
6	J8808MSD-FS(0)		10/26/2018 12:24:52 PM	5-0369.dam	AC_10262018_369.wiff	
7	J8722-FS-D(3)	VC-CS00-DW06-1018	10/26/2018 12:35:44 PM	5-0369.dam	AC_10262018_369.wiff	
8	J8720-FS-D(7)	VC-CS00-DW04-1018	10/26/2018 12:46:35 PM	5-0369.dam	AC_10262018_369.wiff	
9	J8716-FS-D(5)	VC-CS00-DW01-1018	10/26/2018 12:57:26 PM	5-0369.dam	AC_10262018_369.wiff	
10	J8688-FS-D(3)	VC-CS18-DW01-1018	10/26/2018 1:08:19 PM	5-0369.dam	AC_10262018_369.wiff	
11	J8687-FS-D(7)	VC-CS10-DW04-1018	10/26/2018 1:19:10 PM	5-0369.dam	AC_10262018_369.wiff	
13	KB76	CCV	10/26/2018 1:40:54 PM	5-0369.dam	AC_10262018_369.wiff	
14	CR987LCS-FS(0)	Laboratory Control Sample	10/26/2018 1:51:45 PM	5-0369.dam	AC_10262018_369.wiff	
15	J8667-FS-D(3)	VC-CS12-DW01-1018	10/26/2018 2:02:37 PM	5-0369.dam	AC_10262018_369.wiff	
16	J8717-FS(0)	VC-CS00-DW02-1018	10/26/2018 2:13:28 PM	5-0369.dam	AC_10262018_369.wiff	
17	J8718-FS(0)	VC-CS00-DW02P-1018	10/26/2018 2:24:20 PM	5-0369.dam	AC_10262018_369.wiff	
18	J8719-FS(0)	VC-CS00-DW03-1018	10/26/2018 2:35:12 PM	5-0369.dam	AC_10262018_369.wiff	(2)
19	J8721-FS(0)	VC-CS00-DW05-1018	10/26/2018 2:46:02 PM	5-0369.dam	AC_10262018_369.wiff	
20	J8722-FS(0)	VC-CS00-DW06-1018	10/26/2018 2:56:55 PM	5-0369.dam	AC_10262018_369.wiff	
21	KB77	CCV	10/26/2018 3:07:47 PM	5-0369.dam	AC_10262018_369.wiff	

(1) Samples do not apply to this batch. LMG 11/01/18

(2) Confirmation of surrogate recoveries only. Samples not reported. LMG 11/01/18

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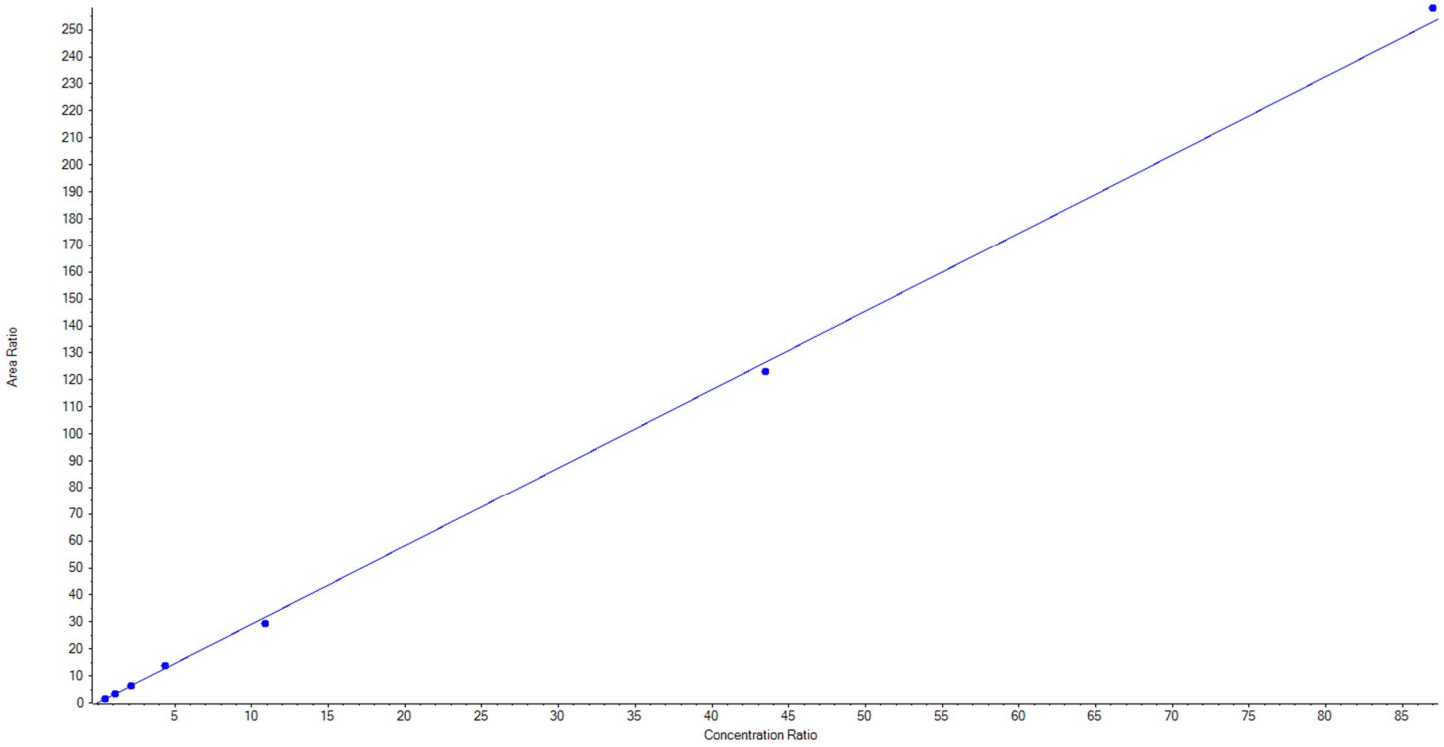
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFBS_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	298.9 / 80.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C3-PFBS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 2.90746 x + 0.06970 (r = 0.99940) (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	104.635578	103.6
3	KB74	L2	True	252.50	249.370464	98.8
4	KB75	L3	True	505.00	495.098560	98.0
5	KB76	L4	True	1010.00	1091.288759	108.1
6	KB77	L5	True	2525.00	2332.691625	92.4
7	KB78	L6	True	10100.00	9811.581725	97.1
8	KB79	L7	True	20200.00	20608.833290	102.0



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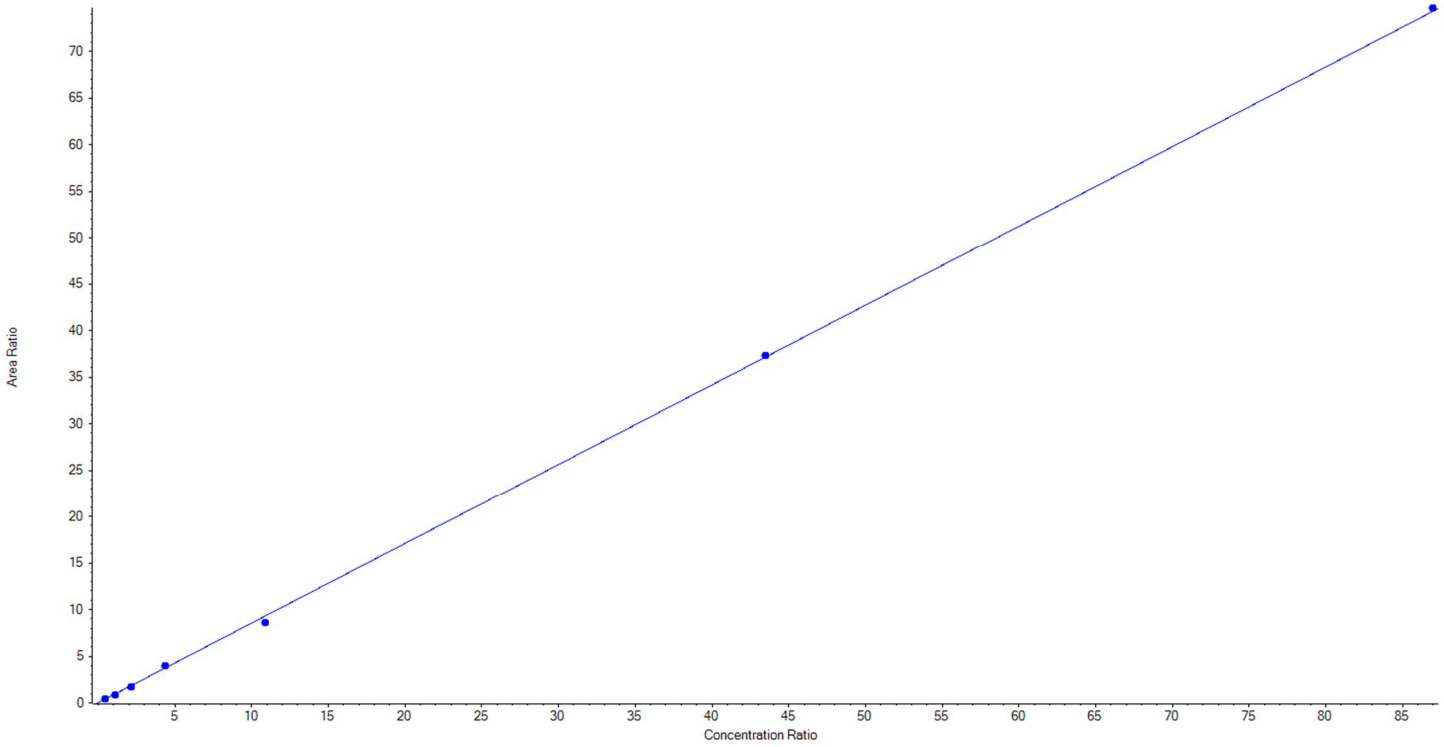
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFBS_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	298.9 / 99.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C3-PFBS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.85386 x + 0.01367 (r = 0.99964) (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	109.976962	108.9
3	KB74	L2	True	252.50	242.180085	95.9
4	KB75	L3	True	505.00	475.121472	94.1
5	KB76	L4	True	1010.00	1086.381545	107.6
6	KB77	L5	True	2525.00	2339.199841	92.6
7	KB78	L6	True	10100.00	10143.472130	100.4
8	KB79	L7	True	20200.00	20297.167965	100.5



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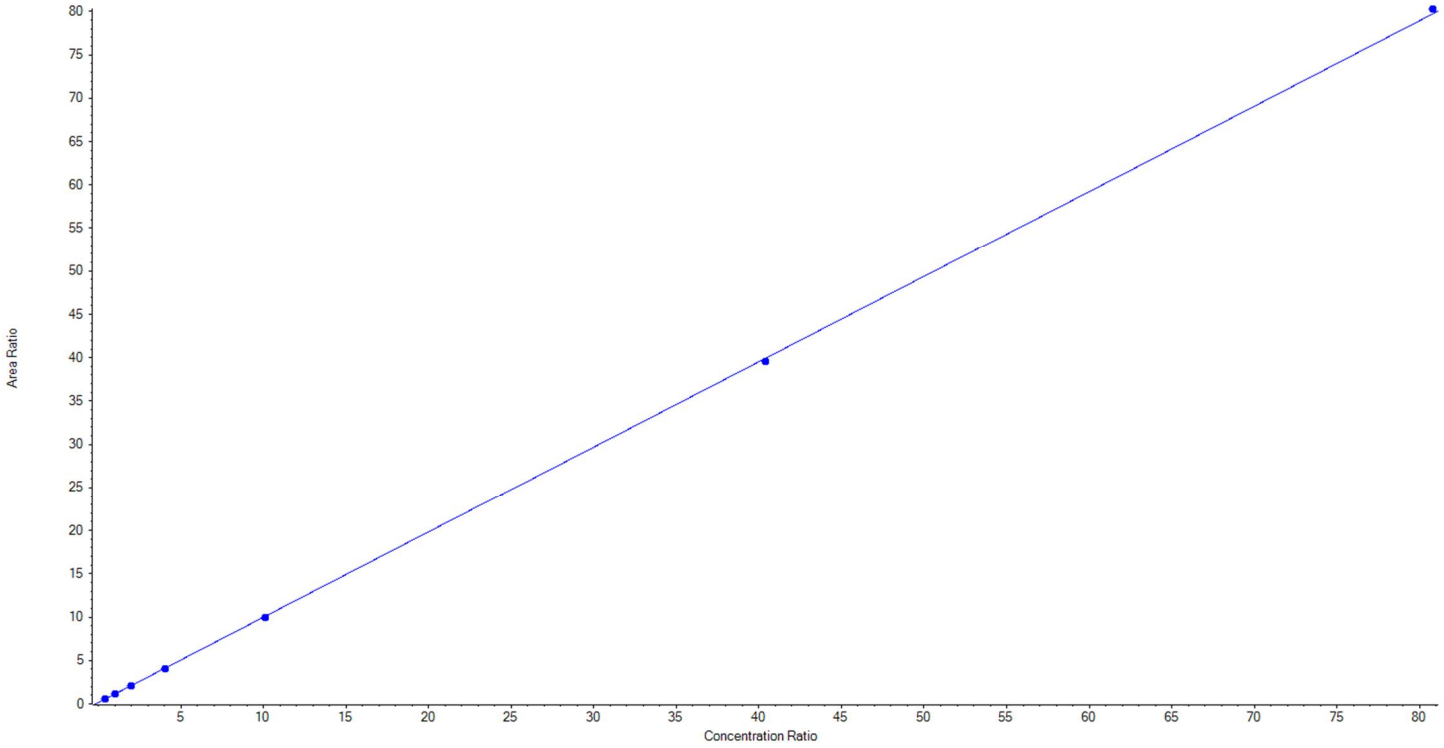
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFHxA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	313.0 / 269.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C5-PFHxA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.98501 x + 0.13333 (r = 0.99994) (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	98.968181	98.0
3	KB74	L2	True	252.50	269.910942	106.9
4	KB75	L3	True	505.00	490.752146	97.2
5	KB76	L4	True	1010.00	1004.472242	99.5
6	KB77	L5	True	2525.00	2495.865956	98.9
7	KB78	L6	True	10100.00	9993.499522	99.0
8	KB79	L7	True	20200.00	20340.031011	100.7



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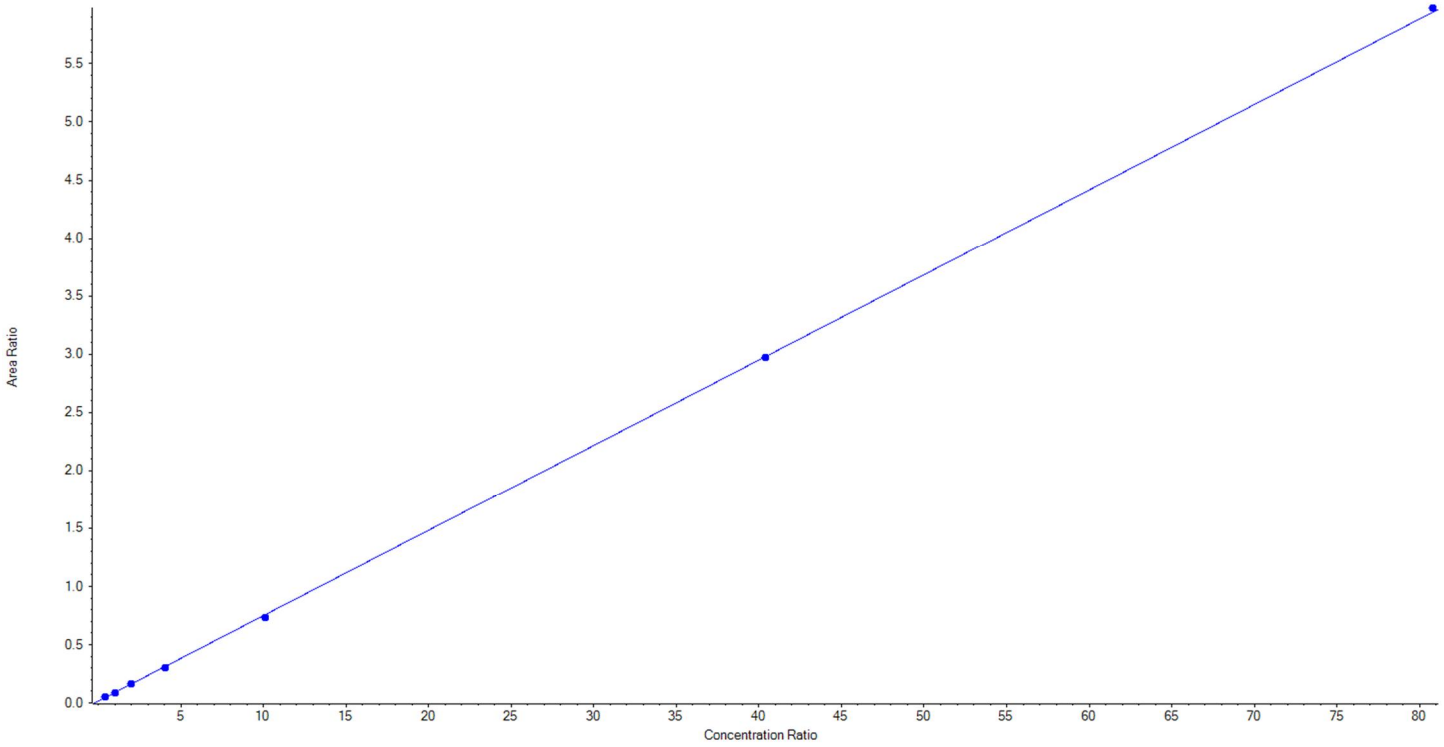
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFHxA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	313.0 / 119.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C5-PFHxA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.07336 x + 0.01493 (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	101.00	113.183087	112.1
3	KB74	L2	True	252.50	230.645561	91.3
4	KB75	L3	True	505.00	514.901118	102.0
5	KB76	L4	True	1010.00	980.952621	97.1
6	KB77	L5	True	2525.00	2451.366061	97.1
7	KB78	L6	True	10100.00	10083.260482	99.8
8	KB79	L7	True	20200.00	20319.191070	100.6



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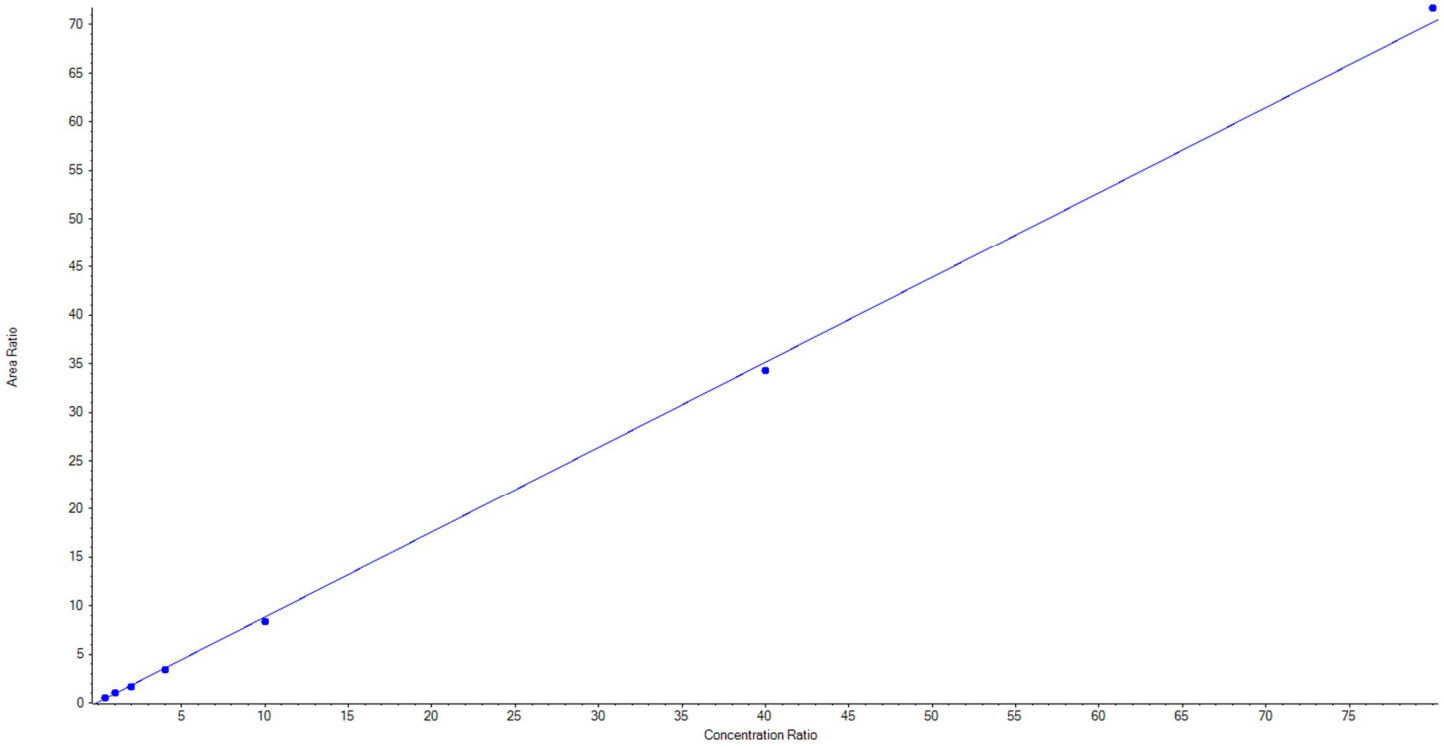
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFHpA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	363.0 / 319.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C4-PFHpA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.87722 x + 0.06760 (r = 0.99955) (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	113.465532	113.5
3	KB74	L2	True	250.00	261.922885	104.8
4	KB75	L3	True	500.00	452.888167	90.6
5	KB76	L4	True	1000.00	963.772233	96.4
6	KB77	L5	True	2500.00	2376.996854	95.1
7	KB78	L6	True	10000.00	9765.162244	97.7
8	KB79	L7	True	20000.00	20415.792084	102.1



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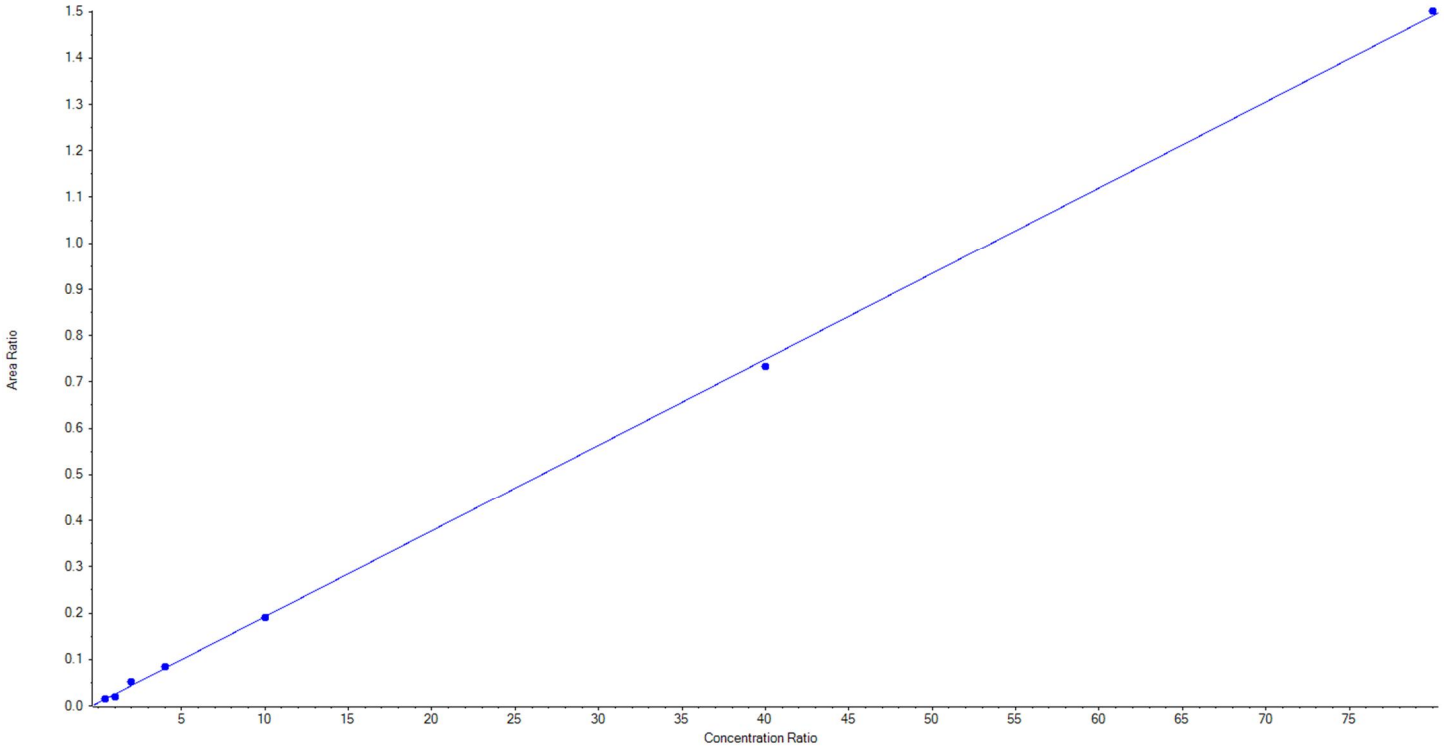
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFHpA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	363.0 / 169.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C4-PFHpA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.01856 x + 0.00664 (r = 0.99907) (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	103.311634	103.3
3	KB74	L2	True	250.00	175.823351	70.3
4	KB75	L3	True	500.00	618.850678	123.8
5	KB76	L4	True	1000.00	1051.701356	105.2
6	KB77	L5	True	2500.00	2469.602759	98.8
7	KB78	L6	True	10000.00	9796.218447	98.0
8	KB79	L7	True	20000.00	20134.491774	100.7



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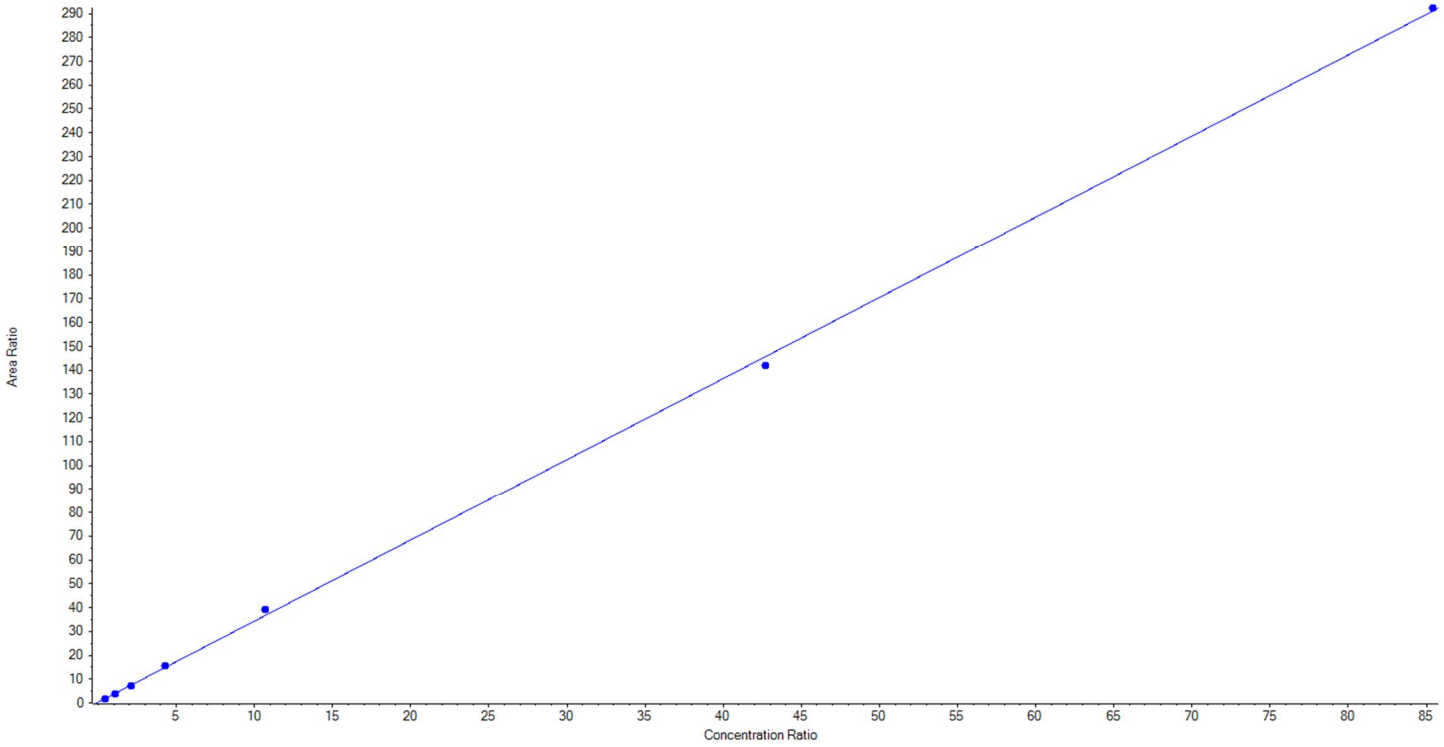
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFHxS_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	399.0 / 80.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C3-PFHxS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 3.40443 x + 0.28942 (r = 0.99956) (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	105.225987	104.2
3	KB74	L2	True	252.50	232.865372	92.2
4	KB75	L3	True	505.00	467.824000	92.6
5	KB76	L4	True	1010.00	1074.776448	106.4
6	KB77	L5	True	2525.00	2696.493262	106.8
7	KB78	L6	True	10100.00	9828.822898	97.3
8	KB79	L7	True	20200.00	20287.492034	100.4



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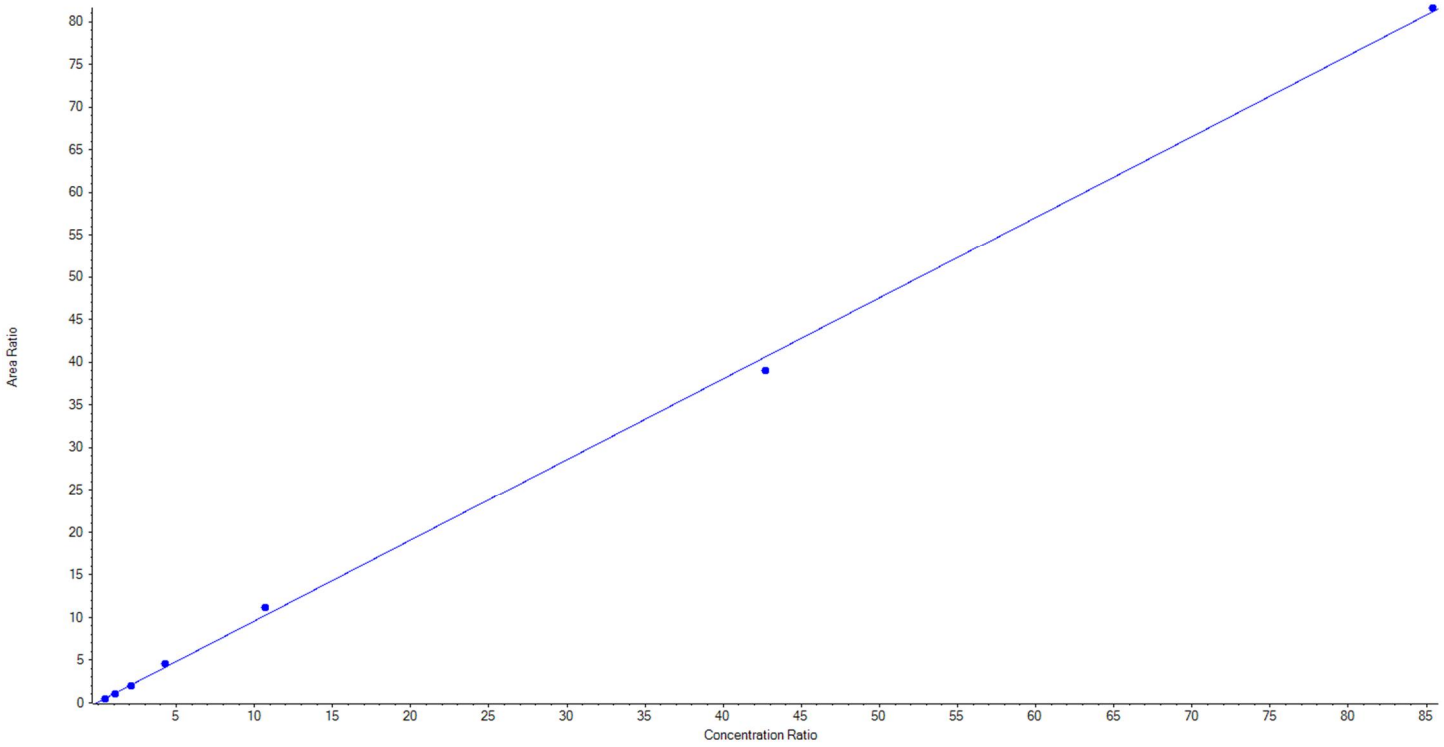
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFHxS_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	399.0 / 99.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C3-PFHxS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.94916 x + 0.10161 (r = 0.99926) (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	98.139274	97.2
3	KB74	L2	True	252.50	231.314187	91.6
4	KB75	L3	True	505.00	484.563583	96.0
5	KB76	L4	True	1010.00	1107.476178	109.7
6	KB77	L5	True	2525.00	2749.725828	108.9
7	KB78	L6	True	10100.00	9714.855919	96.2
8	KB79	L7	True	20200.00	20307.425032	100.5



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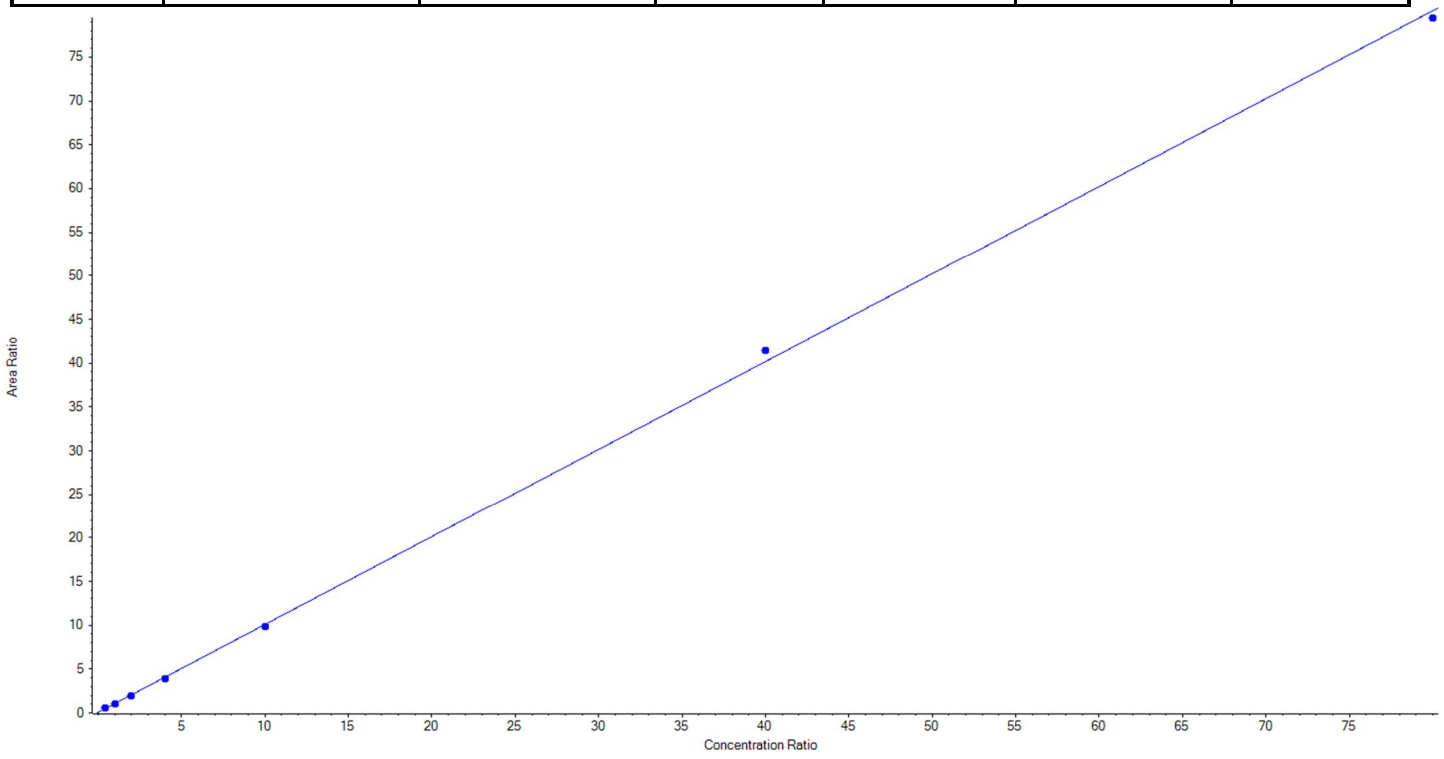
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFOA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	413.0 / 369.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C8-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.00279 x + 0.06080 (r = 0.99969) (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	113.608497	113.6
3	KB74	L2	True	250.00	242.259718	96.9
4	KB75	L3	True	500.00	467.456638	93.5
5	KB76	L4	True	1000.00	956.844142	95.7
6	KB77	L5	True	2500.00	2452.232813	98.1
7	KB78	L6	True	10000.00	10326.914009	103.3
8	KB79	L7	True	20000.00	19790.684183	99.0



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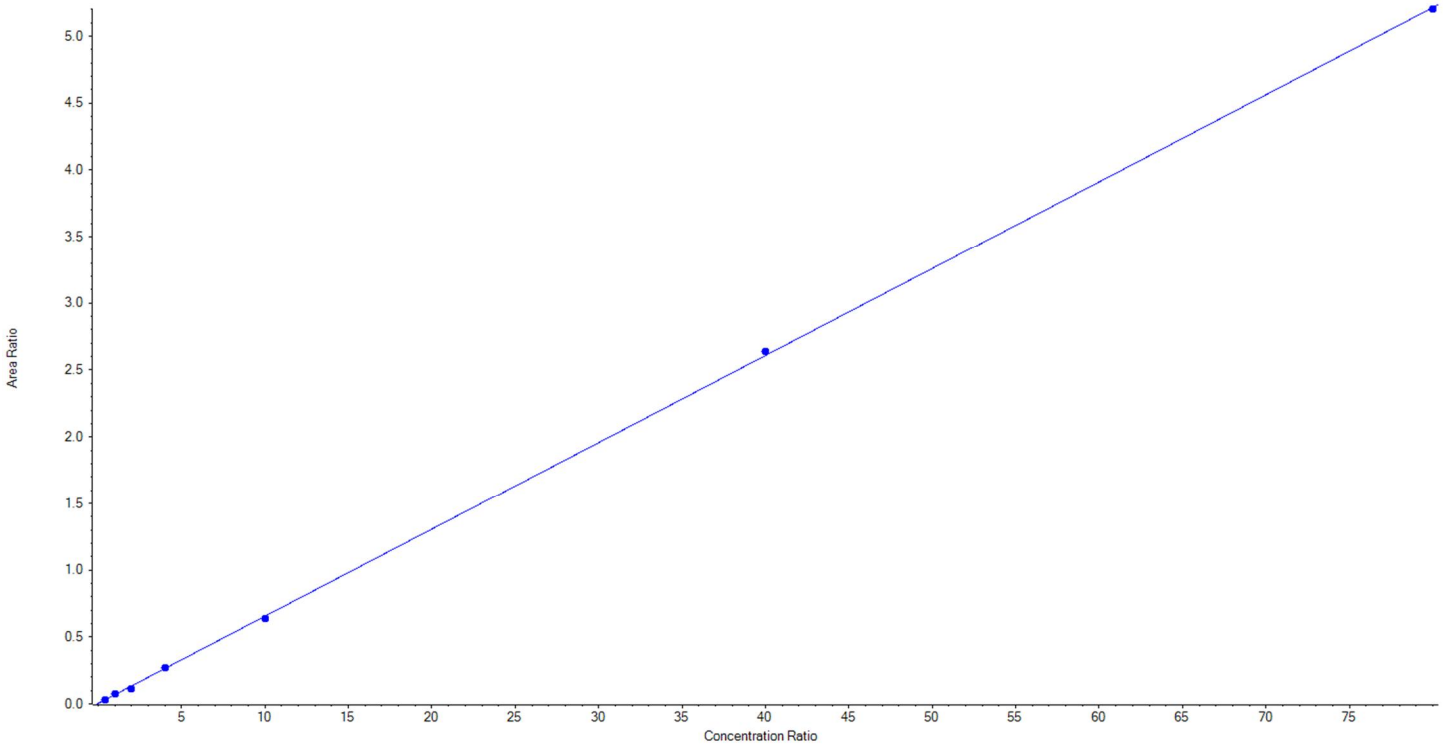
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFOA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	413.0 / 169.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C8-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.06512 x + 0.00376 (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	104.849376	104.9
3	KB74	L2	True	250.00	273.238913	109.3
4	KB75	L3	True	500.00	421.303706	84.3
5	KB76	L4	True	1000.00	1028.034772	102.8
6	KB77	L5	True	2500.00	2444.883328	97.8
7	KB78	L6	True	10000.00	10121.411629	101.2
8	KB79	L7	True	20000.00	19956.278277	99.8



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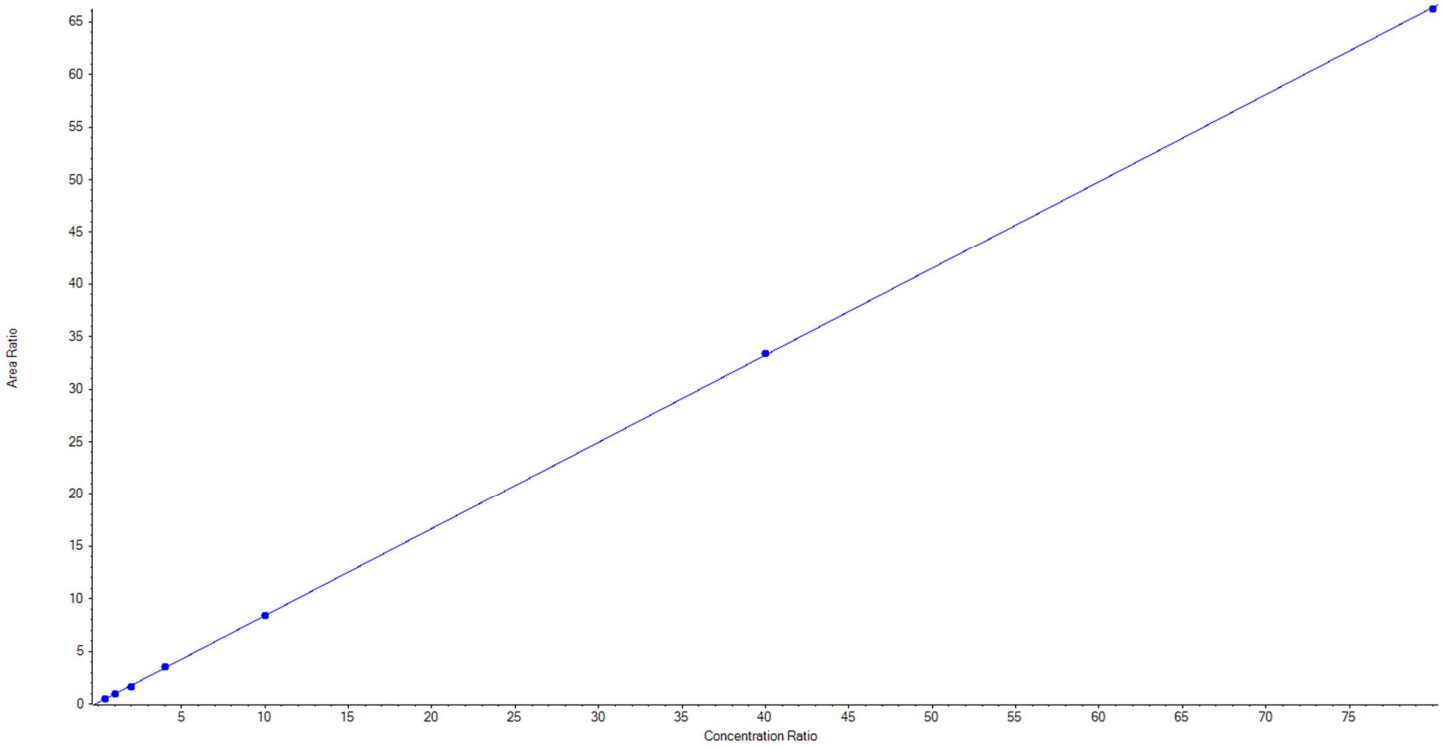
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFNA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	463.0 / 419.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C9-PFNA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.82839 x + 0.10849 (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	100.00	100.132667	100.1
3	KB74	L2	True	250.00	263.216231	105.3
4	KB75	L3	True	500.00	450.336433	90.1
5	KB76	L4	True	1000.00	1046.243999	104.6
6	KB77	L5	True	2500.00	2491.510736	99.7
7	KB78	L6	True	10000.00	10047.185055	100.5
8	KB79	L7	True	20000.00	19951.374879	99.8



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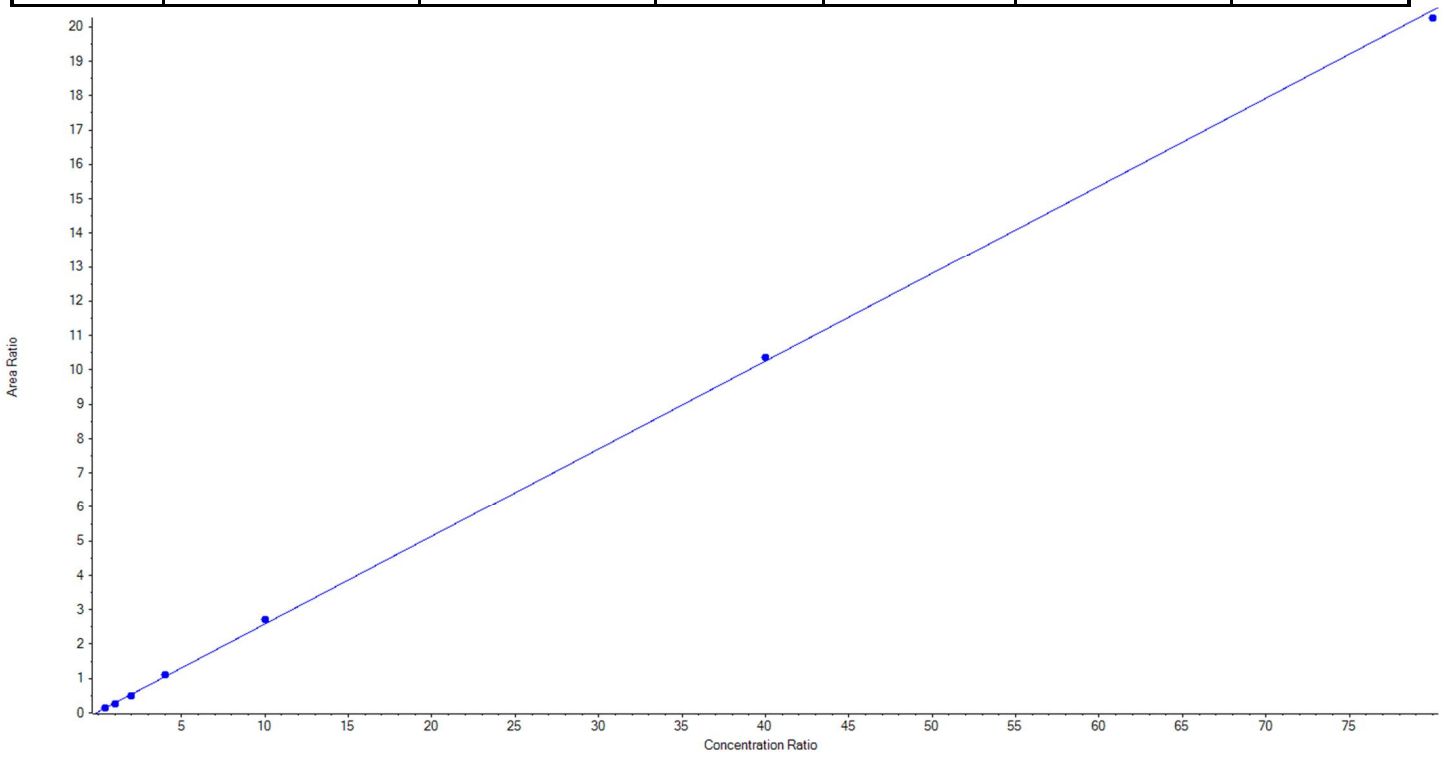
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFNA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	463.0 / 219.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C9-PFNA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.25566 x + 0.02957 (r = 0.99963) (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	111.702594	111.7
3	KB74	L2	True	250.00	220.916460	88.4
4	KB75	L3	True	500.00	448.287193	89.7
5	KB76	L4	True	1000.00	1050.052047	105.0
6	KB77	L5	True	2500.00	2632.290752	105.3
7	KB78	L6	True	10000.00	10108.558837	101.1
8	KB79	L7	True	20000.00	19778.192118	98.9



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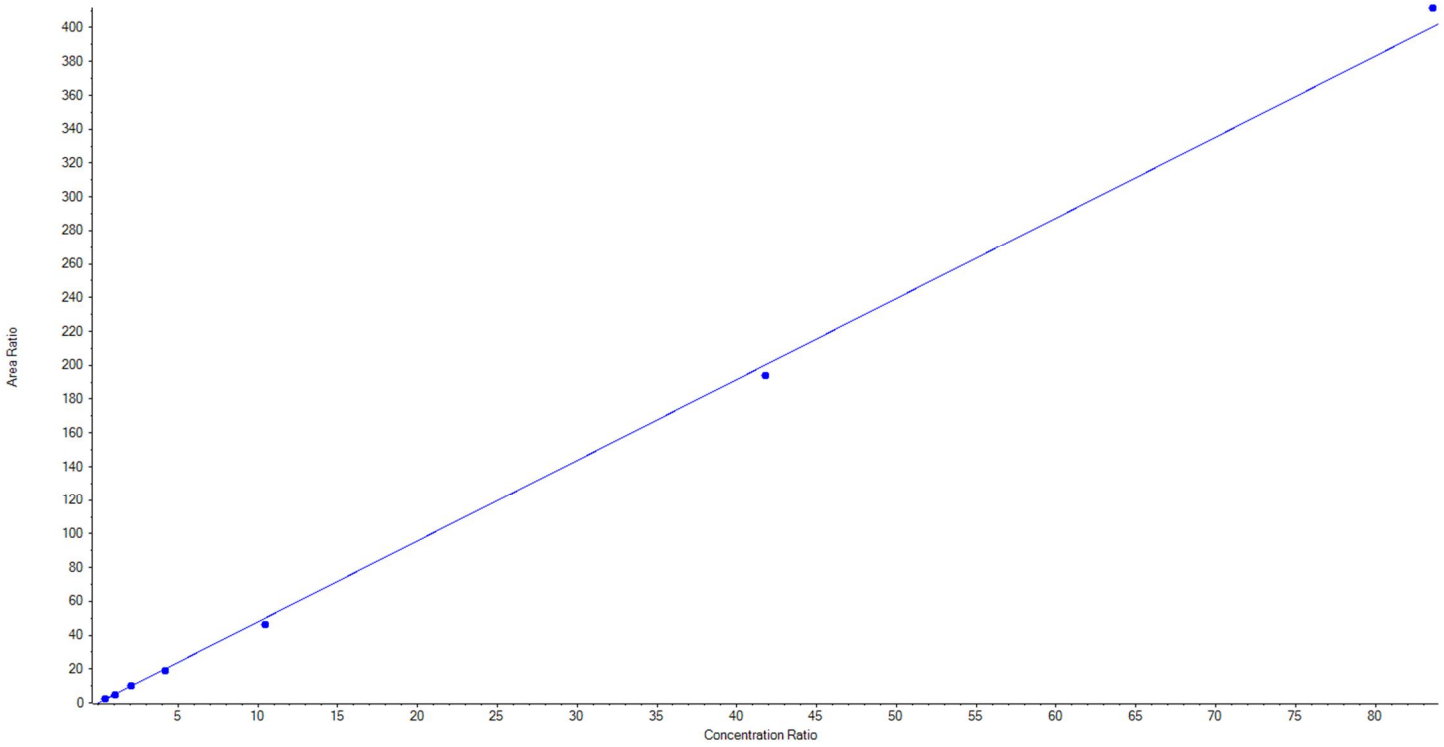
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFOS_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	499.0 / 80.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C8-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 4.79098 x + -0.03583 (r = 0.99927) (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	112.998705	113.0
3	KB74	L2	True	250.00	245.807613	98.3
4	KB75	L3	True	500.00	508.954098	101.8
5	KB76	L4	True	1000.00	953.422687	95.3
6	KB77	L5	True	2500.00	2300.880982	92.0
7	KB78	L6	True	10000.00	9674.048541	96.7
8	KB79	L7	True	20000.00	20553.887374	102.8



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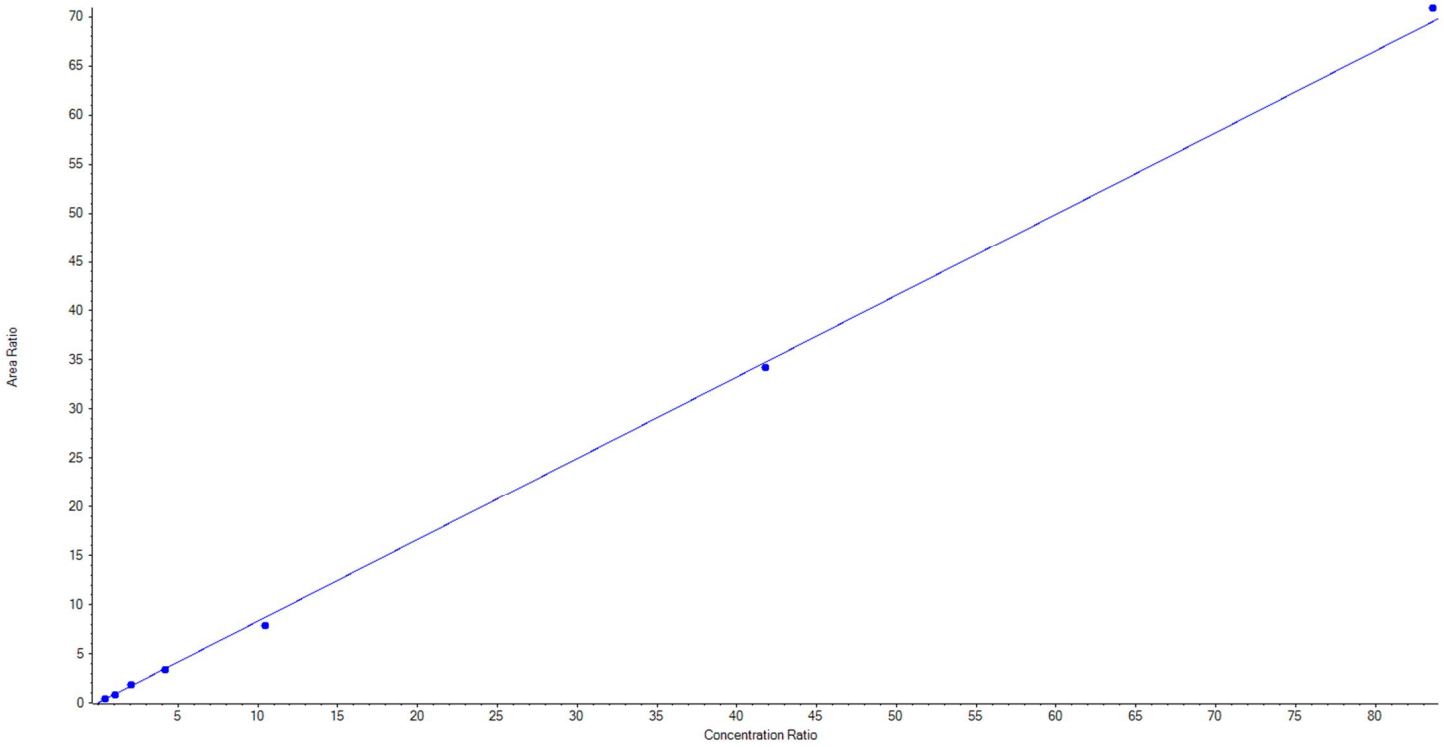
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFOS_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	499.0 / 99.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C8-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.83172 x + -0.00135 (r = 0.99945) (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	110.962710	111.0
3	KB74	L2	True	250.00	244.538081	97.8
4	KB75	L3	True	500.00	520.238814	104.1
5	KB76	L4	True	1000.00	958.547975	95.9
6	KB77	L5	True	2500.00	2271.299000	90.9
7	KB78	L6	True	10000.00	9849.093945	98.5
8	KB79	L7	True	20000.00	20395.319474	102.0



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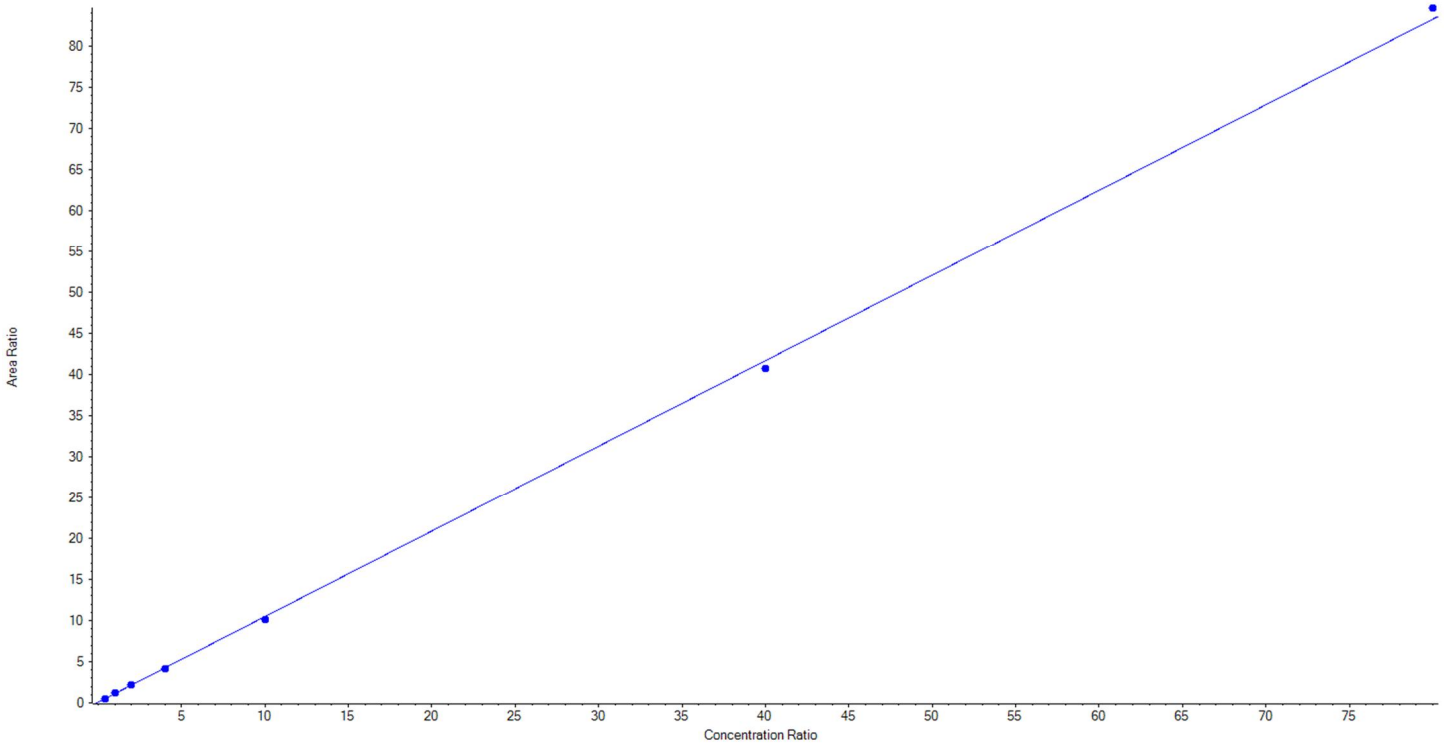
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFDA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	513.0 / 469.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C6-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.03992 x + 0.08967 (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	100.375074	100.4
3	KB74	L2	True	250.00	264.467518	105.8
4	KB75	L3	True	500.00	495.556524	99.1
5	KB76	L4	True	1000.00	987.592944	98.8
6	KB77	L5	True	2500.00	2418.646707	96.8
7	KB78	L6	True	10000.00	9760.929085	97.6
8	KB79	L7	True	20000.00	20322.432148	101.6



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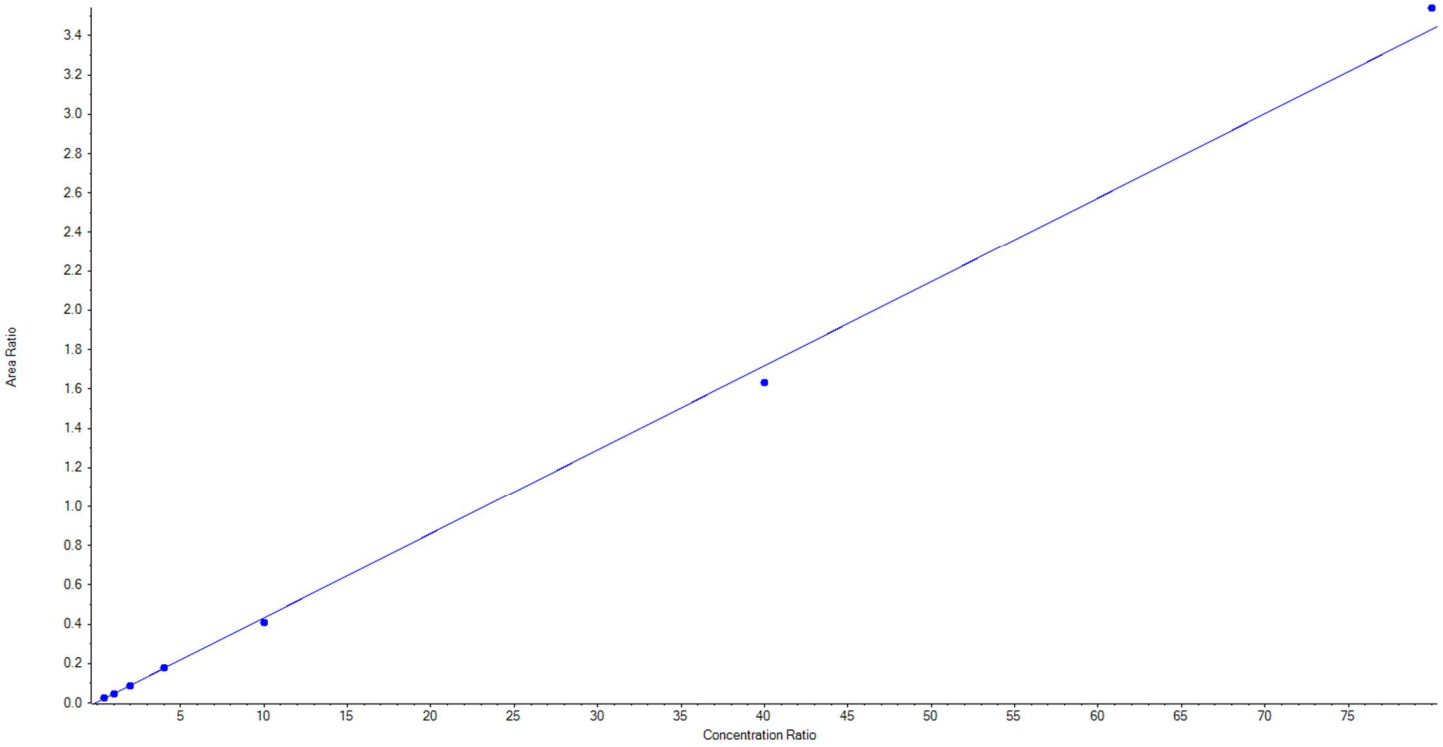
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFDA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	513.0 / 219.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C6-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.04284 x + 0.00408 (r = 0.99914) (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	112.406023	112.4
3	KB74	L2	True	250.00	245.500787	98.2
4	KB75	L3	True	500.00	479.073328	95.8
5	KB76	L4	True	1000.00	1010.924950	101.1
6	KB77	L5	True	2500.00	2354.317167	94.2
7	KB78	L6	True	10000.00	9514.985150	95.2
8	KB79	L7	True	20000.00	20632.792594	103.2



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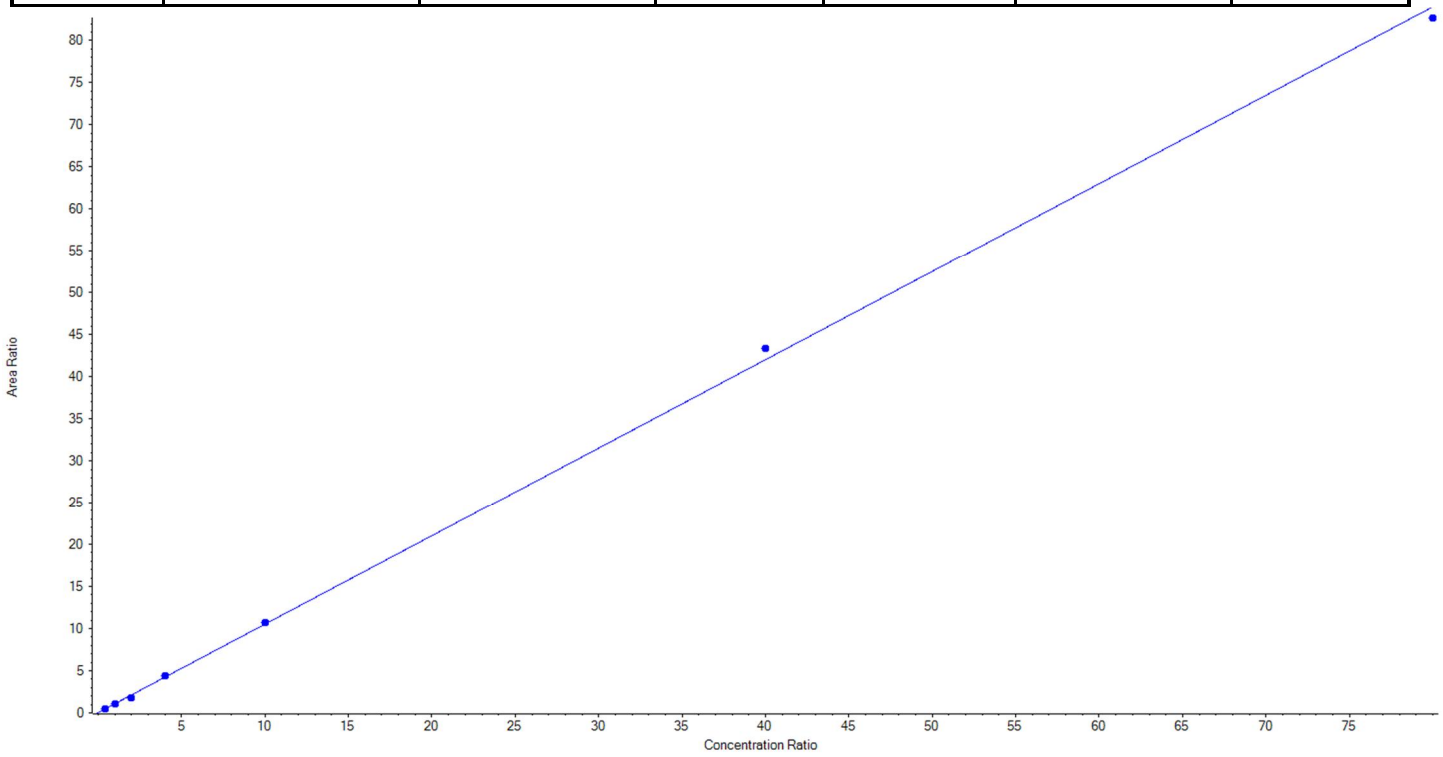
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFUnA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	563.0 / 519.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C7-PFUnA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.04939 x + 0.04151 (r = 0.99953) (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	111.527231	111.5
3	KB74	L2	True	250.00	244.824605	97.9
4	KB75	L3	True	500.00	423.690587	84.7
5	KB76	L4	True	1000.00	1026.343861	102.6
6	KB77	L5	True	2500.00	2538.187940	101.5
7	KB78	L6	True	10000.00	10323.155375	103.2
8	KB79	L7	True	20000.00	19682.270401	98.4



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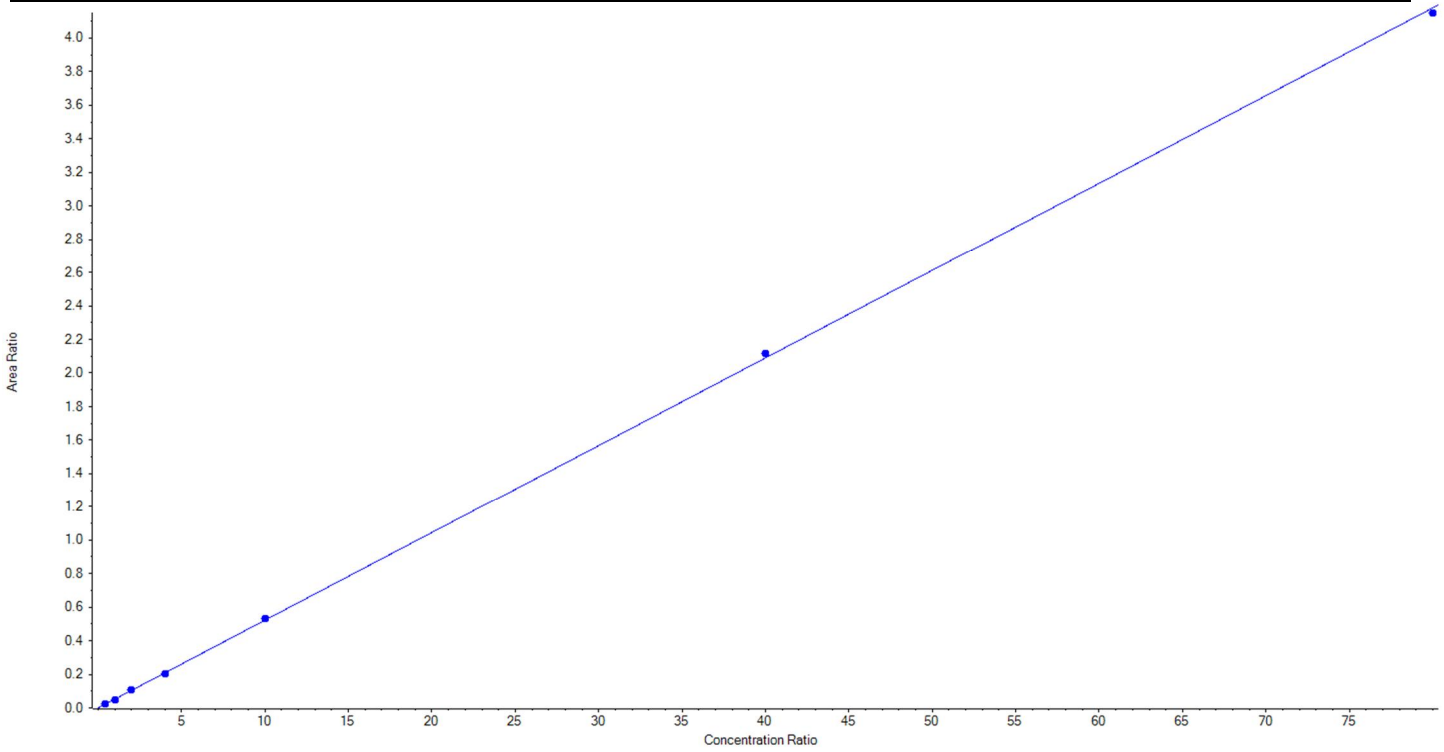
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFUnA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	563.0 / 269.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C7-PFUnA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.05225 x + -5.79528e-5 (r = 0.99994) (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	102.220892	102.2
3	KB74	L2	True	250.00	242.442598	97.0
4	KB75	L3	True	500.00	501.608235	100.3
5	KB76	L4	True	1000.00	981.918474	98.2
6	KB77	L5	True	2500.00	2544.385755	101.8
7	KB78	L6	True	10000.00	10125.204796	101.3
8	KB79	L7	True	20000.00	19852.219250	99.3



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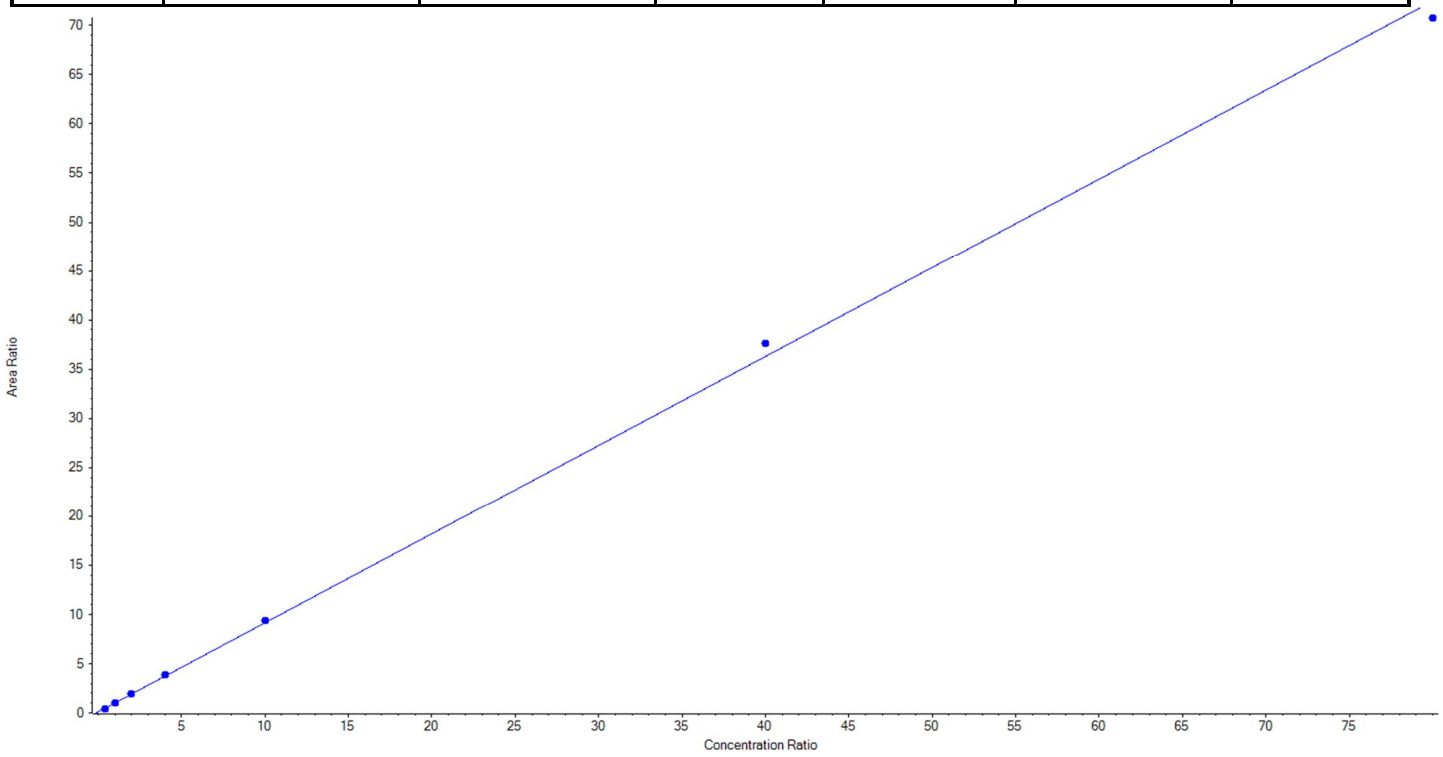
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFDoA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	613.0 / 569.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C2-PFDoA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.90471 x + 0.10550 (r = 0.99952) (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	90.939755	90.9
3	KB74	L2	True	250.00	247.072023	98.8
4	KB75	L3	True	500.00	506.360909	101.3
5	KB76	L4	True	1000.00	1050.478389	105.1
6	KB77	L5	True	2500.00	2565.539851	102.6
7	KB78	L6	True	10000.00	10368.355085	103.7
8	KB79	L7	True	20000.00	19521.253987	97.6



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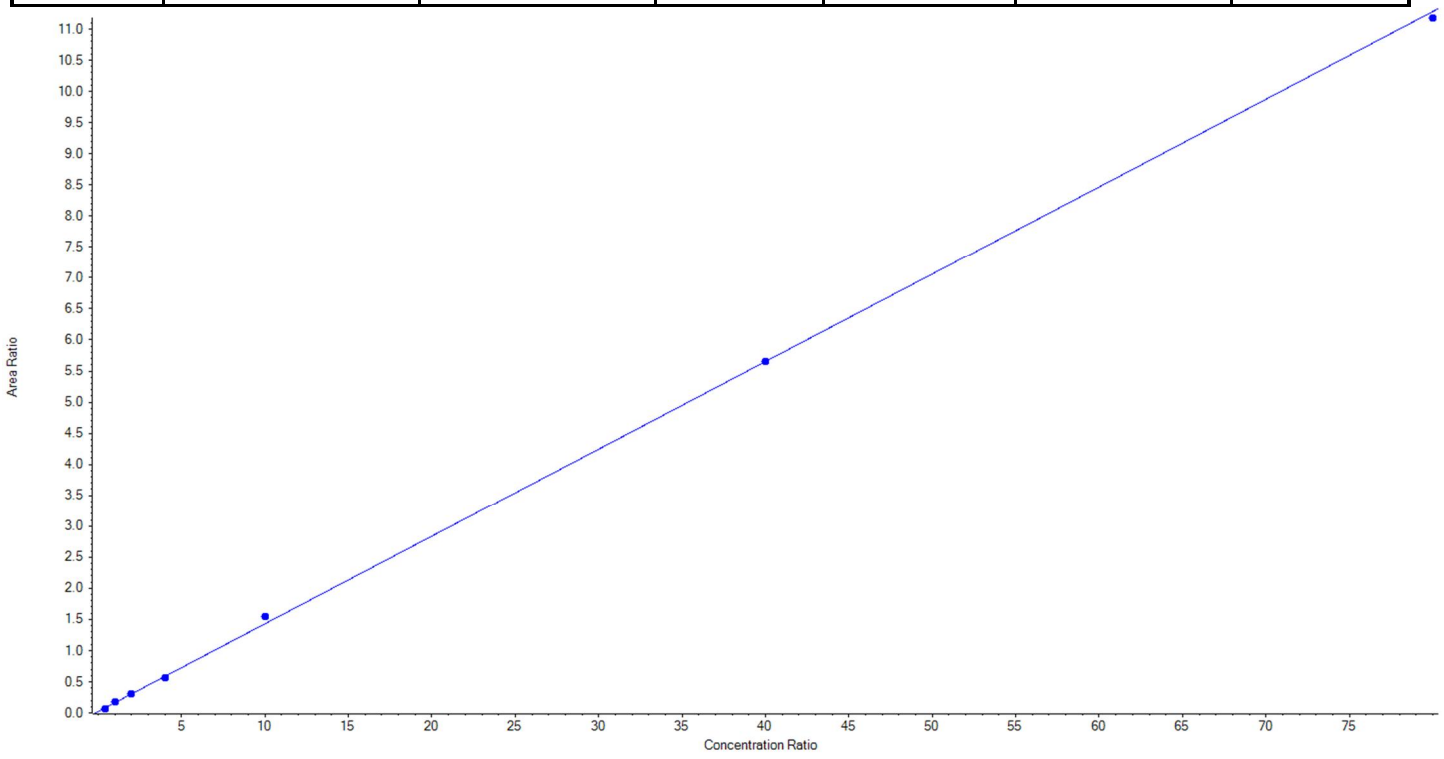
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFDoA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	613.0 / 319.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C2-PFDoA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.14074 x + 0.02292 (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	86.545687	86.6
3	KB74	L2	True	250.00	274.615048	109.9
4	KB75	L3	True	500.00	494.661881	98.9
5	KB76	L4	True	1000.00	971.395687	97.1
6	KB77	L5	True	2500.00	2712.576260	108.5
7	KB78	L6	True	10000.00	9996.454238	100.0
8	KB79	L7	True	20000.00	19813.751199	99.1



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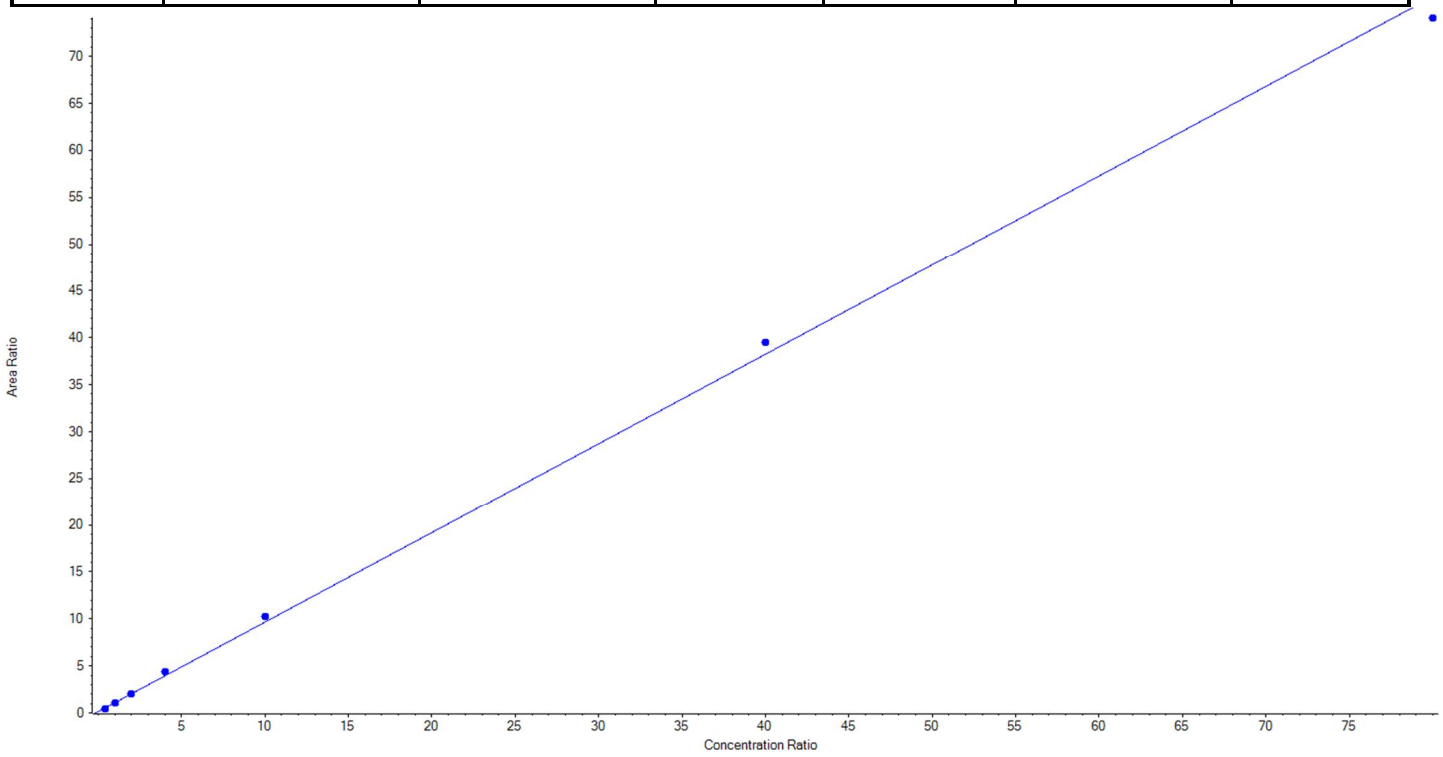
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFTrDA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	663.0 / 619.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C2-PFTeDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.95260 x + 0.12887 (r = 0.99908) (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	85.967911	86.0
3	KB74	L2	True	250.00	241.563939	96.6
4	KB75	L3	True	500.00	488.700899	97.7
5	KB76	L4	True	1000.00	1126.764608	112.7
6	KB77	L5	True	2500.00	2664.921530	106.6
7	KB78	L6	True	10000.00	10336.521146	103.4
8	KB79	L7	True	20000.00	19405.559967	97.0



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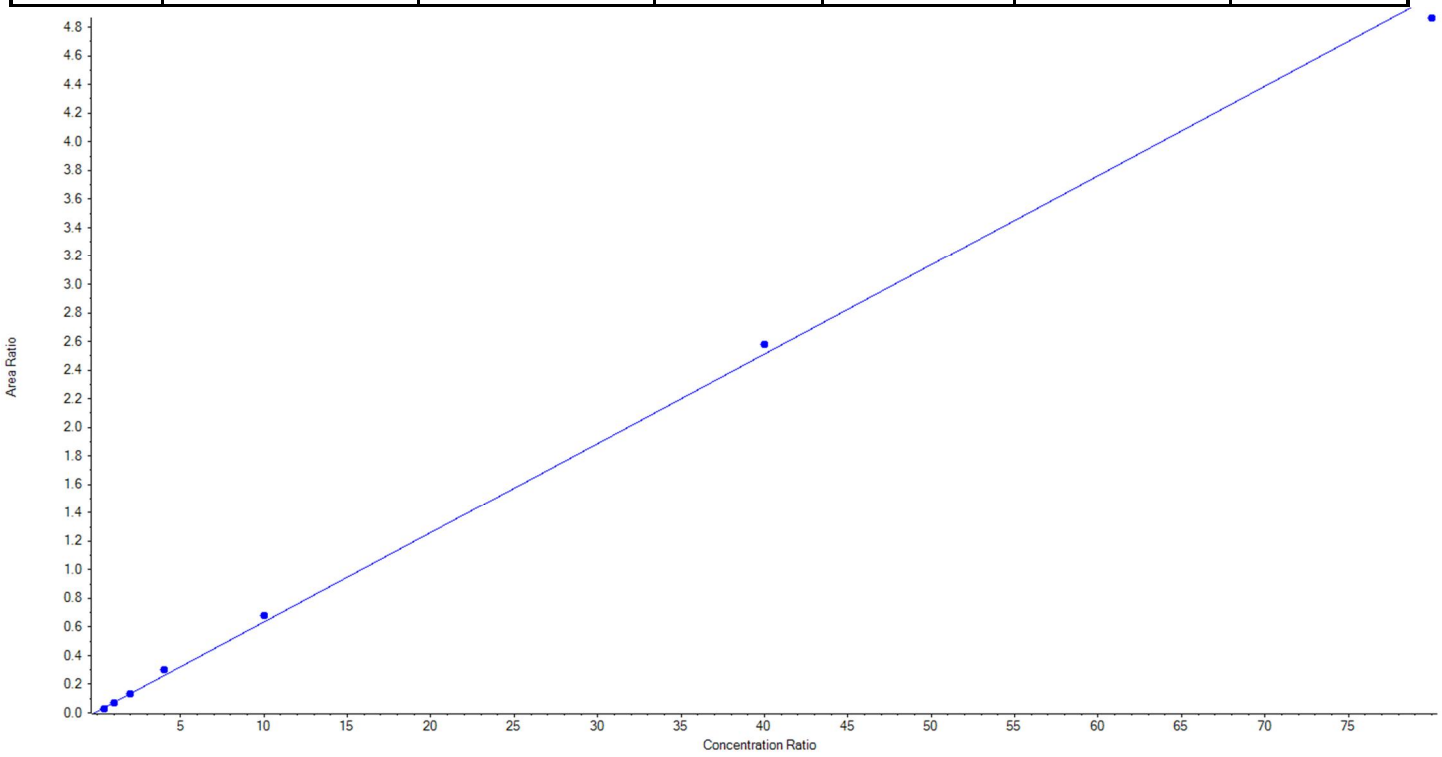
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFTrDA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	663.0 / 169.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C2-PFTeDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.06256 x + 0.00941 (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	78.198175	78.2
3	KB74	L2	True	250.00	247.986856	99.2
4	KB75	L3	True	500.00	495.036348	99.0
5	KB76	L4	True	1000.00	1164.067670	116.4
6	KB77	L5	True	2500.00	2684.712399	107.4
7	KB78	L6	True	10000.00	10280.911529	102.8
8	KB79	L7	True	20000.00	19399.087023	97.0



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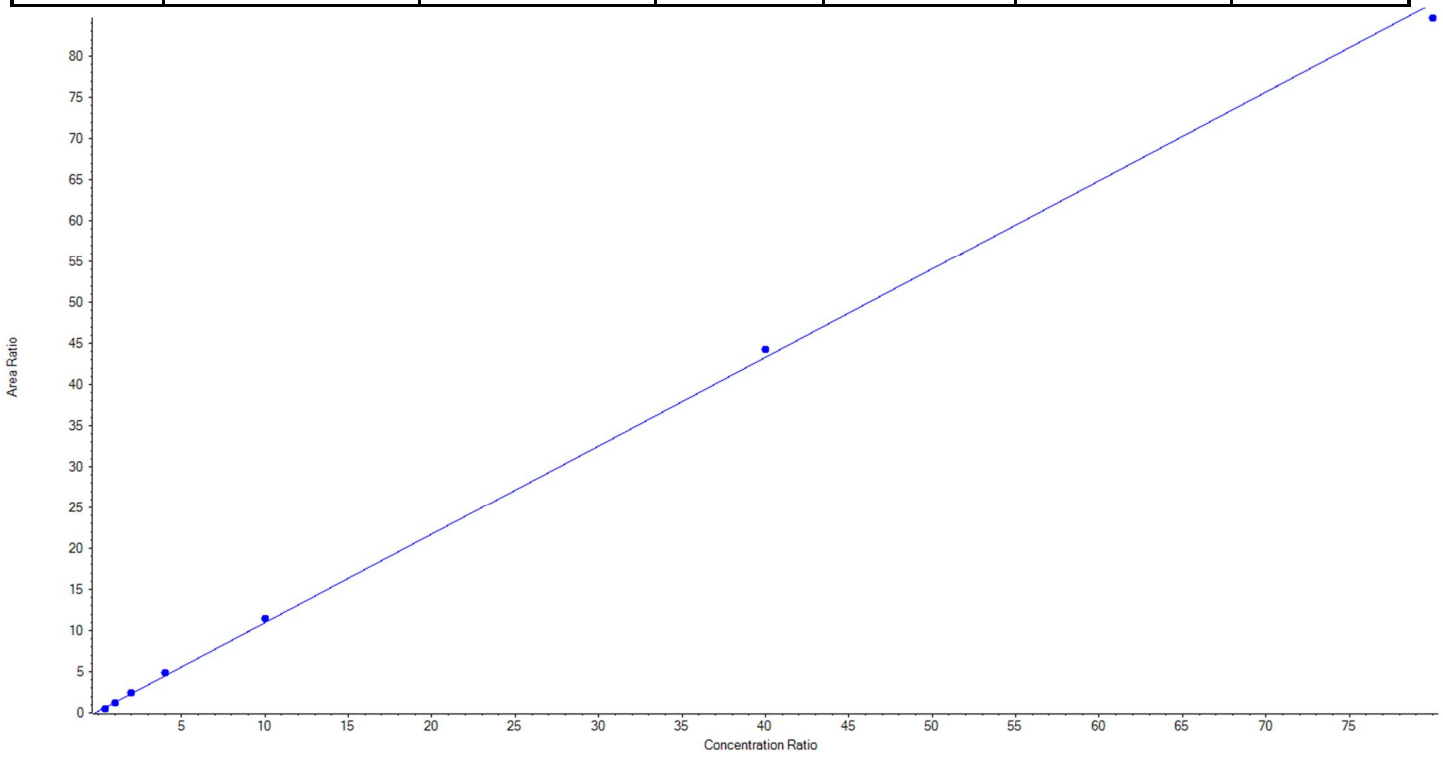
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFTeDA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	713.0 / 669.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C2-PFTeDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.07817 x + 0.18334 (r = 0.99951) (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	81.728327	81.7
3	KB74	L2	True	250.00	253.645310	101.5
4	KB75	L3	True	500.00	515.154084	103.0
5	KB76	L4	True	1000.00	1095.645152	109.6
6	KB77	L5	True	2500.00	2603.218162	104.1
7	KB78	L6	True	10000.00	10217.289136	102.2
8	KB79	L7	True	20000.00	19583.319829	97.9



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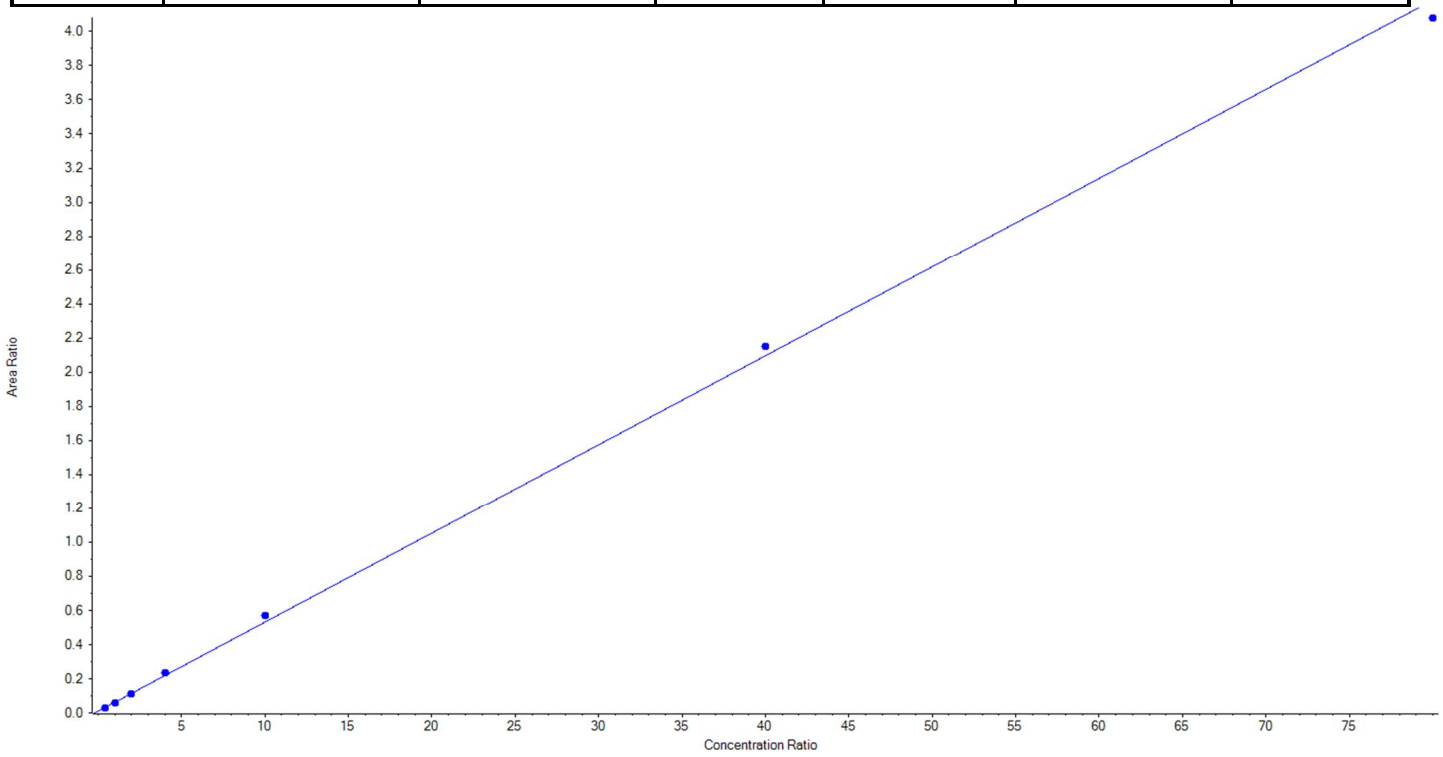
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	PFTeDA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	713.0 / 169.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	13C2-PFTeDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.05216 x + 0.01003 (r = 0.99933) (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	89.886117	89.9
3	KB74	L2	True	250.00	238.937138	95.6
4	KB75	L3	True	500.00	490.005825	98.0
5	KB76	L4	True	1000.00	1092.239213	109.2
6	KB77	L5	True	2500.00	2680.771848	107.2
7	KB78	L6	True	10000.00	10258.453725	102.6
8	KB79	L7	True	20000.00	19499.706134	97.5



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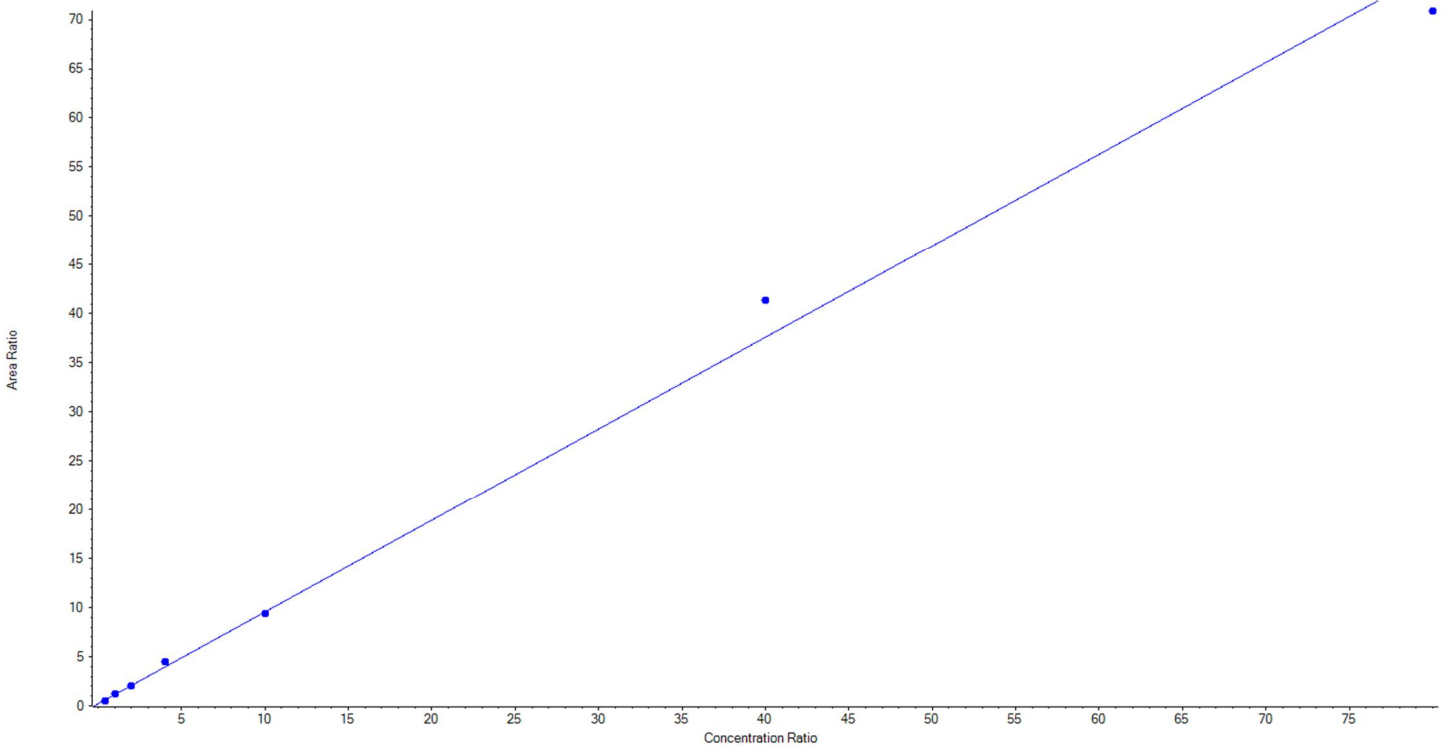
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	NMeFOSAA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	570.0 / 419.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	d3-MeFOSAA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.93472 x + 0.21431 (r = 0.99704) (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	75.824991	75.8
3	KB74	L2	True	250.00	268.876365	107.6
4	KB75	L3	True	500.00	500.524214	100.1
5	KB76	L4	True	1000.00	1133.404189	113.3
6	KB77	L5	True	2500.00	2465.257046	98.6
7	KB78	L6	True	10000.00	11007.670601	110.1
8	KB79	L7	True	20000.00	18898.442593	94.5



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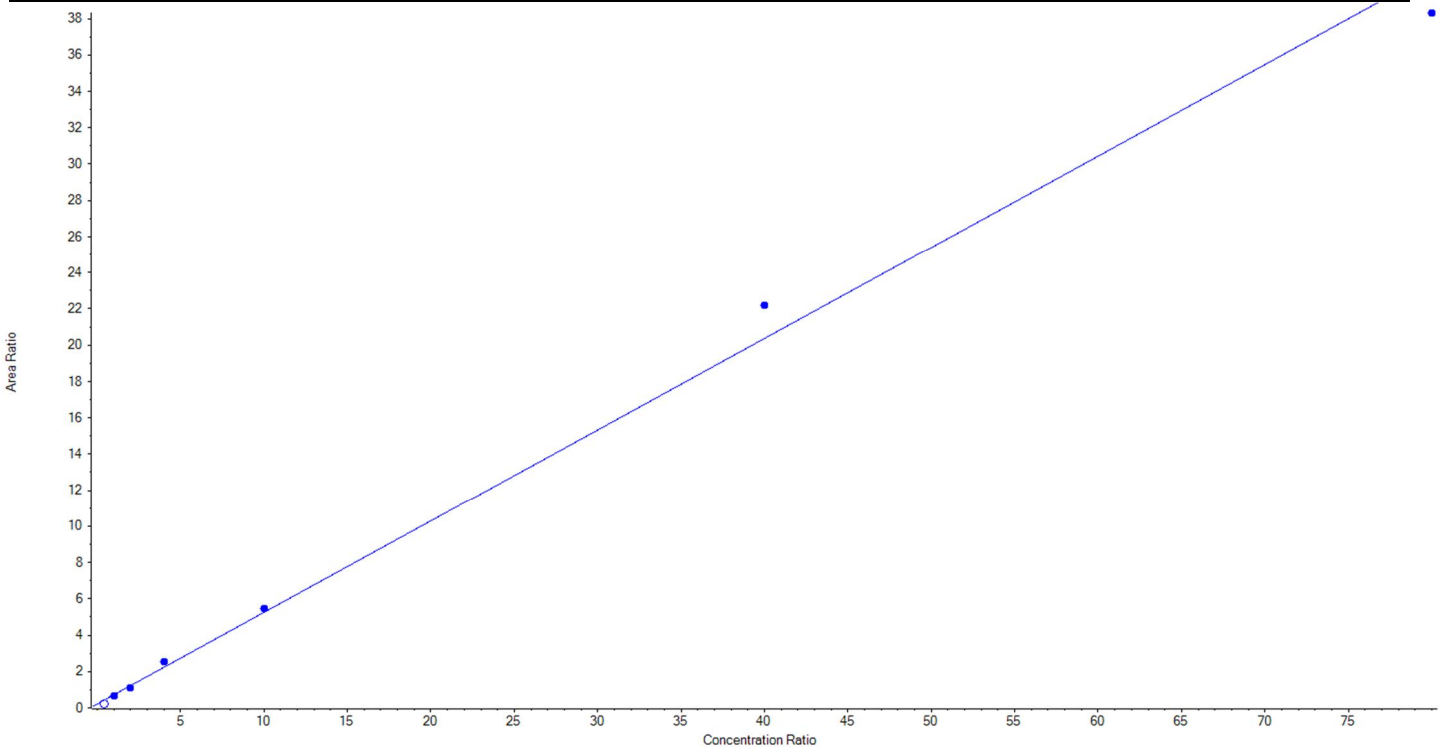
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	NMeFOSAA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	570.0 / 512.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	d3-MeFOSAA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.50367 x + 0.21759 (r = 0.99687) (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	3.453918	3.5
3	KB74	L2	True	250.00	218.419800	87.4
4	KB75	L3	True	500.00	439.990383	88.0
5	KB76	L4	True	1000.00	1163.925478	116.4
6	KB77	L5	True	2500.00	2616.439396	104.7
7	KB78	L6	True	10000.00	10905.550987	109.1
8	KB79	L7	True	20000.00	18905.673956	94.5



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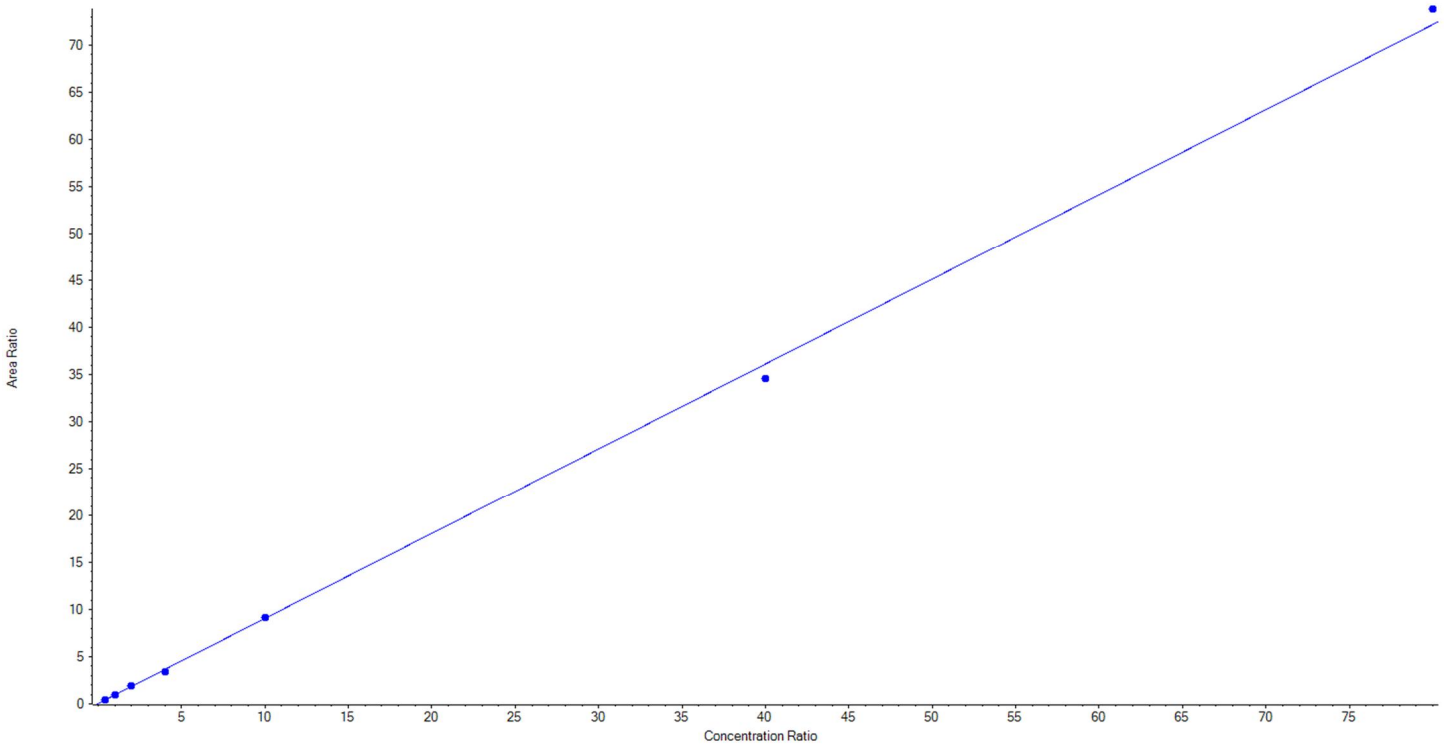
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:50:36 PM

Analyte Name	NEtFOSAA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	584.0 / 419.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	d5-EtFOSAA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.90168 x + 0.04836 (r = 0.99948) (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	104.771450	104.8
3	KB74	L2	True	250.00	251.018896	100.4
4	KB75	L3	True	500.00	508.056535	101.6
5	KB76	L4	True	1000.00	943.782521	94.4
6	KB77	L5	True	2500.00	2522.760733	100.9
7	KB78	L6	True	10000.00	9564.590700	95.7
8	KB79	L7	True	20000.00	20455.019164	102.3



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Calibration Summary Report

Created with Analyst Reporter
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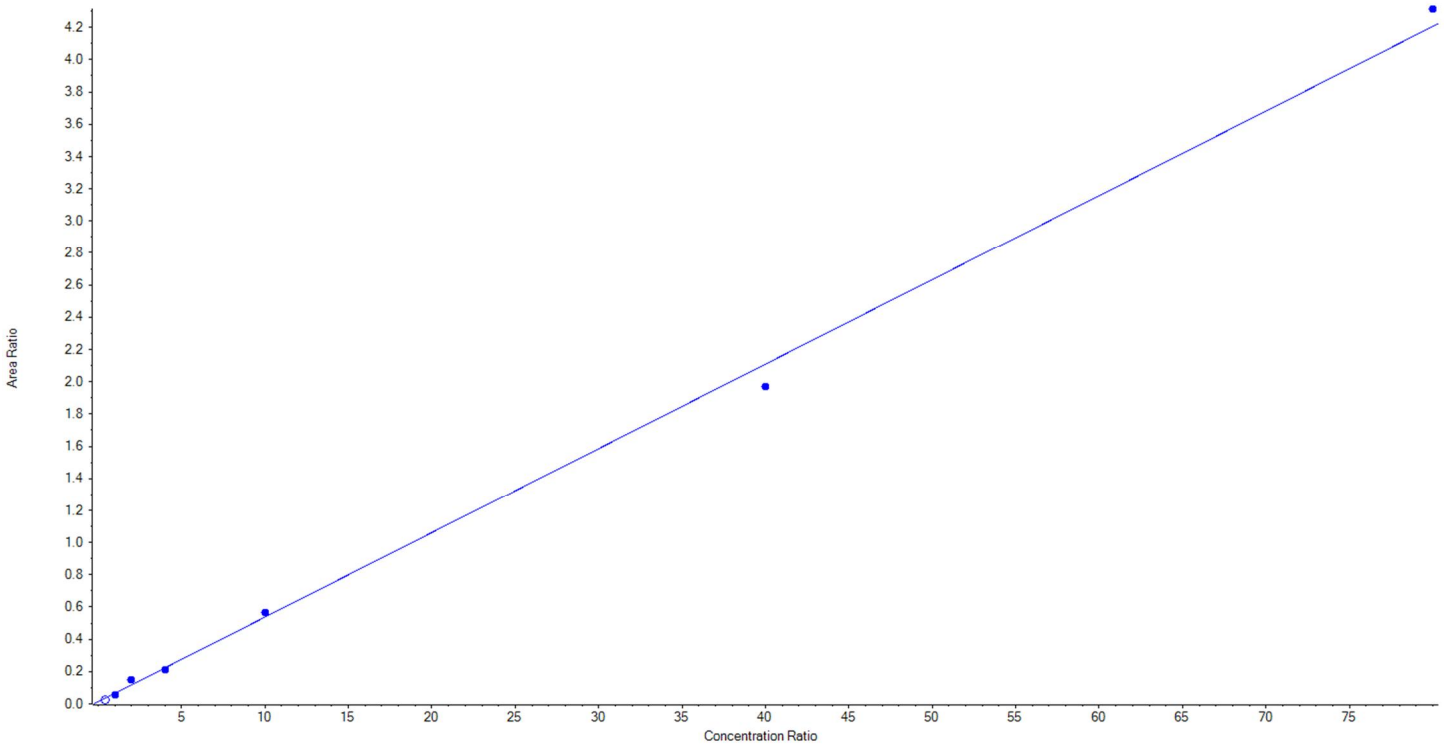
Analyte Name	NEtFOSAA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	584.0 / 483.0	**Result Table**	18-0620_18-0621_18-0622_BASE
Internal Standard	d5-EtFOSAA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.05241 x + 0.01326 (r = 0.99796) (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	41.412646	41.4
3	KB74	L2	True	250.00	191.667209	76.7
4	KB75	L3	True	500.00	637.470069	127.5
5	KB76	L4	True	1000.00	945.207707	94.5
6	KB77	L5	True	2500.00	2637.389496	105.5
7	KB78	L6	True	10000.00	9326.284871	93.3
8	KB79	L7	True	20000.00	20511.980648	102.6



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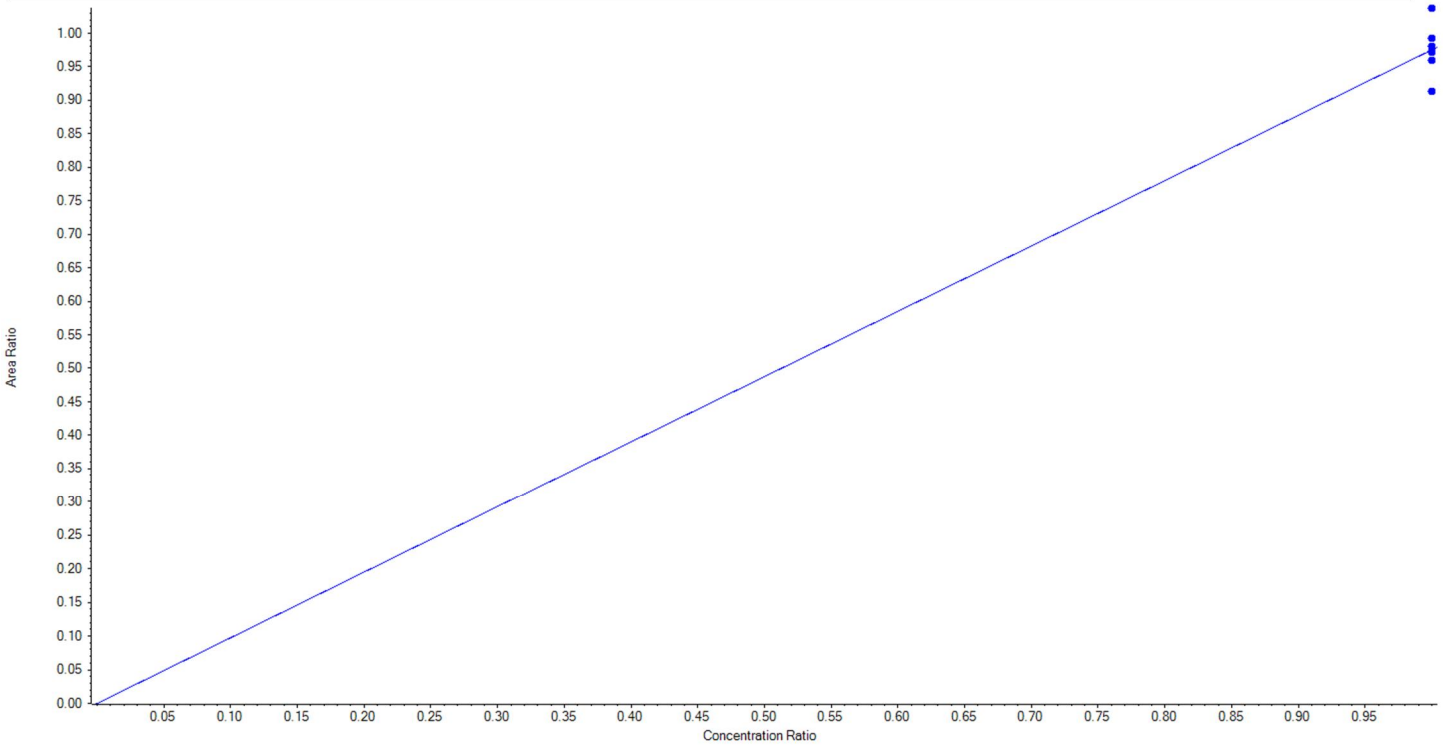
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:47:52 PM

Analyte Name	13C2-PFDoA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	615.0 / 570.0	**Result Table**	18-0620_18-0621_18-0622_SIS
Internal Standard	13C2-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.97505 x (std. dev. = 0.03727) (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	234.027671	93.6
3	KB74	L2	True	250.00	265.932266	106.4
4	KB75	L3	True	250.00	249.447374	99.8
5	KB76	L4	True	250.00	245.945631	98.4
6	KB77	L5	True	250.00	248.975274	99.6
7	KB78	L6	True	250.00	251.235272	100.5
8	KB79	L7	True	250.00	254.436513	101.8



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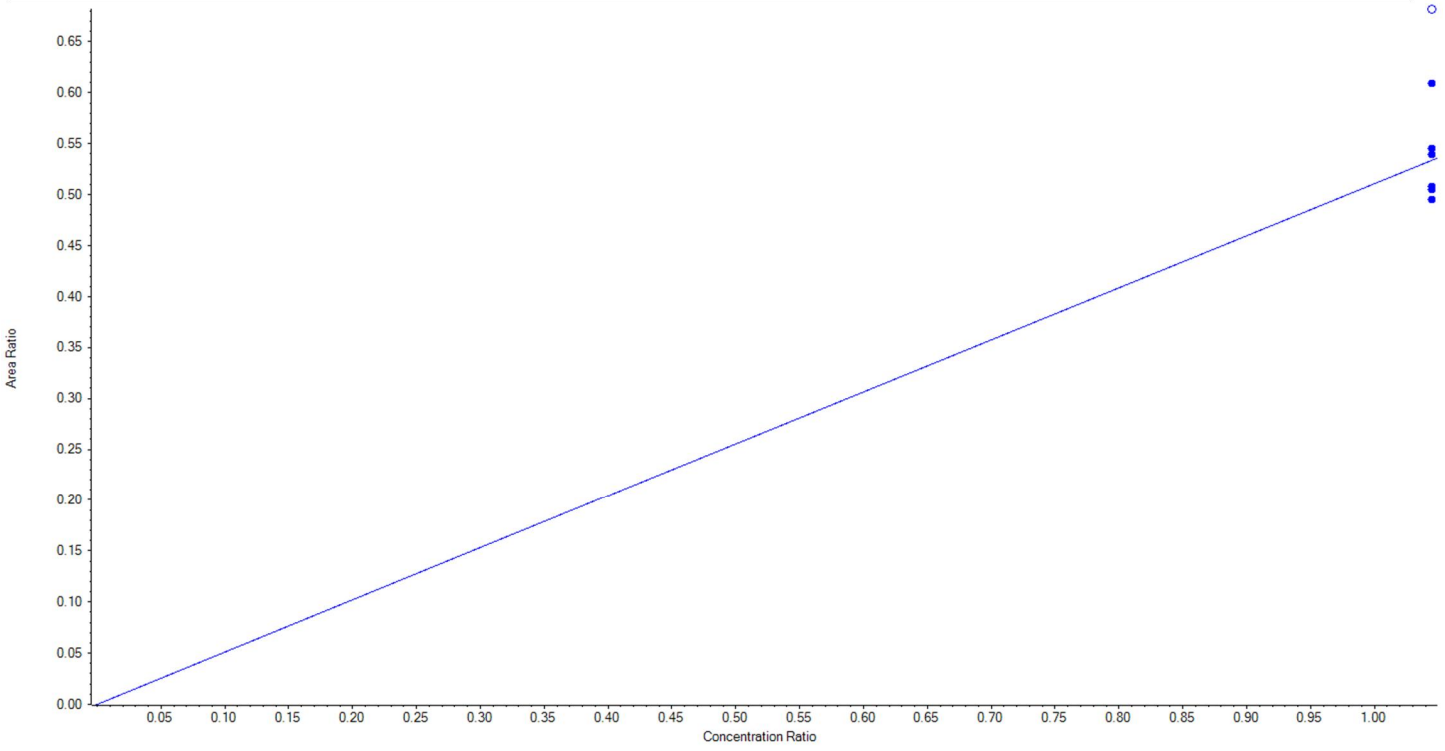
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:47:52 PM

Analyte Name	d3-MeFOSAA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	573.0 / 419.0	**Result Table**	18-0620_18-0621_18-0622_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.51076 x (std. dev. = 0.04023) (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	252.745204	101.1
3	KB74	L2	True	250.00	237.867686	95.2
4	KB75	L3	True	250.00	255.434971	102.2
5	KB76	L4	True	250.00	232.186572	92.9
6	KB77	L5	True	250.00	236.383719	94.6
7	KB78	L6	True	250.00	285.381847	114.2
8	KB79	L7	False	250.00	319.413436	127.8



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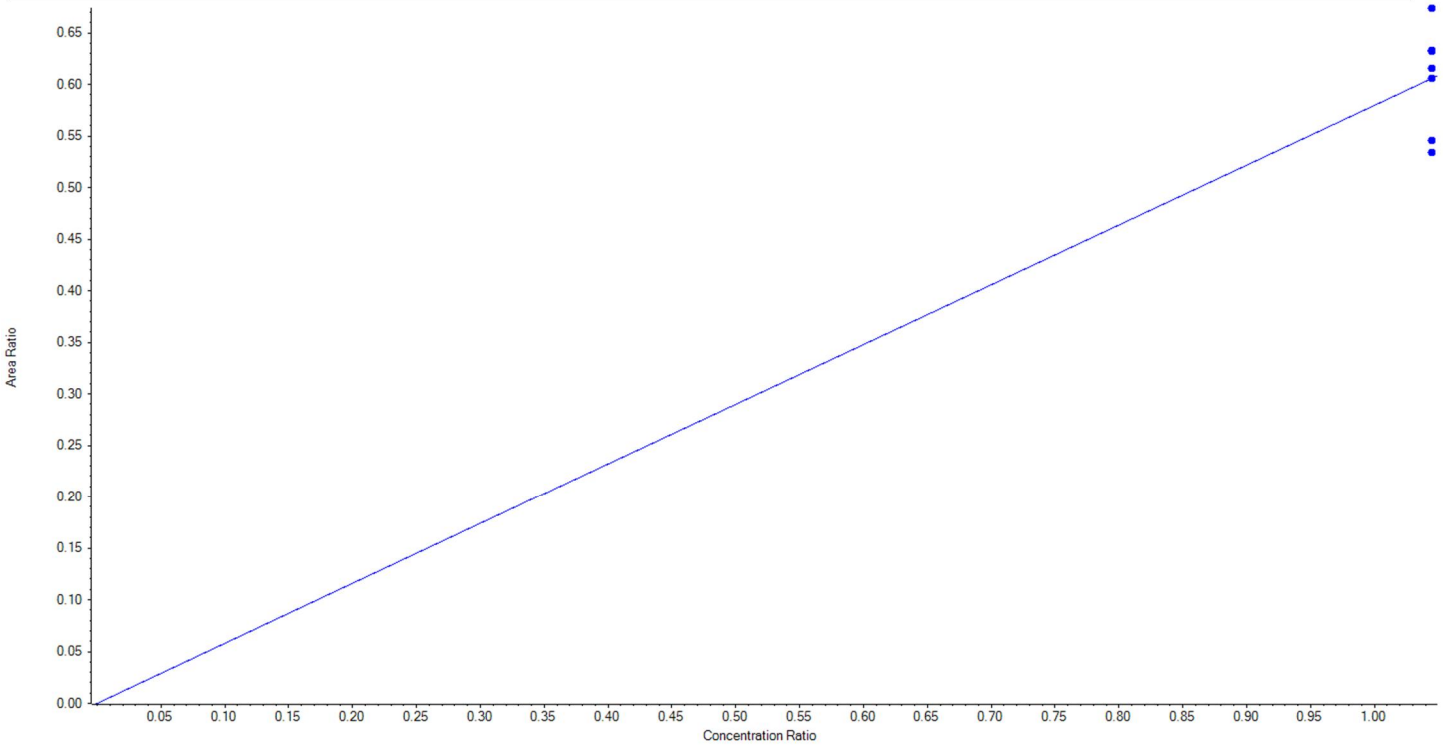
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:47:52 PM

Analyte Name	d5-EtFOSAA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	589.0 / 419.0	**Result Table**	18-0620_18-0621_18-0622_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.57975 x (std. dev. = 0.04771) (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	261.116785	104.5
3	KB74	L2	True	250.00	260.842878	104.3
4	KB75	L3	True	250.00	225.192349	90.1
5	KB76	L4	True	250.00	254.251713	101.7
6	KB77	L5	True	250.00	220.425706	88.2
7	KB78	L6	True	250.00	278.106701	111.2
8	KB79	L7	True	250.00	250.063868	100.0



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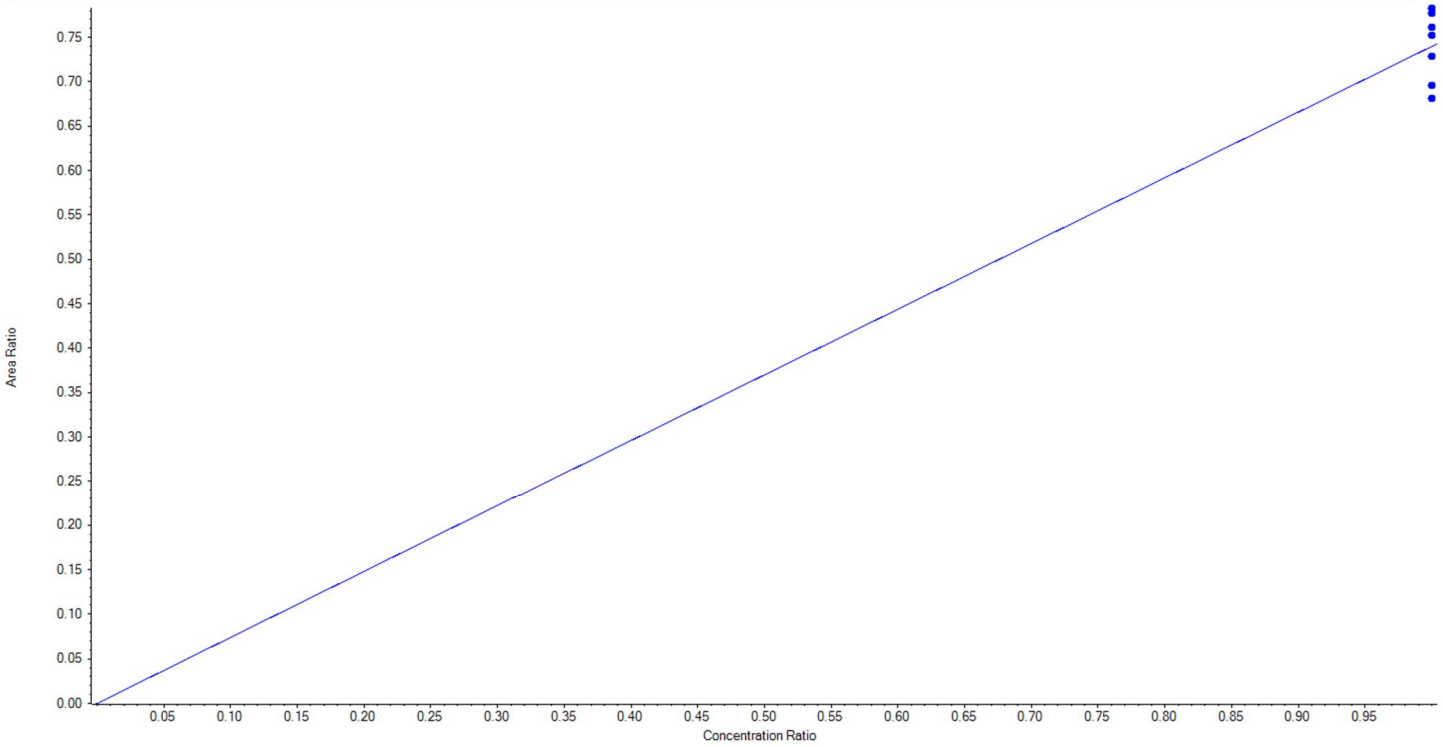
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:47:52 PM

Analyte Name	13C5-PFHxA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	318.0 / 273.0	**Result Table**	18-0620_18-0621_18-0622_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.73994 x (std. dev. = 0.03937) (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	262.567314	105.0
3	KB74	L2	True	250.00	254.187234	101.7
4	KB75	L3	True	250.00	230.325952	92.1
5	KB76	L4	True	250.00	235.058052	94.0
6	KB77	L5	True	250.00	257.145365	102.9
7	KB78	L6	True	250.00	264.503275	105.8
8	KB79	L7	True	250.00	246.212808	98.5



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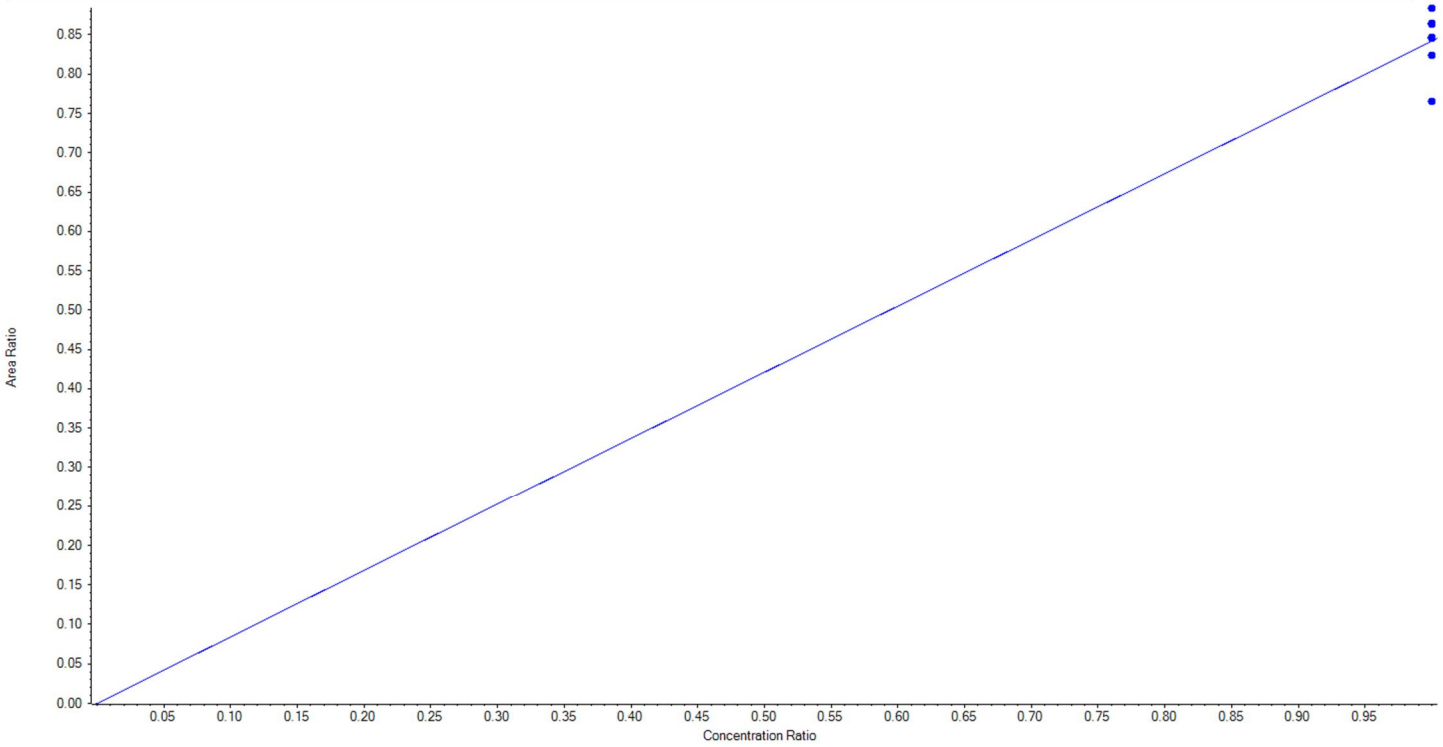
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:47:52 PM

Analyte Name	13C4-PFHpA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	367.0 / 322.0	**Result Table**	18-0620_18-0621_18-0622_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.84182 x (std. dev. = 0.03866) (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	262.427043	105.0
3	KB74	L2	True	250.00	251.075240	100.4
4	KB75	L3	True	250.00	244.763156	97.9
5	KB76	L4	True	250.00	256.507439	102.6
6	KB77	L5	True	250.00	256.669677	102.7
7	KB78	L6	True	250.00	251.342992	100.5
8	KB79	L7	True	250.00	227.214453	90.9



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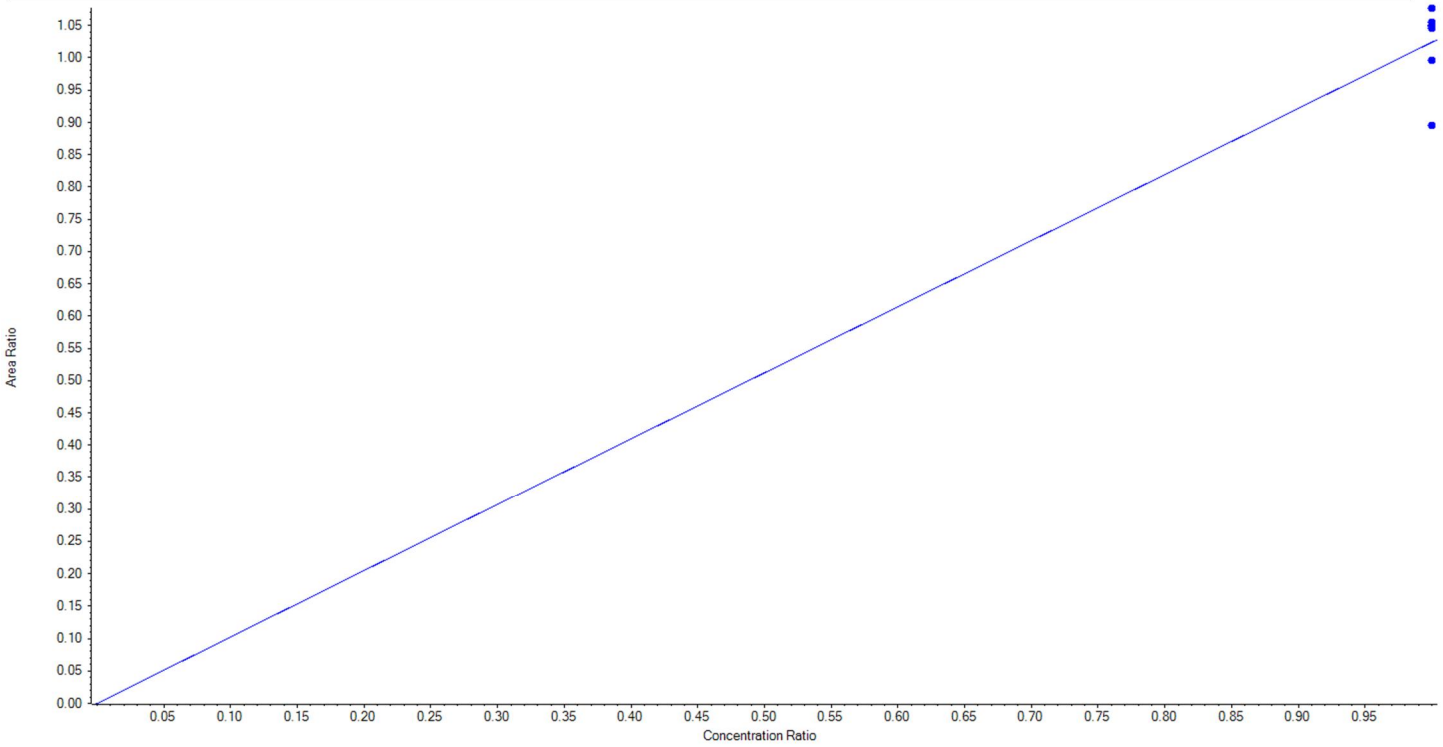
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:47:52 PM

Analyte Name	13C8-PFOA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	421.0 / 376.0	**Result Table**	18-0620_18-0621_18-0622_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.02405 x (std. dev. = 0.06175) (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	255.212785	102.1
3	KB74	L2	True	250.00	262.875155	105.2
4	KB75	L3	True	250.00	256.482263	102.6
5	KB76	L4	True	250.00	257.662297	103.1
6	KB77	L5	True	250.00	256.019871	102.4
7	KB78	L6	True	250.00	243.157749	97.3
8	KB79	L7	True	250.00	218.589880	87.4



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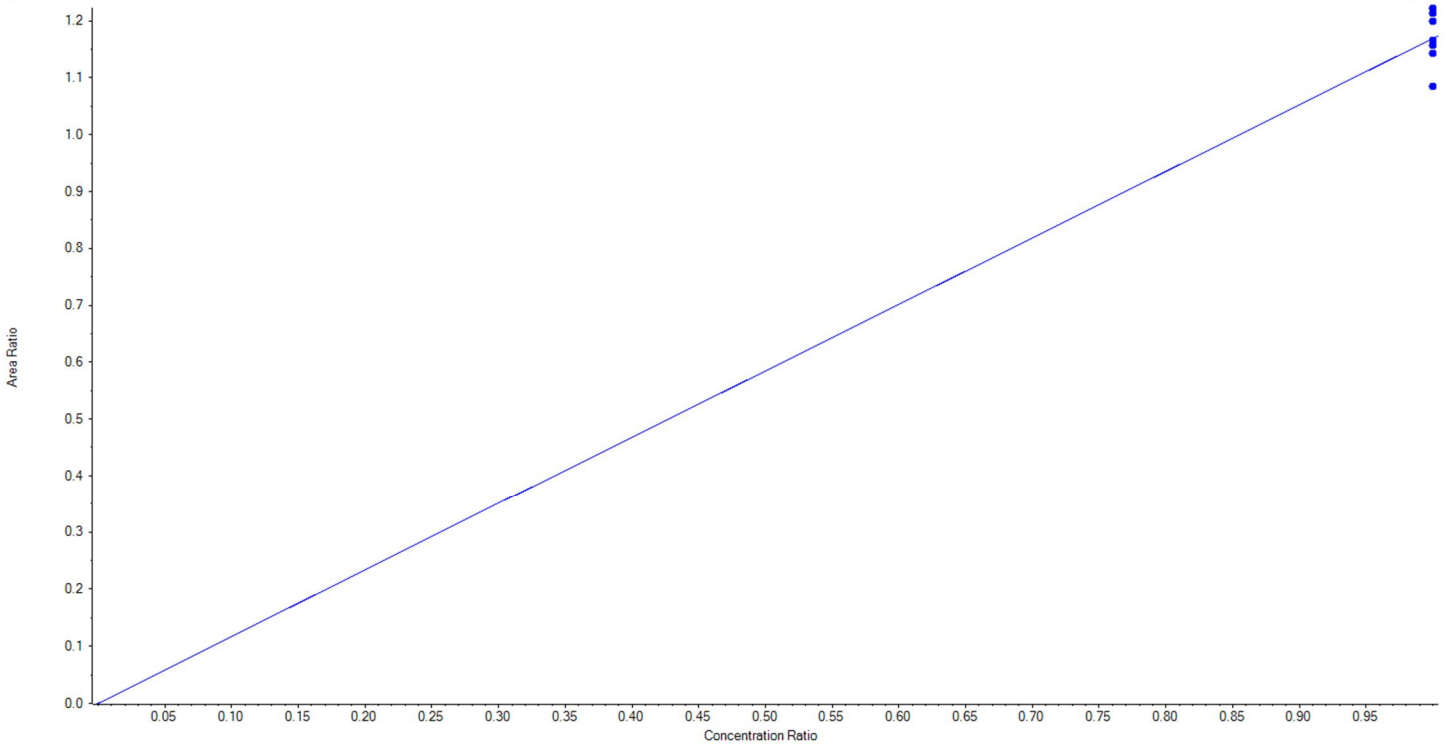
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:47:52 PM

Analyte Name	13C9-PFNA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	472.0 / 427.0	**Result Table**	18-0620_18-0621_18-0622_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 1.16930 x (std. dev. = 0.04759) (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	247.430463	99.0
3	KB74	L2	True	250.00	261.328420	104.5
4	KB75	L3	True	250.00	259.384215	103.8
5	KB76	L4	True	250.00	244.372857	97.8
6	KB77	L5	True	250.00	249.179395	99.7
7	KB78	L6	True	250.00	256.344825	102.5
8	KB79	L7	True	250.00	231.959824	92.8



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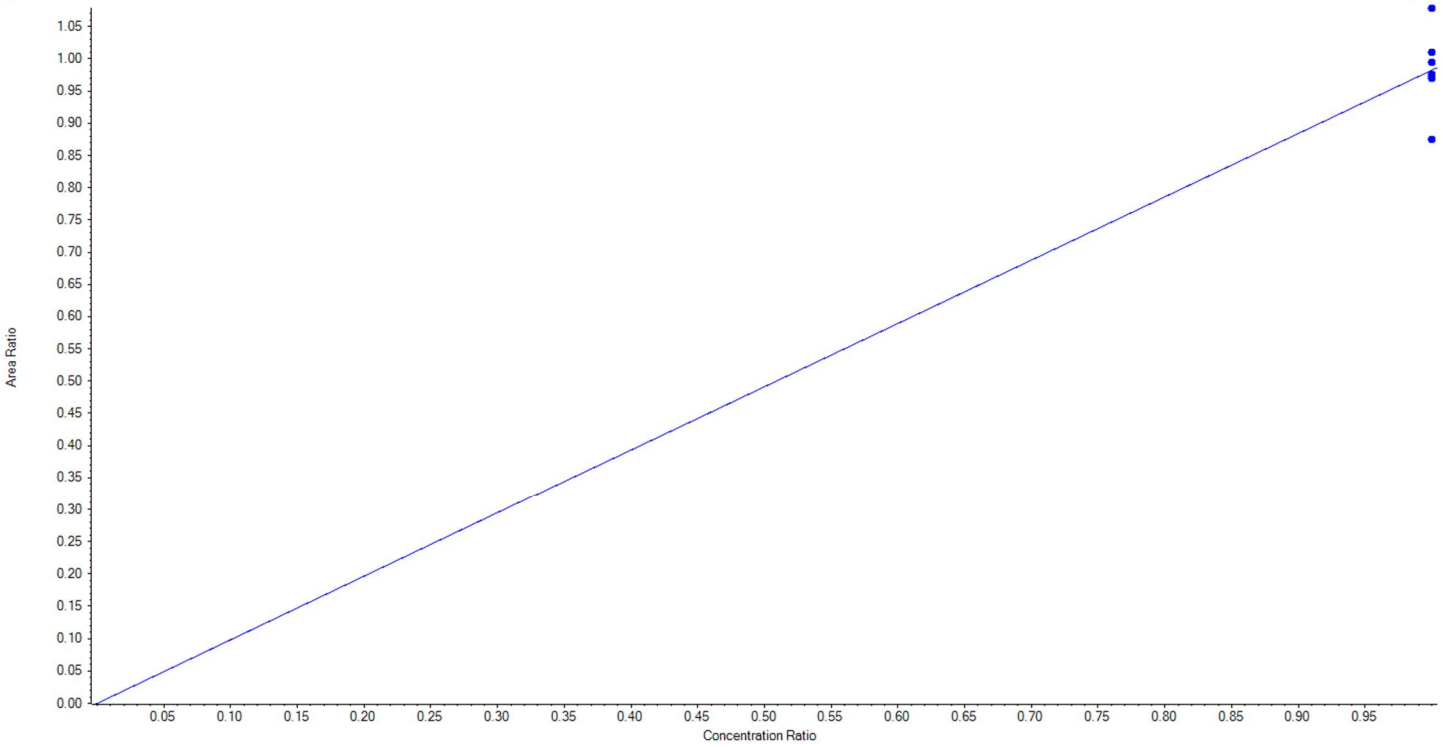
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:47:52 PM

Analyte Name	13C6-PFDA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	519.0 / 474.0	**Result Table**	18-0620_18-0621_18-0622_SIS
Internal Standard	13C2-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.98235 x (std. dev. = 0.06079) (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	246.733475	98.7
3	KB74	L2	True	250.00	253.248818	101.3
4	KB75	L3	True	250.00	257.192135	102.9
5	KB76	L4	True	250.00	248.450649	99.4
6	KB77	L5	True	250.00	274.445566	109.8
7	KB78	L6	True	250.00	247.435316	99.0
8	KB79	L7	True	250.00	222.494042	89.0



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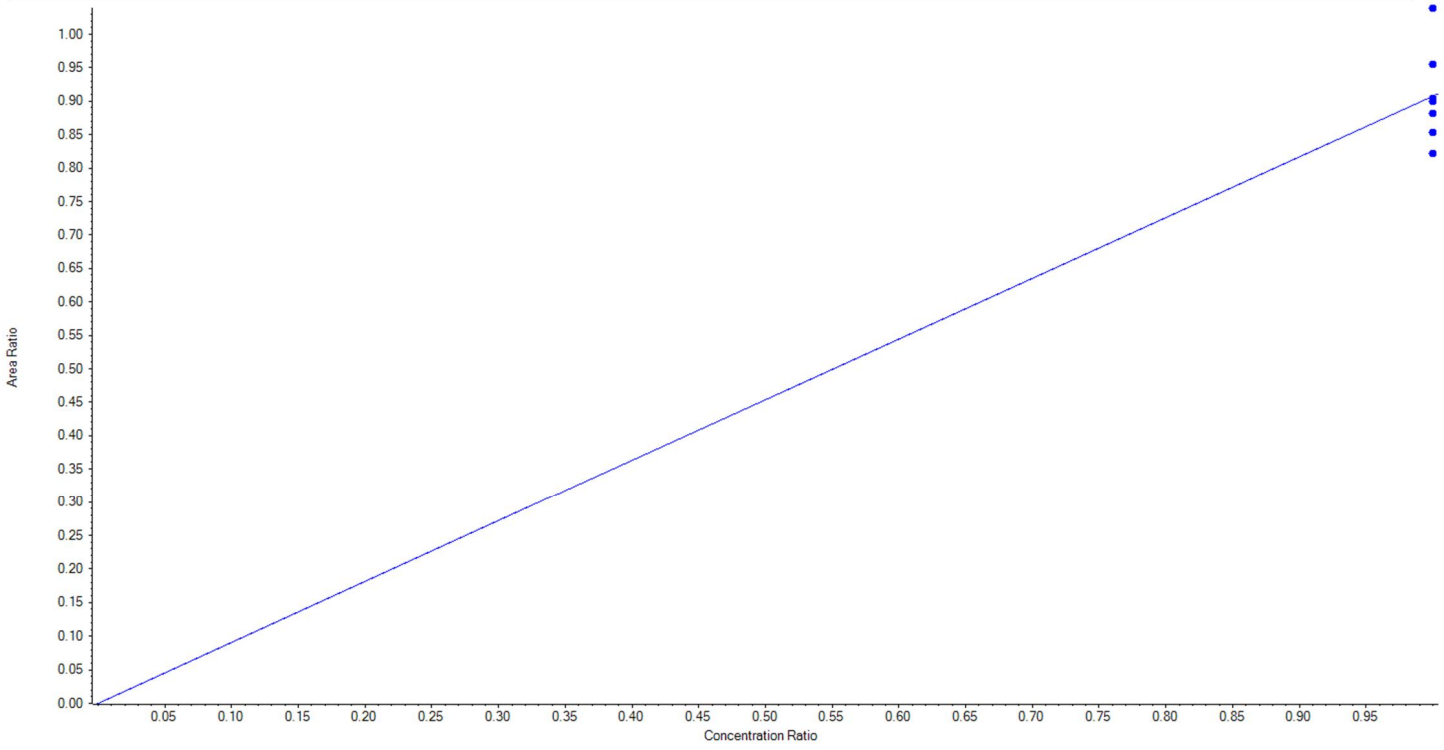
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:47:52 PM

Analyte Name	13C7-PFUnA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	570.0 / 525.0	**Result Table**	18-0620_18-0621_18-0622_SIS
Internal Standard	13C2-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.90743 x (std. dev. = 0.07148) (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	247.760751	99.1
3	KB74	L2	True	250.00	262.960755	105.2
4	KB75	L3	True	250.00	286.201660	114.5
5	KB76	L4	True	250.00	234.954208	94.0
6	KB77	L5	True	250.00	249.135582	99.7
7	KB78	L6	True	250.00	242.726450	97.1
8	KB79	L7	True	250.00	226.260594	90.5



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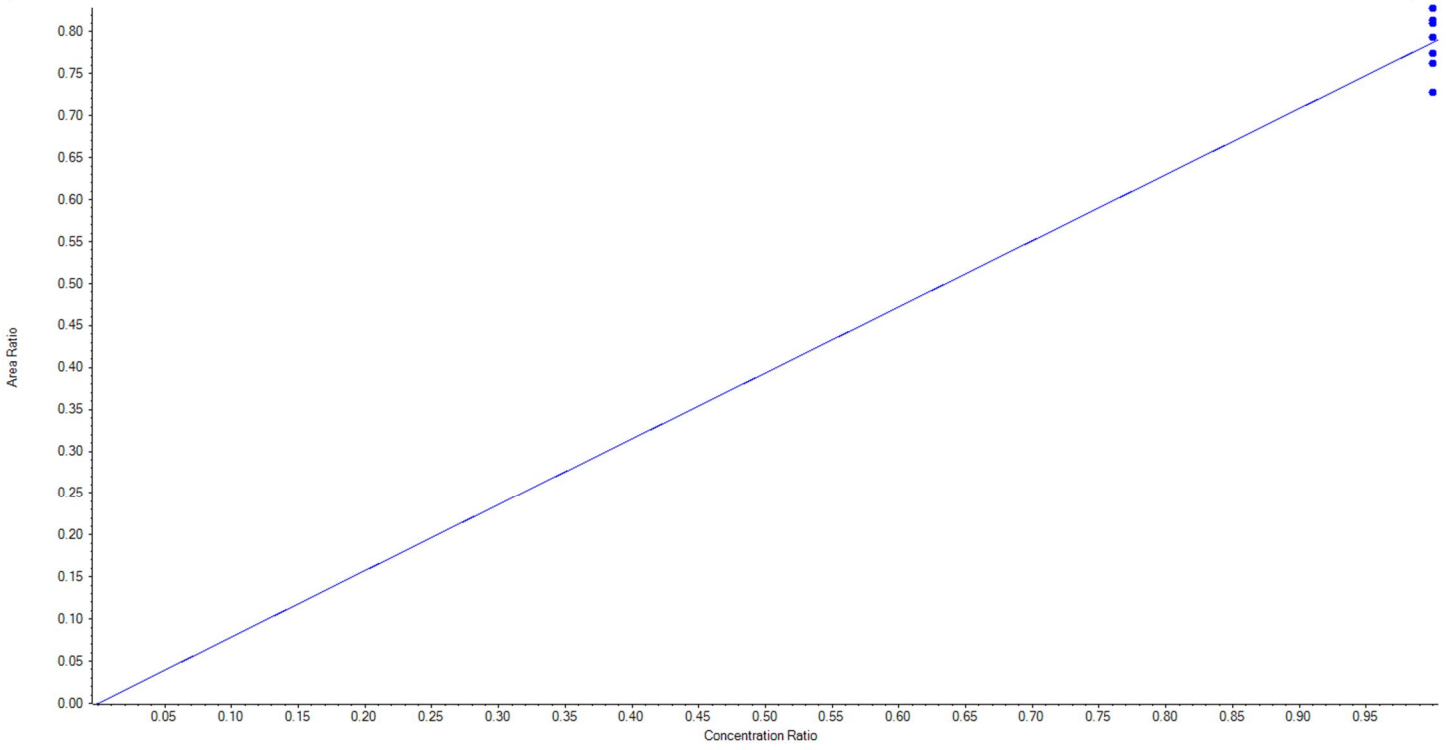
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:47:52 PM

Analyte Name	13C2-PFTeDA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	715.0 / 670.0	**Result Table**	18-0620_18-0621_18-0622_SIS
Internal Standard	13C2-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.78723 x (std. dev. = 0.03476) (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	242.249601	96.9
3	KB74	L2	True	250.00	262.922814	105.2
4	KB75	L3	True	250.00	245.975733	98.4
5	KB76	L4	True	250.00	231.048930	92.4
6	KB77	L5	True	250.00	252.097071	100.8
7	KB78	L6	True	250.00	258.482884	103.4
8	KB79	L7	True	250.00	257.222966	102.9



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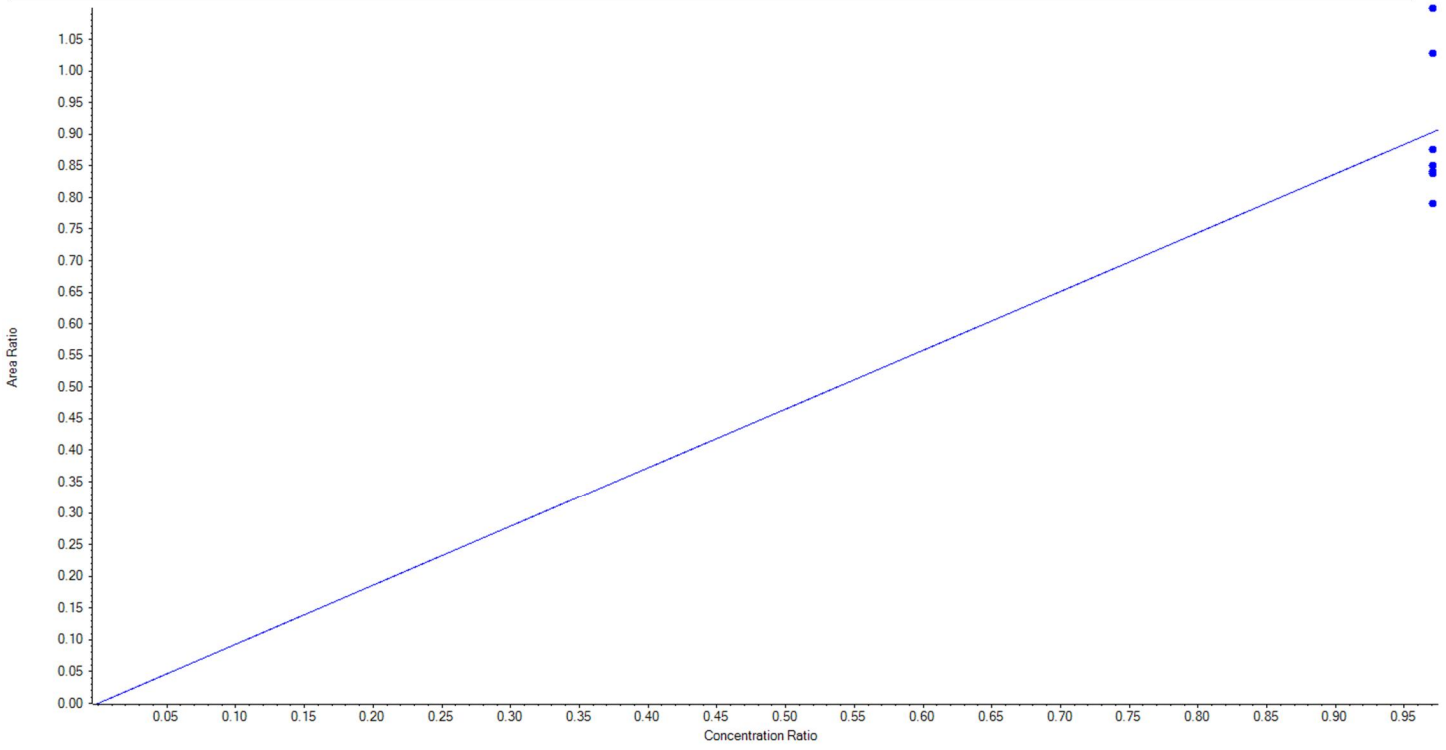
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:47:52 PM

Analyte Name	13C3-PFBS	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	302.0 / 99.0	**Result Table**	18-0620_18-0621_18-0622_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.93048 x (std. dev. = 0.11752) (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	225.022462	96.9
3	KB74	L2	True	232.25	215.609121	92.8
4	KB75	L3	True	232.25	218.748838	94.2
5	KB76	L4	True	232.25	203.233433	87.5
6	KB77	L5	True	232.25	216.348971	93.2
7	KB78	L6	True	232.25	264.163371	113.7
8	KB79	L7	True	232.25	282.623804	121.7



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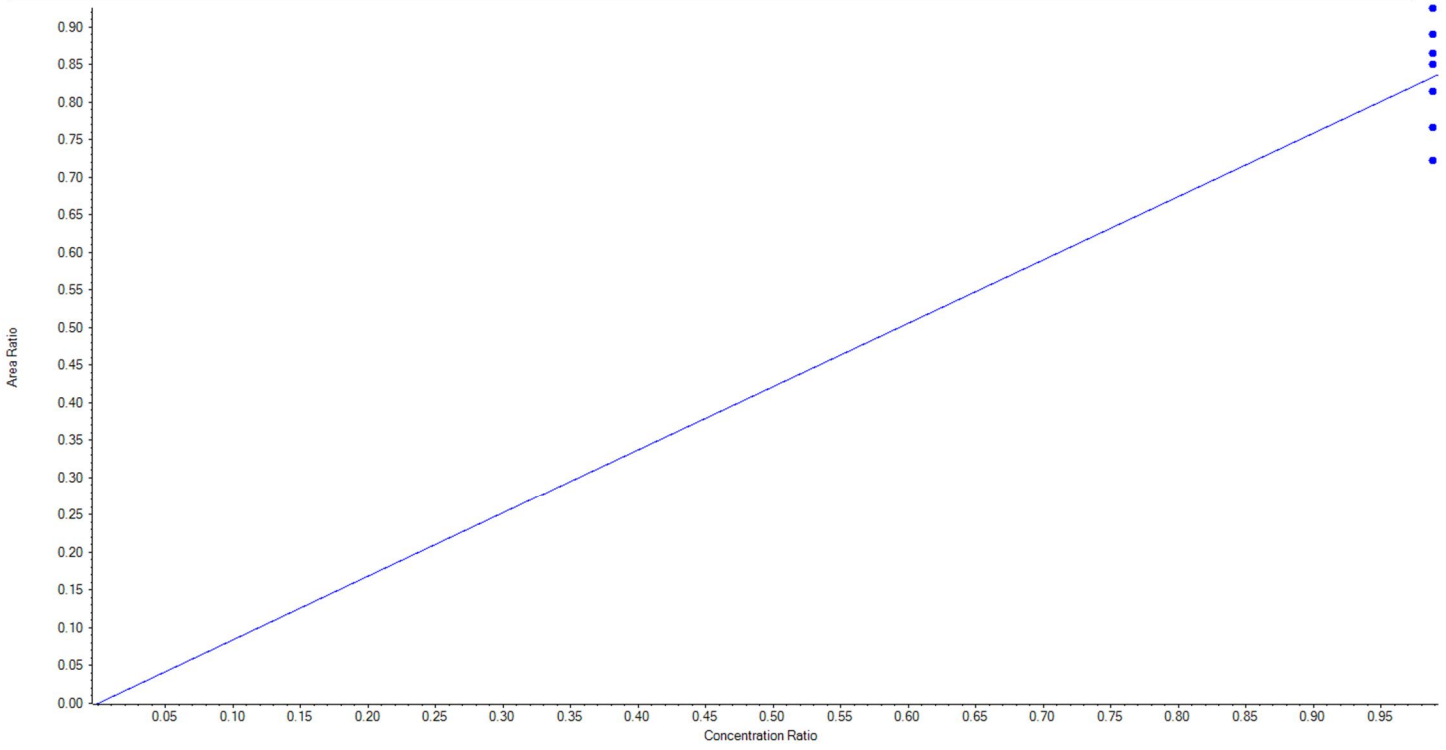
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:47:52 PM

Analyte Name	13C3-PFHxS	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	402.0 / 99.0	**Result Table**	18-0620_18-0621_18-0622_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.84316 x (std. dev. = 0.07172) (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	231.144826	97.7
3	KB74	L2	True	236.50	241.172849	102.0
4	KB75	L3	True	236.50	245.474666	103.8
5	KB76	L4	True	236.50	217.481590	92.0
6	KB77	L5	True	236.50	204.966129	86.7
7	KB78	L6	True	236.50	262.529838	111.0
8	KB79	L7	True	236.50	252.730102	106.9



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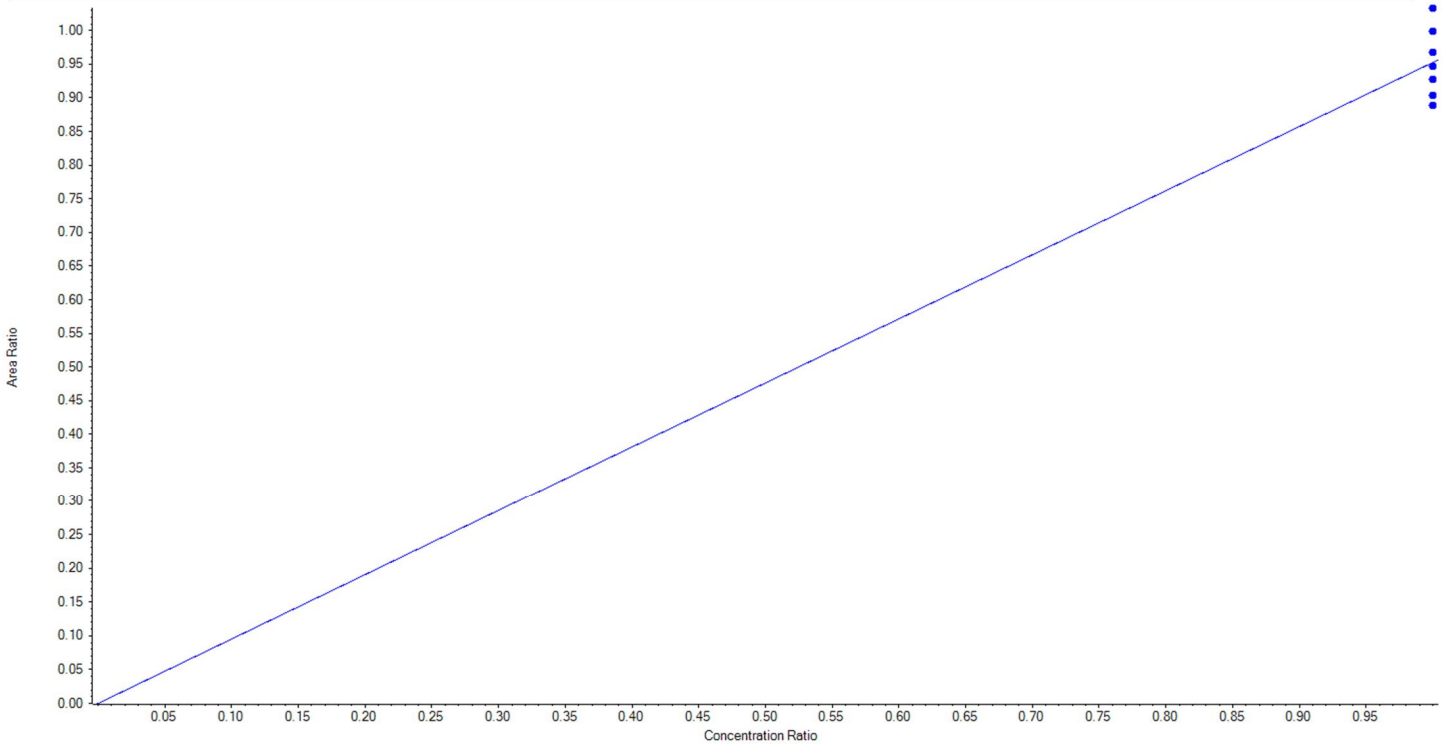
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/10/2018 3:47:52 PM

Analyte Name	13C8-PFOS	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	507.0 / 99.0	**Result Table**	18-0620_18-0621_18-0622_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:36:00 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.95250 x (std. dev. = 0.05159) (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	250.871078	104.9
3	KB74	L2	True	239.25	243.225761	101.7
4	KB75	L3	True	239.25	223.367998	93.4
5	KB76	L4	True	239.25	233.089271	97.4
6	KB77	L5	True	239.25	226.800752	94.8
7	KB78	L6	True	239.25	259.494294	108.5
8	KB79	L7	True	239.25	237.900846	99.4



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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	2018-10-17T19:46:52	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.57	36035.22	104.635578	126.2	true
PFBS_2	298.9 / 99.0	1.57	10918.15	109.976962	78.2	true
PFHxA_1	313.0 / 269.0	1.90	32164.19	98.968181	3.3	false
PFHxA_2	313.0 / 119.0	1.91	2959.44	113.183087	3.5	false
PFHpA_1	363.0 / 319.0	2.32	32551.91	113.465532	39.8	false
PFHpA_2	363.0 / 169.0	2.32	1000.19	103.311634	29.1	false
PFHxS_1	399.0 / 80.0	2.34	44418.07	105.225987	134.5	false
PFHxS_2	399.0 / 99.0	2.34	12198.64	98.139274	86.9	false
PFOA_1	413.0 / 369.0	2.73	42708.15	113.608497	67.5	false
PFOA_2	413.0 / 169.0	2.73	2568.95	104.849376	46.6	false
PFNA_1	463.0 / 419.0	3.14	40302.36	100.132667	94.3	false
PFNA_2	463.0 / 219.0	3.14	13162.53	111.702594	118.3	false
PFOS_1	499.0 / 80.0	3.13	65728.52	112.998705	102.9	false
PFOS_2	499.0 / 99.0	3.13	11345.50	110.962710	100.1	false
PFDA_1	513.0 / 469.0	3.50	49242.60	100.375074	136.7	false
PFDA_2	513.0 / 219.0	3.49	2266.31	112.406023	88.7	false
PFUnA_1	563.0 / 519.0	3.83	45897.49	111.527231	163.3	false
PFUnA_2	563.0 / 269.0	3.82	1918.57	102.220892	42.6	true
PFDoA_1	613.0 / 569.0	4.11	39723.04	90.939755	179.1	false
PFDoA_2	613.0 / 319.0	4.11	6547.85	86.545687	145.5	false
PFTrDA_1	663.0 / 619.0	4.37	34866.78	85.967911	309.6	false
PFTrDA_2	663.0 / 169.0	4.36	2214.00	78.198175	110.2	false
PFTeDA_1	713.0 / 669.0	4.59	40930.04	81.728327	685.4	false
PFTeDA_2	713.0 / 169.0	4.58	2198.76	89.886117	212.0	false
NMeFOSAA_1	570.0 / 419.0	3.65	8081.03	75.824991	298.4	false
NMeFOSAA_2	570.0 / 512.0	3.65	3645.21	3.453918	224.2	false
NEtFOSAA_1	584.0 / 419.0	3.82	8180.80	104.771450	524.6	false
NEtFOSAA_2	584.0 / 483.0	3.82	421.19	41.412646	48.5	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	2018-10-17T19:57:45	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.57	93283.23	249.370464	246.3	false
PFBS_2	298.9 / 99.0	1.57	26423.99	242.180085	146.1	false
PFHxA_1	313.0 / 269.0	1.90	81008.49	269.910942	7.1	false
PFHxA_2	313.0 / 119.0	1.89	5592.03	230.645561	6.5	false
PFHpA_1	363.0 / 319.0	2.31	75049.99	261.922885	57.6	false
PFHpA_2	363.0 / 169.0	2.31	1497.90	175.823351	28.9	true
PFHxS_1	399.0 / 80.0	2.33	108184.43	232.865372	188.9	false
PFHxS_2	399.0 / 99.0	2.33	30598.50	231.314187	310.4	false
PFOA_1	413.0 / 369.0	2.73	100033.19	242.259718	128.9	false
PFOA_2	413.0 / 169.0	2.73	7259.40	273.238913	110.3	false
PFNA_1	463.0 / 419.0	3.13	107846.09	263.216231	192.5	false
PFNA_2	463.0 / 219.0	3.12	28095.55	220.916460	213.9	false
PFOS_1	499.0 / 80.0	3.12	165271.40	245.807613	161.0	false
PFOS_2	499.0 / 99.0	3.12	28706.92	244.538081	211.7	true
PFDA_1	513.0 / 469.0	3.49	122994.62	264.467518	236.7	false
PFDA_2	513.0 / 219.0	3.48	4770.77	245.500787	791.7	false
PFUnA_1	563.0 / 519.0	3.82	106014.14	244.824605	237.3	false
PFUnA_2	563.0 / 269.0	3.81	5018.00	242.442598	81.5	false
PFDoA_1	613.0 / 569.0	4.10	107705.01	247.072023	318.6	false
PFDoA_2	613.0 / 319.0	4.10	19126.54	274.615048	276.9	false
PFTrDA_1	663.0 / 619.0	4.35	90249.73	241.563939	481.4	false
PFTrDA_2	663.0 / 169.0	4.35	6147.30	247.986856	208.6	false
PFTeDA_1	713.0 / 669.0	4.58	109852.37	253.645310	931.4	false
PFTeDA_2	713.0 / 169.0	4.58	5150.42	238.937138	369.4	false
NMeFOSAA_1	570.0 / 419.0	3.65	21539.90	268.876365	843.1	false
NMeFOSAA_2	570.0 / 512.0	3.65	11614.86	218.419800	528.2	false
NEtFOSAA_1	584.0 / 419.0	3.81	21525.62	251.018896	397.7	false
NEtFOSAA_2	584.0 / 483.0	3.80	1206.24	191.667209	290.9	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	2018-10-17T20:08:39	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.57	163617.84	495.098560	296.3	false
PFBS_2	298.9 / 99.0	1.57	45956.46	475.121472	212.6	false
PFHxA_1	313.0 / 269.0	1.89	123711.77	490.752146	10.9	false
PFHxA_2	313.0 / 119.0	1.89	9937.29	514.901118	10.8	false
PFHpA_1	363.0 / 319.0	2.31	119885.50	452.888167	85.7	false
PFHpA_2	363.0 / 169.0	2.31	3804.54	618.850678	67.0	false
PFHxS_1	399.0 / 80.0	2.33	185842.71	467.824000	256.2	false
PFHxS_2	399.0 / 99.0	2.33	54144.25	484.563583	238.2	false
PFOA_1	413.0 / 369.0	2.72	178566.76	467.456638	160.8	false
PFOA_2	413.0 / 169.0	2.72	10469.56	421.303706	138.9	false
PFNA_1	463.0 / 419.0	3.12	170504.46	450.336433	203.9	false
PFNA_2	463.0 / 219.0	3.12	51980.47	448.287193	301.6	false
PFOS_1	499.0 / 80.0	3.12	275067.90	508.954098	204.8	false
PFOS_2	499.0 / 99.0	3.12	48946.70	520.238814	287.5	false
PFDA_1	513.0 / 469.0	3.48	213151.42	495.556524	301.2	false
PFDA_2	513.0 / 219.0	3.48	8539.13	479.073328	239.1	false
PFUnA_1	563.0 / 519.0	3.81	185383.49	423.690587	269.5	false
PFUnA_2	563.0 / 269.0	3.81	10671.72	501.608235	165.4	false
PFDoA_1	613.0 / 569.0	4.09	184868.00	506.360909	343.9	false
PFDoA_2	613.0 / 319.0	4.09	28751.08	494.661881	331.3	false
PFTrDA_1	663.0 / 619.0	4.35	151211.59	488.700899	597.4	false
PFTrDA_2	663.0 / 169.0	4.34	10123.70	495.036348	322.3	false
PFTeDA_1	713.0 / 669.0	4.57	182656.44	515.154084	1232.8	false
PFTeDA_2	713.0 / 169.0	4.56	8526.49	490.005825	501.7	false
NMeFOSAA_1	570.0 / 419.0	3.63	34656.73	500.524214	2338.0	false
NMeFOSAA_2	570.0 / 512.0	3.64	18345.00	439.990383	658.5	false
NEtFOSAA_1	584.0 / 419.0	3.80	31971.45	508.056535	633.3	false
NEtFOSAA_2	584.0 / 483.0	3.80	2497.16	637.470069	8056.1	true

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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	2018-10-17T20:19:32	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	336045.72	1091.288759	552.2	false
PFBS_2	298.9 / 99.0	1.56	98081.89	1086.381545	407.4	false
PFHxA_1	313.0 / 269.0	1.89	240693.36	1004.472242	18.1	false
PFHxA_2	313.0 / 119.0	1.89	17814.42	980.952621	16.5	false
PFHpA_1	363.0 / 319.0	2.30	251954.77	963.772233	144.8	false
PFHpA_2	363.0 / 169.0	2.30	6187.13	1051.701356	84.1	false
PFHxS_1	399.0 / 80.0	2.32	369801.30	1074.776448	333.3	false
PFHxS_2	399.0 / 99.0	2.32	106671.06	1107.476178	416.8	false
PFOA_1	413.0 / 369.0	2.71	347996.75	956.844142	237.9	false
PFOA_2	413.0 / 169.0	2.71	24237.17	1028.034772	244.5	false
PFNA_1	463.0 / 419.0	3.11	345587.51	1046.243999	410.7	false
PFNA_2	463.0 / 219.0	3.11	106652.75	1050.052047	427.7	false
PFOS_1	499.0 / 80.0	3.11	549475.41	953.422687	298.0	false
PFOS_2	499.0 / 99.0	3.11	96044.01	958.547975	432.6	false
PFDA_1	513.0 / 469.0	3.47	409723.46	987.592944	454.6	false
PFDA_2	513.0 / 219.0	3.47	17306.29	1010.924950	319.9	false
PFUnA_1	563.0 / 519.0	3.80	370869.35	1026.343861	315.7	false
PFUnA_2	563.0 / 269.0	3.80	17491.40	981.918474	206.5	false
PFDoA_1	613.0 / 569.0	4.09	374694.74	1050.478389	498.6	false
PFDoA_2	613.0 / 319.0	4.09	54643.36	971.395687	458.0	false
PFTrDA_1	663.0 / 619.0	4.34	321677.62	1126.764608	812.9	false
PFTrDA_2	663.0 / 169.0	4.34	21874.98	1164.067670	449.0	false
PFTeDA_1	713.0 / 669.0	4.56	357047.01	1095.645152	1545.8	false
PFTeDA_2	713.0 / 169.0	4.56	17306.66	1092.239213	701.8	false
NMeFOSAA_1	570.0 / 419.0	3.63	68030.30	1133.404189	751.5	false
NMeFOSAA_2	570.0 / 512.0	3.63	39158.03	1163.925478	709.7	false
NEtFOSAA_1	584.0 / 419.0	3.80	66289.88	943.782521	754.6	false
NEtFOSAA_2	584.0 / 483.0	3.80	4059.44	945.207707	43600.8	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	2018-10-17T20:30:23	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.57	776289.58	2332.691625	927.0	false
PFBS_2	298.9 / 99.0	1.56	228434.75	2339.199841	734.2	false
PFHxA_1	313.0 / 269.0	1.89	609668.03	2495.865956	39.8	false
PFHxA_2	313.0 / 119.0	1.89	44913.51	2451.366061	32.3	false
PFHpA_1	363.0 / 319.0	2.30	584043.68	2376.996854	232.0	false
PFHpA_2	363.0 / 169.0	2.30	13193.99	2469.602759	211.4	false
PFHxS_1	399.0 / 80.0	2.32	886495.01	2696.493262	388.0	false
PFHxS_2	399.0 / 99.0	2.32	252473.06	2749.725828	571.1	false
PFOA_1	413.0 / 369.0	2.71	834165.44	2452.232813	357.8	false
PFOA_2	413.0 / 169.0	2.71	53993.69	2444.883328	444.0	false
PFNA_1	463.0 / 419.0	3.11	783461.97	2491.510736	552.9	false
PFNA_2	463.0 / 219.0	3.11	254909.55	2632.290752	603.7	false
PFOS_1	499.0 / 80.0	3.11	1306443.89	2300.880982	452.4	false
PFOS_2	499.0 / 99.0	3.11	224020.69	2271.299000	545.6	false
PFDA_1	513.0 / 469.0	3.47	986588.88	2418.646707	564.2	false
PFDA_2	513.0 / 219.0	3.47	39607.95	2354.317167	415.6	false
PFUnA_1	563.0 / 519.0	3.80	871741.30	2538.187940	460.9	false
PFUnA_2	563.0 / 269.0	3.80	43333.05	2544.385755	300.0	false
PFDoA_1	613.0 / 569.0	4.09	821796.76	2565.539851	662.4	false
PFDoA_2	613.0 / 319.0	4.09	135656.47	2712.576260	522.0	false
PFTrDA_1	663.0 / 619.0	4.33	735746.86	2664.921530	986.7	false
PFTrDA_2	663.0 / 169.0	4.33	48743.98	2684.712399	618.7	false
PFTeDA_1	713.0 / 669.0	4.56	816378.76	2603.218162	1929.9	false
PFTeDA_2	713.0 / 169.0	4.55	40737.36	2680.771848	1193.3	false
NMeFOSAA_1	570.0 / 419.0	3.63	151508.36	2465.257046	2245.1	false
NMeFOSAA_2	570.0 / 512.0	3.63	88173.15	2616.439396	615.9	false
NEtFOSAA_1	584.0 / 419.0	3.79	155433.42	2522.760733	648.0	false
NEtFOSAA_2	584.0 / 483.0	3.79	9620.27	2637.389496	1231310.6	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	2018-10-17T20:41:14	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	3735985.71	9811.581725	1503.9	false
PFBS_2	298.9 / 99.0	1.56	1134069.29	10143.472130	1449.0	false
PFHxA_1	313.0 / 269.0	1.88	2658827.36	9993.499522	90.8	false
PFHxA_2	313.0 / 119.0	1.88	200130.60	10083.260482	76.5	false
PFHpA_1	363.0 / 319.0	2.30	2497856.31	9765.162244	436.5	false
PFHpA_2	363.0 / 169.0	2.30	53385.07	9796.218447	441.5	false
PFHxS_1	399.0 / 80.0	2.32	3854430.51	9828.822898	984.2	false
PFHxS_2	399.0 / 99.0	2.32	1062752.95	9714.855919	1104.6	false
PFOA_1	413.0 / 369.0	2.71	3551933.53	10326.914009	921.2	false
PFOA_2	413.0 / 169.0	2.71	226064.95	10121.411629	875.1	false
PFNA_1	463.0 / 419.0	3.11	3442576.47	10047.185055	870.1	false
PFNA_2	463.0 / 219.0	3.11	1068510.97	10108.558837	1018.0	false
PFOS_1	499.0 / 80.0	3.10	5888305.73	9674.048541	719.2	false
PFOS_2	499.0 / 99.0	3.10	1040866.54	9849.093945	1187.7	false
PFDA_1	513.0 / 469.0	3.47	4121337.28	9760.929085	867.9	false
PFDA_2	513.0 / 219.0	3.46	165545.81	9514.985150	1080.3	false
PFUnA_1	563.0 / 519.0	3.79	3980687.38	10323.155375	894.2	false
PFUnA_2	563.0 / 269.0	3.79	194191.57	10125.204796	674.2	false
PFDoA_1	613.0 / 569.0	4.08	3840657.97	10368.355085	1057.4	false
PFDoA_2	613.0 / 319.0	4.08	576764.61	9996.454238	1020.7	false
PFTrDA_1	663.0 / 619.0	4.33	3350407.66	10336.521146	1444.2	false
PFTrDA_2	663.0 / 169.0	4.33	218945.29	10280.911529	1007.9	false
PFTeDA_1	713.0 / 669.0	4.55	3751651.69	10217.289136	2725.0	false
PFTeDA_2	713.0 / 169.0	4.54	182332.73	10258.453725	1759.6	false
NMeFOSAA_1	570.0 / 419.0	3.62	753927.92	11007.670601	2278.1	false
NMeFOSAA_2	570.0 / 512.0	3.62	404364.11	10905.550987	1426.8	false
NEtFOSAA_1	584.0 / 419.0	3.79	707833.72	9564.590700	1144.3	false
NEtFOSAA_2	584.0 / 483.0	3.79	40332.26	9326.284871	2770.2	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	2018-10-17T20:52:06	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	7654212.63	20608.833290	2863.5	false
PFBS_2	298.9 / 99.0	1.56	2213700.05	20297.167965	1861.8	false
PFHxA_1	313.0 / 269.0	1.89	5068064.70	20340.031011	123.0	false
PFHxA_2	313.0 / 119.0	1.88	377383.63	20319.191070	98.6	false
PFHpA_1	363.0 / 319.0	2.29	4752932.81	20415.792084	545.6	false
PFHpA_2	363.0 / 169.0	2.30	99502.18	20134.491774	637.6	false
PFHxS_1	399.0 / 80.0	2.32	6929917.90	20287.492034	1348.5	false
PFHxS_2	399.0 / 99.0	2.32	1934460.53	20307.425032	1153.9	false
PFOA_1	413.0 / 369.0	2.71	6162786.15	19790.684183	1174.3	false
PFOA_2	413.0 / 169.0	2.71	403546.52	19956.278277	1429.0	false
PFNA_1	463.0 / 419.0	3.11	6224206.25	19951.374879	1314.8	false
PFNA_2	463.0 / 219.0	3.11	1903895.81	19778.192118	1655.3	false
PFOS_1	499.0 / 80.0	3.10	10402856.43	20553.887374	904.0	true
PFOS_2	499.0 / 99.0	3.10	1792140.82	20395.319474	1641.5	false
PFDA_1	513.0 / 469.0	3.47	7455074.70	20322.432148	1181.3	false
PFDA_2	513.0 / 219.0	3.47	311824.53	20632.792594	1380.7	false
PFUnA_1	563.0 / 519.0	3.79	6840458.50	19682.270401	830.9	false
PFUnA_2	563.0 / 269.0	3.79	343323.53	19852.219250	642.0	false
PFDoA_1	613.0 / 569.0	4.07	7074590.20	19521.253987	1036.7	false
PFDoA_2	613.0 / 319.0	4.07	1117673.36	19813.751199	984.9	false
PFTrDA_1	663.0 / 619.0	4.32	6045542.29	19405.559967	1420.4	false
PFTrDA_2	663.0 / 169.0	4.32	396998.36	19399.087023	1127.9	false
PFTeDA_1	713.0 / 669.0	4.54	6908120.06	19583.319829	2951.8	false
PFTeDA_2	713.0 / 169.0	4.54	332887.97	19499.706134	2522.7	false
NMeFOSAA_1	570.0 / 419.0	3.62	1331189.45	18898.442593	2363.5	false
NMeFOSAA_2	570.0 / 512.0	3.62	719500.36	18905.673956	1612.0	false
NEtFOSAA_1	584.0 / 419.0	3.78	1231583.02	20455.019164	1168.4	false
NEtFOSAA_2	584.0 / 483.0	3.78	71957.40	20511.980648	877.0	false

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Summary Quant 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	2018-10-17T19:46:52	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.10	91402.83	234.027671	1231.7	false
d3-MeFOSAA	573.0 / 419.0	3.65	16104.22	252.745204	203.5	false
d5-EtFOSAA	589.0 / 419.0	3.81	18885.04	261.116785	197.5	false
13C5-PFHxA	318.0 / 273.0	1.89	61468.01	262.567314	846.3	false
13C4-PFHpA	367.0 / 322.0	2.30	69894.37	262.427043	1233.4	false
13C8-PFOA	421.0 / 376.0	2.72	82686.75	255.212785	7328.7	false
13C9-PFNA	472.0 / 427.0	3.12	91536.04	247.430463	984.5	false
13C6-PFDA	519.0 / 474.0	3.48	97086.56	246.733475	862.5	false
13C7-PFUnA	570.0 / 525.0	3.81	90055.69	247.760751	681.9	false
13C2-PFTeDA	715.0 / 670.0	4.58	76389.03	242.249601	2670.6	false
13C3-PFBS	302.0 / 99.0	1.55	26120.14	225.022462	521.2	false
13C3-PFHxS	402.0 / 99.0	2.33	24312.83	231.144826	504.5	false
13C8-PFOS	507.0 / 99.0	3.12	29809.56	250.871078	289.5	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	2018-10-17T19:57:45	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.09	107747.25	265.932266	1391.1	false
d3-MeFOSAA	573.0 / 419.0	3.64	17700.53	237.867686	243.9	false
d5-EtFOSAA	589.0 / 419.0	3.80	22032.11	260.842878	257.9	false
13C5-PFHxA	318.0 / 273.0	1.89	67688.32	254.187234	641.8	false
13C4-PFHpA	367.0 / 322.0	2.30	76065.72	251.075240	798.7	false
13C8-PFOA	421.0 / 376.0	2.72	96880.10	262.875155	404.7	false
13C9-PFNA	472.0 / 427.0	3.11	109970.74	261.328420	1372.3	false
13C6-PFDA	519.0 / 474.0	3.48	103376.35	253.248818	1556.3	false
13C7-PFUnA	570.0 / 525.0	3.80	99154.47	262.960755	932.2	false
13C2-PFTeDA	715.0 / 670.0	4.57	86008.02	262.922814	1938.6	false
13C3-PFBS	302.0 / 99.0	1.55	29228.78	215.609121	465.4	false
13C3-PFHxS	402.0 / 99.0	2.32	29626.05	241.172849	441.9	false
13C8-PFOS	507.0 / 99.0	3.11	33752.70	243.225761	275.4	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	2018-10-17T20:08:39	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.08	95394.66	249.447374	1919.0	false
d3-MeFOSAA	573.0 / 419.0	3.63	16732.69	255.434971	259.5	false
d5-EtFOSAA	589.0 / 419.0	3.79	16744.24	225.192349	304.7	false
13C5-PFHxA	318.0 / 273.0	1.88	59853.55	230.325952	495.7	false
13C4-PFHpA	367.0 / 322.0	2.29	72363.27	244.763156	5134.6	false
13C8-PFOA	421.0 / 376.0	2.71	92242.14	256.482263	3147.3	false
13C9-PFNA	472.0 / 427.0	3.10	106517.52	259.384215	1506.1	false
13C6-PFDA	519.0 / 474.0	3.47	99092.64	257.192135	1016.5	false
13C7-PFUnA	570.0 / 525.0	3.79	101859.96	286.201660	947.8	false
13C2-PFTeDA	715.0 / 670.0	4.56	75947.40	245.975733	2310.8	false
13C3-PFBS	302.0 / 99.0	1.55	26105.02	218.748838	604.7	false
13C3-PFHxS	402.0 / 99.0	2.32	26545.24	245.474666	396.8	false
13C8-PFOS	507.0 / 99.0	3.10	27286.93	223.367998	263.5	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	2018-10-17T20:19:32	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.08	95903.63	245.945631	1244.5	false
d3-MeFOSAA	573.0 / 419.0	3.62	15347.55	232.186572	188.7	false
d5-EtFOSAA	589.0 / 419.0	3.79	19076.22	254.251713	210.8	false
13C5-PFHxA	318.0 / 273.0	1.88	58835.13	235.058052	1009.1	false
13C4-PFHpA	367.0 / 322.0	2.29	73044.35	256.507439	778.8	false
13C8-PFOA	421.0 / 376.0	2.70	89256.01	257.662297	1337.8	false
13C9-PFNA	472.0 / 427.0	3.10	96659.60	244.372857	1496.3	false
13C6-PFDA	519.0 / 474.0	3.46	97605.58	248.450649	1104.6	false
13C7-PFUnA	570.0 / 525.0	3.78	85263.94	234.954208	671.4	false
13C2-PFTeDA	715.0 / 670.0	4.55	72740.35	231.048930	2036.8	false
13C3-PFBS	302.0 / 99.0	1.55	24473.16	203.233433	669.1	false
13C3-PFHxS	402.0 / 99.0	2.32	23731.17	217.481590	485.7	false
13C8-PFOS	507.0 / 99.0	3.10	28732.45	233.089271	315.7	false

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Summary Quant 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	2018-10-17T20:30:23	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.07	87520.82	248.975274	984.0	false
d3-MeFOSAA	573.0 / 419.0	3.62	15905.32	236.383719	163.7	false
d5-EtFOSAA	589.0 / 419.0	3.78	16835.01	220.425706	271.8	false
13C5-PFHxA	318.0 / 273.0	1.88	61167.94	257.145365	677.6	false
13C4-PFHpA	367.0 / 322.0	2.29	69461.61	256.669677	849.4	false
13C8-PFOA	421.0 / 376.0	2.70	84283.75	256.019871	1295.1	false
13C9-PFNA	472.0 / 427.0	3.10	93667.25	249.179395	1439.8	false
13C6-PFDA	519.0 / 474.0	3.46	97196.35	274.445566	2304.2	false
13C7-PFUnA	570.0 / 525.0	3.78	81503.66	249.135582	792.6	false
13C2-PFTeDA	715.0 / 670.0	4.55	71548.15	252.097071	2268.3	false
13C3-PFBS	302.0 / 99.0	1.55	26519.94	216.348971	787.4	false
13C3-PFHxS	402.0 / 99.0	2.31	22766.78	204.966129	549.1	false
13C8-PFOS	507.0 / 99.0	3.10	28458.87	226.800752	280.5	false

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Summary Quant 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	2018-10-17T20:41:14	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.07	102072.61	251.235272	905.7	false
d3-MeFOSAA	573.0 / 419.0	3.61	18026.94	285.381847	140.7	false
d5-EtFOSAA	589.0 / 419.0	3.78	19940.39	278.106701	245.9	false
13C5-PFHxA	318.0 / 273.0	1.87	67298.42	264.503275	733.1	false
13C4-PFHpA	367.0 / 322.0	2.28	72755.48	251.342992	508.8	false
13C8-PFOA	421.0 / 376.0	2.70	85622.31	243.157749	1201.3	false
13C9-PFNA	472.0 / 427.0	3.09	103069.19	256.344825	1142.1	false
13C6-PFDA	519.0 / 474.0	3.45	101281.21	247.435316	1442.1	false
13C7-PFUnA	570.0 / 525.0	3.78	91776.59	242.726450	856.9	false
13C2-PFTeDA	715.0 / 670.0	4.54	84788.29	258.482884	1567.2	false
13C3-PFBS	302.0 / 99.0	1.54	30399.13	264.163371	680.5	false
13C3-PFHxS	402.0 / 99.0	2.31	27375.94	262.529838	495.9	false
13C8-PFOS	507.0 / 99.0	3.09	30568.34	259.494294	315.3	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	2018-10-17T20:52:06	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.07	99995.01	254.436513	1141.6	false
d3-MeFOSAA	573.0 / 419.0	3.62	18400.21	319.413436	102.1	false
d5-EtFOSAA	589.0 / 419.0	3.78	16351.10	250.063868	251.7	false
13C5-PFHxA	318.0 / 273.0	1.87	63134.84	246.212808	622.1	false
13C4-PFHpA	367.0 / 322.0	2.28	66285.64	227.214453	928.8	false
13C8-PFOA	421.0 / 376.0	2.70	77573.52	218.589880	452635.8	false
13C9-PFNA	472.0 / 427.0	3.09	93994.33	231.959824	113653.9	false
13C6-PFDA	519.0 / 474.0	3.45	88095.93	222.494042	731.4	false
13C7-PFUnA	570.0 / 525.0	3.78	82754.96	226.260594	1283.3	false
13C2-PFTeDA	715.0 / 670.0	4.54	81617.66	257.222966	1991.1	false
13C3-PFBS	302.0 / 99.0	1.54	29660.00	282.623804	815.0	false
13C3-PFHxS	402.0 / 99.0	2.31	24033.73	252.730102	656.4	false
13C8-PFOS	507.0 / 99.0	3.09	25557.23	237.900846	289.4	false

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Summary Ion Ratio 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	2018-10-17T19:46:52	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	1.57	PFBS			
PFBS_2	298.9 / 99.0	1.57	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.90	PFHxA			
PFHxA_2	313.0 / 119.0	1.91	PFHxA	0.090	0.077	ü
PFHpA_1	363.0 / 319.0	2.32	PFHpA			
PFHpA_2	363.0 / 169.0	2.32	PFHpA	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.34	PFHxS			
PFHxS_2	399.0 / 99.0	2.34	PFHxS	0.270	0.282	ü
PFOA_1	413.0 / 369.0	2.73	PFOA			
PFOA_2	413.0 / 169.0	2.73	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.14	PFNA			
PFNA_2	463.0 / 219.0	3.14	PFNA	0.330	0.306	ü
PFOS_1	499.0 / 80.0	3.13	PFOS			
PFOS_2	499.0 / 99.0	3.13	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.50	PFDA			
PFDA_2	513.0 / 219.0	3.49	PFDA	0.050	0.041	ü
PFUnA_1	563.0 / 519.0	3.83	PFUnA			
PFUnA_2	563.0 / 269.0	3.82	PFUnA	0.040	0.049	ü
PFDoA_1	613.0 / 569.0	4.11	PFDoA			
PFDoA_2	613.0 / 319.0	4.11	PFDoA	0.160	0.160	ü
PFTrDA_1	663.0 / 619.0	4.37	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.36	PFTrDA	0.060	0.066	ü
PFTeDA_1	713.0 / 669.0	4.59	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.58	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.65	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.65	NMeFOSAA	0.450	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.82	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.82	NEtFOSAA	0.050	0.062	ü

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Summary Ion Ratio 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	2018-10-17T19:57:45	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	1.57	PFBS			
PFBS_2	298.9 / 99.0	1.57	PFBS	0.280	0.292	ü
PFHxA_1	313.0 / 269.0	1.90	PFHxA			
PFHxA_2	313.0 / 119.0	1.89	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.31	PFHpA			
PFHpA_2	363.0 / 169.0	2.31	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.33	PFHxS			
PFHxS_2	399.0 / 99.0	2.33	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.73	PFOA			
PFOA_2	413.0 / 169.0	2.73	PFOA	0.070	0.065	ü
PFNA_1	463.0 / 419.0	3.13	PFNA			
PFNA_2	463.0 / 219.0	3.12	PFNA	0.260	0.306	ü
PFOS_1	499.0 / 80.0	3.12	PFOS			
PFOS_2	499.0 / 99.0	3.12	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.49	PFDA			
PFDA_2	513.0 / 219.0	3.48	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.82	PFUnA			
PFUnA_2	563.0 / 269.0	3.81	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.10	PFDoA			
PFDoA_2	613.0 / 319.0	4.10	PFDoA	0.180	0.160	ü
PFTrDA_1	663.0 / 619.0	4.35	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.35	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.58	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.58	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.65	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.65	NMeFOSAA	0.540	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.81	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.80	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio 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	2018-10-17T20:08:39	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	1.57	PFBS			
PFBS_2	298.9 / 99.0	1.57	PFBS	0.280	0.292	ü
PFHxA_1	313.0 / 269.0	1.89	PFHxA			
PFHxA_2	313.0 / 119.0	1.89	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.31	PFHpA			
PFHpA_2	363.0 / 169.0	2.31	PFHpA	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.33	PFHxS			
PFHxS_2	399.0 / 99.0	2.33	PFHxS	0.290	0.282	ü
PFOA_1	413.0 / 369.0	2.72	PFOA			
PFOA_2	413.0 / 169.0	2.72	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.12	PFNA			
PFNA_2	463.0 / 219.0	3.12	PFNA	0.300	0.306	ü
PFOS_1	499.0 / 80.0	3.12	PFOS			
PFOS_2	499.0 / 99.0	3.12	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.48	PFDA			
PFDA_2	513.0 / 219.0	3.48	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.81	PFUnA			
PFUnA_2	563.0 / 269.0	3.81	PFUnA	0.060	0.049	ü
PFDoA_1	613.0 / 569.0	4.09	PFDoA			
PFDoA_2	613.0 / 319.0	4.09	PFDoA	0.160	0.160	ü
PFTrDA_1	663.0 / 619.0	4.35	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.34	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.57	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.56	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.63	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.64	NMeFOSAA	0.530	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.80	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.80	NEtFOSAA	0.080	0.062	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	2018-10-17T20:19:32	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	1.89	PFHxA			
PFHxA_2	313.0 / 119.0	1.89	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.30	PFHpA			
PFHpA_2	363.0 / 169.0	2.30	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.32	PFHxS			
PFHxS_2	399.0 / 99.0	2.32	PFHxS	0.290	0.282	ü
PFOA_1	413.0 / 369.0	2.71	PFOA			
PFOA_2	413.0 / 169.0	2.71	PFOA	0.070	0.065	ü
PFNA_1	463.0 / 419.0	3.11	PFNA			
PFNA_2	463.0 / 219.0	3.11	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	3.11	PFOS			
PFOS_2	499.0 / 99.0	3.11	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.47	PFDA			
PFDA_2	513.0 / 219.0	3.47	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.80	PFUnA			
PFUnA_2	563.0 / 269.0	3.80	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.09	PFDoA			
PFDoA_2	613.0 / 319.0	4.09	PFDoA	0.150	0.160	ü
PFTrDA_1	663.0 / 619.0	4.34	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.34	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.56	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.56	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.63	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.63	NMeFOSAA	0.580	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.80	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.80	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

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Printed: 30/10/2018 3:54:01 PM

Sample Name	KB77	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T20:30:23	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	1.57	PFBS			
PFBS_2	298.9 / 99.0	1.56	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.89	PFHxA			
PFHxA_2	313.0 / 119.0	1.89	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.30	PFHpA			
PFHpA_2	363.0 / 169.0	2.30	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.32	PFHxS			
PFHxS_2	399.0 / 99.0	2.32	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.71	PFOA			
PFOA_2	413.0 / 169.0	2.71	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.11	PFNA			
PFNA_2	463.0 / 219.0	3.11	PFNA	0.330	0.306	ü
PFOS_1	499.0 / 80.0	3.11	PFOS			
PFOS_2	499.0 / 99.0	3.11	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.47	PFDA			
PFDA_2	513.0 / 219.0	3.47	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.80	PFUnA			
PFUnA_2	563.0 / 269.0	3.80	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.09	PFDoA			
PFDoA_2	613.0 / 319.0	4.09	PFDoA	0.170	0.160	ü
PFTrDA_1	663.0 / 619.0	4.33	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.33	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.56	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.55	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.63	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.63	NMeFOSAA	0.580	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.79	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.79	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio 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	2018-10-17T20:41:14	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.56	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.88	PFHxA			
PFHxA_2	313.0 / 119.0	1.88	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.30	PFHpA			
PFHpA_2	363.0 / 169.0	2.30	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.32	PFHxS			
PFHxS_2	399.0 / 99.0	2.32	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.71	PFOA			
PFOA_2	413.0 / 169.0	2.71	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.11	PFNA			
PFNA_2	463.0 / 219.0	3.11	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	3.10	PFOS			
PFOS_2	499.0 / 99.0	3.10	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.47	PFDA			
PFDA_2	513.0 / 219.0	3.46	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.79	PFUnA			
PFUnA_2	563.0 / 269.0	3.79	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.08	PFDoA			
PFDoA_2	613.0 / 319.0	4.08	PFDoA	0.150	0.160	ü
PFTrDA_1	663.0 / 619.0	4.33	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.33	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.55	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.54	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.62	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.62	NMeFOSAA	0.540	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.79	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.79	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 30/10/2018 3:54:10 PM

Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T20:52:06	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	1.89	PFHxA			
PFHxA_2	313.0 / 119.0	1.88	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.29	PFHpA			
PFHpA_2	363.0 / 169.0	2.30	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.32	PFHxS			
PFHxS_2	399.0 / 99.0	2.32	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.71	PFOA			
PFOA_2	413.0 / 169.0	2.71	PFOA	0.070	0.065	ü
PFNA_1	463.0 / 419.0	3.11	PFNA			
PFNA_2	463.0 / 219.0	3.11	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	3.10	PFOS			
PFOS_2	499.0 / 99.0	3.10	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.47	PFDA			
PFDA_2	513.0 / 219.0	3.47	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.79	PFUnA			
PFUnA_2	563.0 / 269.0	3.79	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.07	PFDoA			
PFDoA_2	613.0 / 319.0	4.07	PFDoA	0.160	0.160	ü
PFTrDA_1	663.0 / 619.0	4.32	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.32	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.54	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.54	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.62	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.62	NMeFOSAA	0.540	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.78	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.78	NEtFOSAA	0.060	0.062	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	2018-10-17T19:46:52	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	1.57	13C3-PFBS	302.0 / 99.0	26120.14	232.25
PFBS_2	298.9 / 99.0	1.57	13C3-PFBS	302.0 / 99.0	26120.14	232.25
PFHxA_1	313.0 / 269.0	1.90	13C5-PFHxA	318.0 / 273.0	61468.01	250.00
PFHxA_2	313.0 / 119.0	1.91	13C5-PFHxA	318.0 / 273.0	61468.01	250.00
PFHpA_1	363.0 / 319.0	2.32	13C4-PFHpA	367.0 / 322.0	69894.37	250.00
PFHpA_2	363.0 / 169.0	2.32	13C4-PFHpA	367.0 / 322.0	69894.37	250.00
PFHxS_1	399.0 / 80.0	2.34	13C3-PFHxS	402.0 / 99.0	24619.85	236.50
PFHxS_2	399.0 / 99.0	2.34	13C3-PFHxS	402.0 / 99.0	24619.85	236.50
PFOA_1	413.0 / 369.0	2.73	13C8-PFOA	421.0 / 376.0	82686.75	250.00
PFOA_2	413.0 / 169.0	2.73	13C8-PFOA	421.0 / 376.0	82686.75	250.00
PFNA_1	463.0 / 419.0	3.14	13C9-PFNA	472.0 / 427.0	91536.04	250.00
PFNA_2	463.0 / 219.0	3.14	13C9-PFNA	472.0 / 427.0	91536.04	250.00
PFOS_1	499.0 / 80.0	3.13	13C8-PFOS	507.0 / 99.0	29514.87	239.25
PFOS_2	499.0 / 99.0	3.13	13C8-PFOS	507.0 / 99.0	29514.87	239.25
PFDA_1	513.0 / 469.0	3.50	13C6-PFDA	519.0 / 474.0	97086.56	250.00
PFDA_2	513.0 / 219.0	3.49	13C6-PFDA	519.0 / 474.0	97086.56	250.00
PFUnA_1	563.0 / 519.0	3.83	13C7-PFUnA	570.0 / 525.0	90055.69	250.00
PFUnA_2	563.0 / 269.0	3.82	13C7-PFUnA	570.0 / 525.0	90055.69	250.00
PFDoA_1	613.0 / 569.0	4.11	13C2-PFDoA	615.0 / 570.0	91402.83	250.00
PFDoA_2	613.0 / 319.0	4.11	13C2-PFDoA	615.0 / 570.0	91402.83	250.00
PFTrDA_1	663.0 / 619.0	4.37	13C2-PFTeDA	715.0 / 670.0	76389.03	250.00
PFTrDA_2	663.0 / 169.0	4.36	13C2-PFTeDA	715.0 / 670.0	76389.03	250.00
PFTeDA_1	713.0 / 669.0	4.59	13C2-PFTeDA	715.0 / 670.0	76389.03	250.00
PFTeDA_2	713.0 / 169.0	4.58	13C2-PFTeDA	715.0 / 670.0	76389.03	250.00
NMeFOSAA_1	570.0 / 419.0	3.65	d3-MeFOSAA	573.0 / 419.0	16233.26	250.00
NMeFOSAA_2	570.0 / 512.0	3.65	d3-MeFOSAA	573.0 / 419.0	16233.26	250.00
NEtFOSAA_1	584.0 / 419.0	3.82	d5-EtFOSAA	589.0 / 419.0	19192.99	250.00
NEtFOSAA_2	584.0 / 483.0	3.82	d5-EtFOSAA	589.0 / 419.0	19192.99	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	2018-10-17T19:57:45	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	1.57	13C3-PFBS	302.0 / 99.0	29228.78	232.25
PFBS_2	298.9 / 99.0	1.57	13C3-PFBS	302.0 / 99.0	29228.78	232.25
PFHxA_1	313.0 / 269.0	1.90	13C5-PFHxA	318.0 / 273.0	67688.32	250.00
PFHxA_2	313.0 / 119.0	1.89	13C5-PFHxA	318.0 / 273.0	67688.32	250.00
PFHpA_1	363.0 / 319.0	2.31	13C4-PFHpA	367.0 / 322.0	76065.72	250.00
PFHpA_2	363.0 / 169.0	2.31	13C4-PFHpA	367.0 / 322.0	76065.72	250.00
PFHxS_1	399.0 / 80.0	2.33	13C3-PFHxS	402.0 / 99.0	29708.48	236.50
PFHxS_2	399.0 / 99.0	2.33	13C3-PFHxS	402.0 / 99.0	29708.48	236.50
PFOA_1	413.0 / 369.0	2.73	13C8-PFOA	421.0 / 376.0	96880.10	250.00
PFOA_2	413.0 / 169.0	2.73	13C8-PFOA	421.0 / 376.0	96880.10	250.00
PFNA_1	463.0 / 419.0	3.13	13C9-PFNA	472.0 / 427.0	109970.74	250.00
PFNA_2	463.0 / 219.0	3.12	13C9-PFNA	472.0 / 427.0	109970.74	250.00
PFOS_1	499.0 / 80.0	3.12	13C8-PFOS	507.0 / 99.0	33822.33	239.25
PFOS_2	499.0 / 99.0	3.12	13C8-PFOS	507.0 / 99.0	33822.33	239.25
PFDA_1	513.0 / 469.0	3.49	13C6-PFDA	519.0 / 474.0	103376.35	250.00
PFDA_2	513.0 / 219.0	3.48	13C6-PFDA	519.0 / 474.0	103376.35	250.00
PFUnA_1	563.0 / 519.0	3.82	13C7-PFUnA	570.0 / 525.0	99154.47	250.00
PFUnA_2	563.0 / 269.0	3.81	13C7-PFUnA	570.0 / 525.0	99154.47	250.00
PFDoA_1	613.0 / 569.0	4.10	13C2-PFDoA	615.0 / 570.0	107747.25	250.00
PFDoA_2	613.0 / 319.0	4.10	13C2-PFDoA	615.0 / 570.0	107747.25	250.00
PFTrDA_1	663.0 / 619.0	4.35	13C2-PFTeDA	715.0 / 670.0	86008.02	250.00
PFTrDA_2	663.0 / 169.0	4.35	13C2-PFTeDA	715.0 / 670.0	86008.02	250.00
PFTeDA_1	713.0 / 669.0	4.58	13C2-PFTeDA	715.0 / 670.0	86008.02	250.00
PFTeDA_2	713.0 / 169.0	4.58	13C2-PFTeDA	715.0 / 670.0	86008.02	250.00
NMeFOSAA_1	570.0 / 419.0	3.65	d3-MeFOSAA	573.0 / 419.0	17661.42	250.00
NMeFOSAA_2	570.0 / 512.0	3.65	d3-MeFOSAA	573.0 / 419.0	17661.42	250.00
NEtFOSAA_1	584.0 / 419.0	3.81	d5-EtFOSAA	589.0 / 419.0	22570.27	250.00
NEtFOSAA_2	584.0 / 483.0	3.80	d5-EtFOSAA	589.0 / 419.0	22570.27	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	2018-10-17T20:08:39	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	1.57	13C3-PFBS	302.0 / 99.0	26105.02	232.25
PFBS_2	298.9 / 99.0	1.57	13C3-PFBS	302.0 / 99.0	26105.02	232.25
PFHxA_1	313.0 / 269.0	1.89	13C5-PFHxA	318.0 / 273.0	59853.55	250.00
PFHxA_2	313.0 / 119.0	1.89	13C5-PFHxA	318.0 / 273.0	59853.55	250.00
PFHpA_1	363.0 / 319.0	2.31	13C4-PFHpA	367.0 / 322.0	72363.27	250.00
PFHpA_2	363.0 / 169.0	2.31	13C4-PFHpA	367.0 / 322.0	72363.27	250.00
PFHxS_1	399.0 / 80.0	2.33	13C3-PFHxS	402.0 / 99.0	26459.07	236.50
PFHxS_2	399.0 / 99.0	2.33	13C3-PFHxS	402.0 / 99.0	26459.07	236.50
PFOA_1	413.0 / 369.0	2.72	13C8-PFOA	421.0 / 376.0	92242.14	250.00
PFOA_2	413.0 / 169.0	2.72	13C8-PFOA	421.0 / 376.0	92242.14	250.00
PFNA_1	463.0 / 419.0	3.12	13C9-PFNA	472.0 / 427.0	106517.52	250.00
PFNA_2	463.0 / 219.0	3.12	13C9-PFNA	472.0 / 427.0	106517.52	250.00
PFOS_1	499.0 / 80.0	3.12	13C8-PFOS	507.0 / 99.0	27084.38	239.25
PFOS_2	499.0 / 99.0	3.12	13C8-PFOS	507.0 / 99.0	27084.38	239.25
PFDA_1	513.0 / 469.0	3.48	13C6-PFDA	519.0 / 474.0	99092.64	250.00
PFDA_2	513.0 / 219.0	3.48	13C6-PFDA	519.0 / 474.0	99092.64	250.00
PFUnA_1	563.0 / 519.0	3.81	13C7-PFUnA	570.0 / 525.0	101859.96	250.00
PFUnA_2	563.0 / 269.0	3.81	13C7-PFUnA	570.0 / 525.0	101859.96	250.00
PFDoA_1	613.0 / 569.0	4.09	13C2-PFDoA	615.0 / 570.0	95394.66	250.00
PFDoA_2	613.0 / 319.0	4.09	13C2-PFDoA	615.0 / 570.0	95394.66	250.00
PFTrDA_1	663.0 / 619.0	4.35	13C2-PFTeDA	715.0 / 670.0	75947.40	250.00
PFTrDA_2	663.0 / 169.0	4.34	13C2-PFTeDA	715.0 / 670.0	75947.40	250.00
PFTeDA_1	713.0 / 669.0	4.57	13C2-PFTeDA	715.0 / 670.0	75947.40	250.00
PFTeDA_2	713.0 / 169.0	4.56	13C2-PFTeDA	715.0 / 670.0	75947.40	250.00
NMeFOSAA_1	570.0 / 419.0	3.63	d3-MeFOSAA	573.0 / 419.0	16616.33	250.00
NMeFOSAA_2	570.0 / 512.0	3.64	d3-MeFOSAA	573.0 / 419.0	16616.33	250.00
NEtFOSAA_1	584.0 / 419.0	3.80	d5-EtFOSAA	589.0 / 419.0	16999.01	250.00
NEtFOSAA_2	584.0 / 483.0	3.80	d5-EtFOSAA	589.0 / 419.0	16999.01	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	2018-10-17T20:19:32	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	24473.16	232.25
PFBS_2	298.9 / 99.0	1.56	13C3-PFBS	302.0 / 99.0	24473.16	232.25
PFHxA_1	313.0 / 269.0	1.89	13C5-PFHxA	318.0 / 273.0	58835.13	250.00
PFHxA_2	313.0 / 119.0	1.89	13C5-PFHxA	318.0 / 273.0	58835.13	250.00
PFHpA_1	363.0 / 319.0	2.30	13C4-PFHpA	367.0 / 322.0	73044.35	250.00
PFHpA_2	363.0 / 169.0	2.30	13C4-PFHpA	367.0 / 322.0	73044.35	250.00
PFHxS_1	399.0 / 80.0	2.32	13C3-PFHxS	402.0 / 99.0	23463.21	236.50
PFHxS_2	399.0 / 99.0	2.32	13C3-PFHxS	402.0 / 99.0	23463.21	236.50
PFOA_1	413.0 / 369.0	2.71	13C8-PFOA	421.0 / 376.0	89256.01	250.00
PFOA_2	413.0 / 169.0	2.71	13C8-PFOA	421.0 / 376.0	89256.01	250.00
PFNA_1	463.0 / 419.0	3.11	13C9-PFNA	472.0 / 427.0	96659.60	250.00
PFNA_2	463.0 / 219.0	3.11	13C9-PFNA	472.0 / 427.0	96659.60	250.00
PFOS_1	499.0 / 80.0	3.11	13C8-PFOS	507.0 / 99.0	28834.11	239.25
PFOS_2	499.0 / 99.0	3.11	13C8-PFOS	507.0 / 99.0	28834.11	239.25
PFDA_1	513.0 / 469.0	3.47	13C6-PFDA	519.0 / 474.0	97605.58	250.00
PFDA_2	513.0 / 219.0	3.47	13C6-PFDA	519.0 / 474.0	97605.58	250.00
PFUnA_1	563.0 / 519.0	3.80	13C7-PFUnA	570.0 / 525.0	85263.94	250.00
PFUnA_2	563.0 / 269.0	3.80	13C7-PFUnA	570.0 / 525.0	85263.94	250.00
PFDoA_1	613.0 / 569.0	4.09	13C2-PFDoA	615.0 / 570.0	95903.63	250.00
PFDoA_2	613.0 / 319.0	4.09	13C2-PFDoA	615.0 / 570.0	95903.63	250.00
PFTrDA_1	663.0 / 619.0	4.34	13C2-PFTeDA	715.0 / 670.0	72740.35	250.00
PFTrDA_2	663.0 / 169.0	4.34	13C2-PFTeDA	715.0 / 670.0	72740.35	250.00
PFTeDA_1	713.0 / 669.0	4.56	13C2-PFTeDA	715.0 / 670.0	72740.35	250.00
PFTeDA_2	713.0 / 169.0	4.56	13C2-PFTeDA	715.0 / 670.0	72740.35	250.00
NMeFOSAA_1	570.0 / 419.0	3.63	d3-MeFOSAA	573.0 / 419.0	15280.98	250.00
NMeFOSAA_2	570.0 / 512.0	3.63	d3-MeFOSAA	573.0 / 419.0	15280.98	250.00
NEtFOSAA_1	584.0 / 419.0	3.80	d5-EtFOSAA	589.0 / 419.0	19201.47	250.00
NEtFOSAA_2	584.0 / 483.0	3.80	d5-EtFOSAA	589.0 / 419.0	19201.47	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	2018-10-17T20:30:23	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	1.57	13C3-PFBS	302.0 / 99.0	26519.94	232.25
PFBS_2	298.9 / 99.0	1.56	13C3-PFBS	302.0 / 99.0	26519.94	232.25
PFHxA_1	313.0 / 269.0	1.89	13C5-PFHxA	318.0 / 273.0	61167.94	250.00
PFHxA_2	313.0 / 119.0	1.89	13C5-PFHxA	318.0 / 273.0	61167.94	250.00
PFHpA_1	363.0 / 319.0	2.30	13C4-PFHpA	367.0 / 322.0	69461.61	250.00
PFHpA_2	363.0 / 169.0	2.30	13C4-PFHpA	367.0 / 322.0	69461.61	250.00
PFHxS_1	399.0 / 80.0	2.32	13C3-PFHxS	402.0 / 99.0	22669.25	236.50
PFHxS_2	399.0 / 99.0	2.32	13C3-PFHxS	402.0 / 99.0	22669.25	236.50
PFOA_1	413.0 / 369.0	2.71	13C8-PFOA	421.0 / 376.0	84283.75	250.00
PFOA_2	413.0 / 169.0	2.71	13C8-PFOA	421.0 / 376.0	84283.75	250.00
PFNA_1	463.0 / 419.0	3.11	13C9-PFNA	472.0 / 427.0	93667.25	250.00
PFNA_2	463.0 / 219.0	3.11	13C9-PFNA	472.0 / 427.0	93667.25	250.00
PFOS_1	499.0 / 80.0	3.11	13C8-PFOS	507.0 / 99.0	28376.74	239.25
PFOS_2	499.0 / 99.0	3.11	13C8-PFOS	507.0 / 99.0	28376.74	239.25
PFDA_1	513.0 / 469.0	3.47	13C6-PFDA	519.0 / 474.0	97196.35	250.00
PFDA_2	513.0 / 219.0	3.47	13C6-PFDA	519.0 / 474.0	97196.35	250.00
PFUnA_1	563.0 / 519.0	3.80	13C7-PFUnA	570.0 / 525.0	81503.66	250.00
PFUnA_2	563.0 / 269.0	3.80	13C7-PFUnA	570.0 / 525.0	81503.66	250.00
PFDoA_1	613.0 / 569.0	4.09	13C2-PFDoA	615.0 / 570.0	87520.82	250.00
PFDoA_2	613.0 / 319.0	4.09	13C2-PFDoA	615.0 / 570.0	87520.82	250.00
PFTrDA_1	663.0 / 619.0	4.33	13C2-PFTeDA	715.0 / 670.0	71548.15	250.00
PFTrDA_2	663.0 / 169.0	4.33	13C2-PFTeDA	715.0 / 670.0	71548.15	250.00
PFTeDA_1	713.0 / 669.0	4.56	13C2-PFTeDA	715.0 / 670.0	71548.15	250.00
PFTeDA_2	713.0 / 169.0	4.55	13C2-PFTeDA	715.0 / 670.0	71548.15	250.00
NMeFOSAA_1	570.0 / 419.0	3.63	d3-MeFOSAA	573.0 / 419.0	16063.93	250.00
NMeFOSAA_2	570.0 / 512.0	3.63	d3-MeFOSAA	573.0 / 419.0	16063.93	250.00
NEtFOSAA_1	584.0 / 419.0	3.79	d5-EtFOSAA	589.0 / 419.0	16992.28	250.00
NEtFOSAA_2	584.0 / 483.0	3.79	d5-EtFOSAA	589.0 / 419.0	16992.28	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	2018-10-17T20:41:14	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	30399.13	232.25
PFBS_2	298.9 / 99.0	1.56	13C3-PFBS	302.0 / 99.0	30399.13	232.25
PFHxA_1	313.0 / 269.0	1.88	13C5-PFHxA	318.0 / 273.0	67298.42	250.00
PFHxA_2	313.0 / 119.0	1.88	13C5-PFHxA	318.0 / 273.0	67298.42	250.00
PFHpA_1	363.0 / 319.0	2.30	13C4-PFHpA	367.0 / 322.0	72755.48	250.00
PFHpA_2	363.0 / 169.0	2.30	13C4-PFHpA	367.0 / 322.0	72755.48	250.00
PFHxS_1	399.0 / 80.0	2.32	13C3-PFHxS	402.0 / 99.0	27186.76	236.50
PFHxS_2	399.0 / 99.0	2.32	13C3-PFHxS	402.0 / 99.0	27186.76	236.50
PFOA_1	413.0 / 369.0	2.71	13C8-PFOA	421.0 / 376.0	85622.31	250.00
PFOA_2	413.0 / 169.0	2.71	13C8-PFOA	421.0 / 376.0	85622.31	250.00
PFNA_1	463.0 / 419.0	3.11	13C9-PFNA	472.0 / 427.0	103069.19	250.00
PFNA_2	463.0 / 219.0	3.11	13C9-PFNA	472.0 / 427.0	103069.19	250.00
PFOS_1	499.0 / 80.0	3.10	13C8-PFOS	507.0 / 99.0	30401.17	239.25
PFOS_2	499.0 / 99.0	3.10	13C8-PFOS	507.0 / 99.0	30401.17	239.25
PFDA_1	513.0 / 469.0	3.47	13C6-PFDA	519.0 / 474.0	101281.21	250.00
PFDA_2	513.0 / 219.0	3.46	13C6-PFDA	519.0 / 474.0	101281.21	250.00
PFUnA_1	563.0 / 519.0	3.79	13C7-PFUnA	570.0 / 525.0	91776.59	250.00
PFUnA_2	563.0 / 269.0	3.79	13C7-PFUnA	570.0 / 525.0	91776.59	250.00
PFDoA_1	613.0 / 569.0	4.08	13C2-PFDoA	615.0 / 570.0	102072.61	250.00
PFDoA_2	613.0 / 319.0	4.08	13C2-PFDoA	615.0 / 570.0	102072.61	250.00
PFTrDA_1	663.0 / 619.0	4.33	13C2-PFTeDA	715.0 / 670.0	84788.29	250.00
PFTrDA_2	663.0 / 169.0	4.33	13C2-PFTeDA	715.0 / 670.0	84788.29	250.00
PFTeDA_1	713.0 / 669.0	4.55	13C2-PFTeDA	715.0 / 670.0	84788.29	250.00
PFTeDA_2	713.0 / 169.0	4.54	13C2-PFTeDA	715.0 / 670.0	84788.29	250.00
NMeFOSAA_1	570.0 / 419.0	3.62	d3-MeFOSAA	573.0 / 419.0	18223.77	250.00
NMeFOSAA_2	570.0 / 512.0	3.62	d3-MeFOSAA	573.0 / 419.0	18223.77	250.00
NEtFOSAA_1	584.0 / 419.0	3.79	d5-EtFOSAA	589.0 / 419.0	20489.99	250.00
NEtFOSAA_2	584.0 / 483.0	3.79	d5-EtFOSAA	589.0 / 419.0	20489.99	250.00

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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	2018-10-17T20:52:06	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	29660.00	232.25
PFBS_2	298.9 / 99.0	1.56	13C3-PFBS	302.0 / 99.0	29660.00	232.25
PFHxA_1	313.0 / 269.0	1.89	13C5-PFHxA	318.0 / 273.0	63134.84	250.00
PFHxA_2	313.0 / 119.0	1.88	13C5-PFHxA	318.0 / 273.0	63134.84	250.00
PFHpA_1	363.0 / 319.0	2.29	13C4-PFHpA	367.0 / 322.0	66285.64	250.00
PFHpA_2	363.0 / 169.0	2.30	13C4-PFHpA	367.0 / 322.0	66285.64	250.00
PFHxS_1	399.0 / 80.0	2.32	13C3-PFHxS	402.0 / 99.0	23705.87	236.50
PFHxS_2	399.0 / 99.0	2.32	13C3-PFHxS	402.0 / 99.0	23705.87	236.50
PFOA_1	413.0 / 369.0	2.71	13C8-PFOA	421.0 / 376.0	77573.52	250.00
PFOA_2	413.0 / 169.0	2.71	13C8-PFOA	421.0 / 376.0	77573.52	250.00
PFNA_1	463.0 / 419.0	3.11	13C9-PFNA	472.0 / 427.0	93994.33	250.00
PFNA_2	463.0 / 219.0	3.11	13C9-PFNA	472.0 / 427.0	93994.33	250.00
PFOS_1	499.0 / 80.0	3.10	13C8-PFOS	507.0 / 99.0	25276.93	239.25
PFOS_2	499.0 / 99.0	3.10	13C8-PFOS	507.0 / 99.0	25276.93	239.25
PFDA_1	513.0 / 469.0	3.47	13C6-PFDA	519.0 / 474.0	88095.93	250.00
PFDA_2	513.0 / 219.0	3.47	13C6-PFDA	519.0 / 474.0	88095.93	250.00
PFUnA_1	563.0 / 519.0	3.79	13C7-PFUnA	570.0 / 525.0	82754.96	250.00
PFUnA_2	563.0 / 269.0	3.79	13C7-PFUnA	570.0 / 525.0	82754.96	250.00
PFDoA_1	613.0 / 569.0	4.07	13C2-PFDoA	615.0 / 570.0	99995.01	250.00
PFDoA_2	613.0 / 319.0	4.07	13C2-PFDoA	615.0 / 570.0	99995.01	250.00
PFTrDA_1	663.0 / 619.0	4.32	13C2-PFTeDA	715.0 / 670.0	81617.66	250.00
PFTrDA_2	663.0 / 169.0	4.32	13C2-PFTeDA	715.0 / 670.0	81617.66	250.00
PFTeDA_1	713.0 / 669.0	4.54	13C2-PFTeDA	715.0 / 670.0	81617.66	250.00
PFTeDA_2	713.0 / 169.0	4.54	13C2-PFTeDA	715.0 / 670.0	81617.66	250.00
NMeFOSAA_1	570.0 / 419.0	3.62	d3-MeFOSAA	573.0 / 419.0	18782.71	250.00
NMeFOSAA_2	570.0 / 512.0	3.62	d3-MeFOSAA	573.0 / 419.0	18782.71	250.00
NEtFOSAA_1	584.0 / 419.0	3.78	d5-EtFOSAA	589.0 / 419.0	16682.63	250.00
NEtFOSAA_2	584.0 / 483.0	3.78	d5-EtFOSAA	589.0 / 419.0	16682.63	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	2018-10-17T19:46:52	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	4.10	13C2-PFDA	515.0 / 470.0	100139.46	250.00
d3-MeFOSAA	573.0 / 419.0	3.65	13C4-PFOS	503.0 / 99.0	29846.55	239.25
d5-EtFOSAA	589.0 / 419.0	3.81	13C4-PFOS	503.0 / 99.0	29846.55	239.25
13C5-PFHxA	318.0 / 273.0	1.89	13C2-PFOA	415.0 / 370.0	79095.63	250.00
13C4-PFHpA	367.0 / 322.0	2.30	13C2-PFOA	415.0 / 370.0	79095.63	250.00
13C8-PFOA	421.0 / 376.0	2.72	13C2-PFOA	415.0 / 370.0	79095.63	250.00
13C9-PFNA	472.0 / 427.0	3.12	13C2-PFOA	415.0 / 370.0	79095.63	250.00
13C6-PFDA	519.0 / 474.0	3.48	13C2-PFDA	515.0 / 470.0	100139.46	250.00
13C7-PFUnA	570.0 / 525.0	3.81	13C2-PFDA	515.0 / 470.0	100139.46	250.00
13C2-PFTeDA	715.0 / 670.0	4.58	13C2-PFDA	515.0 / 470.0	100139.46	250.00
13C3-PFBS	302.0 / 99.0	1.55	13C4-PFOS	503.0 / 99.0	29846.55	239.25
13C3-PFHxS	402.0 / 99.0	2.33	13C4-PFOS	503.0 / 99.0	29846.55	239.25
13C8-PFOS	507.0 / 99.0	3.12	13C4-PFOS	503.0 / 99.0	29846.55	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	2018-10-17T19:57:45	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	4.09	13C2-PFDA	515.0 / 470.0	103883.83	250.00
d3-MeFOSAA	573.0 / 419.0	3.64	13C4-PFOS	503.0 / 99.0	34856.85	239.25
d5-EtFOSAA	589.0 / 419.0	3.80	13C4-PFOS	503.0 / 99.0	34856.85	239.25
13C5-PFHxA	318.0 / 273.0	1.89	13C2-PFOA	415.0 / 370.0	89971.31	250.00
13C4-PFHpA	367.0 / 322.0	2.30	13C2-PFOA	415.0 / 370.0	89971.31	250.00
13C8-PFOA	421.0 / 376.0	2.72	13C2-PFOA	415.0 / 370.0	89971.31	250.00
13C9-PFNA	472.0 / 427.0	3.11	13C2-PFOA	415.0 / 370.0	89971.31	250.00
13C6-PFDA	519.0 / 474.0	3.48	13C2-PFDA	515.0 / 470.0	103883.83	250.00
13C7-PFUnA	570.0 / 525.0	3.80	13C2-PFDA	515.0 / 470.0	103883.83	250.00
13C2-PFTeDA	715.0 / 670.0	4.57	13C2-PFDA	515.0 / 470.0	103883.83	250.00
13C3-PFBS	302.0 / 99.0	1.55	13C4-PFOS	503.0 / 99.0	34856.85	239.25
13C3-PFHxS	402.0 / 99.0	2.32	13C4-PFOS	503.0 / 99.0	34856.85	239.25
13C8-PFOS	507.0 / 99.0	3.11	13C4-PFOS	503.0 / 99.0	34856.85	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	2018-10-17T20:08:39	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	4.08	13C2-PFDA	515.0 / 470.0	98052.33	250.00
d3-MeFOSAA	573.0 / 419.0	3.63	13C4-PFOS	503.0 / 99.0	30684.77	239.25
d5-EtFOSAA	589.0 / 419.0	3.79	13C4-PFOS	503.0 / 99.0	30684.77	239.25
13C5-PFHxA	318.0 / 273.0	1.88	13C2-PFOA	415.0 / 370.0	87799.30	250.00
13C4-PFHpA	367.0 / 322.0	2.29	13C2-PFOA	415.0 / 370.0	87799.30	250.00
13C8-PFOA	421.0 / 376.0	2.71	13C2-PFOA	415.0 / 370.0	87799.30	250.00
13C9-PFNA	472.0 / 427.0	3.10	13C2-PFOA	415.0 / 370.0	87799.30	250.00
13C6-PFDA	519.0 / 474.0	3.47	13C2-PFDA	515.0 / 470.0	98052.33	250.00
13C7-PFUnA	570.0 / 525.0	3.79	13C2-PFDA	515.0 / 470.0	98052.33	250.00
13C2-PFTeDA	715.0 / 670.0	4.56	13C2-PFDA	515.0 / 470.0	98052.33	250.00
13C3-PFBS	302.0 / 99.0	1.55	13C4-PFOS	503.0 / 99.0	30684.77	239.25
13C3-PFHxS	402.0 / 99.0	2.32	13C4-PFOS	503.0 / 99.0	30684.77	239.25
13C8-PFOS	507.0 / 99.0	3.10	13C4-PFOS	503.0 / 99.0	30684.77	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	2018-10-17T20:19:32	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	4.08	13C2-PFDA	515.0 / 470.0	99978.99	250.00
d3-MeFOSAA	573.0 / 419.0	3.62	13C4-PFOS	503.0 / 99.0	30962.75	239.25
d5-EtFOSAA	589.0 / 419.0	3.79	13C4-PFOS	503.0 / 99.0	30962.75	239.25
13C5-PFHxA	318.0 / 273.0	1.88	13C2-PFOA	415.0 / 370.0	84567.91	250.00
13C4-PFHpA	367.0 / 322.0	2.29	13C2-PFOA	415.0 / 370.0	84567.91	250.00
13C8-PFOA	421.0 / 376.0	2.70	13C2-PFOA	415.0 / 370.0	84567.91	250.00
13C9-PFNA	472.0 / 427.0	3.10	13C2-PFOA	415.0 / 370.0	84567.91	250.00
13C6-PFDA	519.0 / 474.0	3.46	13C2-PFDA	515.0 / 470.0	99978.99	250.00
13C7-PFUnA	570.0 / 525.0	3.78	13C2-PFDA	515.0 / 470.0	99978.99	250.00
13C2-PFTeDA	715.0 / 670.0	4.55	13C2-PFDA	515.0 / 470.0	99978.99	250.00
13C3-PFBS	302.0 / 99.0	1.55	13C4-PFOS	503.0 / 99.0	30962.75	239.25
13C3-PFHxS	402.0 / 99.0	2.32	13C4-PFOS	503.0 / 99.0	30962.75	239.25
13C8-PFOS	507.0 / 99.0	3.10	13C4-PFOS	503.0 / 99.0	30962.75	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	2018-10-17T20:30:23	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	4.07	13C2-PFDA	515.0 / 470.0	90129.70	250.00
d3-MeFOSAA	573.0 / 419.0	3.62	13C4-PFOS	503.0 / 99.0	31518.26	239.25
d5-EtFOSAA	589.0 / 419.0	3.78	13C4-PFOS	503.0 / 99.0	31518.26	239.25
13C5-PFHxA	318.0 / 273.0	1.88	13C2-PFOA	415.0 / 370.0	80369.12	250.00
13C4-PFHpA	367.0 / 322.0	2.29	13C2-PFOA	415.0 / 370.0	80369.12	250.00
13C8-PFOA	421.0 / 376.0	2.70	13C2-PFOA	415.0 / 370.0	80369.12	250.00
13C9-PFNA	472.0 / 427.0	3.10	13C2-PFOA	415.0 / 370.0	80369.12	250.00
13C6-PFDA	519.0 / 474.0	3.46	13C2-PFDA	515.0 / 470.0	90129.70	250.00
13C7-PFUnA	570.0 / 525.0	3.78	13C2-PFDA	515.0 / 470.0	90129.70	250.00
13C2-PFTeDA	715.0 / 670.0	4.55	13C2-PFDA	515.0 / 470.0	90129.70	250.00
13C3-PFBS	302.0 / 99.0	1.55	13C4-PFOS	503.0 / 99.0	31518.26	239.25
13C3-PFHxS	402.0 / 99.0	2.31	13C4-PFOS	503.0 / 99.0	31518.26	239.25
13C8-PFOS	507.0 / 99.0	3.10	13C4-PFOS	503.0 / 99.0	31518.26	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	2018-10-17T20:41:14	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	4.07	13C2-PFDA	515.0 / 470.0	104169.70	250.00
d3-MeFOSAA	573.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	29589.19	239.25
d5-EtFOSAA	589.0 / 419.0	3.78	13C4-PFOS	503.0 / 99.0	29589.19	239.25
13C5-PFHxA	318.0 / 273.0	1.87	13C2-PFOA	415.0 / 370.0	85964.25	250.00
13C4-PFHpA	367.0 / 322.0	2.28	13C2-PFOA	415.0 / 370.0	85964.25	250.00
13C8-PFOA	421.0 / 376.0	2.70	13C2-PFOA	415.0 / 370.0	85964.25	250.00
13C9-PFNA	472.0 / 427.0	3.09	13C2-PFOA	415.0 / 370.0	85964.25	250.00
13C6-PFDA	519.0 / 474.0	3.45	13C2-PFDA	515.0 / 470.0	104169.70	250.00
13C7-PFUnA	570.0 / 525.0	3.78	13C2-PFDA	515.0 / 470.0	104169.70	250.00
13C2-PFTeDA	715.0 / 670.0	4.54	13C2-PFDA	515.0 / 470.0	104169.70	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	29589.19	239.25
13C3-PFHxS	402.0 / 99.0	2.31	13C4-PFOS	503.0 / 99.0	29589.19	239.25
13C8-PFOS	507.0 / 99.0	3.09	13C4-PFOS	503.0 / 99.0	29589.19	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	2018-10-17T20:52:06	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0620_18-0621_18-0622_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	4.07	13C2-PFDA	515.0 / 470.0	100765.46	250.00
d3-MeFOSAA	573.0 / 419.0	3.62	13C4-PFOS	503.0 / 99.0	26984.04	239.25
d5-EtFOSAA	589.0 / 419.0	3.78	13C4-PFOS	503.0 / 99.0	26984.04	239.25
13C5-PFHxA	318.0 / 273.0	1.87	13C2-PFOA	415.0 / 370.0	86636.81	250.00
13C4-PFHpA	367.0 / 322.0	2.28	13C2-PFOA	415.0 / 370.0	86636.81	250.00
13C8-PFOA	421.0 / 376.0	2.70	13C2-PFOA	415.0 / 370.0	86636.81	250.00
13C9-PFNA	472.0 / 427.0	3.09	13C2-PFOA	415.0 / 370.0	86636.81	250.00
13C6-PFDA	519.0 / 474.0	3.45	13C2-PFDA	515.0 / 470.0	100765.46	250.00
13C7-PFUnA	570.0 / 525.0	3.78	13C2-PFDA	515.0 / 470.0	100765.46	250.00
13C2-PFTeDA	715.0 / 670.0	4.54	13C2-PFDA	515.0 / 470.0	100765.46	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	26984.04	239.25
13C3-PFHxS	402.0 / 99.0	2.31	13C4-PFOS	503.0 / 99.0	26984.04	239.25
13C8-PFOS	507.0 / 99.0	3.09	13C4-PFOS	503.0 / 99.0	26984.04	239.25

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:13:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.56	877.420602	1010.00	86.87
PFBS_2	298.9 / 99.0	1.56	838.659062	1010.00	83.04
PFHxA_1	313.0 / 269.0	1.89	1006.652936	1010.00	99.67
PFHxA_2	313.0 / 119.0	1.89	896.376115	1010.00	88.75
PFHpA_1	363.0 / 319.0	2.30	856.292979	1000.00	85.63
PFHpA_2	363.0 / 169.0	2.29	976.724688	1000.00	97.67
PFHxS_1	399.0 / 80.0	2.32	998.233289	1010.00	98.83
PFHxS_2	399.0 / 99.0	2.32	992.688608	1010.00	98.29
PFOA_1	413.0 / 369.0	2.71	930.879127	1000.00	93.09
PFOA_2	413.0 / 169.0	2.71	872.168076	1000.00	87.22
PFNA_1	463.0 / 419.0	3.11	1034.052055	1000.00	103.41
PFNA_2	463.0 / 219.0	3.10	1037.625087	1000.00	103.76
PFOS_1	499.0 / 80.0	3.10	906.626239	1000.00	90.66
PFOS_2	499.0 / 99.0	3.10	919.881718	1000.00	91.99
PFDA_1	513.0 / 469.0	3.46	983.979238	1000.00	98.40
PFDA_2	513.0 / 219.0	3.46	976.593938	1000.00	97.66
PFUnA_1	563.0 / 519.0	3.79	923.159866	1000.00	92.32
PFUnA_2	563.0 / 269.0	3.79	975.741234	1000.00	97.57
PFDoA_1	613.0 / 569.0	4.07	980.552902	1000.00	98.06
PFDoA_2	613.0 / 319.0	4.07	934.947666	1000.00	93.49
PFTrDA_1	663.0 / 619.0	4.32	1073.075185	1000.00	107.31
PFTrDA_2	663.0 / 169.0	4.32	1041.820014	1000.00	104.18
PFTeDA_1	713.0 / 669.0	4.54	1020.055697	1000.00	102.01
PFTeDA_2	713.0 / 169.0	4.54	1079.815842	1000.00	107.98
NMeFOSAA_1	570.0 / 419.0	3.62	945.129517	1000.00	94.51
NMeFOSAA_2	570.0 / 512.0	3.62	965.108458	1000.00	96.51
NEtFOSAA_1	584.0 / 419.0	3.78	1244.646852	1000.00	124.46
NEtFOSAA_2	584.0 / 483.0	3.78	1233.660110	1000.00	123.37

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QC Summary Report

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Sample Name	KB75 ISC	**Injection Vial**	1
Sample ID	ISC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T16:26:43	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.57	484.754015	505.00	95.99
PFBS_2	298.9 / 99.0	1.57	460.129667	505.00	91.11
PFHxA_1	313.0 / 269.0	1.90	499.859458	505.00	98.98
PFHxA_2	313.0 / 119.0	1.90	576.477169	505.00	114.15
PFHpA_1	363.0 / 319.0	2.31	471.017380	500.00	94.20
PFHpA_2	363.0 / 169.0	2.31	436.165761	500.00	87.23
PFHxS_1	399.0 / 80.0	2.34	513.112977	505.00	101.61
PFHxS_2	399.0 / 99.0	2.33	489.788084	505.00	96.99
PFOA_1	413.0 / 369.0	2.73	515.841656	500.00	103.17
PFOA_2	413.0 / 169.0	2.73	514.415457	500.00	102.88
PFNA_1	463.0 / 419.0	3.13	520.080727	500.00	104.02
PFNA_2	463.0 / 219.0	3.13	556.083264	500.00	111.22
PFOS_1	499.0 / 80.0	3.13	436.705182	500.00	87.34
PFOS_2	499.0 / 99.0	3.12	453.370724	500.00	90.67
PFDA_1	513.0 / 469.0	3.49	476.762125	500.00	95.35
PFDA_2	513.0 / 219.0	3.49	450.324500	500.00	90.06
PFUnA_1	563.0 / 519.0	3.82	491.199250	500.00	98.24
PFUnA_2	563.0 / 269.0	3.82	460.483278	500.00	92.10
PFDoA_1	613.0 / 569.0	4.10	501.048127	500.00	100.21
PFDoA_2	613.0 / 319.0	4.10	559.603662	500.00	111.92
PFTrDA_1	663.0 / 619.0	4.35	482.323681	500.00	96.46
PFTrDA_2	663.0 / 169.0	4.35	495.196388	500.00	99.04
PFTeDA_1	713.0 / 669.0	4.57	504.774637	500.00	100.95
PFTeDA_2	713.0 / 169.0	4.57	502.172391	500.00	100.43
NMeFOSAA_1	570.0 / 419.0	3.65	532.487486	500.00	106.50
NMeFOSAA_2	570.0 / 512.0	3.65	388.465632	500.00	77.69
NEtFOSAA_1	584.0 / 419.0	3.81	553.294527	500.00	110.66
NEtFOSAA_2	584.0 / 483.0	3.81	589.430119	500.00	117.89

QC Summary Report

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Sample Name	KB76	**Injection Vial**	11
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:27:08	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.55	1048.321748	1010.00	103.79
PFBS_2	298.9 / 99.0	1.55	1024.409959	1010.00	101.43
PFHxA_1	313.0 / 269.0	1.87	1022.567378	1010.00	101.24
PFHxA_2	313.0 / 119.0	1.88	1197.578194	1010.00	118.57
PFHpA_1	363.0 / 319.0	2.28	934.075677	1000.00	93.41
PFHpA_2	363.0 / 169.0	2.28	817.388429	1000.00	81.74
PFHxS_1	399.0 / 80.0	2.31	1084.891607	1010.00	107.42
PFHxS_2	399.0 / 99.0	2.31	1082.429708	1010.00	107.17
PFOA_1	413.0 / 369.0	2.70	938.657255	1000.00	93.87
PFOA_2	413.0 / 169.0	2.69	892.695819	1000.00	89.27
PFNA_1	463.0 / 419.0	3.10	1048.340706	1000.00	104.83
PFNA_2	463.0 / 219.0	3.09	1126.491410	1000.00	112.65
PFOS_1	499.0 / 80.0	3.09	966.951370	1000.00	96.70
PFOS_2	499.0 / 99.0	3.09	936.478922	1000.00	93.65
PFDA_1	513.0 / 469.0	3.45	1010.730940	1000.00	101.07
PFDA_2	513.0 / 219.0	3.45	834.839957	1000.00	83.48
PFUnA_1	563.0 / 519.0	3.77	1006.996895	1000.00	100.70
PFUnA_2	563.0 / 269.0	3.77	1014.507162	1000.00	101.45
PFDoA_1	613.0 / 569.0	4.05	988.089208	1000.00	98.81
PFDoA_2	613.0 / 319.0	4.05	978.390371	1000.00	97.84
PFTrDA_1	663.0 / 619.0	4.29	1012.392995	1000.00	101.24
PFTrDA_2	663.0 / 169.0	4.29	1044.843221	1000.00	104.48
PFTeDA_1	713.0 / 669.0	4.50	1046.919582	1000.00	104.69
PFTeDA_2	713.0 / 169.0	4.50	1077.241305	1000.00	107.72
NMeFOSAA_1	570.0 / 419.0	3.60	1049.852049	1000.00	104.99
NMeFOSAA_2	570.0 / 512.0	3.60	1030.316997	1000.00	103.03
NEtFOSAA_1	584.0 / 419.0	3.76	1083.421759	1000.00	108.34
NEtFOSAA_2	584.0 / 483.0	3.76	1253.844564	1000.00	125.38

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QC Summary Report

Sample Name	KB77	**Injection Vial**	23
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:37:35	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.54	2672.317878	2525.00	105.83
PFBS_2	298.9 / 99.0	1.54	2758.432300	2525.00	109.24
PFHxA_1	313.0 / 269.0	1.86	2564.322453	2525.00	101.56
PFHxA_2	313.0 / 119.0	1.86	2609.278225	2525.00	103.34
PFHpA_1	363.0 / 319.0	2.27	2240.068106	2500.00	89.60
PFHpA_2	363.0 / 169.0	2.27	2218.739105	2500.00	88.75
PFHxS_1	399.0 / 80.0	2.30	2402.488339	2525.00	95.15
PFHxS_2	399.0 / 99.0	2.30	2478.195264	2525.00	98.15
PFOA_1	413.0 / 369.0	2.69	2519.795119	2500.00	100.79
PFOA_2	413.0 / 169.0	2.68	2349.298766	2500.00	93.97
PFNA_1	463.0 / 419.0	3.08	2661.000914	2500.00	106.44
PFNA_2	463.0 / 219.0	3.08	2961.935461	2500.00	118.48
PFOS_1	499.0 / 80.0	3.08	2407.311089	2500.00	96.29
PFOS_2	499.0 / 99.0	3.08	2431.649988	2500.00	97.27
PFDA_1	513.0 / 469.0	3.43	2234.853631	2500.00	89.39
PFDA_2	513.0 / 219.0	3.44	2091.599285	2500.00	83.66
PFUnA_1	563.0 / 519.0	3.75	2312.985334	2500.00	92.52
PFUnA_2	563.0 / 269.0	3.75	2455.382545	2500.00	98.22
PFDoA_1	613.0 / 569.0	4.03	2621.017342	2500.00	104.84
PFDoA_2	613.0 / 319.0	4.03	2645.760726	2500.00	105.83
PFTrDA_1	663.0 / 619.0	4.27	2712.212493	2500.00	108.49
PFTrDA_2	663.0 / 169.0	4.27	2776.673206	2500.00	111.07
PFTeDA_1	713.0 / 669.0	4.49	2617.381212	2500.00	104.70
PFTeDA_2	713.0 / 169.0	4.48	2633.143989	2500.00	105.33
NMeFOSAA_1	570.0 / 419.0	3.59	2705.860683	2500.00	108.23
NMeFOSAA_2	570.0 / 512.0	3.59	2420.996661	2500.00	96.84
NEtFOSAA_1	584.0 / 419.0	3.75	2363.357841	2500.00	94.53
NEtFOSAA_2	584.0 / 483.0	3.75	3292.311563	2500.00	131.69

QC Summary Report

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Sample Name	KB76	**Injection Vial**	33
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:26:13	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.54	874.223416	1010.00	86.56
PFBS_2	298.9 / 99.0	1.54	876.271485	1010.00	86.76
PFHxA_1	313.0 / 269.0	1.86	972.288490	1010.00	96.27
PFHxA_2	313.0 / 119.0	1.86	942.625482	1010.00	93.33
PFHpA_1	363.0 / 319.0	2.27	974.674424	1000.00	97.47
PFHpA_2	363.0 / 169.0	2.28	867.840170	1000.00	86.78
PFHxS_1	399.0 / 80.0	2.29	1151.247983	1010.00	113.98
PFHxS_2	399.0 / 99.0	2.29	1164.551186	1010.00	115.30
PFOA_1	413.0 / 369.0	2.68	991.177164	1000.00	99.12
PFOA_2	413.0 / 169.0	2.68	996.581851	1000.00	99.66
PFNA_1	463.0 / 419.0	3.08	1013.796384	1000.00	101.38
PFNA_2	463.0 / 219.0	3.08	1052.147681	1000.00	105.21
PFOS_1	499.0 / 80.0	3.08	1057.425318	1000.00	105.74
PFOS_2	499.0 / 99.0	3.08	1048.089183	1000.00	104.81
PFDA_1	513.0 / 469.0	3.43	988.700420	1000.00	98.87
PFDA_2	513.0 / 219.0	3.43	998.869023	1000.00	99.89
PFUnA_1	563.0 / 519.0	3.75	1112.267088	1000.00	111.23
PFUnA_2	563.0 / 269.0	3.75	1147.339086	1000.00	114.73
PFDoA_1	613.0 / 569.0	4.03	1009.243631	1000.00	100.92
PFDoA_2	613.0 / 319.0	4.03	1034.662367	1000.00	103.47
PFTrDA_1	663.0 / 619.0	4.27	1012.842974	1000.00	101.28
PFTrDA_2	663.0 / 169.0	4.27	1033.271463	1000.00	103.33
PFTeDA_1	713.0 / 669.0	4.49	969.058608	1000.00	96.91
PFTeDA_2	713.0 / 169.0	4.48	980.312845	1000.00	98.03
NMeFOSAA_1	570.0 / 419.0	3.58	1000.060500	1000.00	100.01
NMeFOSAA_2	570.0 / 512.0	3.58	944.720403	1000.00	94.47
NEtFOSAA_1	584.0 / 419.0	3.74	988.284623	1000.00	98.83
NEtFOSAA_2	584.0 / 483.0	3.74	1081.056675	1000.00	108.11

Sample Name	KB77	**Injection Vial**	43
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:14:50	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.54	2460.460121	2525.00	97.44
PFBS_2	298.9 / 99.0	1.54	2414.918647	2525.00	95.64
PFHxA_1	313.0 / 269.0	1.86	2593.862175	2525.00	102.73
PFHxA_2	313.0 / 119.0	1.86	2480.096837	2525.00	98.22
PFHpA_1	363.0 / 319.0	2.27	2521.415084	2500.00	100.86
PFHpA_2	363.0 / 169.0	2.27	2189.210166	2500.00	87.57
PFHxS_1	399.0 / 80.0	2.29	2567.984517	2525.00	101.70
PFHxS_2	399.0 / 99.0	2.29	2714.163656	2525.00	107.49
PFOA_1	413.0 / 369.0	2.68	2372.312871	2500.00	94.89
PFOA_2	413.0 / 169.0	2.68	2163.719943	2500.00	86.55
PFNA_1	463.0 / 419.0	3.08	2550.649272	2500.00	102.03
PFNA_2	463.0 / 219.0	3.07	2598.746457	2500.00	103.95
PFOS_1	499.0 / 80.0	3.08	2682.521674	2500.00	107.30
PFOS_2	499.0 / 99.0	3.08	2706.003053	2500.00	108.24
PFDA_1	513.0 / 469.0	3.43	2514.954074	2500.00	100.60
PFDA_2	513.0 / 219.0	3.43	2545.197959	2500.00	101.81
PFUnA_1	563.0 / 519.0	3.75	2532.267626	2500.00	101.29
PFUnA_2	563.0 / 269.0	3.75	2629.871602	2500.00	105.19
PFDoA_1	613.0 / 569.0	4.03	2567.800104	2500.00	102.71
PFDoA_2	613.0 / 319.0	4.03	2779.174067	2500.00	111.17
PFTrDA_1	663.0 / 619.0	4.27	2632.225297	2500.00	105.29
PFTrDA_2	663.0 / 169.0	4.27	2682.692442	2500.00	107.31
PFTeDA_1	713.0 / 669.0	4.48	2494.765895	2500.00	99.79
PFTeDA_2	713.0 / 169.0	4.48	2486.297179	2500.00	99.45
NMeFOSAA_1	570.0 / 419.0	3.58	2740.081912	2500.00	109.60
NMeFOSAA_2	570.0 / 512.0	3.58	2719.491627	2500.00	108.78
NEtFOSAA_1	584.0 / 419.0	3.74	2778.037538	2500.00	111.12
NEtFOSAA_2	584.0 / 483.0	3.74	2857.049702	2500.00	114.28

Sample Name	KB76	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:03:28	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.54	931.322940	1010.00	92.21
PFBS_2	298.9 / 99.0	1.54	964.621861	1010.00	95.51
PFHxA_1	313.0 / 269.0	1.86	1072.104571	1010.00	106.15
PFHxA_2	313.0 / 119.0	1.86	1009.705635	1010.00	99.97
PFHpA_1	363.0 / 319.0	2.27	921.992153	1000.00	92.20
PFHpA_2	363.0 / 169.0	2.27	893.031842	1000.00	89.30
PFHxS_1	399.0 / 80.0	2.29	1081.520846	1010.00	107.08
PFHxS_2	399.0 / 99.0	2.29	1069.013400	1010.00	105.84
PFOA_1	413.0 / 369.0	2.68	1036.343129	1000.00	103.63
PFOA_2	413.0 / 169.0	2.68	978.371979	1000.00	97.84
PFNA_1	463.0 / 419.0	3.07	1067.270154	1000.00	106.73
PFNA_2	463.0 / 219.0	3.07	1145.801188	1000.00	114.58
PFOS_1	499.0 / 80.0	3.07	996.757976	1000.00	99.68
PFOS_2	499.0 / 99.0	3.07	1018.047868	1000.00	101.80
PFDA_1	513.0 / 469.0	3.42	984.789513	1000.00	98.48
PFDA_2	513.0 / 219.0	3.42	1035.299681	1000.00	103.53
PFUnA_1	563.0 / 519.0	3.74	1060.136651	1000.00	106.01
PFUnA_2	563.0 / 269.0	3.74	1052.668926	1000.00	105.27
PFDoA_1	613.0 / 569.0	4.02	1047.016891	1000.00	104.70
PFDoA_2	613.0 / 319.0	4.02	1062.709766	1000.00	106.27
PFTrDA_1	663.0 / 619.0	4.26	1087.518875	1000.00	108.75
PFTrDA_2	663.0 / 169.0	4.26	1020.506833	1000.00	102.05
PFTeDA_1	713.0 / 669.0	4.48	1029.729399	1000.00	102.97
PFTeDA_2	713.0 / 169.0	4.47	1023.826108	1000.00	102.38
NMeFOSAA_1	570.0 / 419.0	3.58	1079.956451	1000.00	108.00
NMeFOSAA_2	570.0 / 512.0	3.57	1007.009901	1000.00	100.70
NEtFOSAA_1	584.0 / 419.0	3.73	948.814915	1000.00	94.88
NEtFOSAA_2	584.0 / 483.0	3.73	1217.181867	1000.00	121.72

Sample Name	KB77	**Injection Vial**	5
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T03:19:32	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.54	2568.083581	2525.00	101.71
PFBS_2	298.9 / 99.0	1.54	2647.448886	2525.00	104.85
PFHxA_1	313.0 / 269.0	1.86	2454.553424	2525.00	97.21
PFHxA_2	313.0 / 119.0	1.86	2589.884768	2525.00	102.57
PFHpA_1	363.0 / 319.0	2.27	2502.333037	2500.00	100.09
PFHpA_2	363.0 / 169.0	2.27	2095.621494	2500.00	83.82
PFHxS_1	399.0 / 80.0	2.29	2464.478364	2525.00	97.60
PFHxS_2	399.0 / 99.0	2.29	2655.517979	2525.00	105.17
PFOA_1	413.0 / 369.0	2.67	2600.610689	2500.00	104.02
PFOA_2	413.0 / 169.0	2.67	2495.981967	2500.00	99.84
PFNA_1	463.0 / 419.0	3.07	2499.976554	2500.00	100.00
PFNA_2	463.0 / 219.0	3.07	2489.374678	2500.00	99.57
PFOS_1	499.0 / 80.0	3.07	2429.086011	2500.00	97.16
PFOS_2	499.0 / 99.0	3.07	2428.230788	2500.00	97.13
PFDA_1	513.0 / 469.0	3.42	2395.171048	2500.00	95.81
PFDA_2	513.0 / 219.0	3.42	2533.967982	2500.00	101.36
PFUnA_1	563.0 / 519.0	3.74	2462.929179	2500.00	98.52
PFUnA_2	563.0 / 269.0	3.74	2623.109059	2500.00	104.92
PFDoA_1	613.0 / 569.0	4.02	2619.486333	2500.00	104.78
PFDoA_2	613.0 / 319.0	4.02	2512.333305	2500.00	100.49
PFTrDA_1	663.0 / 619.0	4.26	2746.981169	2500.00	109.88
PFTrDA_2	663.0 / 169.0	4.26	2795.454495	2500.00	111.82
PFTeDA_1	713.0 / 669.0	4.47	2608.727148	2500.00	104.35
PFTeDA_2	713.0 / 169.0	4.47	2659.990359	2500.00	106.40
NMeFOSAA_1	570.0 / 419.0	3.57	2847.309980	2500.00	113.89
NMeFOSAA_2	570.0 / 512.0	3.57	2696.694958	2500.00	107.87
NEtFOSAA_1	584.0 / 419.0	3.73	2619.374579	2500.00	104.77
NEtFOSAA_2	584.0 / 483.0	3.73	2822.720296	2500.00	112.91

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:13:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.06	231.611603	250.00	92.64
d3-MeFOSAA	573.0 / 419.0	3.61	244.423694	250.00	97.77
d5-EtFOSAA	589.0 / 419.0	3.78	176.181506	250.00	70.47
13C5-PFHxA	318.0 / 273.0	1.88	233.905404	250.00	93.56
13C4-PFHpA	367.0 / 322.0	2.29	244.843738	250.00	97.94
13C8-PFOA	421.0 / 376.0	2.70	255.222211	250.00	102.09
13C9-PFNA	472.0 / 427.0	3.09	253.115276	250.00	101.25
13C6-PFDA	519.0 / 474.0	3.45	223.796875	250.00	89.52
13C7-PFUnA	570.0 / 525.0	3.77	237.910809	250.00	95.16
13C2-PFTeDA	715.0 / 670.0	4.54	218.862217	250.00	87.54
13C3-PFBS	302.0 / 99.0	1.55	206.860264	232.25	89.07
13C3-PFHxS	402.0 / 99.0	2.31	210.154754	236.50	88.86
13C8-PFOS	507.0 / 99.0	3.09	222.736043	239.25	93.10

Sample Name	KB75 ISC	**Injection Vial**	1
Sample ID	ISC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T16:26:43	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.09	251.127463	250.00	100.45
d3-MeFOSAA	573.0 / 419.0	3.64	274.156186	250.00	109.66
d5-EtFOSAA	589.0 / 419.0	3.80	241.528333	250.00	96.61
13C5-PFHxA	318.0 / 273.0	1.89	281.490799	250.00	112.60
13C4-PFHpA	367.0 / 322.0	2.30	281.687014	250.00	112.67
13C8-PFOA	421.0 / 376.0	2.72	257.597627	250.00	103.04
13C9-PFNA	472.0 / 427.0	3.12	235.101963	250.00	94.04
13C6-PFDA	519.0 / 474.0	3.48	244.921857	250.00	97.97
13C7-PFUnA	570.0 / 525.0	3.80	241.728100	250.00	96.69
13C2-PFTeDA	715.0 / 670.0	4.57	288.553002	250.00	115.42
13C3-PFBS	302.0 / 99.0	1.55	232.800259	232.25	100.24
13C3-PFHxS	402.0 / 99.0	2.32	234.237542	236.50	99.04
13C8-PFOS	507.0 / 99.0	3.11	243.421728	239.25	101.74

Sample Name	KB76	**Injection Vial**	11
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:27:08	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.03	273.547303	250.00	109.42
d3-MeFOSAA	573.0 / 419.0	3.59	286.209324	250.00	114.48
d5-EtFOSAA	589.0 / 419.0	3.75	236.872751	250.00	94.75
13C5-PFHxA	318.0 / 273.0	1.86	254.430661	250.00	101.77
13C4-PFHpA	367.0 / 322.0	2.27	280.939123	250.00	112.38
13C8-PFOA	421.0 / 376.0	2.68	272.226307	250.00	108.89
13C9-PFNA	472.0 / 427.0	3.08	232.554387	250.00	93.02
13C6-PFDA	519.0 / 474.0	3.43	251.393093	250.00	100.56
13C7-PFUnA	570.0 / 525.0	3.75	261.744698	250.00	104.70
13C2-PFTeDA	715.0 / 670.0	4.50	299.914437	250.00	119.97
13C3-PFBS	302.0 / 99.0	1.53	232.227133	232.25	99.99
13C3-PFHxS	402.0 / 99.0	2.30	208.064057	236.50	87.98
13C8-PFOS	507.0 / 99.0	3.08	220.321228	239.25	92.09

Sample Name	KB77	**Injection Vial**	23
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:37:35	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.02	258.974154	250.00	103.59
d3-MeFOSAA	573.0 / 419.0	3.58	323.846757	250.00	129.54
d5-EtFOSAA	589.0 / 419.0	3.74	307.353900	250.00	122.94
13C5-PFHxA	318.0 / 273.0	1.85	251.047803	250.00	100.42
13C4-PFHpA	367.0 / 322.0	2.26	253.425952	250.00	101.37
13C8-PFOA	421.0 / 376.0	2.68	242.018487	250.00	96.81
13C9-PFNA	472.0 / 427.0	3.06	215.487287	250.00	86.19
13C6-PFDA	519.0 / 474.0	3.42	253.079861	250.00	101.23
13C7-PFUnA	570.0 / 525.0	3.74	265.261545	250.00	106.10
13C2-PFTeDA	715.0 / 670.0	4.48	279.312908	250.00	111.73
13C3-PFBS	302.0 / 99.0	1.53	244.351122	232.25	105.21
13C3-PFHxS	402.0 / 99.0	2.29	255.094150	236.50	107.86
13C8-PFOS	507.0 / 99.0	3.06	247.795556	239.25	103.57

Sample Name	KB76	**Injection Vial**	33
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:26:13	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.02	277.123221	250.00	110.85
d3-MeFOSAA	573.0 / 419.0	3.57	323.634771	250.00	129.45
d5-EtFOSAA	589.0 / 419.0	3.74	300.282887	250.00	120.11
13C5-PFHxA	318.0 / 273.0	1.85	288.908822	250.00	115.56
13C4-PFHpA	367.0 / 322.0	2.26	290.774312	250.00	116.31
13C8-PFOA	421.0 / 376.0	2.67	277.793225	250.00	111.12
13C9-PFNA	472.0 / 427.0	3.06	244.997096	250.00	98.00
13C6-PFDA	519.0 / 474.0	3.41	246.534004	250.00	98.61
13C7-PFUnA	570.0 / 525.0	3.73	246.699375	250.00	98.68
13C2-PFTeDA	715.0 / 670.0	4.48	298.502762	250.00	119.40
13C3-PFBS	302.0 / 99.0	1.52	280.502524	232.25	120.78
13C3-PFHxS	402.0 / 99.0	2.28	209.962839	236.50	88.78
13C8-PFOS	507.0 / 99.0	3.06	229.387030	239.25	95.88

Sample Name	KB77	**Injection Vial**	43
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:14:50	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.02	293.614202	250.00	117.45
d3-MeFOSAA	573.0 / 419.0	3.58	300.278010	250.00	120.11
d5-EtFOSAA	589.0 / 419.0	3.74	273.062603	250.00	109.23
13C5-PFHxA	318.0 / 273.0	1.85	249.936966	250.00	99.97
13C4-PFHpA	367.0 / 322.0	2.26	239.635004	250.00	95.85
13C8-PFOA	421.0 / 376.0	2.67	248.362317	250.00	99.34
13C9-PFNA	472.0 / 427.0	3.06	217.126285	250.00	86.85
13C6-PFDA	519.0 / 474.0	3.41	264.902289	250.00	105.96
13C7-PFUnA	570.0 / 525.0	3.73	278.026244	250.00	111.21
13C2-PFTeDA	715.0 / 670.0	4.48	323.107393	250.00	129.24
13C3-PFBS	302.0 / 99.0	1.53	273.345379	232.25	117.69
13C3-PFHxS	402.0 / 99.0	2.28	242.785225	236.50	102.66
13C8-PFOS	507.0 / 99.0	3.06	218.160212	239.25	91.19

Sample Name	KB76	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:03:28	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.01	288.047565	250.00	115.22
d3-MeFOSAA	573.0 / 419.0	3.57	279.628905	250.00	111.85
d5-EtFOSAA	589.0 / 419.0	3.73	293.977592	250.00	117.59
13C5-PFHxA	318.0 / 273.0	1.84	248.587280	250.00	99.43
13C4-PFHpA	367.0 / 322.0	2.25	257.526274	250.00	103.01
13C8-PFOA	421.0 / 376.0	2.67	250.091713	250.00	100.04
13C9-PFNA	472.0 / 427.0	3.06	216.981208	250.00	86.79
13C6-PFDA	519.0 / 474.0	3.41	276.277673	250.00	110.51
13C7-PFUnA	570.0 / 525.0	3.72	285.674175	250.00	114.27
13C2-PFTeDA	715.0 / 670.0	4.47	303.221515	250.00	121.29
13C3-PFBS	302.0 / 99.0	1.52	243.621339	232.25	104.90
13C3-PFHxS	402.0 / 99.0	2.28	202.561681	236.50	85.65
13C8-PFOS	507.0 / 99.0	3.06	214.704867	239.25	89.74

Sample Name	KB77	**Injection Vial**	5
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T03:19:32	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.01	294.208466	250.00	117.68
d3-MeFOSAA	573.0 / 419.0	3.57	320.128614	250.00	128.05
d5-EtFOSAA	589.0 / 419.0	3.73	314.922909	250.00	125.97
13C5-PFHxA	318.0 / 273.0	1.85	274.835249	250.00	109.93
13C4-PFHpA	367.0 / 322.0	2.25	252.860851	250.00	101.14
13C8-PFOA	421.0 / 376.0	2.67	249.851636	250.00	99.94
13C9-PFNA	472.0 / 427.0	3.06	250.424485	250.00	100.17
13C6-PFDA	519.0 / 474.0	3.41	265.231282	250.00	106.09
13C7-PFUnA	570.0 / 525.0	3.72	298.274408	250.00	119.31
13C2-PFTeDA	715.0 / 670.0	4.47	308.986335	250.00	123.59
13C3-PFBS	302.0 / 99.0	1.52	266.717441	232.25	114.84
13C3-PFHxS	402.0 / 99.0	2.28	262.348480	236.50	110.93
13C8-PFOS	507.0 / 99.0	3.05	259.927240	239.25	108.64

QC Summary Report

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Sample Name	KB75 ISC	**Injection Vial**	2
Sample ID	ISC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T11:41:21	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.55	473.498255	505.00	93.76
PFBS_2	298.9 / 99.0	1.55	476.514790	505.00	94.36
PFHxA_1	313.0 / 269.0	1.88	496.782000	505.00	98.37
PFHxA_2	313.0 / 119.0	1.88	420.546914	505.00	83.28
PFHpA_1	363.0 / 319.0	2.29	439.828834	500.00	87.97
PFHpA_2	363.0 / 169.0	2.29	359.565085	500.00	71.91
PFHxS_1	399.0 / 80.0	2.31	480.201572	505.00	95.09
PFHxS_2	399.0 / 99.0	2.31	488.861766	505.00	96.80
PFOA_1	413.0 / 369.0	2.70	486.191271	500.00	97.24
PFOA_2	413.0 / 169.0	2.70	511.411322	500.00	102.28
PFNA_1	463.0 / 419.0	3.10	507.851597	500.00	101.57
PFNA_2	463.0 / 219.0	3.10	542.731542	500.00	108.55
PFOS_1	499.0 / 80.0	3.10	496.022088	500.00	99.20
PFOS_2	499.0 / 99.0	3.10	492.401549	500.00	98.48
PFDA_1	513.0 / 469.0	3.46	459.942018	500.00	91.99
PFDA_2	513.0 / 219.0	3.45	448.606500	500.00	89.72
PFUnA_1	563.0 / 519.0	3.78	447.627027	500.00	89.53
PFUnA_2	563.0 / 269.0	3.78	475.558304	500.00	95.11
PFDoA_1	613.0 / 569.0	4.06	496.259734	500.00	99.25
PFDoA_2	613.0 / 319.0	4.06	486.888986	500.00	97.38
PFTrDA_1	663.0 / 619.0	4.31	522.019548	500.00	104.40
PFTrDA_2	663.0 / 169.0	4.31	476.069842	500.00	95.21
PFTeDA_1	713.0 / 669.0	4.52	519.962324	500.00	103.99
PFTeDA_2	713.0 / 169.0	4.52	493.319228	500.00	98.66
NMeFOSAA_1	570.0 / 419.0	3.61	548.547082	500.00	109.71
NMeFOSAA_2	570.0 / 512.0	3.61	519.317669	500.00	103.86
NEtFOSAA_1	584.0 / 419.0	3.78	488.814735	500.00	97.76
NEtFOSAA_2	584.0 / 483.0	3.78	677.398189	500.00	135.48

Sample Name	KB76	**Injection Vial**	13
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:40:54	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.54	1001.490240	1010.00	99.16
PFBS_2	298.9 / 99.0	1.54	1002.146036	1010.00	99.22
PFHxA_1	313.0 / 269.0	1.86	1005.281551	1010.00	99.53
PFHxA_2	313.0 / 119.0	1.86	872.012013	1010.00	86.34
PFHpA_1	363.0 / 319.0	2.27	998.415619	1000.00	99.84
PFHpA_2	363.0 / 169.0	2.27	960.809460	1000.00	96.08
PFHxS_1	399.0 / 80.0	2.29	1041.889631	1010.00	103.16
PFHxS_2	399.0 / 99.0	2.29	1051.432632	1010.00	104.10
PFOA_1	413.0 / 369.0	2.68	1107.538155	1000.00	110.75
PFOA_2	413.0 / 169.0	2.68	1071.956432	1000.00	107.20
PFNA_1	463.0 / 419.0	3.08	1182.137941	1000.00	118.21
PFNA_2	463.0 / 219.0	3.08	1191.206094	1000.00	119.12
PFOS_1	499.0 / 80.0	3.08	1175.617902	1000.00	117.56
PFOS_2	499.0 / 99.0	3.07	1179.599051	1000.00	117.96
PFDA_1	513.0 / 469.0	3.43	1053.668276	1000.00	105.37
PFDA_2	513.0 / 219.0	3.43	984.092854	1000.00	98.41
PFUnA_1	563.0 / 519.0	3.75	966.733619	1000.00	96.67
PFUnA_2	563.0 / 269.0	3.75	1030.211201	1000.00	103.02
PFDoA_1	613.0 / 569.0	4.03	972.955511	1000.00	97.30
PFDoA_2	613.0 / 319.0	4.03	1031.059233	1000.00	103.11
PFTrDA_1	663.0 / 619.0	4.27	1025.992736	1000.00	102.60
PFTrDA_2	663.0 / 169.0	4.27	972.401240	1000.00	97.24
PFTeDA_1	713.0 / 669.0	4.49	983.964175	1000.00	98.40
PFTeDA_2	713.0 / 169.0	4.49	1007.496563	1000.00	100.75
NMeFOSAA_1	570.0 / 419.0	3.58	1056.804837	1000.00	105.68
NMeFOSAA_2	570.0 / 512.0	3.58	1053.950732	1000.00	105.40
NEtFOSAA_1	584.0 / 419.0	3.74	981.588128	1000.00	98.16
NEtFOSAA_2	584.0 / 483.0	3.74	794.213366	1000.00	79.42

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QC Summary Report

Sample Name	KB77	**Injection Vial**	21
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T15:07:47	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.54	2673.048902	2525.00	105.86
PFBS_2	298.9 / 99.0	1.54	2633.692020	2525.00	104.30
PFHxA_1	313.0 / 269.0	1.86	2728.896240	2525.00	108.08
PFHxA_2	313.0 / 119.0	1.86	2569.851347	2525.00	101.78
PFHpA_1	363.0 / 319.0	2.27	2464.672816	2500.00	98.59
PFHpA_2	363.0 / 169.0	2.27	2433.875401	2500.00	97.36
PFHxS_1	399.0 / 80.0	2.29	2790.044128	2525.00	110.50
PFHxS_2	399.0 / 99.0	2.29	2868.401176	2525.00	113.60
PFOA_1	413.0 / 369.0	2.68	2390.208006	2500.00	95.61
PFOA_2	413.0 / 169.0	2.68	2326.173607	2500.00	93.05
PFNA_1	463.0 / 419.0	3.07	2715.991327	2500.00	108.64
PFNA_2	463.0 / 219.0	3.07	2809.084014	2500.00	112.36
PFOS_1	499.0 / 80.0	3.07	3109.954106	2500.00	124.40
PFOS_2	499.0 / 99.0	3.07	3044.267549	2500.00	121.77
PFDA_1	513.0 / 469.0	3.43	2284.632596	2500.00	91.39
PFDA_2	513.0 / 219.0	3.43	1932.471012	2500.00	77.30
PFUnA_1	563.0 / 519.0	3.74	2554.285790	2500.00	102.17
PFUnA_2	563.0 / 269.0	3.74	2568.027859	2500.00	102.72
PFDoA_1	613.0 / 569.0	4.03	2447.006974	2500.00	97.88
PFDoA_2	613.0 / 319.0	4.02	2475.211096	2500.00	99.01
PFTrDA_1	663.0 / 619.0	4.27	2771.220625	2500.00	110.85
PFTrDA_2	663.0 / 169.0	4.27	2630.748721	2500.00	105.23
PFTeDA_1	713.0 / 669.0	4.48	2615.513503	2500.00	104.62
PFTeDA_2	713.0 / 169.0	4.48	2649.622799	2500.00	105.98
NMeFOSAA_1	570.0 / 419.0	3.58	2959.945416	2500.00	118.40
NMeFOSAA_2	570.0 / 512.0	3.58	3207.575301	2500.00	128.30
NEtFOSAA_1	584.0 / 419.0	3.74	2611.889087	2500.00	104.48
NEtFOSAA_2	584.0 / 483.0	3.74	2845.506648	2500.00	113.82

Sample Name	KB75 ISC	**Injection Vial**	2
Sample ID	ISC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T11:41:21	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.05	270.649131	250.00	108.26
d3-MeFOSAA	573.0 / 419.0	3.60	280.191682	250.00	112.08
d5-EtFOSAA	589.0 / 419.0	3.77	296.572787	250.00	118.63
13C5-PFHxA	318.0 / 273.0	1.86	265.831540	250.00	106.33
13C4-PFHpA	367.0 / 322.0	2.28	270.815934	250.00	108.33
13C8-PFOA	421.0 / 376.0	2.69	265.803056	250.00	106.32
13C9-PFNA	472.0 / 427.0	3.09	223.316124	250.00	89.33
13C6-PFDA	519.0 / 474.0	3.44	248.258096	250.00	99.30
13C7-PFUnA	570.0 / 525.0	3.76	266.121845	250.00	106.45
13C2-PFTeDA	715.0 / 670.0	4.52	289.448479	250.00	115.78
13C3-PFBS	302.0 / 99.0	1.53	253.856828	232.25	109.30
13C3-PFHxS	402.0 / 99.0	2.30	232.380958	236.50	98.26
13C8-PFOS	507.0 / 99.0	3.08	235.916966	239.25	98.61

Sample Name	KB76	**Injection Vial**	13
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:40:54	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.02	280.194385	250.00	112.08
d3-MeFOSAA	573.0 / 419.0	3.58	319.231339	250.00	127.69
d5-EtFOSAA	589.0 / 419.0	3.74	324.791788	250.00	129.92
13C5-PFHxA	318.0 / 273.0	1.85	284.188233	250.00	113.68
13C4-PFHpA	367.0 / 322.0	2.26	274.404781	250.00	109.76
13C8-PFOA	421.0 / 376.0	2.67	261.737408	250.00	104.69
13C9-PFNA	472.0 / 427.0	3.06	218.047180	250.00	87.22
13C6-PFDA	519.0 / 474.0	3.42	239.089238	250.00	95.64
13C7-PFUnA	570.0 / 525.0	3.73	281.716303	250.00	112.69
13C2-PFTeDA	715.0 / 670.0	4.48	303.499745	250.00	121.40
13C3-PFBS	302.0 / 99.0	1.52	262.808422	232.25	113.16
13C3-PFHxS	402.0 / 99.0	2.28	238.016682	236.50	100.64
13C8-PFOS	507.0 / 99.0	3.06	208.729330	239.25	87.24

Sample Name	KB77	**Injection Vial**	21
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T15:07:47	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.01	290.192057	250.00	116.08
d3-MeFOSAA	573.0 / 419.0	3.57	306.716336	250.00	122.69
d5-EtFOSAA	589.0 / 419.0	3.73	322.791448	250.00	129.12
13C5-PFHxA	318.0 / 273.0	1.85	256.829670	250.00	102.73
13C4-PFHpA	367.0 / 322.0	2.25	258.907291	250.00	103.56
13C8-PFOA	421.0 / 376.0	2.67	271.893448	250.00	108.76
13C9-PFNA	472.0 / 427.0	3.06	231.182752	250.00	92.47
13C6-PFDA	519.0 / 474.0	3.41	257.574732	250.00	103.03
13C7-PFUnA	570.0 / 525.0	3.73	267.484745	250.00	106.99
13C2-PFTeDA	715.0 / 670.0	4.48	285.370992	250.00	114.15
13C3-PFBS	302.0 / 99.0	1.52	255.301000	232.25	109.93
13C3-PFHxS	402.0 / 99.0	2.28	225.572345	236.50	95.38
13C8-PFOS	507.0 / 99.0	3.06	216.844145	239.25	90.63

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Summary Quant 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	2018-10-17T21:13:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	299608.43	877.420602	544.9	false
PFBS_2	298.9 / 99.0	1.56	83942.08	838.659062	365.9	false
PFHxA_1	313.0 / 269.0	1.89	241930.51	1006.652936	19.8	false
PFHxA_2	313.0 / 119.0	1.89	16403.84	896.376115	16.0	false
PFHpA_1	363.0 / 319.0	2.30	215911.99	856.292979	126.4	false
PFHpA_2	363.0 / 169.0	2.29	5561.78	976.724688	99.7	false
PFHxS_1	399.0 / 80.0	2.32	361966.55	998.233289	454.9	false
PFHxS_2	399.0 / 99.0	2.32	100883.75	992.688608	416.4	false
PFOA_1	413.0 / 369.0	2.71	338169.16	930.879127	304.4	false
PFOA_2	413.0 / 169.0	2.71	20580.91	872.168076	223.7	false
PFNA_1	463.0 / 419.0	3.11	356729.03	1034.052055	304.0	false
PFNA_2	463.0 / 219.0	3.10	110066.88	1037.625087	466.5	false
PFOS_1	499.0 / 80.0	3.10	539708.03	906.626239	343.1	false
PFOS_2	499.0 / 99.0	3.10	95211.86	919.881718	450.1	false
PFDA_1	513.0 / 469.0	3.46	380336.88	983.979238	327.0	false
PFDA_2	513.0 / 219.0	3.46	15587.84	976.593938	361.3	false
PFUnA_1	563.0 / 519.0	3.79	349720.15	923.159866	376.6	false
PFUnA_2	563.0 / 269.0	3.79	18202.70	975.741234	188.3	false
PFDoA_1	613.0 / 569.0	4.07	341302.82	980.552902	460.6	false
PFDoA_2	613.0 / 319.0	4.07	51304.06	934.947666	412.2	false
PFTrDA_1	663.0 / 619.0	4.32	300565.45	1073.075185	751.7	false
PFTrDA_2	663.0 / 169.0	4.32	19250.55	1041.820014	533.2	false
PFTeDA_1	713.0 / 669.0	4.54	326564.00	1020.055697	1259.1	false
PFTeDA_2	713.0 / 169.0	4.54	16770.44	1079.815842	804.1	false
NMeFOSAA_1	570.0 / 419.0	3.62	66944.31	945.129517	505.3	false
NMeFOSAA_2	570.0 / 512.0	3.62	38615.63	965.108458	1105.4	false
NEtFOSAA_1	584.0 / 419.0	3.78	66942.43	1244.646852	673.7	true
NEtFOSAA_2	584.0 / 483.0	3.78	4011.16	1233.660110	1226.3	false

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Summary Quant Report

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Sample Name	KB75 ISC	**Injection Vial**	1
Sample ID	ISC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T16:26:43	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.57	156637.46	484.754015	262.8	false
PFBS_2	298.9 / 99.0	1.57	43517.52	460.129667	214.7	false
PFHxA_1	313.0 / 269.0	1.90	130040.84	499.859458	56.8	false
PFHxA_2	313.0 / 119.0	1.90	11384.85	576.477169	44.8	false
PFHpA_1	363.0 / 319.0	2.31	121122.08	471.017380	111.3	false
PFHpA_2	363.0 / 169.0	2.31	2746.97	436.165761	75.6	false
PFHxS_1	399.0 / 80.0	2.34	173952.54	513.112977	288.8	false
PFHxS_2	399.0 / 99.0	2.33	46850.78	489.788084	366.8	false
PFOA_1	413.0 / 369.0	2.73	166821.22	515.841656	181.2	false
PFOA_2	413.0 / 169.0	2.73	10789.33	514.415457	139.3	false
PFNA_1	463.0 / 419.0	3.13	149516.53	520.080727	196.1	false
PFNA_2	463.0 / 219.0	3.13	48829.04	556.083264	252.5	false
PFOS_1	499.0 / 80.0	3.13	239634.39	436.705182	142.7	false
PFOS_2	499.0 / 99.0	3.12	43329.08	453.370724	258.7	false
PFDA_1	513.0 / 469.0	3.49	192145.64	476.762125	286.1	false
PFDA_2	513.0 / 219.0	3.49	7531.29	450.324500	124.9	false
PFUnA_1	563.0 / 519.0	3.82	177755.10	491.199250	276.9	false
PFUnA_2	563.0 / 269.0	3.82	8127.71	460.483278	95.7	false
PFDoA_1	613.0 / 569.0	4.10	181007.95	501.048127	387.8	false
PFDoA_2	613.0 / 319.0	4.10	31881.83	559.603662	217.7	false
PFTrDA_1	663.0 / 619.0	4.35	172121.90	482.323681	471.0	false
PFTrDA_2	663.0 / 169.0	4.35	11669.54	495.196388	242.9	false
PFTeDA_1	713.0 / 669.0	4.57	206566.41	504.774637	972.2	false
PFTeDA_2	713.0 / 169.0	4.57	10047.66	502.172391	417.6	false
NMeFOSAA_1	570.0 / 419.0	3.65	36712.48	532.487486	986.8	false
NMeFOSAA_2	570.0 / 512.0	3.65	16651.87	388.465632	243.1	false
NEtFOSAA_1	584.0 / 419.0	3.81	33457.81	553.294527	428.3	false
NEtFOSAA_2	584.0 / 483.0	3.81	2239.79	589.430119	477.9	false

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Summary Quant Report

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Sample Name	KB76	**Injection Vial**	11
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:27:08	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	368147.20	1048.321748	409.1	false
PFBS_2	298.9 / 99.0	1.55	105474.56	1024.409959	307.6	false
PFHxA_1	313.0 / 269.0	1.87	260457.17	1022.567378	79.1	false
PFHxA_2	313.0 / 119.0	1.88	22924.74	1197.578194	69.2	false
PFHpA_1	363.0 / 319.0	2.28	262958.64	934.075677	184.0	false
PFHpA_2	363.0 / 169.0	2.28	5291.34	817.388429	86.0	false
PFHxS_1	399.0 / 80.0	2.31	356172.16	1084.891607	287.4	false
PFHxS_2	399.0 / 99.0	2.31	99548.37	1082.429708	370.0	false
PFOA_1	413.0 / 369.0	2.70	354507.89	938.657255	231.6	false
PFOA_2	413.0 / 169.0	2.69	21894.81	892.695819	249.6	false
PFNA_1	463.0 / 419.0	3.10	323777.88	1048.340706	357.7	false
PFNA_2	463.0 / 219.0	3.09	106793.49	1126.491410	432.7	false
PFOS_1	499.0 / 80.0	3.09	529308.65	966.951370	202.6	false
PFOS_2	499.0 / 99.0	3.09	89121.09	936.478922	381.2	false
PFDA_1	513.0 / 469.0	3.45	411983.52	1010.730940	389.1	false
PFDA_2	513.0 / 219.0	3.45	14116.78	834.839957	182.4	false
PFUnA_1	563.0 / 519.0	3.77	393877.47	1006.996895	286.6	false
PFUnA_2	563.0 / 269.0	3.77	19558.41	1014.507162	157.7	false
PFDoA_1	613.0 / 569.0	4.05	381461.26	988.089208	445.0	false
PFDoA_2	613.0 / 319.0	4.05	59450.08	978.390371	288.6	false
PFTrDA_1	663.0 / 619.0	4.29	365669.05	1012.392995	584.0	false
PFTrDA_2	663.0 / 169.0	4.29	24848.10	1044.843221	298.2	false
PFTeDA_1	713.0 / 669.0	4.50	430970.16	1046.919582	1144.9	false
PFTeDA_2	713.0 / 169.0	4.50	21537.11	1077.241305	481.2	false
NMeFOSAA_1	570.0 / 419.0	3.60	80478.12	1049.852049	607.5	false
NMeFOSAA_2	570.0 / 512.0	3.60	44585.55	1030.316997	551.5	false
NEtFOSAA_1	584.0 / 419.0	3.76	71925.11	1083.421759	579.6	false
NEtFOSAA_2	584.0 / 483.0	3.76	5020.14	1253.844564	313.3	false

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Summary Quant Report

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Sample Name	KB77	**Injection Vial**	23
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:37:35	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	901098.78	2672.317878	692.0	false
PFBS_2	298.9 / 99.0	1.54	272961.70	2758.432300	647.0	false
PFHxA_1	313.0 / 269.0	1.86	685626.67	2564.322453	143.4	false
PFHxA_2	313.0 / 119.0	1.86	52282.02	2609.278225	114.4	false
PFHpA_1	363.0 / 319.0	2.27	609801.00	2240.068106	330.8	false
PFHpA_2	363.0 / 169.0	2.27	13178.49	2218.739105	183.9	false
PFHxS_1	399.0 / 80.0	2.30	872285.20	2402.488339	659.3	false
PFHxS_2	399.0 / 99.0	2.30	251317.19	2478.195264	807.3	false
PFOA_1	413.0 / 369.0	2.69	908613.82	2519.795119	467.3	false
PFOA_2	413.0 / 169.0	2.68	55020.16	2349.298766	299.5	false
PFNA_1	463.0 / 419.0	3.08	810907.01	2661.000914	495.0	false
PFNA_2	463.0 / 219.0	3.08	277863.98	2961.935461	611.5	false
PFOS_1	499.0 / 80.0	3.08	1367316.35	2407.311089	300.0	false
PFOS_2	499.0 / 99.0	3.08	239908.15	2431.649988	780.5	false
PFDA_1	513.0 / 469.0	3.43	966486.86	2234.853631	672.1	false
PFDA_2	513.0 / 219.0	3.44	37325.85	2091.599285	266.4	false
PFUnA_1	563.0 / 519.0	3.75	972088.15	2312.985334	422.9	false
PFUnA_2	563.0 / 269.0	3.75	51151.53	2455.382545	278.3	false
PFDoA_1	613.0 / 569.0	4.03	1003041.17	2621.017342	507.8	false
PFDoA_2	613.0 / 319.0	4.03	158174.96	2645.760726	416.9	false
PFTrDA_1	663.0 / 619.0	4.27	952932.86	2712.212493	817.9	false
PFTrDA_2	663.0 / 169.0	4.27	64141.44	2776.673206	477.0	false
PFTeDA_1	713.0 / 669.0	4.49	1044719.86	2617.381212	1809.2	false
PFTeDA_2	713.0 / 169.0	4.48	50948.98	2633.143989	793.4	false
NMeFOSAA_1	570.0 / 419.0	3.59	209112.76	2705.860683	800.6	false
NMeFOSAA_2	570.0 / 512.0	3.59	103130.38	2420.996661	580.5	false
NEtFOSAA_1	584.0 / 419.0	3.75	182416.82	2363.357841	748.6	false
NEtFOSAA_2	584.0 / 483.0	3.75	14969.16	3292.311563	2265.0	false

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Summary Quant Report

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Sample Name	KB76	**Injection Vial**	33
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:26:13	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	326204.23	874.223416	498.0	false
PFBS_2	298.9 / 99.0	1.54	95821.21	876.271485	406.5	false
PFHxA_1	313.0 / 269.0	1.86	254097.11	972.288490	73.8	false
PFHxA_2	313.0 / 119.0	1.86	18687.15	942.625482	67.2	false
PFHpA_1	363.0 / 319.0	2.27	255972.38	974.674424	175.4	false
PFHpA_2	363.0 / 169.0	2.28	5215.21	867.840170	126.6	false
PFHxS_1	399.0 / 80.0	2.29	338093.30	1151.247983	340.4	false
PFHxS_2	399.0 / 99.0	2.29	95750.77	1164.551186	501.9	false
PFOA_1	413.0 / 369.0	2.68	344307.02	991.177164	229.4	false
PFOA_2	413.0 / 169.0	2.68	22463.22	996.581851	199.4	false
PFNA_1	463.0 / 419.0	3.08	297872.11	1013.796384	297.7	false
PFNA_2	463.0 / 219.0	3.08	94961.42	1052.147681	344.6	false
PFOS_1	499.0 / 80.0	3.08	524560.51	1057.425318	200.9	false
PFOS_2	499.0 / 99.0	3.08	90380.03	1048.089183	612.6	false
PFDA_1	513.0 / 469.0	3.43	389368.38	988.700420	397.2	false
PFDA_2	513.0 / 219.0	3.43	16237.07	998.869023	159.3	false
PFUnA_1	563.0 / 519.0	3.75	403420.96	1112.267088	370.6	false
PFUnA_2	563.0 / 269.0	3.75	20530.54	1147.339086	164.6	false
PFDoA_1	613.0 / 569.0	4.03	388468.65	1009.243631	393.6	false
PFDoA_2	613.0 / 319.0	4.03	62583.68	1034.662367	295.4	false
PFTrDA_1	663.0 / 619.0	4.27	358551.95	1012.842974	675.3	false
PFTrDA_2	663.0 / 169.0	4.27	24093.65	1033.271463	405.2	false
PFTeDA_1	713.0 / 669.0	4.49	392211.74	969.058608	1142.0	false
PFTeDA_2	713.0 / 169.0	4.48	19290.64	980.312845	528.5	false
NMeFOSAA_1	570.0 / 419.0	3.58	76257.67	1000.060500	524.9	false
NMeFOSAA_2	570.0 / 512.0	3.58	40910.39	944.720403	483.0	false
NEtFOSAA_1	584.0 / 419.0	3.74	72367.62	988.284623	533.2	false
NEtFOSAA_2	584.0 / 483.0	3.74	4805.20	1081.056675	360.8	false

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Summary Quant Report

Sample Name	KB77	**Injection Vial**	43
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:14:50	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	875032.48	2460.460121	699.1	false
PFBS_2	298.9 / 99.0	1.54	252040.81	2414.918647	665.0	false
PFHxA_1	313.0 / 269.0	1.86	662783.27	2593.862175	136.0	false
PFHxA_2	313.0 / 119.0	1.86	47545.25	2480.096837	104.6	false
PFHpA_1	363.0 / 319.0	2.27	622525.25	2521.415084	269.9	false
PFHpA_2	363.0 / 169.0	2.27	11810.63	2189.210166	155.4	false
PFHxS_1	399.0 / 80.0	2.29	836042.66	2567.984517	435.0	false
PFHxS_2	399.0 / 99.0	2.29	246724.26	2714.163656	621.1	false
PFOA_1	413.0 / 369.0	2.68	843110.68	2372.312871	369.7	false
PFOA_2	413.0 / 169.0	2.68	49951.55	2163.719943	300.7	false
PFNA_1	463.0 / 419.0	3.08	752308.16	2550.649272	579.5	false
PFNA_2	463.0 / 219.0	3.07	236155.22	2598.746457	540.2	false
PFOS_1	499.0 / 80.0	3.08	1275040.63	2682.521674	294.1	false
PFOS_2	499.0 / 99.0	3.08	223403.56	2706.003053	656.7	false
PFDA_1	513.0 / 469.0	3.43	958625.62	2514.954074	566.3	false
PFDA_2	513.0 / 219.0	3.43	39995.83	2545.197959	243.0	false
PFUnA_1	563.0 / 519.0	3.75	939939.87	2532.267626	518.8	false
PFUnA_2	563.0 / 269.0	3.75	48405.54	2629.871602	363.0	false
PFDoA_1	613.0 / 569.0	4.03	939368.65	2567.800104	633.7	false
PFDoA_2	613.0 / 319.0	4.03	158676.97	2779.174067	452.8	false
PFTrDA_1	663.0 / 619.0	4.27	902165.87	2632.225297	952.5	false
PFTrDA_2	663.0 / 169.0	4.27	60457.53	2682.692442	617.5	false
PFTeDA_1	713.0 / 669.0	4.48	971775.46	2494.765895	1560.3	false
PFTeDA_2	713.0 / 169.0	4.48	46960.83	2486.297179	782.5	false
NMeFOSAA_1	570.0 / 419.0	3.58	182804.04	2740.081912	908.9	false
NMeFOSAA_2	570.0 / 512.0	3.58	99563.30	2719.491627	660.2	false
NEtFOSAA_1	584.0 / 419.0	3.74	180776.96	2778.037538	801.2	false
NEtFOSAA_2	584.0 / 483.0	3.74	10992.47	2857.049702	2197.7	false

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Summary Quant Report

Sample Name	KB76	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:03:28	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	366144.62	931.322940	434.8	false
PFBS_2	298.9 / 99.0	1.54	111138.80	964.621861	431.1	false
PFHxA_1	313.0 / 269.0	1.86	291274.56	1072.104571	73.8	false
PFHxA_2	313.0 / 119.0	1.86	20803.73	1009.705635	63.1	false
PFHpA_1	363.0 / 319.0	2.27	260202.68	921.992153	166.9	false
PFHpA_2	363.0 / 169.0	2.27	5745.44	893.031842	107.0	false
PFHxS_1	399.0 / 80.0	2.29	367249.52	1081.520846	354.8	false
PFHxS_2	399.0 / 99.0	2.29	101711.54	1069.013400	509.1	false
PFOA_1	413.0 / 369.0	2.68	392550.39	1036.343129	336.1	false
PFOA_2	413.0 / 169.0	2.68	24069.15	978.371979	188.1	false
PFNA_1	463.0 / 419.0	3.07	336076.51	1067.270154	444.9	false
PFNA_2	463.0 / 219.0	3.07	110763.18	1145.801188	460.6	false
PFOS_1	499.0 / 80.0	3.07	570785.52	996.757976	243.8	false
PFOS_2	499.0 / 99.0	3.07	101349.09	1018.047868	412.9	false
PFDA_1	513.0 / 469.0	3.42	441595.24	984.789513	362.3	false
PFDA_2	513.0 / 219.0	3.42	19145.09	1035.299681	247.0	false
PFUnA_1	563.0 / 519.0	3.74	452565.62	1060.136651	316.5	false
PFUnA_2	563.0 / 269.0	3.74	22160.17	1052.668926	182.3	false
PFDoA_1	613.0 / 569.0	4.02	425151.85	1047.016891	479.2	false
PFDoA_2	613.0 / 319.0	4.02	67813.10	1062.709766	331.9	false
PFTrDA_1	663.0 / 619.0	4.26	396435.93	1087.518875	710.9	false
PFTrDA_2	663.0 / 169.0	4.26	24568.90	1020.506833	309.6	false
PFTeDA_1	713.0 / 669.0	4.48	429049.94	1029.729399	1400.2	false
PFTeDA_2	713.0 / 169.0	4.47	20750.83	1023.826108	624.8	false
NMeFOSAA_1	570.0 / 419.0	3.58	85916.36	1079.956451	822.9	false
NMeFOSAA_2	570.0 / 512.0	3.57	45389.64	1007.009901	528.1	false
NEtFOSAA_1	584.0 / 419.0	3.73	80424.11	948.814915	914.4	false
NEtFOSAA_2	584.0 / 483.0	3.73	6220.50	1217.181867	1809.1	false

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Summary Quant Report

Sample Name	KB77	**Injection Vial**	5
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T03:19:32	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	902594.95	2568.083581	676.6	false
PFBS_2	298.9 / 99.0	1.54	273057.62	2647.448886	747.2	false
PFHxA_1	313.0 / 269.0	1.86	693269.49	2454.553424	151.1	false
PFHxA_2	313.0 / 119.0	1.86	54794.41	2589.884768	128.8	false
PFHpA_1	363.0 / 319.0	2.27	654877.23	2502.333037	259.4	false
PFHpA_2	363.0 / 169.0	2.27	12004.29	2095.621494	186.9	false
PFHxS_1	399.0 / 80.0	2.29	882915.13	2464.478364	540.8	false
PFHxS_2	399.0 / 99.0	2.29	265601.14	2655.517979	881.4	false
PFOA_1	413.0 / 369.0	2.67	933443.50	2600.610689	467.6	false
PFOA_2	413.0 / 169.0	2.67	58176.64	2495.981967	294.4	false
PFNA_1	463.0 / 419.0	3.07	854481.39	2499.976554	659.3	false
PFNA_2	463.0 / 219.0	3.07	262206.77	2489.374678	680.5	false
PFOS_1	499.0 / 80.0	3.07	1400875.24	2429.086011	389.1	false
PFOS_2	499.0 / 99.0	3.07	243248.79	2428.230788	879.2	false
PFDA_1	513.0 / 469.0	3.42	975681.05	2395.171048	698.1	false
PFDA_2	513.0 / 219.0	3.42	42538.28	2533.967982	333.3	false
PFUnA_1	563.0 / 519.0	3.74	1046523.37	2462.929179	486.5	false
PFUnA_2	563.0 / 269.0	3.74	55263.16	2623.109059	302.1	false
PFDoA_1	613.0 / 569.0	4.02	1024239.84	2619.486333	702.5	false
PFDoA_2	613.0 / 319.0	4.02	153584.59	2512.333305	484.2	false
PFTrDA_1	663.0 / 619.0	4.26	960085.61	2746.981169	962.0	false
PFTrDA_2	663.0 / 169.0	4.26	64240.78	2795.454495	475.8	false
PFTeDA_1	713.0 / 669.0	4.47	1036019.54	2608.727148	1861.7	false
PFTeDA_2	713.0 / 169.0	4.47	51197.15	2659.990359	893.8	false
NMeFOSAA_1	570.0 / 419.0	3.57	204537.27	2847.309980	863.0	false
NMeFOSAA_2	570.0 / 512.0	3.57	106422.71	2696.694958	504.4	false
NEtFOSAA_1	584.0 / 419.0	3.73	196758.44	2619.374579	1193.5	false
NEtFOSAA_2	584.0 / 483.0	3.73	12536.16	2822.720296	681.4	false

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Summary Quant 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	2018-10-17T21:13:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	93406.68	231.611603	1689.5	false
d3-MeFOSAA	573.0 / 419.0	3.61	17579.80	244.423694	175.3	false
d5-EtFOSAA	589.0 / 419.0	3.78	14383.26	176.181506	200.6	false
13C5-PFHxA	318.0 / 273.0	1.88	59013.59	233.905404	685.2	false
13C4-PFHpA	367.0 / 322.0	2.29	70279.06	244.843738	1118.6	false
13C8-PFOA	421.0 / 376.0	2.70	89115.92	255.222211	9011.3	false
13C9-PFNA	472.0 / 427.0	3.09	100916.15	253.115276	1888.1	false
13C6-PFDA	519.0 / 474.0	3.45	90930.64	223.796875	1073.3	false
13C7-PFUnA	570.0 / 525.0	3.77	89293.12	237.910809	829.4	false
13C2-PFTeDA	715.0 / 670.0	4.54	71262.97	218.862217	1767.1	false
13C3-PFBS	302.0 / 99.0	1.55	27104.45	206.860264	624.1	false
13C3-PFHxS	402.0 / 99.0	2.31	24951.95	210.154754	577.2	false
13C8-PFOS	507.0 / 99.0	3.09	29875.11	222.736043	244.5	false

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Summary Quant Report

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Sample Name	KB75 ISC	**Injection Vial**	1
Sample ID	ISC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T16:26:43	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.09	94338.75	251.127463	1365.2	false
d3-MeFOSAA	573.0 / 419.0	3.64	16495.97	274.156186	183.9	false
d5-EtFOSAA	589.0 / 419.0	3.80	16495.84	241.528333	209.2	false
13C5-PFHxA	318.0 / 273.0	1.89	61842.02	281.490799	535.3	false
13C4-PFHpA	367.0 / 322.0	2.30	70406.28	281.687014	906.0	false
13C8-PFOA	421.0 / 376.0	2.72	78322.47	257.597627	350.9	false
13C9-PFNA	472.0 / 427.0	3.12	81621.81	235.101963	2597.8	false
13C6-PFDA	519.0 / 474.0	3.48	92696.22	244.921857	1436.4	false
13C7-PFUnA	570.0 / 525.0	3.80	84510.22	241.728100	8760.5	false
13C2-PFTeDA	715.0 / 670.0	4.57	87517.92	288.553002	2379.7	false
13C3-PFBS	302.0 / 99.0	1.55	25518.56	232.800259	357.2	false
13C3-PFHxS	402.0 / 99.0	2.32	23266.50	234.237542	363.5	false
13C8-PFOS	507.0 / 99.0	3.11	27314.14	243.421728	277.9	false

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Summary Quant Report

Sample Name	KB76	**Injection Vial**	11
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:27:08	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	103623.69	273.547303	923.6	false
d3-MeFOSAA	573.0 / 419.0	3.59	18877.56	286.209324	241.4	false
d5-EtFOSAA	589.0 / 419.0	3.75	17733.87	236.872751	212.3	false
13C5-PFHxA	318.0 / 273.0	1.86	62575.66	254.430661	671.8	false
13C4-PFHpA	367.0 / 322.0	2.27	78609.20	280.939123	880.0	false
13C8-PFOA	421.0 / 376.0	2.68	92659.75	272.226307	1244.0	false
13C9-PFNA	472.0 / 427.0	3.08	90383.89	232.554387	910.9	false
13C6-PFDA	519.0 / 474.0	3.43	95944.16	251.393093	2574.1	false
13C7-PFUnA	570.0 / 525.0	3.75	92276.41	261.744698	830.9	false
13C2-PFTeDA	715.0 / 670.0	4.50	91727.48	299.914437	1544.3	false
13C3-PFBS	302.0 / 99.0	1.53	27904.10	232.227133	414.5	false
13C3-PFHxS	402.0 / 99.0	2.30	22654.47	208.064057	281.1	false
13C8-PFOS	507.0 / 99.0	3.08	27099.84	220.321228	207.9	false

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Summary Quant Report

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Sample Name	KB77	**Injection Vial**	23
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:37:35	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	104587.04	258.974154	1532.9	false
d3-MeFOSAA	573.0 / 419.0	3.58	19554.84	323.846757	183.6	true
d5-EtFOSAA	589.0 / 419.0	3.74	21065.89	307.353900	181.8	false
13C5-PFHxA	318.0 / 273.0	1.85	66976.41	251.047803	745.2	false
13C4-PFHpA	367.0 / 322.0	2.26	76920.42	253.425952	926.9	false
13C8-PFOA	421.0 / 376.0	2.68	89359.15	242.018487	2002.4	false
13C9-PFNA	472.0 / 427.0	3.06	90848.47	215.487287	751.9	false
13C6-PFDA	519.0 / 474.0	3.42	102971.64	253.079861	949.0	false
13C7-PFUnA	570.0 / 525.0	3.74	99696.97	265.261545	1604.6	false
13C2-PFTeDA	715.0 / 670.0	4.48	91072.64	279.312908	1579.4	false
13C3-PFBS	302.0 / 99.0	1.53	26879.54	244.351122	473.8	false
13C3-PFHxS	402.0 / 99.0	2.29	25427.86	255.094150	334.4	false
13C8-PFOS	507.0 / 99.0	3.06	27903.35	247.795556	178.1	false

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Summary Quant Report

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Sample Name	KB76	**Injection Vial**	33
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:26:13	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	103377.42	277.123221	985.2	false
d3-MeFOSAA	573.0 / 419.0	3.57	18757.59	323.634771	208.3	true
d5-EtFOSAA	589.0 / 419.0	3.74	19755.08	300.282887	202.3	false
13C5-PFHxA	318.0 / 273.0	1.85	64098.35	288.908822	576.5	false
13C4-PFHpA	367.0 / 322.0	2.26	73395.12	290.774312	1255.2	false
13C8-PFOA	421.0 / 376.0	2.67	85296.80	277.793225	3039.8	false
13C9-PFNA	472.0 / 427.0	3.06	85896.90	244.997096	3856.7	false
13C6-PFDA	519.0 / 474.0	3.41	92654.85	246.534004	1081.7	false
13C7-PFUnA	570.0 / 525.0	3.73	85645.99	246.699375	579.6	false
13C2-PFTeDA	715.0 / 670.0	4.48	89903.50	298.502762	1744.2	false
13C3-PFBS	302.0 / 99.0	1.52	29617.72	280.502524	462.6	false
13C3-PFHxS	402.0 / 99.0	2.28	20089.03	209.962839	240.2	false
13C8-PFOS	507.0 / 99.0	3.06	24793.57	229.387030	217.4	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 7:57:34 AM

Sample Name	KB77	**Injection Vial**	43
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:14:50	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	99955.07	293.614202	1342.8	false
d3-MeFOSAA	573.0 / 419.0	3.58	17091.75	300.278010	196.2	false
d5-EtFOSAA	589.0 / 419.0	3.74	17642.16	273.062603	191.3	false
13C5-PFHxA	318.0 / 273.0	1.85	64017.09	249.936966	608.4	false
13C4-PFHpA	367.0 / 322.0	2.26	69829.80	239.635004	1214.6	false
13C8-PFOA	421.0 / 376.0	2.67	88039.21	248.362317	6790.2	false
13C9-PFNA	472.0 / 427.0	3.06	87883.69	217.126285	862.3	false
13C6-PFDA	519.0 / 474.0	3.41	90855.68	264.902289	703.5	false
13C7-PFUnA	570.0 / 525.0	3.73	88084.56	278.026244	664.9	false
13C2-PFTeDA	715.0 / 670.0	4.48	88807.61	323.107393	1619.9	false
13C3-PFBS	302.0 / 99.0	1.53	28344.42	273.345379	386.1	false
13C3-PFHxS	402.0 / 99.0	2.28	22812.87	242.785225	278.1	false
13C8-PFOS	507.0 / 99.0	3.06	23157.24	218.160212	209.0	false

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Summary Quant Report

Sample Name	KB76	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:03:28	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	109168.21	288.047565	1294.3	false
d3-MeFOSAA	573.0 / 419.0	3.57	19668.86	279.628905	219.7	false
d5-EtFOSAA	589.0 / 419.0	3.73	23471.33	293.977592	266.9	false
13C5-PFHxA	318.0 / 273.0	1.84	66845.13	248.587280	560.4	false
13C4-PFHpA	367.0 / 322.0	2.25	78783.91	257.526274	722.1	false
13C8-PFOA	421.0 / 376.0	2.67	93071.17	250.091713	2889.4	false
13C9-PFNA	472.0 / 427.0	3.06	92202.66	216.981208	1800.2	false
13C6-PFDA	519.0 / 474.0	3.41	105491.23	276.277673	959.5	false
13C7-PFUnA	570.0 / 525.0	3.72	100760.24	285.674175	960.0	false
13C2-PFTeDA	715.0 / 670.0	4.47	92782.80	303.221515	1734.5	false
13C3-PFBS	302.0 / 99.0	1.52	31218.02	243.621339	570.3	false
13C3-PFHxS	402.0 / 99.0	2.28	23520.63	202.561681	498.9	false
13C8-PFOS	507.0 / 99.0	3.06	28163.54	214.704867	291.0	false

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Summary Quant Report

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Sample Name	KB77	**Injection Vial**	5
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T03:19:32	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	106859.15	294.208466	1202.3	false
d3-MeFOSAA	573.0 / 419.0	3.57	18457.16	320.128614	195.0	false
d5-EtFOSAA	589.0 / 419.0	3.73	20609.67	314.922909	291.5	false
13C5-PFHxA	318.0 / 273.0	1.85	70710.44	274.835249	535.7	false
13C4-PFHpA	367.0 / 322.0	2.25	74014.67	252.860851	867.8	false
13C8-PFOA	421.0 / 376.0	2.67	88964.82	249.851636	1006.3	false
13C9-PFNA	472.0 / 427.0	3.06	101816.55	250.424485	1033.1	false
13C6-PFDA	519.0 / 474.0	3.41	97055.44	265.231282	1019.5	false
13C7-PFUnA	570.0 / 525.0	3.72	100822.80	298.274408	686.8	false
13C2-PFTeDA	715.0 / 670.0	4.47	90609.00	308.986335	1655.2	false
13C3-PFBS	302.0 / 99.0	1.52	28014.61	266.717441	578.0	false
13C3-PFHxS	402.0 / 99.0	2.28	24969.71	262.348480	447.1	false
13C8-PFOS	507.0 / 99.0	3.05	27947.34	259.927240	265.7	false

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Summary Quant Report

Sample Name	KB75 ISC	**Injection Vial**	2
Sample ID	ISC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T11:41:21	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	192603.89	473.498255	250.7	false
PFBS_2	298.9 / 99.0	1.55	56701.67	476.514790	250.0	false
PFHxA_1	313.0 / 269.0	1.88	150563.49	496.782000	55.8	false
PFHxA_2	313.0 / 119.0	1.88	9962.78	420.546914	38.9	false
PFHpA_1	363.0 / 319.0	2.29	134460.56	439.828834	112.1	false
PFHpA_2	363.0 / 169.0	2.29	2782.06	359.565085	62.7	true
PFHxS_1	399.0 / 80.0	2.31	188753.58	480.201572	253.4	false
PFHxS_2	399.0 / 99.0	2.31	54083.92	488.861766	269.6	false
PFOA_1	413.0 / 369.0	2.70	200412.45	486.191271	192.9	false
PFOA_2	413.0 / 169.0	2.70	13650.47	511.411322	140.7	false
PFNA_1	463.0 / 419.0	3.10	171256.53	507.851597	243.7	false
PFNA_2	463.0 / 219.0	3.10	55888.71	542.731542	212.4	false
PFOS_1	499.0 / 80.0	3.10	301386.58	496.022088	162.1	false
PFOS_2	499.0 / 99.0	3.10	52086.28	492.401549	298.7	false
PFDA_1	513.0 / 469.0	3.46	212802.39	459.942018	371.9	false
PFDA_2	513.0 / 219.0	3.45	8601.04	448.606500	169.0	false
PFUnA_1	563.0 / 519.0	3.78	202045.80	447.627027	236.8	false
PFUnA_2	563.0 / 269.0	3.78	10449.65	475.558304	117.2	false
PFDoA_1	613.0 / 569.0	4.06	218601.05	496.259734	414.3	false
PFDoA_2	613.0 / 319.0	4.06	34147.83	486.888986	240.0	false
PFTrDA_1	663.0 / 619.0	4.31	210253.32	522.019548	500.2	false
PFTrDA_2	663.0 / 169.0	4.31	12761.59	476.069842	224.1	false
PFTeDA_1	713.0 / 669.0	4.52	240810.51	519.962324	939.4	false
PFTeDA_2	713.0 / 169.0	4.52	11213.68	493.319228	361.5	false
NMeFOSAA_1	570.0 / 419.0	3.61	44292.52	548.547082	514.9	false
NMeFOSAA_2	570.0 / 512.0	3.61	24712.14	519.317669	263.6	false
NEtFOSAA_1	584.0 / 419.0	3.78	43463.83	488.814735	528.2	false
NEtFOSAA_2	584.0 / 483.0	3.78	3725.69	677.398189	3829.7	false

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Summary Quant Report

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Sample Name	KB76	**Injection Vial**	13
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:40:54	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	351046.35	1001.490240	398.1	false
PFBS_2	298.9 / 99.0	1.54	102973.01	1002.146036	367.8	false
PFHxA_1	313.0 / 269.0	1.86	270021.85	1005.281551	72.7	false
PFHxA_2	313.0 / 119.0	1.86	17861.19	872.012013	54.1	false
PFHpA_1	363.0 / 319.0	2.27	258714.83	998.415619	169.6	false
PFHpA_2	363.0 / 169.0	2.27	5648.08	960.809460	103.4	false
PFHxS_1	399.0 / 80.0	2.29	346770.75	1041.889631	264.2	false
PFHxS_2	399.0 / 99.0	2.29	98023.35	1051.432632	434.0	false
PFOA_1	413.0 / 369.0	2.68	378573.82	1107.538155	254.6	false
PFOA_2	413.0 / 169.0	2.68	23789.51	1071.956432	199.7	false
PFNA_1	463.0 / 419.0	3.08	321913.06	1182.137941	364.2	false
PFNA_2	463.0 / 219.0	3.08	99776.90	1191.206094	425.3	false
PFOS_1	499.0 / 80.0	3.08	534198.09	1175.617902	178.3	false
PFOS_2	499.0 / 99.0	3.07	93162.86	1179.599051	389.2	false
PFDA_1	513.0 / 469.0	3.43	410355.21	1053.668276	378.0	false
PFDA_2	513.0 / 219.0	3.43	15845.97	984.092854	184.0	false
PFUnA_1	563.0 / 519.0	3.75	409378.12	966.733619	414.0	false
PFUnA_2	563.0 / 269.0	3.75	21493.91	1030.211201	208.0	false
PFDoA_1	613.0 / 569.0	4.03	387028.23	972.955511	364.5	false
PFDoA_2	613.0 / 319.0	4.03	64393.01	1031.059233	314.0	false
PFTrDA_1	663.0 / 619.0	4.27	376905.98	1025.992736	614.5	false
PFTrDA_2	663.0 / 169.0	4.27	23591.00	972.401240	278.3	false
PFTeDA_1	713.0 / 669.0	4.49	413172.98	983.964175	1249.6	false
PFTeDA_2	713.0 / 169.0	4.49	20555.88	1007.496563	519.8	false
NMeFOSAA_1	570.0 / 419.0	3.58	79793.54	1056.804837	822.7	false
NMeFOSAA_2	570.0 / 512.0	3.58	44842.49	1053.950732	335.3	false
NEtFOSAA_1	584.0 / 419.0	3.74	79593.58	981.588128	565.1	false
NEtFOSAA_2	584.0 / 483.0	3.74	3986.88	794.213366	285.1	false

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Summary Quant Report

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Sample Name	KB77	**Injection Vial**	21
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T15:07:47	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	897482.83	2673.048902	580.1	false
PFBS_2	298.9 / 99.0	1.54	259517.87	2633.692020	706.0	false
PFHxA_1	313.0 / 269.0	1.86	665109.28	2728.896240	124.8	false
PFHxA_2	313.0 / 119.0	1.86	46989.37	2569.851347	99.2	false
PFHpA_1	363.0 / 319.0	2.27	610780.57	2464.672816	225.5	false
PFHpA_2	363.0 / 169.0	2.27	13125.13	2433.875401	146.0	false
PFHxS_1	399.0 / 80.0	2.29	856274.13	2790.044128	508.5	false
PFHxS_2	399.0 / 99.0	2.29	245829.59	2868.401176	680.3	false
PFOA_1	413.0 / 369.0	2.68	863742.32	2390.208006	402.0	false
PFOA_2	413.0 / 169.0	2.68	54581.53	2326.173607	297.5	false
PFNA_1	463.0 / 419.0	3.07	791634.49	2715.991327	680.5	false
PFNA_2	463.0 / 219.0	3.07	252247.55	2809.084014	766.6	false
PFOS_1	499.0 / 80.0	3.07	1480329.22	3109.954106	316.9	false
PFOS_2	499.0 / 99.0	3.07	251672.20	3044.267549	644.7	false
PFDA_1	513.0 / 469.0	3.43	923273.86	2284.632596	644.9	false
PFDA_2	513.0 / 219.0	3.43	32262.97	1932.471012	241.2	false
PFUnA_1	563.0 / 519.0	3.74	993720.65	2554.285790	462.9	false
PFUnA_2	563.0 / 269.0	3.74	49542.52	2568.027859	283.1	false
PFDoA_1	613.0 / 569.0	4.03	964416.91	2447.006974	651.0	false
PFDoA_2	613.0 / 319.0	4.02	152438.17	2475.211096	437.0	false
PFTrDA_1	663.0 / 619.0	4.27	913327.76	2771.220625	907.4	false
PFTrDA_2	663.0 / 169.0	4.27	57061.88	2630.748721	486.8	false
PFTeDA_1	713.0 / 669.0	4.48	979547.86	2615.513503	1861.2	false
PFTeDA_2	713.0 / 169.0	4.48	48098.04	2649.622799	670.2	false
NMeFOSAA_1	570.0 / 419.0	3.58	203213.41	2959.945416	1309.4	false
NMeFOSAA_2	570.0 / 512.0	3.58	120327.44	3207.575301	612.1	false
NEtFOSAA_1	584.0 / 419.0	3.74	201390.36	2611.889087	1053.2	false
NEtFOSAA_2	584.0 / 483.0	3.74	12969.46	2845.506648	97446.7	false

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Summary Quant Report

Created with Analyst Reporter
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Sample Name	KB75 ISC	**Injection Vial**	2
Sample ID	ISC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T11:41:21	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.05	114970.06	270.649131	1203.6	false
d3-MeFOSAA	573.0 / 419.0	3.60	19457.41	280.191682	223.2	false
d5-EtFOSAA	589.0 / 419.0	3.77	23376.93	296.572787	277.7	false
13C5-PFHxA	318.0 / 273.0	1.86	72017.01	265.831540	574.3	false
13C4-PFHpA	367.0 / 322.0	2.28	83469.52	270.815934	1008.0	false
13C8-PFOA	421.0 / 376.0	2.69	99658.32	265.803056	3298.9	false
13C9-PFNA	472.0 / 427.0	3.09	95604.68	223.316124	908.1	false
13C6-PFDA	519.0 / 474.0	3.44	106247.84	248.258096	854.1	false
13C7-PFUnA	570.0 / 525.0	3.76	105207.05	266.121845	1179.5	false
13C2-PFTeDA	715.0 / 670.0	4.52	99271.56	289.448479	1724.1	false
13C3-PFBS	302.0 / 99.0	1.53	32115.26	253.856828	489.6	false
13C3-PFHxS	402.0 / 99.0	2.30	26639.43	232.380958	305.7	false
13C8-PFOS	507.0 / 99.0	3.08	30551.83	235.916966	246.2	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 7:59:13 AM

Sample Name	KB76	**Injection Vial**	13
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:40:54	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	106723.70	280.194385	1306.9	false
d3-MeFOSAA	573.0 / 419.0	3.58	18566.28	319.231339	249.4	false
d5-EtFOSAA	589.0 / 419.0	3.74	21441.28	324.791788	208.3	true
13C5-PFHxA	318.0 / 273.0	1.85	65952.78	284.188233	667.2	false
13C4-PFHpA	367.0 / 322.0	2.26	72450.91	274.404781	874.4	false
13C8-PFOA	421.0 / 376.0	2.67	84065.51	261.737408	1143.2	false
13C9-PFNA	472.0 / 427.0	3.06	79966.48	218.047180	1012.8	false
13C6-PFDA	519.0 / 474.0	3.42	91748.73	239.089238	1032.1	false
13C7-PFUnA	570.0 / 525.0	3.73	99861.85	281.716303	763.8	false
13C2-PFTeDA	715.0 / 670.0	4.48	93333.01	303.499745	2682.6	false
13C3-PFBS	302.0 / 99.0	1.52	27845.28	262.808422	425.3	false
13C3-PFHxS	402.0 / 99.0	2.28	22851.85	238.016682	340.2	false
13C8-PFOS	507.0 / 99.0	3.06	22638.68	208.729330	209.6	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 7:59:19 AM

Sample Name	KB77	**Injection Vial**	21
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T15:07:47	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_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	107626.45	290.192057	1229.2	false
d3-MeFOSAA	573.0 / 419.0	3.57	17650.16	306.716336	273.0	false
d5-EtFOSAA	589.0 / 419.0	3.73	21084.34	322.791448	254.3	false
13C5-PFHxA	318.0 / 273.0	1.85	61101.81	256.829670	456.6	false
13C4-PFHpA	367.0 / 322.0	2.25	70077.45	258.907291	848.4	false
13C8-PFOA	421.0 / 376.0	2.67	89522.59	271.893448	945.7	false
13C9-PFNA	472.0 / 427.0	3.06	86915.01	231.182752	3515.2	false
13C6-PFDA	519.0 / 474.0	3.41	96244.37	257.574732	893.3	false
13C7-PFUnA	570.0 / 525.0	3.73	92324.87	267.484745	808.2	false
13C2-PFTeDA	715.0 / 670.0	4.48	85451.32	285.370992	1290.9	false
13C3-PFBS	302.0 / 99.0	1.52	26764.37	255.301000	565.3	false
13C3-PFHxS	402.0 / 99.0	2.28	21428.52	225.572345	382.2	false
13C8-PFOS	507.0 / 99.0	3.06	23270.60	216.844145	258.3	false

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 01/11/2018 8:00:52 AM

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:13:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	0.280	0.292	ü
PFHxA_1	313.0 / 269.0	1.89	PFHxA			
PFHxA_2	313.0 / 119.0	1.89	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.30	PFHpA			
PFHpA_2	363.0 / 169.0	2.29	PFHpA	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.32	PFHxS			
PFHxS_2	399.0 / 99.0	2.32	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.71	PFOA			
PFOA_2	413.0 / 169.0	2.71	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.11	PFNA			
PFNA_2	463.0 / 219.0	3.10	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	3.10	PFOS			
PFOS_2	499.0 / 99.0	3.10	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.46	PFDA			
PFDA_2	513.0 / 219.0	3.46	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.79	PFUnA			
PFUnA_2	563.0 / 269.0	3.79	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.07	PFDoA			
PFDoA_2	613.0 / 319.0	4.07	PFDoA	0.150	0.160	ü
PFTrDA_1	663.0 / 619.0	4.32	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.32	PFTrDA	0.060	0.066	ü
PFTeDA_1	713.0 / 669.0	4.54	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.54	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.62	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.62	NMeFOSAA	0.580	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.78	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.78	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 01/11/2018 8:00:58 AM

Sample Name	KB75 ISC	**Injection Vial**	1
Sample ID	ISC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T16:26:43	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.57	PFBS			
PFBS_2	298.9 / 99.0	1.57	PFBS	0.280	0.292	ü
PFHxA_1	313.0 / 269.0	1.90	PFHxA			
PFHxA_2	313.0 / 119.0	1.90	PFHxA	0.090	0.077	ü
PFHpA_1	363.0 / 319.0	2.31	PFHpA			
PFHpA_2	363.0 / 169.0	2.31	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.34	PFHxS			
PFHxS_2	399.0 / 99.0	2.33	PFHxS	0.270	0.282	ü
PFOA_1	413.0 / 369.0	2.73	PFOA			
PFOA_2	413.0 / 169.0	2.73	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.13	PFNA			
PFNA_2	463.0 / 219.0	3.13	PFNA	0.330	0.306	ü
PFOS_1	499.0 / 80.0	3.13	PFOS			
PFOS_2	499.0 / 99.0	3.12	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.49	PFDA			
PFDA_2	513.0 / 219.0	3.49	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.82	PFUnA			
PFUnA_2	563.0 / 269.0	3.82	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.10	PFDoA			
PFDoA_2	613.0 / 319.0	4.10	PFDoA	0.180	0.160	ü
PFTrDA_1	663.0 / 619.0	4.35	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.35	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.57	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.57	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.65	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.65	NMeFOSAA	0.450	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.81	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.81	NEtFOSAA	0.070	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 01/11/2018 8:01:02 AM

Sample Name	KB76	**Injection Vial**	11
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:27:08	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.88	PFHxA	0.090	0.077	ü
PFHpA_1	363.0 / 319.0	2.28	PFHpA			
PFHpA_2	363.0 / 169.0	2.28	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.31	PFHxS			
PFHxS_2	399.0 / 99.0	2.31	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.70	PFOA			
PFOA_2	413.0 / 169.0	2.69	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.10	PFNA			
PFNA_2	463.0 / 219.0	3.09	PFNA	0.330	0.306	ü
PFOS_1	499.0 / 80.0	3.09	PFOS			
PFOS_2	499.0 / 99.0	3.09	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.45	PFDA			
PFDA_2	513.0 / 219.0	3.45	PFDA	0.030	0.041	ü
PFUnA_1	563.0 / 519.0	3.77	PFUnA			
PFUnA_2	563.0 / 269.0	3.77	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.05	PFDoA			
PFDoA_2	613.0 / 319.0	4.05	PFDoA	0.160	0.160	ü
PFTrDA_1	663.0 / 619.0	4.29	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.29	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.50	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.50	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.60	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.60	NMeFOSAA	0.550	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.76	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.76	NEtFOSAA	0.070	0.062	ü

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Summary Ion Ratio Report

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Printed: 01/11/2018 8:01:08 AM

Sample Name	KB77	**Injection Vial**	23
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:37:35	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.86	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	0.025	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.290	0.282	ü
PFOA_1	413.0 / 369.0	2.69	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.340	0.306	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.44	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.75	PFUnA			
PFUnA_2	563.0 / 269.0	3.75	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.03	PFDoA			
PFDoA_2	613.0 / 319.0	4.03	PFDoA	0.160	0.160	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.59	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.59	NMeFOSAA	0.490	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.75	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.75	NEtFOSAA	0.080	0.062	ü

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Summary Ion Ratio Report

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Printed: 01/11/2018 8:01:13 AM

Sample Name	KB76	**Injection Vial**	33
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:26:13	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.86	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	2.28	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.070	0.065	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.320	0.306	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.43	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.75	PFUnA			
PFUnA_2	563.0 / 269.0	3.75	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.03	PFDoA			
PFDoA_2	613.0 / 319.0	4.03	PFDoA	0.160	0.160	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.58	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.58	NMeFOSAA	0.540	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.74	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.74	NEtFOSAA	0.070	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 01/11/2018 8:01:18 AM

Sample Name	KB77	**Injection Vial**	43
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:14:50	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.86	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	0.025	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.300	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.43	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.75	PFUnA			
PFUnA_2	563.0 / 269.0	3.75	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.03	PFDoA			
PFDoA_2	613.0 / 319.0	4.03	PFDoA	0.170	0.160	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.58	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.58	NMeFOSAA	0.540	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.74	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.74	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 01/11/2018 8:01:23 AM

Sample Name	KB76	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:03:28	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.86	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	0.025	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.330	0.306	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	4.02	PFDoA	0.160	0.160	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.060	0.066	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.58	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.530	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.080	0.062	ü

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Summary Ion Ratio Report

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Sample Name	KB77	**Injection Vial**	5
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T03:19:32	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.86	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	0.025	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.300	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	4.02	PFDoA	0.150	0.160	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.520	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

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Sample Name	KB75 ISC	**Injection Vial**	2
Sample ID	ISC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T11:41:21	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.88	PFHxA			
PFHxA_2	313.0 / 119.0	1.88	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.29	PFHpA			
PFHpA_2	363.0 / 169.0	2.29	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.31	PFHxS			
PFHxS_2	399.0 / 99.0	2.31	PFHxS	0.290	0.282	ü
PFOA_1	413.0 / 369.0	2.70	PFOA			
PFOA_2	413.0 / 169.0	2.70	PFOA	0.070	0.065	ü
PFNA_1	463.0 / 419.0	3.10	PFNA			
PFNA_2	463.0 / 219.0	3.10	PFNA	0.330	0.306	ü
PFOS_1	499.0 / 80.0	3.10	PFOS			
PFOS_2	499.0 / 99.0	3.10	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.46	PFDA			
PFDA_2	513.0 / 219.0	3.45	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.78	PFUnA			
PFUnA_2	563.0 / 269.0	3.78	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.06	PFDoA			
PFDoA_2	613.0 / 319.0	4.06	PFDoA	0.160	0.160	ü
PFTrDA_1	663.0 / 619.0	4.31	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.31	PFTrDA	0.060	0.066	ü
PFTeDA_1	713.0 / 669.0	4.52	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.52	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.61	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.61	NMeFOSAA	0.560	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.78	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.78	NEtFOSAA	0.090	0.062	ü

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Summary Ion Ratio Report

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Sample Name	KB76	**Injection Vial**	13
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:40:54	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
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	1.86	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	0.025	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.43	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.75	PFUnA			
PFUnA_2	563.0 / 269.0	3.75	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.03	PFDoA			
PFDoA_2	613.0 / 319.0	4.03	PFDoA	0.170	0.160	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.060	0.066	ü
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.49	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.58	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.58	NMeFOSAA	0.560	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.74	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.74	NEtFOSAA	0.050	0.062	ü

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Summary Ion Ratio Report

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Sample Name	KB77	**Injection Vial**	21
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T15:07:47	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
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	1.86	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	0.025	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.290	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.320	0.306	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.43	PFDA	0.030	0.041	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.03	PFDoA			
PFDoA_2	613.0 / 319.0	4.02	PFDoA	0.160	0.160	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.060	0.066	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.58	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.58	NMeFOSAA	0.590	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.74	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.74	NEtFOSAA	0.060	0.062	ü

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Summary Internal Standard 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	2018-10-17T21:13:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	27104.45	232.25
PFBS_2	298.9 / 99.0	1.56	13C3-PFBS	302.0 / 99.0	27104.45	232.25
PFHxA_1	313.0 / 269.0	1.89	13C5-PFHxA	318.0 / 273.0	59013.59	250.00
PFHxA_2	313.0 / 119.0	1.89	13C5-PFHxA	318.0 / 273.0	59013.59	250.00
PFHpA_1	363.0 / 319.0	2.30	13C4-PFHpA	367.0 / 322.0	70279.06	250.00
PFHpA_2	363.0 / 169.0	2.29	13C4-PFHpA	367.0 / 322.0	70279.06	250.00
PFHxS_1	399.0 / 80.0	2.32	13C3-PFHxS	402.0 / 99.0	24692.35	236.50
PFHxS_2	399.0 / 99.0	2.32	13C3-PFHxS	402.0 / 99.0	24692.35	236.50
PFOA_1	413.0 / 369.0	2.71	13C8-PFOA	421.0 / 376.0	89115.92	250.00
PFOA_2	413.0 / 169.0	2.71	13C8-PFOA	421.0 / 376.0	89115.92	250.00
PFNA_1	463.0 / 419.0	3.11	13C9-PFNA	472.0 / 427.0	100916.15	250.00
PFNA_2	463.0 / 219.0	3.10	13C9-PFNA	472.0 / 427.0	100916.15	250.00
PFOS_1	499.0 / 80.0	3.10	13C8-PFOS	507.0 / 99.0	29786.30	239.25
PFOS_2	499.0 / 99.0	3.10	13C8-PFOS	507.0 / 99.0	29786.30	239.25
PFDA_1	513.0 / 469.0	3.46	13C6-PFDA	519.0 / 474.0	90930.64	250.00
PFDA_2	513.0 / 219.0	3.46	13C6-PFDA	519.0 / 474.0	90930.64	250.00
PFUnA_1	563.0 / 519.0	3.79	13C7-PFUnA	570.0 / 525.0	89293.12	250.00
PFUnA_2	563.0 / 269.0	3.79	13C7-PFUnA	570.0 / 525.0	89293.12	250.00
PFDoA_1	613.0 / 569.0	4.07	13C2-PFDoA	615.0 / 570.0	93406.68	250.00
PFDoA_2	613.0 / 319.0	4.07	13C2-PFDoA	615.0 / 570.0	93406.68	250.00
PFTrDA_1	663.0 / 619.0	4.32	13C2-PFTeDA	715.0 / 670.0	71262.97	250.00
PFTrDA_2	663.0 / 169.0	4.32	13C2-PFTeDA	715.0 / 670.0	71262.97	250.00
PFTeDA_1	713.0 / 669.0	4.54	13C2-PFTeDA	715.0 / 670.0	71262.97	250.00
PFTeDA_2	713.0 / 169.0	4.54	13C2-PFTeDA	715.0 / 670.0	71262.97	250.00
NMeFOSAA_1	570.0 / 419.0	3.62	d3-MeFOSAA	573.0 / 419.0	17861.22	250.00
NMeFOSAA_2	570.0 / 512.0	3.62	d3-MeFOSAA	573.0 / 419.0	17861.22	250.00
NEtFOSAA_1	584.0 / 419.0	3.78	d5-EtFOSAA	589.0 / 419.0	14753.24	250.00
NEtFOSAA_2	584.0 / 483.0	3.78	d5-EtFOSAA	589.0 / 419.0	14753.24	250.00

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Summary Internal Standard Report

Sample Name	KB75 ISC	**Injection Vial**	1
Sample ID	ISC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T16:26:43	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.57	13C3-PFBS	302.0 / 99.0	25518.56	232.25
PFBS_2	298.9 / 99.0	1.57	13C3-PFBS	302.0 / 99.0	25518.56	232.25
PFHxA_1	313.0 / 269.0	1.90	13C5-PFHxA	318.0 / 273.0	61842.02	250.00
PFHxA_2	313.0 / 119.0	1.90	13C5-PFHxA	318.0 / 273.0	61842.02	250.00
PFHpA_1	363.0 / 319.0	2.31	13C4-PFHpA	367.0 / 322.0	70406.28	250.00
PFHpA_2	363.0 / 169.0	2.31	13C4-PFHpA	367.0 / 322.0	70406.28	250.00
PFHxS_1	399.0 / 80.0	2.34	13C3-PFHxS	402.0 / 99.0	22662.71	236.50
PFHxS_2	399.0 / 99.0	2.33	13C3-PFHxS	402.0 / 99.0	22662.71	236.50
PFOA_1	413.0 / 369.0	2.73	13C8-PFOA	421.0 / 376.0	78322.47	250.00
PFOA_2	413.0 / 169.0	2.73	13C8-PFOA	421.0 / 376.0	78322.47	250.00
PFNA_1	463.0 / 419.0	3.13	13C9-PFNA	472.0 / 427.0	81621.81	250.00
PFNA_2	463.0 / 219.0	3.13	13C9-PFNA	472.0 / 427.0	81621.81	250.00
PFOS_1	499.0 / 80.0	3.13	13C8-PFOS	507.0 / 99.0	27515.16	239.25
PFOS_2	499.0 / 99.0	3.12	13C8-PFOS	507.0 / 99.0	27515.16	239.25
PFDA_1	513.0 / 469.0	3.49	13C6-PFDA	519.0 / 474.0	92696.22	250.00
PFDA_2	513.0 / 219.0	3.49	13C6-PFDA	519.0 / 474.0	92696.22	250.00
PFUnA_1	563.0 / 519.0	3.82	13C7-PFUnA	570.0 / 525.0	84510.22	250.00
PFUnA_2	563.0 / 269.0	3.82	13C7-PFUnA	570.0 / 525.0	84510.22	250.00
PFDoA_1	613.0 / 569.0	4.10	13C2-PFDoA	615.0 / 570.0	94338.75	250.00
PFDoA_2	613.0 / 319.0	4.10	13C2-PFDoA	615.0 / 570.0	94338.75	250.00
PFTrDA_1	663.0 / 619.0	4.35	13C2-PFTeDA	715.0 / 670.0	87517.92	250.00
PFTrDA_2	663.0 / 169.0	4.35	13C2-PFTeDA	715.0 / 670.0	87517.92	250.00
PFTeDA_1	713.0 / 669.0	4.57	13C2-PFTeDA	715.0 / 670.0	87517.92	250.00
PFTeDA_2	713.0 / 169.0	4.57	13C2-PFTeDA	715.0 / 670.0	87517.92	250.00
NMeFOSAA_1	570.0 / 419.0	3.65	d3-MeFOSAA	573.0 / 419.0	16648.07	250.00
NMeFOSAA_2	570.0 / 512.0	3.65	d3-MeFOSAA	573.0 / 419.0	16648.07	250.00
NEtFOSAA_1	584.0 / 419.0	3.81	d5-EtFOSAA	589.0 / 419.0	16369.23	250.00
NEtFOSAA_2	584.0 / 483.0	3.81	d5-EtFOSAA	589.0 / 419.0	16369.23	250.00

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Summary Internal Standard Report

Sample Name	KB76	**Injection Vial**	11
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:27:08	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	27904.10	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	27904.10	232.25
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	62575.66	250.00
PFHxA_2	313.0 / 119.0	1.88	13C5-PFHxA	318.0 / 273.0	62575.66	250.00
PFHpA_1	363.0 / 319.0	2.28	13C4-PFHpA	367.0 / 322.0	78609.20	250.00
PFHpA_2	363.0 / 169.0	2.28	13C4-PFHpA	367.0 / 322.0	78609.20	250.00
PFHxS_1	399.0 / 80.0	2.31	13C3-PFHxS	402.0 / 99.0	22391.60	236.50
PFHxS_2	399.0 / 99.0	2.31	13C3-PFHxS	402.0 / 99.0	22391.60	236.50
PFOA_1	413.0 / 369.0	2.70	13C8-PFOA	421.0 / 376.0	92659.75	250.00
PFOA_2	413.0 / 169.0	2.69	13C8-PFOA	421.0 / 376.0	92659.75	250.00
PFNA_1	463.0 / 419.0	3.10	13C9-PFNA	472.0 / 427.0	90383.89	250.00
PFNA_2	463.0 / 219.0	3.09	13C9-PFNA	472.0 / 427.0	90383.89	250.00
PFOS_1	499.0 / 80.0	3.09	13C8-PFOS	507.0 / 99.0	27386.51	239.25
PFOS_2	499.0 / 99.0	3.09	13C8-PFOS	507.0 / 99.0	27386.51	239.25
PFDA_1	513.0 / 469.0	3.45	13C6-PFDA	519.0 / 474.0	95944.16	250.00
PFDA_2	513.0 / 219.0	3.45	13C6-PFDA	519.0 / 474.0	95944.16	250.00
PFUnA_1	563.0 / 519.0	3.77	13C7-PFUnA	570.0 / 525.0	92276.41	250.00
PFUnA_2	563.0 / 269.0	3.77	13C7-PFUnA	570.0 / 525.0	92276.41	250.00
PFDoA_1	613.0 / 569.0	4.05	13C2-PFDoA	615.0 / 570.0	103623.69	250.00
PFDoA_2	613.0 / 319.0	4.05	13C2-PFDoA	615.0 / 570.0	103623.69	250.00
PFTrDA_1	663.0 / 619.0	4.29	13C2-PFTeDA	715.0 / 670.0	91727.48	250.00
PFTrDA_2	663.0 / 169.0	4.29	13C2-PFTeDA	715.0 / 670.0	91727.48	250.00
PFTeDA_1	713.0 / 669.0	4.50	13C2-PFTeDA	715.0 / 670.0	91727.48	250.00
PFTeDA_2	713.0 / 169.0	4.50	13C2-PFTeDA	715.0 / 670.0	91727.48	250.00
NMeFOSAA_1	570.0 / 419.0	3.60	d3-MeFOSAA	573.0 / 419.0	19441.18	250.00
NMeFOSAA_2	570.0 / 512.0	3.60	d3-MeFOSAA	573.0 / 419.0	19441.18	250.00
NEtFOSAA_1	584.0 / 419.0	3.76	d5-EtFOSAA	589.0 / 419.0	18181.38	250.00
NEtFOSAA_2	584.0 / 483.0	3.76	d5-EtFOSAA	589.0 / 419.0	18181.38	250.00

Sample Name	KB77	**Injection Vial**	23
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:37:35	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	26879.54	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	26879.54	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	66976.41	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	66976.41	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	76920.42	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	76920.42	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	25012.91	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	25012.91	236.50
PFOA_1	413.0 / 369.0	2.69	13C8-PFOA	421.0 / 376.0	89359.15	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	89359.15	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	90848.47	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	90848.47	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	28384.92	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	28384.92	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	102971.64	250.00
PFDA_2	513.0 / 219.0	3.44	13C6-PFDA	519.0 / 474.0	102971.64	250.00
PFUnA_1	563.0 / 519.0	3.75	13C7-PFUnA	570.0 / 525.0	99696.97	250.00
PFUnA_2	563.0 / 269.0	3.75	13C7-PFUnA	570.0 / 525.0	99696.97	250.00
PFDoA_1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	104587.04	250.00
PFDoA_2	613.0 / 319.0	4.03	13C2-PFDoA	615.0 / 570.0	104587.04	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	91072.64	250.00
PFTrDA_2	663.0 / 169.0	4.27	13C2-PFTeDA	715.0 / 670.0	91072.64	250.00
PFTeDA_1	713.0 / 669.0	4.49	13C2-PFTeDA	715.0 / 670.0	91072.64	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	91072.64	250.00
NMeFOSAA_1	570.0 / 419.0	3.59	d3-MeFOSAA	573.0 / 419.0	20240.95	250.00
NMeFOSAA_2	570.0 / 512.0	3.59	d3-MeFOSAA	573.0 / 419.0	20240.95	250.00
NEtFOSAA_1	584.0 / 419.0	3.75	d5-EtFOSAA	589.0 / 419.0	21279.62	250.00
NEtFOSAA_2	584.0 / 483.0	3.75	d5-EtFOSAA	589.0 / 419.0	21279.62	250.00

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Summary Internal Standard Report

Sample Name	KB76	**Injection Vial**	33
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:26:13	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	29617.72	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	29617.72	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	64098.35	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	64098.35	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	73395.12	250.00
PFHpA_2	363.0 / 169.0	2.28	13C4-PFHpA	367.0 / 322.0	73395.12	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	20050.94	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	20050.94	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	85296.80	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	85296.80	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	85896.90	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	85896.90	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	24814.72	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	24814.72	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	92654.85	250.00
PFDA_2	513.0 / 219.0	3.43	13C6-PFDA	519.0 / 474.0	92654.85	250.00
PFUnA_1	563.0 / 519.0	3.75	13C7-PFUnA	570.0 / 525.0	85645.99	250.00
PFUnA_2	563.0 / 269.0	3.75	13C7-PFUnA	570.0 / 525.0	85645.99	250.00
PFDoA_1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	103377.42	250.00
PFDoA_2	613.0 / 319.0	4.03	13C2-PFDoA	615.0 / 570.0	103377.42	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	89903.50	250.00
PFTrDA_2	663.0 / 169.0	4.27	13C2-PFTeDA	715.0 / 670.0	89903.50	250.00
PFTeDA_1	713.0 / 669.0	4.49	13C2-PFTeDA	715.0 / 670.0	89903.50	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	89903.50	250.00
NMeFOSAA_1	570.0 / 419.0	3.58	d3-MeFOSAA	573.0 / 419.0	19289.11	250.00
NMeFOSAA_2	570.0 / 512.0	3.58	d3-MeFOSAA	573.0 / 419.0	19289.11	250.00
NEtFOSAA_1	584.0 / 419.0	3.74	d5-EtFOSAA	589.0 / 419.0	20030.67	250.00
NEtFOSAA_2	584.0 / 483.0	3.74	d5-EtFOSAA	589.0 / 419.0	20030.67	250.00

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Summary Internal Standard Report

Sample Name	KB77	**Injection Vial**	43
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:14:50	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	28344.42	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	28344.42	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	64017.09	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	64017.09	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	69829.80	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	69829.80	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	22440.64	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	22440.64	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	88039.21	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	88039.21	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	87883.69	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	87883.69	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	23751.91	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	23751.91	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	90855.68	250.00
PFDA_2	513.0 / 219.0	3.43	13C6-PFDA	519.0 / 474.0	90855.68	250.00
PFUnA_1	563.0 / 519.0	3.75	13C7-PFUnA	570.0 / 525.0	88084.56	250.00
PFUnA_2	563.0 / 269.0	3.75	13C7-PFUnA	570.0 / 525.0	88084.56	250.00
PFDoA_1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	99955.07	250.00
PFDoA_2	613.0 / 319.0	4.03	13C2-PFDoA	615.0 / 570.0	99955.07	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	88807.61	250.00
PFTrDA_2	663.0 / 169.0	4.27	13C2-PFTeDA	715.0 / 670.0	88807.61	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	88807.61	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	88807.61	250.00
NMeFOSAA_1	570.0 / 419.0	3.58	d3-MeFOSAA	573.0 / 419.0	17477.95	250.00
NMeFOSAA_2	570.0 / 512.0	3.58	d3-MeFOSAA	573.0 / 419.0	17477.95	250.00
NEtFOSAA_1	584.0 / 419.0	3.74	d5-EtFOSAA	589.0 / 419.0	17955.57	250.00
NEtFOSAA_2	584.0 / 483.0	3.74	d5-EtFOSAA	589.0 / 419.0	17955.57	250.00

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Summary Internal Standard Report

Sample Name	KB76	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:03:28	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	31218.02	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	31218.02	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	66845.13	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	66845.13	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	78783.91	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	78783.91	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	23158.65	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	23158.65	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	93071.17	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	93071.17	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	92202.66	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	92202.66	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	28647.82	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	28647.82	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	105491.23	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	105491.23	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	100760.24	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	100760.24	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	109168.21	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	109168.21	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	92782.80	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	92782.80	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	92782.80	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	92782.80	250.00
NMeFOSAA_1	570.0 / 419.0	3.58	d3-MeFOSAA	573.0 / 419.0	20205.51	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	20205.51	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	23173.74	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	23173.74	250.00

Sample Name	KB77	**Injection Vial**	5
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T03:19:32	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	28014.61	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	28014.61	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	70710.44	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	70710.44	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	74014.67	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	74014.67	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	24686.05	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	24686.05	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	88964.82	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	88964.82	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	101816.55	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	101816.55	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	28820.70	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	28820.70	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	97055.44	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	97055.44	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	100822.80	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	100822.80	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	106859.15	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	106859.15	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	90609.00	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	90609.00	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	90609.00	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	90609.00	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	18833.95	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	18833.95	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	20720.67	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	20720.67	250.00

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Summary Internal Standard Report

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Printed: 01/11/2018 8:03:24 AM

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:13:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	103402.36	250.00
d3-MeFOSAA	573.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	33690.55	239.25
d5-EtFOSAA	589.0 / 419.0	3.78	13C4-PFOS	503.0 / 99.0	33690.55	239.25
13C5-PFHxA	318.0 / 273.0	1.88	13C2-PFOA	415.0 / 370.0	85242.44	250.00
13C4-PFHpA	367.0 / 322.0	2.29	13C2-PFOA	415.0 / 370.0	85242.44	250.00
13C8-PFOA	421.0 / 376.0	2.70	13C2-PFOA	415.0 / 370.0	85242.44	250.00
13C9-PFNA	472.0 / 427.0	3.09	13C2-PFOA	415.0 / 370.0	85242.44	250.00
13C6-PFDA	519.0 / 474.0	3.45	13C2-PFDA	515.0 / 470.0	103402.36	250.00
13C7-PFUnA	570.0 / 525.0	3.77	13C2-PFDA	515.0 / 470.0	103402.36	250.00
13C2-PFTeDA	715.0 / 670.0	4.54	13C2-PFDA	515.0 / 470.0	103402.36	250.00
13C3-PFBS	302.0 / 99.0	1.55	13C4-PFOS	503.0 / 99.0	33690.55	239.25
13C3-PFHxS	402.0 / 99.0	2.31	13C4-PFOS	503.0 / 99.0	33690.55	239.25
13C8-PFOS	507.0 / 99.0	3.09	13C4-PFOS	503.0 / 99.0	33690.55	239.25

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Summary Internal Standard Report

Sample Name	KB75 ISC	**Injection Vial**	1
Sample ID	ISC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T16:26:43	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	4.09	13C2-PFDA	515.0 / 470.0	96318.27	250.00
d3-MeFOSAA	573.0 / 419.0	3.64	13C4-PFOS	503.0 / 99.0	28184.95	239.25
d5-EtFOSAA	589.0 / 419.0	3.80	13C4-PFOS	503.0 / 99.0	28184.95	239.25
13C5-PFHxA	318.0 / 273.0	1.89	13C2-PFOA	415.0 / 370.0	74227.28	250.00
13C4-PFHpA	367.0 / 322.0	2.30	13C2-PFOA	415.0 / 370.0	74227.28	250.00
13C8-PFOA	421.0 / 376.0	2.72	13C2-PFOA	415.0 / 370.0	74227.28	250.00
13C9-PFNA	472.0 / 427.0	3.12	13C2-PFOA	415.0 / 370.0	74227.28	250.00
13C6-PFDA	519.0 / 474.0	3.48	13C2-PFDA	515.0 / 470.0	96318.27	250.00
13C7-PFUnA	570.0 / 525.0	3.80	13C2-PFDA	515.0 / 470.0	96318.27	250.00
13C2-PFTeDA	715.0 / 670.0	4.57	13C2-PFDA	515.0 / 470.0	96318.27	250.00
13C3-PFBS	302.0 / 99.0	1.55	13C4-PFOS	503.0 / 99.0	28184.95	239.25
13C3-PFHxS	402.0 / 99.0	2.32	13C4-PFOS	503.0 / 99.0	28184.95	239.25
13C8-PFOS	507.0 / 99.0	3.11	13C4-PFOS	503.0 / 99.0	28184.95	239.25

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Summary Internal Standard Report

Sample Name	KB76	**Injection Vial**	11
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:27:08	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.03	13C2-PFDA	515.0 / 470.0	97126.87	250.00
d3-MeFOSAA	573.0 / 419.0	3.59	13C4-PFOS	503.0 / 99.0	30895.81	239.25
d5-EtFOSAA	589.0 / 419.0	3.75	13C4-PFOS	503.0 / 99.0	30895.81	239.25
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	83095.99	250.00
13C4-PFHpA	367.0 / 322.0	2.27	13C2-PFOA	415.0 / 370.0	83095.99	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	83095.99	250.00
13C9-PFNA	472.0 / 427.0	3.08	13C2-PFOA	415.0 / 370.0	83095.99	250.00
13C6-PFDA	519.0 / 474.0	3.43	13C2-PFDA	515.0 / 470.0	97126.87	250.00
13C7-PFUnA	570.0 / 525.0	3.75	13C2-PFDA	515.0 / 470.0	97126.87	250.00
13C2-PFTeDA	715.0 / 670.0	4.50	13C2-PFDA	515.0 / 470.0	97126.87	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	30895.81	239.25
13C3-PFHxS	402.0 / 99.0	2.30	13C4-PFOS	503.0 / 99.0	30895.81	239.25
13C8-PFOS	507.0 / 99.0	3.08	13C4-PFOS	503.0 / 99.0	30895.81	239.25

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Summary Internal Standard Report

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Sample Name	KB77	**Injection Vial**	23
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:37:35	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	103546.22	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	28284.73	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	28284.73	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	90138.33	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	90138.33	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	90138.33	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	90138.33	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	103546.22	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	103546.22	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	103546.22	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	28284.73	239.25
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	28284.73	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	28284.73	239.25

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Summary Internal Standard Report

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Sample Name	KB76	**Injection Vial**	33
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:26:13	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	95645.72	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	27149.34	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	27149.34	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	74960.09	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	74960.09	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	74960.09	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	74960.09	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	95645.72	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	95645.72	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	95645.72	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	27149.34	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	27149.34	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	27149.34	239.25

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Summary Internal Standard Report

Sample Name	KB77	**Injection Vial**	43
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:14:50	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	87285.19	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	26662.47	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	26662.47	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	86538.52	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	86538.52	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	86538.52	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	86538.52	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	87285.19	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	87285.19	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	87285.19	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	26662.47	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	26662.47	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	26662.47	239.25

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Summary Internal Standard Report

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Sample Name	KB76	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:03:28	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	97172.81	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	32948.41	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	32948.41	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	90852.08	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	90852.08	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	90852.08	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	90852.08	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	97172.81	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	97172.81	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	97172.81	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	32948.41	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	32948.41	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	32948.41	239.25

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Summary Internal Standard Report

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Sample Name	KB77	**Injection Vial**	5
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T03:19:32	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	93125.66	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	27007.09	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	27007.09	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	86927.09	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	86927.09	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	86927.09	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	86927.09	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	93125.66	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	93125.66	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	93125.66	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	27007.09	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	27007.09	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	27007.09	239.25

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Summary Internal Standard Report

Sample Name	KB75 ISC	**Injection Vial**	2
Sample ID	ISC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T11:41:21	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	32115.26	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	32115.26	232.25
PFHxA_1	313.0 / 269.0	1.88	13C5-PFHxA	318.0 / 273.0	72017.01	250.00
PFHxA_2	313.0 / 119.0	1.88	13C5-PFHxA	318.0 / 273.0	72017.01	250.00
PFHpA_1	363.0 / 319.0	2.29	13C4-PFHpA	367.0 / 322.0	83469.52	250.00
PFHpA_2	363.0 / 169.0	2.29	13C4-PFHpA	367.0 / 322.0	83469.52	250.00
PFHxS_1	399.0 / 80.0	2.31	13C3-PFHxS	402.0 / 99.0	26208.66	236.50
PFHxS_2	399.0 / 99.0	2.31	13C3-PFHxS	402.0 / 99.0	26208.66	236.50
PFOA_1	413.0 / 369.0	2.70	13C8-PFOA	421.0 / 376.0	99658.32	250.00
PFOA_2	413.0 / 169.0	2.70	13C8-PFOA	421.0 / 376.0	99658.32	250.00
PFNA_1	463.0 / 419.0	3.10	13C9-PFNA	472.0 / 427.0	95604.68	250.00
PFNA_2	463.0 / 219.0	3.10	13C9-PFNA	472.0 / 427.0	95604.68	250.00
PFOS_1	499.0 / 80.0	3.10	13C8-PFOS	507.0 / 99.0	30452.32	239.25
PFOS_2	499.0 / 99.0	3.10	13C8-PFOS	507.0 / 99.0	30452.32	239.25
PFDA_1	513.0 / 469.0	3.46	13C6-PFDA	519.0 / 474.0	106247.84	250.00
PFDA_2	513.0 / 219.0	3.45	13C6-PFDA	519.0 / 474.0	106247.84	250.00
PFUnA_1	563.0 / 519.0	3.78	13C7-PFUnA	570.0 / 525.0	105207.05	250.00
PFUnA_2	563.0 / 269.0	3.78	13C7-PFUnA	570.0 / 525.0	105207.05	250.00
PFDoA_1	613.0 / 569.0	4.06	13C2-PFDoA	615.0 / 570.0	114970.06	250.00
PFDoA_2	613.0 / 319.0	4.06	13C2-PFDoA	615.0 / 570.0	114970.06	250.00
PFTrDA_1	663.0 / 619.0	4.31	13C2-PFTeDA	715.0 / 670.0	99271.56	250.00
PFTrDA_2	663.0 / 169.0	4.31	13C2-PFTeDA	715.0 / 670.0	99271.56	250.00
PFTeDA_1	713.0 / 669.0	4.52	13C2-PFTeDA	715.0 / 670.0	99271.56	250.00
PFTeDA_2	713.0 / 169.0	4.52	13C2-PFTeDA	715.0 / 670.0	99271.56	250.00
NMeFOSAA_1	570.0 / 419.0	3.61	d3-MeFOSAA	573.0 / 419.0	19553.00	250.00
NMeFOSAA_2	570.0 / 512.0	3.61	d3-MeFOSAA	573.0 / 419.0	19553.00	250.00
NEtFOSAA_1	584.0 / 419.0	3.78	d5-EtFOSAA	589.0 / 419.0	23994.83	250.00
NEtFOSAA_2	584.0 / 483.0	3.78	d5-EtFOSAA	589.0 / 419.0	23994.83	250.00

Sample Name	KB76	**Injection Vial**	13
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:40:54	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
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	27845.28	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	27845.28	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	65952.78	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	65952.78	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	72450.91	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	72450.91	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	22683.30	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	22683.30	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	84065.51	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	84065.51	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	79966.48	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	79966.48	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	22726.14	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	22726.14	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	91748.73	250.00
PFDA_2	513.0 / 219.0	3.43	13C6-PFDA	519.0 / 474.0	91748.73	250.00
PFUnA_1	563.0 / 519.0	3.75	13C7-PFUnA	570.0 / 525.0	99861.85	250.00
PFUnA_2	563.0 / 269.0	3.75	13C7-PFUnA	570.0 / 525.0	99861.85	250.00
PFDoA_1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	106723.70	250.00
PFDoA_2	613.0 / 319.0	4.03	13C2-PFDoA	615.0 / 570.0	106723.70	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	93333.01	250.00
PFTrDA_2	663.0 / 169.0	4.27	13C2-PFTeDA	715.0 / 670.0	93333.01	250.00
PFTeDA_1	713.0 / 669.0	4.49	13C2-PFTeDA	715.0 / 670.0	93333.01	250.00
PFTeDA_2	713.0 / 169.0	4.49	13C2-PFTeDA	715.0 / 670.0	93333.01	250.00
NMeFOSAA_1	570.0 / 419.0	3.58	d3-MeFOSAA	573.0 / 419.0	19155.52	250.00
NMeFOSAA_2	570.0 / 512.0	3.58	d3-MeFOSAA	573.0 / 419.0	19155.52	250.00
NEtFOSAA_1	584.0 / 419.0	3.74	d5-EtFOSAA	589.0 / 419.0	22179.02	250.00
NEtFOSAA_2	584.0 / 483.0	3.74	d5-EtFOSAA	589.0 / 419.0	22179.02	250.00

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Summary Internal Standard Report

Sample Name	KB77	**Injection Vial**	21
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T15:07:47	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
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	26764.37	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	26764.37	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	61101.81	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	61101.81	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	70077.45	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	70077.45	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	21167.50	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	21167.50	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	89522.59	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	89522.59	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	86915.01	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	86915.01	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	23783.85	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	23783.85	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	96244.37	250.00
PFDA_2	513.0 / 219.0	3.43	13C6-PFDA	519.0 / 474.0	96244.37	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	92324.87	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	92324.87	250.00
PFDoA_1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	107626.45	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	107626.45	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	85451.32	250.00
PFTrDA_2	663.0 / 169.0	4.27	13C2-PFTeDA	715.0 / 670.0	85451.32	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	85451.32	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	85451.32	250.00
NMeFOSAA_1	570.0 / 419.0	3.58	d3-MeFOSAA	573.0 / 419.0	18013.52	250.00
NMeFOSAA_2	570.0 / 512.0	3.58	d3-MeFOSAA	573.0 / 419.0	18013.52	250.00
NEtFOSAA_1	584.0 / 419.0	3.74	d5-EtFOSAA	589.0 / 419.0	21268.93	250.00
NEtFOSAA_2	584.0 / 483.0	3.74	d5-EtFOSAA	589.0 / 419.0	21268.93	250.00

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Summary Internal Standard Report

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Sample Name	KB75 ISC	**Injection Vial**	2
Sample ID	ISC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T11:41:21	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.05	13C2-PFDA	515.0 / 470.0	108915.80	250.00
d3-MeFOSAA	573.0 / 419.0	3.60	13C4-PFOS	503.0 / 99.0	32528.73	239.25
d5-EtFOSAA	589.0 / 419.0	3.77	13C4-PFOS	503.0 / 99.0	32528.73	239.25
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	91531.93	250.00
13C4-PFHpA	367.0 / 322.0	2.28	13C2-PFOA	415.0 / 370.0	91531.93	250.00
13C8-PFOA	421.0 / 376.0	2.69	13C2-PFOA	415.0 / 370.0	91531.93	250.00
13C9-PFNA	472.0 / 427.0	3.09	13C2-PFOA	415.0 / 370.0	91531.93	250.00
13C6-PFDA	519.0 / 474.0	3.44	13C2-PFDA	515.0 / 470.0	108915.80	250.00
13C7-PFUnA	570.0 / 525.0	3.76	13C2-PFDA	515.0 / 470.0	108915.80	250.00
13C2-PFTeDA	715.0 / 670.0	4.52	13C2-PFDA	515.0 / 470.0	108915.80	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	32528.73	239.25
13C3-PFHxS	402.0 / 99.0	2.30	13C4-PFOS	503.0 / 99.0	32528.73	239.25
13C8-PFOS	507.0 / 99.0	3.08	13C4-PFOS	503.0 / 99.0	32528.73	239.25

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Summary Internal Standard Report

Sample Name	KB76	**Injection Vial**	13
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:40:54	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	97659.44	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	27243.12	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	27243.12	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	78409.93	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	78409.93	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	78409.93	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	78409.93	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	97659.44	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	97659.44	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	97659.44	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	27243.12	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	27243.12	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	27243.12	239.25

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Summary Internal Standard Report

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Sample Name	KB77	**Injection Vial**	21
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T15:07:47	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_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	95092.50	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	26955.60	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	26955.60	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	80380.91	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	80380.91	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	80380.91	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	80380.91	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	95092.50	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	95092.50	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	95092.50	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	26955.60	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	26955.60	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	26955.60	239.25

Raw Analytical Data

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Summary Quant Report

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Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:02:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.57	4270.08	7.967207	23.4	true
PFBS_2	298.9 / 99.0	1.57	1751.65	15.187213	22.1	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	3.11	5116.99	< 0	29.4	false
PFNA_2	463.0 / 219.0	3.11	1412.81	< 0	28.4	false
PFOS_1	499.0 / 80.0	3.10	10007.21	20.457445	28.3	false
PFOS_2	499.0 / 99.0	3.11	2107.71	23.036162	36.0	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.08	4132.45	< 0	50.7	false
PFDoA_2	613.0 / 319.0	4.08	648.21	< 0	25.1	false
PFTrDA_1	663.0 / 619.0	4.32	3827.82	< 0	101.8	false
PFTrDA_2	663.0 / 169.0	4.34	292.14	< 0	21.8	false
PFTeDA_1	713.0 / 669.0	4.54	4005.90	< 0	149.6	false
PFTeDA_2	713.0 / 169.0	4.54	211.66	< 0	28.3	false
NMeFOSAA_1	570.0 / 419.0	3.63	1091.61	< 0	277.3	false
NMeFOSAA_2	570.0 / 512.0	3.61	558.08	< 0	27.6	false
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	KB80 IB	**Injection Vial**	2
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T16:37:35	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.57	2579.27	2.554309	19.0	true
PFBS_2	298.9 / 99.0	1.57	1003.69	7.043480	19.4	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	2.73	2798.14	< 0	12.9	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	true
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	true
PFDA_1	513.0 / 469.0	3.48	2589.03	< 0	18.3	false
PFDA_2	513.0 / 219.0	3.46	368.44	< 0	11.1	false
PFUnA_1	563.0 / 519.0	3.81	2100.64	< 0	18.3	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.09	1600.74	< 0	26.6	false
PFDoA_2	613.0 / 319.0	4.07	224.48	< 0	12.6	true
PFTrDA_1	663.0 / 619.0	4.34	1080.33	< 0	40.6	false
PFTrDA_2	663.0 / 169.0	4.33	361.24	< 0	12.8	false
PFTeDA_1	713.0 / 669.0	4.56	1567.25	< 0	69.8	false
PFTeDA_2	713.0 / 169.0	4.57	237.01	< 0	16.0	false
NMeFOSAA_1	570.0 / 419.0	3.63	239.12	< 0	21.4	false
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	CR986PB-FS(0)	**Injection Vial**	13
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:48:52	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	1545.02	< 0	13.4	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	2.28	7514.13	9.282181	13.8	false
PFHpA_2	363.0 / 169.0	2.28	227.08	< 0	7.2	false
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	2.69	113486.91	271.808223	182.4	true
PFOA_2	413.0 / 169.0	2.70	7557.69	279.857424	105.5	false
PFNA_1	463.0 / 419.0	3.08	4915.80	< 0	28.0	false
PFNA_2	463.0 / 219.0	3.10	1204.08	< 0	18.9	false
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	true
PFOS_2	499.0 / 99.0	3.09	1722.52	19.420112	23.6	false
PFDA_1	513.0 / 469.0	3.44	2130.71	< 0	18.4	false
PFDA_2	513.0 / 219.0	3.41	211.34	< 0	14.0	false
PFUnA_1	563.0 / 519.0	3.75	1944.30	< 0	14.3	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	4.28	1128.50	< 0	21.3	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	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	J8667-FS(0)	**Injection Vial**	15
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:10:37	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	4148325.30	7452.763623	428.1	false
PFBS_2	298.9 / 99.0	1.54	1234678.63	7555.011523	573.9	false
PFHxA_1	313.0 / 269.0	1.86	13344930.91	44053.472340	306.2	false
PFHxA_2	313.0 / 119.0	1.86	900044.14	39873.603260	399.1	false
PFHpA_1	363.0 / 319.0	2.27	3510688.20	10650.391037	360.5	false
PFHpA_2	363.0 / 169.0	2.27	77342.16	11022.567387	493.9	false
PFHxS_1	399.0 / 80.0	2.30	34088764.19	85619.959399	1435.0	false
PFHxS_2	399.0 / 99.0	2.30	10511112.21	94689.962194	2215.1	false
PFOA_1	413.0 / 369.0	2.69	14089747.10	40550.856634	937.8	false
PFOA_2	413.0 / 169.0	2.64	1341247.19	59449.209013	743.6	true
PFNA_1	463.0 / 419.0	3.08	80601.71	263.598496	112.9	false
PFNA_2	463.0 / 219.0	3.08	30206.48	330.940580	128.4	false
PFOS_1	499.0 / 80.0	3.05	64773204.91	122425.095463	587.2	false
PFOS_2	499.0 / 99.0	3.08	10378093.54	112988.530563	2050.5	false
PFDA_1	513.0 / 469.0	3.44	25626.65	41.310276	67.1	false
PFDA_2	513.0 / 219.0	3.43	500.59	5.990500	13.3	true
PFUnA_1	563.0 / 519.0	3.76	5437.10	3.808792	30.0	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.04	3169.27	< 0	29.7	false
PFDoA_2	613.0 / 319.0	4.05	480.27	< 0	14.9	false
PFTrDA_1	663.0 / 619.0	4.28	2538.52	< 0	49.5	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.49	1834.97	< 0	35.2	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	3.59	760.53	< 0	22.4	false
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	3.75	732.09	< 0	38.2	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	J8667-FS-D(5)	**Injection Vial**	17
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:32:22	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	60073.20	162.385773	117.1	false
PFBS_2	298.9 / 99.0	1.55	19375.29	180.733263	156.4	false
PFHxA_1	313.0 / 269.0	1.87	198355.32	677.594018	61.9	false
PFHxA_2	313.0 / 119.0	1.87	15076.84	675.180568	43.4	false
PFHpA_1	363.0 / 319.0	2.28	61998.65	203.362980	65.9	false
PFHpA_2	363.0 / 169.0	2.26	2211.17	285.868165	42.4	false
PFHxS_1	399.0 / 80.0	2.30	624295.23	1745.917780	442.1	false
PFHxS_2	399.0 / 99.0	2.30	167049.41	1669.632124	734.8	false
PFOA_1	413.0 / 369.0	2.69	343876.24	902.192298	269.2	false
PFOA_2	413.0 / 169.0	2.67	27392.18	1110.814302	206.9	false
PFNA_1	463.0 / 419.0	3.09	7090.50	< 0	33.5	false
PFNA_2	463.0 / 219.0	3.08	2985.32	0.242309	33.8	false
PFOS_1	499.0 / 80.0	3.06	1319730.28	2435.344979	275.9	false
PFOS_2	499.0 / 99.0	3.08	211964.30	2251.853484	527.1	false
PFDA_1	513.0 / 469.0	3.44	7546.70	< 0	41.7	false
PFDA_2	513.0 / 219.0	3.45	700.71	15.593063	16.0	false
PFUnA_1	563.0 / 519.0	3.78	1441.45	< 0	13.1	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.27	436.43	< 0	17.2	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.49	421.26	< 0	26.6	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	3.73	166.54	< 0	21.7	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	J8668-FS(0)	**Injection Vial**	19
Sample ID	VC-CS12-DW01P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:54:05	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	3785097.55	7261.983420	465.1	false
PFBS_2	298.9 / 99.0	1.54	1126499.43	7361.201432	519.9	false
PFHxA_1	313.0 / 269.0	1.86	14487321.06	45737.871027	331.0	false
PFHxA_2	313.0 / 119.0	1.86	950749.24	40281.444723	428.1	false
PFHpA_1	363.0 / 319.0	2.27	3527818.88	10101.841814	373.6	false
PFHpA_2	363.0 / 169.0	2.27	79114.09	10640.408126	418.1	false
PFHxS_1	399.0 / 80.0	2.30	36010637.06	90901.403562	1527.3	false
PFHxS_2	399.0 / 99.0	2.30	11029759.87	99861.351747	1979.9	false
PFOA_1	413.0 / 369.0	2.68	14168425.69	42380.446514	806.1	false
PFOA_2	413.0 / 169.0	2.64	1276349.99	58795.752288	565.6	false
PFNA_1	463.0 / 419.0	3.08	75800.02	235.734395	119.2	false
PFNA_2	463.0 / 219.0	3.08	29438.58	308.943830	130.6	false
PFOS_1	499.0 / 80.0	3.04	73081904.54	146527.063816	638.7	false
PFOS_2	499.0 / 99.0	3.08	11699034.01	135114.049006	1603.2	true
PFDA_1	513.0 / 469.0	3.43	15817.34	17.582383	46.2	false
PFDA_2	513.0 / 219.0	3.42	454.20	3.462148	15.7	true
PFUnA_1	563.0 / 519.0	3.75	3254.75	< 0	23.8	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.03	1273.77	< 0	20.0	false
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.28	949.63	< 0	29.5	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	J8668-FS-D(3)	**Injection Vial**	20
Sample ID	VC-CS12-DW01P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:04:57	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	343980.50	826.954706	302.5	false
PFBS_2	298.9 / 99.0	1.54	103383.74	848.283196	294.8	false
PFHxA_1	313.0 / 269.0	1.86	1195741.24	4129.405152	154.4	false
PFHxA_2	313.0 / 119.0	1.87	78696.72	3628.108511	127.1	false
PFHpA_1	363.0 / 319.0	2.27	300608.68	1065.822768	192.8	false
PFHpA_2	363.0 / 169.0	2.27	7799.53	1241.434409	147.9	false
PFHxS_1	399.0 / 80.0	2.30	3319263.19	9688.484861	990.2	false
PFHxS_2	399.0 / 99.0	2.30	930375.75	9735.326696	1387.6	false
PFOA_1	413.0 / 369.0	2.68	1483785.81	3837.719494	437.2	false
PFOA_2	413.0 / 169.0	2.65	132282.34	5274.892983	320.0	false
PFNA_1	463.0 / 419.0	3.09	12284.97	4.938397	45.4	false
PFNA_2	463.0 / 219.0	3.07	3857.43	9.425745	41.3	false
PFOS_1	499.0 / 80.0	3.06	8474192.76	15362.203362	418.9	false
PFOS_2	499.0 / 99.0	3.08	1401662.24	14635.448214	1156.2	false
PFDA_1	513.0 / 469.0	3.44	7571.65	< 0	42.7	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.75	928.51	< 0	10.7	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	J8669-FS(0)	**Injection Vial**	24
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:48:27	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	834576.41	1562.408757	180.4	false
PFBS_2	298.9 / 99.0	1.54	232520.00	1483.791271	253.5	false
PFHxA_1	313.0 / 269.0	1.86	6157138.76	19036.386327	194.7	false
PFHxA_2	313.0 / 119.0	1.86	399422.60	16559.806232	254.1	false
PFHpA_1	363.0 / 319.0	2.27	1958215.42	5757.498415	265.3	false
PFHpA_2	363.0 / 169.0	2.24	52823.07	7277.123687	227.3	false
PFHxS_1	399.0 / 80.0	2.30	8810353.01	22563.078651	931.6	false
PFHxS_2	399.0 / 99.0	2.30	2369022.11	21755.120606	1319.2	false
PFOA_1	413.0 / 369.0	2.68	21663501.31	72776.006250	1125.5	false
PFOA_2	413.0 / 169.0	2.63	2232992.95	115522.505654	666.2	true
PFNA_1	463.0 / 419.0	3.08	22229.08	45.484352	61.0	false
PFNA_2	463.0 / 219.0	3.08	5327.45	31.836325	41.1	false
PFOS_1	499.0 / 80.0	3.08	44770083.05	85629.381571	754.8	false
PFOS_2	499.0 / 99.0	3.08	7547914.11	83157.491142	2122.2	false
PFDA_1	513.0 / 469.0	3.43	11166.31	6.666623	44.4	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.76	4690.78	1.049777	25.0	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.03	3735.04	< 0	39.2	false
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.27	2317.99	< 0	58.0	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.48	2766.49	< 0	52.4	true
PFTeDA_2	713.0 / 169.0	4.48	183.63	< 0	19.4	false
NMeFOSAA_1	570.0 / 419.0	3.60	795.59	< 0	30.2	false
NMeFOSAA_2	570.0 / 512.0	3.59	536.62	< 0	15.2	true
NEtFOSAA_1	584.0 / 419.0	3.76	347.05	< 0	31.7	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	J8669-FS-D(3)	**Injection Vial**	25
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:59:18	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	73976.09	159.445085	116.8	false
PFBS_2	298.9 / 99.0	1.54	22985.66	170.867527	158.9	false
PFHxA_1	313.0 / 269.0	1.86	513829.38	1941.868274	84.3	false
PFHxA_2	313.0 / 119.0	1.86	32487.95	1626.385078	69.1	false
PFHpA_1	363.0 / 319.0	2.27	173770.76	622.239322	134.0	false
PFHpA_2	363.0 / 169.0	2.23	4710.89	732.655264	51.5	false
PFHxS_1	399.0 / 80.0	2.30	768652.95	1913.673604	441.4	false
PFHxS_2	399.0 / 99.0	2.30	215858.44	1922.512615	865.1	false
PFOA_1	413.0 / 369.0	2.68	2384939.88	6322.291853	586.7	false
PFOA_2	413.0 / 169.0	2.63	227884.87	9310.304921	481.4	true
PFNA_1	463.0 / 419.0	3.08	5449.35	< 0	27.0	false
PFNA_2	463.0 / 219.0	3.09	1040.79	< 0	19.6	false
PFOS_1	499.0 / 80.0	3.08	4957212.86	9062.022319	483.1	false
PFOS_2	499.0 / 99.0	3.08	851203.82	8961.912762	822.7	false
PFDA_1	513.0 / 469.0	3.43	4321.14	< 0	29.3	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	878.11	< 0	16.1	false
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.30	415.86	< 0	11.8	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	J8669-FS-D(5)	**Injection Vial**	26
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:10:10	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	5688.12	9.309579	30.4	true
PFBS_2	298.9 / 99.0	1.54	2560.16	19.082163	32.4	true
PFHxA_1	313.0 / 269.0	1.86	55470.16	157.708572	28.9	false
PFHxA_2	313.0 / 119.0	1.87	3483.81	110.638907	17.9	false
PFHpA_1	363.0 / 319.0	2.27	24070.43	65.457502	39.7	false
PFHpA_2	363.0 / 169.0	2.25	541.52	0.622350	13.8	false
PFHxS_1	399.0 / 80.0	2.30	88491.63	214.364662	232.5	false
PFHxS_2	399.0 / 99.0	2.30	24644.75	208.897086	233.1	false
PFOA_1	413.0 / 369.0	2.68	289069.74	764.285886	263.9	false
PFOA_2	413.0 / 169.0	2.63	26694.86	1093.971518	153.0	false
PFNA_1	463.0 / 419.0	3.08	3331.72	< 0	19.7	false
PFNA_2	463.0 / 219.0	3.08	1210.18	< 0	26.5	false
PFOS_1	499.0 / 80.0	3.08	530657.07	835.292141	175.4	false
PFOS_2	499.0 / 99.0	3.08	100207.05	907.033887	334.7	false
PFDA_1	513.0 / 469.0	3.44	4503.10	< 0	29.0	false
PFDA_2	513.0 / 219.0	3.42	999.10	30.212067	28.3	false
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.01	864.45	< 0	15.2	false
PFDoA_2	613.0 / 319.0	4.01	444.43	< 0	12.5	true
PFTrDA_1	663.0 / 619.0	4.27	255.12	< 0	12.1	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	J8670-FS(0)	**Injection Vial**	27
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:21:03	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	5518225.61	18763.255775	182.9	false
PFBS_2	298.9 / 99.0	1.53	1591880.63	18432.596793	362.6	false
PFHxA_1	313.0 / 269.0	1.85	25995135.00	95203.203044	265.9	false
PFHxA_2	313.0 / 119.0	1.86	1693324.66	83246.688237	547.5	false
PFHpA_1	363.0 / 319.0	2.27	9832481.36	32046.257777	269.7	false
PFHpA_2	363.0 / 169.0	2.25	222917.14	34277.260781	550.9	false
PFHxS_1	399.0 / 80.0	2.29	62617136.86	160794.996601	656.7	false
PFHxS_2	399.0 / 99.0	2.29	19845862.31	182788.595204	1968.1	false
PFOA_1	413.0 / 369.0	2.68	59934091.56	205496.185729	956.1	false
PFOA_2	413.0 / 169.0	2.63	6995511.43	369358.270135	735.4	true
PFNA_1	463.0 / 419.0	3.06	94844.73	314.111834	74.3	false
PFNA_2	463.0 / 219.0	3.06	20019.67	208.317612	71.9	true
PFOS_1	499.0 / 80.0	3.05	26616397.79	55589.011973	391.3	false
PFOS_2	499.0 / 99.0	3.08	4065217.09	48905.697109	1076.2	false
PFDA_1	513.0 / 469.0	3.43	23633.52	38.318988	44.2	false
PFDA_2	513.0 / 219.0	3.43	1016.93	38.722741	21.1	true
PFUnA_1	563.0 / 519.0	3.75	6900.34	7.086893	22.6	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.04	1928.77	< 0	19.4	false
PFDoA_2	613.0 / 319.0	4.02	528.98	< 0	11.4	true
PFTrDA_1	663.0 / 619.0	4.30	1010.87	< 0	21.3	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	3.72	309.01	< 0	12.9	false
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8670-FS-D(3)	**Injection Vial**	28
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:31:54	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	942291.73	2043.170862	283.0	false
PFBS_2	298.9 / 99.0	1.54	285031.93	2106.467473	337.2	false
PFHxA_1	313.0 / 269.0	1.86	3222007.58	11111.375706	159.1	false
PFHxA_2	313.0 / 119.0	1.86	212041.80	9797.419270	205.3	false
PFHpA_1	363.0 / 319.0	2.27	1125719.79	3620.417042	214.5	false
PFHpA_2	363.0 / 169.0	2.26	29649.01	4442.236854	204.6	false
PFHxS_1	399.0 / 80.0	2.29	7407249.31	23365.368110	868.1	false
PFHxS_2	399.0 / 99.0	2.30	1985765.03	22461.225752	1405.4	false
PFOA_1	413.0 / 369.0	2.68	9094933.65	25371.564309	838.3	false
PFOA_2	413.0 / 169.0	2.64	851534.38	36586.560782	450.9	false
PFNA_1	463.0 / 419.0	3.07	12280.75	8.834639	35.8	false
PFNA_2	463.0 / 219.0	3.07	2220.60	< 0	29.6	true
PFOS_1	499.0 / 80.0	3.05	3251799.61	5612.328386	290.5	false
PFOS_2	499.0 / 99.0	3.08	541606.75	5383.227263	710.8	false
PFDA_1	513.0 / 469.0	3.43	4321.47	< 0	20.9	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	4.28	245.38	< 0	11.4	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	J8670-FS-D(5)	**Injection Vial**	29
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:42:46	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	376898.92	870.489190	251.1	false
PFBS_2	298.9 / 99.0	1.54	113297.15	892.992535	307.6	false
PFHxA_1	313.0 / 269.0	1.86	1143844.45	3837.097628	114.6	false
PFHxA_2	313.0 / 119.0	1.86	76974.74	3446.754182	116.9	false
PFHpA_1	363.0 / 319.0	2.27	438449.52	1456.205152	178.2	false
PFHpA_2	363.0 / 169.0	2.27	11301.30	1708.389153	145.2	false
PFHxS_1	399.0 / 80.0	2.30	2883539.97	7946.528730	739.0	false
PFHxS_2	399.0 / 99.0	2.30	796844.35	7871.061852	1195.6	false
PFOA_1	413.0 / 369.0	2.68	3757293.71	10693.176900	623.2	false
PFOA_2	413.0 / 169.0	2.64	348228.81	15268.098588	446.1	false
PFNA_1	463.0 / 419.0	3.07	5261.03	< 0	24.3	false
PFNA_2	463.0 / 219.0	3.07	910.69	< 0	14.8	false
PFOS_1	499.0 / 80.0	3.06	1403228.03	2533.370388	208.9	false
PFOS_2	499.0 / 99.0	3.08	226105.33	2350.133640	559.6	false
PFDA_1	513.0 / 469.0	3.43	2817.51	< 0	17.6	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

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Summary Quant Report

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Sample Name	J8683-FS(0)	**Injection Vial**	30
Sample ID	VC-CS10-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:53:38	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	787474.24	1991.770155	88.5	false
PFBS_2	298.9 / 99.0	1.54	191846.93	1653.180819	205.8	false
PFHxA_1	313.0 / 269.0	1.86	431876.38	1301.972535	44.5	false
PFHxA_2	313.0 / 119.0	1.86	34038.77	1362.747313	67.1	false
PFHpA_1	363.0 / 319.0	2.27	138997.65	379.827507	44.6	false
PFHpA_2	363.0 / 169.0	2.26	4089.01	465.530021	51.4	false
PFHxS_1	399.0 / 80.0	2.26	1430005.83	3900.549643	118.6	true
PFHxS_2	399.0 / 99.0	2.28	332212.13	3241.627772	290.5	true
PFOA_1	413.0 / 369.0	2.68	7607044.16	23013.845172	456.0	false
PFOA_2	413.0 / 169.0	2.66	674676.27	31436.841650	606.6	false
PFNA_1	463.0 / 419.0	3.07	16884.19	26.925040	28.5	false
PFNA_2	463.0 / 219.0	3.07	6252.07	42.679265	51.4	false
PFOS_1	499.0 / 80.0	3.08	1739037.33	3819.721766	202.4	false
PFOS_2	499.0 / 99.0	3.08	294467.23	3724.329204	678.6	false
PFDA_1	513.0 / 469.0	3.43	13924.58	12.063164	31.5	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.75	4315.69	0.336913	20.2	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.03	2222.91	< 0	21.2	false
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.27	651.62	< 0	19.0	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8683-FS-D(3)	**Injection Vial**	31
Sample ID	VC-CS10-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:04:29	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	162190.55	368.262705	89.4	false
PFBS_2	298.9 / 99.0	1.54	43343.41	336.453401	160.6	false
PFHxA_1	313.0 / 269.0	1.86	88018.68	283.553150	25.6	false
PFHxA_2	313.0 / 119.0	1.86	6310.14	254.629316	26.5	false
PFHpA_1	363.0 / 319.0	2.27	36074.32	108.909822	34.4	false
PFHpA_2	363.0 / 169.0	2.26	807.98	46.230083	18.5	false
PFHxS_1	399.0 / 80.0	2.26	260460.50	751.926048	93.7	true
PFHxS_2	399.0 / 99.0	2.28	62368.14	637.755158	179.9	false
PFOA_1	413.0 / 369.0	2.68	1615699.65	4425.632083	368.8	false
PFOA_2	413.0 / 169.0	2.66	138693.03	5855.574248	294.2	false
PFNA_1	463.0 / 419.0	3.08	7841.06	< 0	31.7	false
PFNA_2	463.0 / 219.0	3.08	2970.23	3.229406	35.7	false
PFOS_1	499.0 / 80.0	3.07	365157.47	716.932216	174.6	false
PFOS_2	499.0 / 99.0	3.07	61277.40	691.676332	313.8	false
PFDA_1	513.0 / 469.0	3.43	10594.83	4.288980	43.7	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.74	2599.83	< 0	19.5	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	4.27	267.71	< 0	11.2	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	J8684-FS(0)	**Injection Vial**	34
Sample ID	VC-CS10-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:37:05	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	631334.17	1534.905165	77.5	false
PFBS_2	298.9 / 99.0	1.54	156279.66	1294.725791	171.6	false
PFHxA_1	313.0 / 269.0	1.86	756078.23	2498.550253	82.3	false
PFHxA_2	313.0 / 119.0	1.86	54381.52	2394.754800	100.3	false
PFHpA_1	363.0 / 319.0	2.27	210805.04	600.108691	65.6	false
PFHpA_2	363.0 / 169.0	2.27	5474.06	670.844865	73.9	false
PFHxS_1	399.0 / 80.0	2.29	2058651.99	5540.359540	137.1	false
PFHxS_2	399.0 / 99.0	2.29	553960.91	5341.451200	367.4	false
PFOA_1	413.0 / 369.0	2.68	2509534.30	8110.279727	338.0	false
PFOA_2	413.0 / 169.0	2.67	221581.74	11033.258674	436.9	false
PFNA_1	463.0 / 419.0	3.07	43100.65	140.115534	58.3	false
PFNA_2	463.0 / 219.0	3.08	13206.47	142.708917	82.8	false
PFOS_1	499.0 / 80.0	3.08	4380048.08	9072.578937	183.8	false
PFOS_2	499.0 / 99.0	3.08	795282.04	9487.498106	747.8	false
PFDA_1	513.0 / 469.0	3.43	44335.40	93.677653	90.1	false
PFDA_2	513.0 / 219.0	3.41	1919.66	97.300972	35.4	false
PFUnA_1	563.0 / 519.0	3.75	11327.12	18.367254	37.1	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.03	5965.74	< 0	45.2	false
PFDoA_2	613.0 / 319.0	4.03	1311.84	< 0	17.9	false
PFTrDA_1	663.0 / 619.0	4.27	2643.97	< 0	43.4	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	3.59	389.74	< 0	15.5	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	3.74	532.16	< 0	29.3	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	J8684-FS-D(3)	**Injection Vial**	35
Sample ID	VC-CS10-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:47:57	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	138382.92	302.896889	78.3	true
PFBS_2	298.9 / 99.0	1.54	33789.62	252.749147	123.3	false
PFHxA_1	313.0 / 269.0	1.86	138546.40	474.399495	36.1	false
PFHxA_2	313.0 / 119.0	1.86	10694.91	475.888138	36.0	false
PFHpA_1	363.0 / 319.0	2.27	42995.87	130.475155	39.0	false
PFHpA_2	363.0 / 169.0	2.28	1136.76	97.671316	27.8	false
PFHxS_1	399.0 / 80.0	2.30	388892.81	1035.654534	146.0	false
PFHxS_2	399.0 / 99.0	2.30	102854.65	976.213849	394.3	false
PFOA_1	413.0 / 369.0	2.68	576700.61	1756.350649	253.5	false
PFOA_2	413.0 / 169.0	2.68	51211.72	2407.978790	271.7	false
PFNA_1	463.0 / 419.0	3.07	11967.73	10.734882	39.5	false
PFNA_2	463.0 / 219.0	3.08	3733.65	15.038741	49.1	false
PFOS_1	499.0 / 80.0	3.08	1034303.49	2010.415512	200.4	false
PFOS_2	499.0 / 99.0	3.08	183144.44	2049.149160	677.8	false
PFDA_1	513.0 / 469.0	3.43	13639.60	11.986261	54.6	false
PFDA_2	513.0 / 219.0	3.45	1082.89	40.827973	21.5	false
PFUnA_1	563.0 / 519.0	3.74	2473.62	< 0	22.6	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.02	2005.15	< 0	25.3	false
PFDoA_2	613.0 / 319.0	4.02	798.38	< 0	18.4	false
PFTrDA_1	663.0 / 619.0	4.27	411.91	< 0	12.1	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	J8685-FS(0)	**Injection Vial**	36
Sample ID	VC-CS10-DW02P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:58:48	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	513715.25	1224.708456	172.1	false
PFBS_2	298.9 / 99.0	1.54	140784.91	1144.335603	181.6	false
PFHxA_1	313.0 / 269.0	1.86	510029.79	1540.408452	60.4	false
PFHxA_2	313.0 / 119.0	1.86	34648.07	1385.045198	72.6	false
PFHpA_1	363.0 / 319.0	2.27	173818.24	487.771825	60.3	false
PFHpA_2	363.0 / 169.0	2.27	3918.46	450.872335	57.2	false
PFHxS_1	399.0 / 80.0	2.29	1577927.02	3845.287221	213.8	false
PFHxS_2	399.0 / 99.0	2.29	425824.18	3716.155243	508.4	false
PFOA_1	413.0 / 369.0	2.68	2865564.02	8119.298841	398.0	false
PFOA_2	413.0 / 169.0	2.68	231940.55	10124.192988	443.5	false
PFNA_1	463.0 / 419.0	3.07	12410.17	13.986162	31.5	false
PFNA_2	463.0 / 219.0	3.07	5219.59	34.770395	47.2	false
PFOS_1	499.0 / 80.0	3.07	964719.28	1798.962988	130.9	false
PFOS_2	499.0 / 99.0	3.07	146695.53	1574.560767	333.4	false
PFDA_1	513.0 / 469.0	3.43	6194.90	< 0	25.3	false
PFDA_2	513.0 / 219.0	3.41	921.81	29.553945	19.4	false
PFUnA_1	563.0 / 519.0	3.74	3281.26	< 0	21.8	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.03	3268.37	< 0	28.8	false
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.27	838.22	< 0	23.0	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	3.62	239.44	< 0	26.4	false
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	3.73	275.16	< 0	10.4	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	J8686-FS(0)	**Injection Vial**	37
Sample ID	VC-CS10-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:09:39	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	856005.88	2242.826954	126.7	false
PFBS_2	298.9 / 99.0	1.54	224999.96	2008.635145	219.7	false
PFHxA_1	313.0 / 269.0	1.86	1791765.10	5630.919024	100.4	false
PFHxA_2	313.0 / 119.0	1.86	110848.76	4654.649866	130.0	false
PFHpA_1	363.0 / 319.0	2.27	680964.86	2084.078899	104.5	false
PFHpA_2	363.0 / 169.0	2.26	16881.88	2375.569165	154.9	false
PFHxS_1	399.0 / 80.0	2.30	3132004.55	8745.472107	198.3	false
PFHxS_2	399.0 / 99.0	2.30	822655.40	8232.812413	656.1	false
PFOA_1	413.0 / 369.0	2.68	27251265.22	89968.345629	743.3	false
PFOA_2	413.0 / 169.0	2.64	2660528.34	135263.699551	703.1	false
PFNA_1	463.0 / 419.0	3.07	27555.37	73.817119	40.2	true
PFNA_2	463.0 / 219.0	3.07	6360.92	50.793139	39.4	true
PFOS_1	499.0 / 80.0	3.08	2447004.17	4623.325029	174.4	false
PFOS_2	499.0 / 99.0	3.08	413176.42	4495.428900	509.1	false
PFDA_1	513.0 / 469.0	3.43	24245.32	45.013140	50.4	false
PFDA_2	513.0 / 219.0	3.43	1701.43	89.585050	41.4	false
PFUnA_1	563.0 / 519.0	3.74	6312.55	5.531825	23.5	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.03	3338.34	< 0	31.9	false
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.27	1250.20	< 0	22.0	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	J8686-FS-D(3)	**Injection Vial**	38
Sample ID	VC-CS10-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:20:32	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	91940.61	227.169861	102.4	false
PFBS_2	298.9 / 99.0	1.54	25262.76	214.035552	132.4	false
PFHxA_1	313.0 / 269.0	1.86	146068.86	516.850584	39.3	false
PFHxA_2	313.0 / 119.0	1.86	8915.00	400.392739	35.0	false
PFHpA_1	363.0 / 319.0	2.27	63211.62	214.211994	53.2	false
PFHpA_2	363.0 / 169.0	2.27	877.95	63.814060	24.0	false
PFHxS_1	399.0 / 80.0	2.29	284268.30	814.995827	177.2	false
PFHxS_2	399.0 / 99.0	2.29	72584.51	739.503688	391.5	false
PFOA_1	413.0 / 369.0	2.67	2886197.37	8380.202879	631.3	false
PFOA_2	413.0 / 169.0	2.63	282473.14	12638.009901	412.6	true
PFNA_1	463.0 / 419.0	3.07	3076.38	< 0	18.0	true
PFNA_2	463.0 / 219.0	3.02	2038.11	< 0	18.4	false
PFOS_1	499.0 / 80.0	3.07	285389.12	514.631524	121.4	false
PFOS_2	499.0 / 99.0	3.07	49789.66	515.772776	424.0	false
PFDA_1	513.0 / 469.0	3.43	4597.31	< 0	27.6	false
PFDA_2	513.0 / 219.0	3.43	264.09	< 0	12.4	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.01	804.58	< 0	12.5	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	J8687-FS(0)	**Injection Vial**	39
Sample ID	VC-CS10-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:31:23	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	407416.60	1036.698870	89.4	true
PFBS_2	298.9 / 99.0	1.54	88770.98	769.562388	161.8	false
PFHxA_1	313.0 / 269.0	1.86	3430643.85	10382.420436	164.9	false
PFHxA_2	313.0 / 119.0	1.86	236843.04	9604.617559	206.7	false
PFHpA_1	363.0 / 319.0	2.27	1290230.54	3697.386352	157.6	false
PFHpA_2	363.0 / 169.0	2.27	27884.67	3707.771516	218.6	false
PFHxS_1	399.0 / 80.0	2.24	1525142.92	4069.021248	150.5	false
PFHxS_2	399.0 / 99.0	2.28	350270.55	3343.125447	309.6	false
PFOA_1	413.0 / 369.0	2.68	76124847.58	295846.791828	832.1	false
PFOA_2	413.0 / 169.0	2.67	11324549.96	677731.748643	891.9	false
PFNA_1	463.0 / 419.0	3.00	130258.43	425.015690	95.5	false
PFNA_2	463.0 / 219.0	3.06	16452.33	158.430544	78.8	true
PFOS_1	499.0 / 80.0	3.07	656757.11	1317.943673	129.7	false
PFOS_2	499.0 / 99.0	3.07	117136.82	1352.590934	315.2	false
PFDA_1	513.0 / 469.0	3.42	6194.57	< 0	18.2	false
PFDA_2	513.0 / 219.0	3.41	381.25	< 0	9.9	true
PFUnA_1	563.0 / 519.0	3.74	4114.83	< 0	18.5	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.02	1260.25	< 0	16.3	false
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.26	902.41	< 0	24.1	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	J8688-FS(0)	**Injection Vial**	44
Sample ID	VC-CS18-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:25:42	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	923136.76	2231.798013	79.6	false
PFBS_2	298.9 / 99.0	1.54	223842.74	1843.592553	234.9	false
PFHxA_1	313.0 / 269.0	1.86	4589555.41	14635.325304	182.0	false
PFHxA_2	313.0 / 119.0	1.86	342952.50	14667.050650	282.1	false
PFHpA_1	363.0 / 319.0	2.26	2451222.91	7626.107193	216.5	false
PFHpA_2	363.0 / 169.0	2.26	48835.83	7111.207007	271.8	false
PFHxS_1	399.0 / 80.0	2.29	16195905.91	40095.374712	460.4	false
PFHxS_2	399.0 / 99.0	2.29	4630280.61	41110.459094	1271.3	false
PFOA_1	413.0 / 369.0	2.67	7908438.97	36251.962900	516.5	false
PFOA_2	413.0 / 169.0	2.62	831557.67	58707.213056	510.9	true
PFNA_1	463.0 / 419.0	3.06	48108.96	142.657816	63.4	false
PFNA_2	463.0 / 219.0	3.06	11644.66	108.653648	74.8	true
PFOS_1	499.0 / 80.0	2.97	4310239.75	8868.375039	193.3	false
PFOS_2	499.0 / 99.0	3.06	573601.04	6797.297001	489.3	false
PFDA_1	513.0 / 469.0	3.42	12830.82	34.953264	33.7	true
PFDA_2	513.0 / 219.0	3.38	2294.08	221.454517	25.8	false
PFUnA_1	563.0 / 519.0	3.73	10948.92	16.724938	38.6	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.02	3675.12	< 0	35.4	false
PFDoA_2	613.0 / 319.0	4.01	1343.81	< 0	21.5	false
PFTrDA_1	663.0 / 619.0	4.26	2579.27	< 0	56.9	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	3.57	351.41	< 0	19.5	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8714-FS(0)	**Injection Vial**	45
Sample ID	VC-SO-FB11-10062018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:36:33	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	2736.53	1.184687	15.2	true
PFBS_2	298.9 / 99.0	1.54	1406.78	8.101164	18.5	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	1.87	1475.38	15.169539	11.9	false
PFHpA_1	363.0 / 319.0	2.27	9141.53	11.691768	16.7	false
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.30	41981.03	96.734667	143.6	false
PFHxS_2	399.0 / 99.0	2.30	13056.74	105.022259	170.9	false
PFOA_1	413.0 / 369.0	2.68	156685.19	386.647197	186.6	false
PFOA_2	413.0 / 169.0	2.67	11396.65	435.616611	140.7	false
PFNA_1	463.0 / 419.0	3.07	3516.41	< 0	18.4	false
PFNA_2	463.0 / 219.0	3.07	1605.65	< 0	29.9	false
PFOS_1	499.0 / 80.0	3.03	18742.09	32.721396	21.9	false
PFOS_2	499.0 / 99.0	3.06	3529.50	33.941906	30.6	false
PFDA_1	513.0 / 469.0	3.42	1642.96	< 0	15.5	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.74	1543.79	< 0	14.8	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	4.02	497.80	< 0	15.7	true
PFTrDA_1	663.0 / 619.0	4.27	710.17	< 0	21.4	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	J8715-FS(0)	**Injection Vial**	46
Sample ID	VC-SO-EB11-10062018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:47:24	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.50	1128.13	5.584054	14.7	true
PFHxA_1	313.0 / 269.0	1.86	28830.40	62.343885	17.0	false
PFHxA_2	313.0 / 119.0	1.86	1582.00	19.974757	11.0	false
PFHpA_1	363.0 / 319.0	2.26	6290.60	2.521279	13.7	false
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.30	3928.25	< 0	20.2	false
PFHxS_2	399.0 / 99.0	2.31	1451.20	< 0	19.7	false
PFOA_1	413.0 / 369.0	2.68	131898.46	300.916005	182.9	false
PFOA_2	413.0 / 169.0	2.67	7955.39	279.137505	126.1	false
PFNA_1	463.0 / 419.0	3.08	3972.96	< 0	26.0	false
PFNA_2	463.0 / 219.0	3.06	751.86	< 0	13.9	false
PFOS_1	499.0 / 80.0	3.07	11057.84	20.261682	24.3	false
PFOS_2	499.0 / 99.0	3.06	2388.68	23.373010	36.8	false
PFDA_1	513.0 / 469.0	3.43	1421.03	< 0	16.2	false
PFDA_2	513.0 / 219.0	3.44	371.07	< 0	13.7	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	1475.57	< 0	17.8	false
PFDoA_2	613.0 / 319.0	4.02	349.75	< 0	10.7	false
PFTrDA_1	663.0 / 619.0	4.26	1409.23	< 0	32.9	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	3.75	343.54	< 0	148.4	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	J8716-FS(0)	**Injection Vial**	47
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:58:16	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.52	1283524.32	2696.637644	80.4	true
PFBS_2	298.9 / 99.0	1.53	288650.12	2065.527204	195.9	false
PFHxA_1	313.0 / 269.0	1.85	3002227.60	7555.632183	121.1	false
PFHxA_2	313.0 / 119.0	1.86	187358.23	6308.551843	202.8	false
PFHpA_1	363.0 / 319.0	2.26	894684.50	2270.351413	130.3	false
PFHpA_2	363.0 / 169.0	2.26	19117.06	2223.293599	132.4	false
PFHxS_1	399.0 / 80.0	2.28	16221605.21	34642.595392	657.7	false
PFHxS_2	399.0 / 99.0	2.28	4693604.20	35948.015097	1604.9	false
PFOA_1	413.0 / 369.0	2.67	2423327.31	6348.875632	255.5	false
PFOA_2	413.0 / 169.0	2.66	188617.54	7613.144615	346.1	false
PFNA_1	463.0 / 419.0	3.07	218125.63	887.669617	140.9	false
PFNA_2	463.0 / 219.0	3.07	71125.57	943.562817	256.1	false
PFOS_1	499.0 / 80.0	3.07	98968286.78	215705.867098	743.5	false
PFOS_2	499.0 / 99.0	3.07	25883773.15	324965.291878	3378.6	false
PFDA_1	513.0 / 469.0	3.42	164940.70	356.570219	144.9	false
PFDA_2	513.0 / 219.0	3.42	6952.34	363.085685	106.9	false
PFUnA_1	563.0 / 519.0	3.73	68884.48	133.826142	103.3	false
PFUnA_2	563.0 / 269.0	3.73	3260.27	136.901993	43.0	true
PFDoA_1	613.0 / 569.0	4.01	3633.65	< 0	26.8	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.26	2112.46	< 0	31.5	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

Sample Name	J8716-FS-D(3)	**Injection Vial**	48
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:09:09	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	128378.06	271.385157	70.6	true
PFBS_2	298.9 / 99.0	1.54	28183.44	203.312569	148.8	false
PFHxA_1	313.0 / 269.0	1.86	210095.73	685.394265	43.6	false
PFHxA_2	313.0 / 119.0	1.86	15148.46	645.414613	47.8	false
PFHpA_1	363.0 / 319.0	2.27	63240.83	192.677472	53.4	false
PFHpA_2	363.0 / 169.0	2.25	2341.12	281.422280	48.1	false
PFHxS_1	399.0 / 80.0	2.29	1183608.08	3300.226412	343.2	false
PFHxS_2	399.0 / 99.0	2.29	341439.32	3410.203906	601.3	false
PFOA_1	413.0 / 369.0	2.68	225441.82	558.223598	176.2	false
PFOA_2	413.0 / 169.0	2.67	17415.49	667.648709	179.2	false
PFNA_1	463.0 / 419.0	3.08	24802.96	51.933726	63.8	false
PFNA_2	463.0 / 219.0	3.07	7612.87	55.302139	79.4	false
PFOS_1	499.0 / 80.0	3.07	14589221.22	26750.562654	961.0	false
PFOS_2	499.0 / 99.0	3.07	2701791.59	28534.881626	1608.6	false
PFDA_1	513.0 / 469.0	3.42	14393.43	11.954555	58.4	false
PFDA_2	513.0 / 219.0	3.41	572.95	8.562041	16.1	true
PFUnA_1	563.0 / 519.0	3.74	7069.85	5.310869	38.9	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	4.26	294.89	< 0	13.6	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	J8717-FS(0)	**Injection Vial**	49
Sample ID	VC-CS00-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:20:02	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.52	82881.40	342.098833	37.3	true
PFBS_2	298.9 / 99.0	1.53	16075.54	225.895308	76.6	false
PFHxA_1	313.0 / 269.0	1.85	340620.24	1211.769473	42.6	false
PFHxA_2	313.0 / 119.0	1.85	26072.20	1229.278341	57.2	false
PFHpA_1	363.0 / 319.0	2.27	91631.90	273.486539	26.0	true
PFHpA_2	363.0 / 169.0	2.25	2027.65	216.758670	32.4	false
PFHxS_1	399.0 / 80.0	2.29	950767.66	2557.578567	117.5	false
PFHxS_2	399.0 / 99.0	2.29	264404.08	2545.841628	367.2	false
PFOA_1	413.0 / 369.0	2.67	640122.53	1850.934447	116.8	false
PFOA_2	413.0 / 169.0	2.66	52090.46	2323.941497	161.7	false
PFNA_1	463.0 / 419.0	3.07	17959.76	29.603428	31.4	false
PFNA_2	463.0 / 219.0	3.07	5907.25	37.534436	42.0	false
PFOS_1	499.0 / 80.0	3.07	8271888.22	18005.733055	305.9	false
PFOS_2	499.0 / 99.0	3.07	1409942.62	17677.486768	899.8	false
PFDA_1	513.0 / 469.0	3.43	9374.61	0.827715	26.9	true
PFDA_2	513.0 / 219.0	3.45	927.83	29.962580	22.2	true
PFUnA_1	563.0 / 519.0	3.75	1466.37	< 0	11.7	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.02	788.11	< 0	10.6	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.27	954.64	< 0	17.6	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	J8718-FS(0)	**Injection Vial**	50
Sample ID	VC-CS00-DW02P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:30:53	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.51	61714.28	276.259718	26.7	true
PFBS_2	298.9 / 99.0	1.52	14292.68	218.529479	60.2	false
PFHxA_1	313.0 / 269.0	1.85	277697.21	1187.341465	38.2	false
PFHxA_2	313.0 / 119.0	1.85	21216.73	1201.862286	53.7	false
PFHpA_1	363.0 / 319.0	2.26	85000.59	277.174663	25.6	true
PFHpA_2	363.0 / 169.0	2.26	1567.05	168.872349	34.2	false
PFHxS_1	399.0 / 80.0	2.28	607764.73	1801.235366	96.8	false
PFHxS_2	399.0 / 99.0	2.28	165044.02	1748.712595	389.9	false
PFOA_1	413.0 / 369.0	2.67	397046.57	1442.344559	97.2	false
PFOA_2	413.0 / 169.0	2.67	32812.39	1840.345808	184.7	false
PFNA_1	463.0 / 419.0	3.07	17195.28	37.390675	32.0	false
PFNA_2	463.0 / 219.0	3.07	4778.24	34.236442	54.0	false
PFOS_1	499.0 / 80.0	3.06	4898982.93	11714.945099	284.9	false
PFOS_2	499.0 / 99.0	3.06	875846.97	12063.039405	709.6	false
PFDA_1	513.0 / 469.0	3.41	8665.04	1.072620	23.7	true
PFDA_2	513.0 / 219.0	3.41	581.25	13.029806	13.2	false
PFUnA_1	563.0 / 519.0	3.71	2563.21	< 0	14.0	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	290.20	< 0	14.0	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	3.72	207.46	< 0	23.9	false
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8719-FS(0)	**Injection Vial**	51
Sample ID	VC-CS00-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:41:45	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.49	3515.92	49.121709	25.8	true
PFHxA_1	313.0 / 269.0	1.86	95257.14	345.321345	20.3	false
PFHxA_2	313.0 / 119.0	1.86	5835.18	260.968639	27.0	false
PFHpA_1	363.0 / 319.0	2.27	30345.42	83.651506	13.5	true
PFHpA_2	363.0 / 169.0	2.25	860.30	48.447012	13.7	false
PFHxS_1	399.0 / 80.0	2.28	56546.01	135.563407	38.0	true
PFHxS_2	399.0 / 99.0	2.28	15316.49	125.921109	70.4	false
PFOA_1	413.0 / 369.0	2.67	148160.56	452.244817	57.3	false
PFOA_2	413.0 / 169.0	2.67	9972.16	470.009992	100.1	false
PFNA_1	463.0 / 419.0	3.06	7489.88	< 0	18.5	false
PFNA_2	463.0 / 219.0	3.06	2660.25	1.673606	27.7	false
PFOS_1	499.0 / 80.0	3.06	419621.50	911.286523	88.0	false
PFOS_2	499.0 / 99.0	3.06	71561.14	893.831671	259.6	false
PFDA_1	513.0 / 469.0	3.42	7348.69	< 0	18.8	true
PFDA_2	513.0 / 219.0	3.39	722.21	22.637326	17.7	false
PFUnA_1	563.0 / 519.0	3.73	2008.22	< 0	12.8	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.02	898.01	< 0	12.9	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.25	692.72	< 0	16.9	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	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	J8720-FS(0)	**Injection Vial**	53
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:14:19	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	46467064.06	126298.669092	638.2	false
PFBS_2	298.9 / 99.0	1.53	14711465.83	136157.886241	769.3	false
PFHxA_1	313.0 / 269.0	1.84	63394153.86	198198.555712	371.0	false
PFHxA_2	313.0 / 119.0	1.85	4352159.30	182678.549924	782.1	false
PFHpA_1	363.0 / 319.0	2.26	9058197.14	34002.821443	317.5	false
PFHpA_2	363.0 / 169.0	2.23	228560.81	40493.192096	411.5	false
PFHxS_1	399.0 / 80.0	2.25	130168697.10	378993.595437	527.9	false
PFHxS_2	399.0 / 99.0	2.29	75287889.99	786258.113138	1120.2	false
PFOA_1	413.0 / 369.0	2.67	18328152.17	59940.668437	749.7	false
PFOA_2	413.0 / 169.0	2.61	1828443.10	92089.391238	686.0	true
PFNA_1	463.0 / 419.0	3.07	391710.02	2140.536913	204.1	false
PFNA_2	463.0 / 219.0	3.07	123820.57	2197.064444	312.9	false
PFOS_1	499.0 / 80.0	2.98	186302729.58	629340.830413	370.3	false
PFOS_2	499.0 / 99.0	3.07	62921090.91	1224357.962856	2055.8	false
PFDA_1	513.0 / 469.0	3.42	97464.92	218.613474	115.0	false
PFDA_2	513.0 / 219.0	3.41	4026.48	217.037750	73.8	true
PFUnA_1	563.0 / 519.0	3.74	33149.21	69.830082	78.9	false
PFUnA_2	563.0 / 269.0	3.74	1739.24	84.290151	25.7	true
PFDoA_1	613.0 / 569.0	4.01	5075.61	< 0	44.1	false
PFDoA_2	613.0 / 319.0	4.01	1288.16	< 0	23.0	true
PFTrDA_1	663.0 / 619.0	4.26	2541.75	< 0	52.9	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	3.72	891.16	< 0	27.2	true
NEtFOSAA_2	584.0 / 483.0	3.75	169.42	< 0	9.4	false

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Summary Quant Report

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Sample Name	J8720-FS-D(3)	**Injection Vial**	54
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:25:10	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	6296339.18	13740.781299	698.9	false
PFBS_2	298.9 / 99.0	1.54	1834723.60	13635.702373	781.5	false
PFHxA_1	313.0 / 269.0	1.85	7020546.42	23659.582539	264.6	false
PFHxA_2	313.0 / 119.0	1.86	424964.21	19206.061510	304.8	false
PFHpA_1	363.0 / 319.0	2.26	990161.45	3218.443646	260.6	false
PFHpA_2	363.0 / 169.0	2.25	25117.26	3793.126185	241.8	false
PFHxS_1	399.0 / 80.0	2.29	33631850.36	100829.438606	1065.4	false
PFHxS_2	399.0 / 99.0	2.29	10367016.57	111476.671270	1448.8	false
PFOA_1	413.0 / 369.0	2.67	1827820.95	5750.037631	528.2	false
PFOA_2	413.0 / 169.0	2.61	179424.48	8700.141224	340.4	false
PFNA_1	463.0 / 419.0	3.07	49981.49	150.569786	128.1	false
PFNA_2	463.0 / 219.0	3.07	17674.11	181.125660	150.8	false
PFOS_1	499.0 / 80.0	3.07	48862883.93	115281.522808	638.4	false
PFOS_2	499.0 / 99.0	3.07	8234383.10	111905.907370	1912.9	false
PFDA_1	513.0 / 469.0	3.42	10999.17	6.517736	52.7	false
PFDA_2	513.0 / 219.0	3.45	738.27	21.924730	15.1	false
PFUnA_1	563.0 / 519.0	3.73	3773.72	0.177495	23.7	false
PFUnA_2	563.0 / 269.0	3.79	251.86	13.772987	7.3	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	4.28	939.76	< 0	20.8	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	J8720-FS-D(5)	**Injection Vial**	1
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:36:01	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	1607911.44	3575.226639	529.1	false
PFBS_2	298.9 / 99.0	1.54	482472.81	3654.891730	612.3	false
PFHxA_1	313.0 / 269.0	1.85	1791040.85	6625.039384	169.3	false
PFHxA_2	313.0 / 119.0	1.86	109978.57	5439.231923	206.9	false
PFHpA_1	363.0 / 319.0	2.26	259919.41	1007.056534	143.6	false
PFHpA_2	363.0 / 169.0	2.26	6463.12	1116.959067	87.9	false
PFHxS_1	399.0 / 80.0	2.29	8904724.59	26198.677033	1035.1	false
PFHxS_2	399.0 / 99.0	2.29	2574650.34	27165.102780	1287.5	false
PFOA_1	413.0 / 369.0	2.67	568989.75	1694.977942	316.7	false
PFOA_2	413.0 / 169.0	2.62	55228.67	2541.658416	217.6	true
PFNA_1	463.0 / 419.0	3.07	18897.06	38.020969	60.3	false
PFNA_2	463.0 / 219.0	3.06	6376.19	48.454747	70.1	false
PFOS_1	499.0 / 80.0	3.06	15035119.42	29892.309783	638.8	false
PFOS_2	499.0 / 99.0	3.06	2592919.79	29693.946149	1764.1	false
PFDA_1	513.0 / 469.0	3.42	7693.28	< 0	44.7	false
PFDA_2	513.0 / 219.0	3.45	555.47	9.549808	10.7	true
PFUnA_1	563.0 / 519.0	3.75	1788.32	< 0	20.5	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.02	1070.89	< 0	15.2	false
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.25	686.69	< 0	22.2	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8721-FS(0)	**Injection Vial**	2
Sample ID	VC-CS00-DW05-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:46:54	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	98081.65	266.362382	72.9	true
PFBS_2	298.9 / 99.0	1.53	21845.05	202.510165	81.6	false
PFHxA_1	313.0 / 269.0	1.85	349109.30	1021.473345	45.4	false
PFHxA_2	313.0 / 119.0	1.85	22903.19	878.705242	52.1	false
PFHpA_1	363.0 / 319.0	2.26	52304.45	121.738529	23.0	true
PFHpA_2	363.0 / 169.0	2.26	470.47	< 0	11.0	false
PFHxS_1	399.0 / 80.0	2.29	302387.96	692.055811	100.3	false
PFHxS_2	399.0 / 99.0	2.29	74364.48	602.863133	223.6	false
PFOA_1	413.0 / 369.0	2.67	169318.74	436.031359	76.5	false
PFOA_2	413.0 / 169.0	2.68	10849.11	430.755258	107.7	false
PFNA_1	463.0 / 419.0	3.06	5462.85	< 0	15.6	false
PFNA_2	463.0 / 219.0	3.07	2563.79	< 0	27.5	false
PFOS_1	499.0 / 80.0	3.07	860769.40	1640.087843	135.4	false
PFOS_2	499.0 / 99.0	3.07	147880.28	1621.686188	385.7	false
PFDA_1	513.0 / 469.0	3.42	21743.22	35.159989	34.6	false
PFDA_2	513.0 / 219.0	3.42	577.45	12.744401	15.0	false
PFUnA_1	563.0 / 519.0	3.70	7342.64	4.877059	22.9	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.02	7635.78	< 0	53.2	false
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.25	2582.00	< 0	49.6	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	J8722-FS(0)	**Injection Vial**	3
Sample ID	VC-CS00-DW06-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:57:47	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	329469.75	1326.073169	73.4	true
PFBS_2	298.9 / 99.0	1.53	85071.40	1167.077578	138.6	false
PFHxA_1	313.0 / 269.0	1.84	2915586.09	9858.878205	119.9	false
PFHxA_2	313.0 / 119.0	1.85	183055.94	8288.837421	178.4	false
PFHpA_1	363.0 / 319.0	2.26	763724.98	2190.277042	96.8	false
PFHpA_2	363.0 / 169.0	2.26	15502.89	2030.818838	141.5	false
PFHxS_1	399.0 / 80.0	2.28	17415349.51	42796.928617	594.9	false
PFHxS_2	399.0 / 99.0	2.28	5014349.96	44193.249711	1279.9	false
PFOA_1	413.0 / 369.0	2.67	2919422.08	7886.683749	221.4	false
PFOA_2	413.0 / 169.0	2.65	269235.42	11206.980625	283.8	false
PFNA_1	463.0 / 419.0	3.06	155606.39	485.638188	90.0	false
PFNA_2	463.0 / 219.0	3.06	44454.27	450.945241	178.5	false
PFOS_1	499.0 / 80.0	3.03	86848272.28	172157.784914	563.4	false
PFOS_2	499.0 / 99.0	3.06	15123556.44	172688.114492	2665.3	false
PFDA_1	513.0 / 469.0	3.41	21198.94	20.750689	37.6	false
PFDA_2	513.0 / 219.0	3.41	1485.93	48.169791	26.0	false
PFUnA_1	563.0 / 519.0	3.73	3925.08	< 0	20.6	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.02	1186.49	< 0	13.5	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.25	852.13	< 0	28.5	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

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Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:02:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.07	91698.47	244.195426	1281.1	false
d3-MeFOSAA	573.0 / 419.0	3.61	16302.89	260.004961	195.5	false
d5-EtFOSAA	589.0 / 419.0	3.78	17051.45	239.580705	212.6	false
13C5-PFHxA	318.0 / 273.0	1.87	61987.66	244.293373	826.7	false
13C4-PFHpA	367.0 / 322.0	2.28	70438.43	244.000657	1152.0	false
13C8-PFOA	421.0 / 376.0	2.70	88535.23	252.114367	1604.4	false
13C9-PFNA	472.0 / 427.0	3.09	100138.19	249.732890	1149.5	false
13C6-PFDA	519.0 / 474.0	3.45	97258.51	257.077741	4005.3	false
13C7-PFUnA	570.0 / 525.0	3.78	88898.52	254.380465	800.7	false
13C2-PFTeDA	715.0 / 670.0	4.54	70451.22	232.374509	2131.0	false
13C3-PFBS	302.0 / 99.0	1.55	25201.92	220.626542	798.1	false
13C3-PFHxS	402.0 / 99.0	2.31	25094.63	242.439381	606.8	false
13C8-PFOS	507.0 / 99.0	3.09	26831.98	229.467599	276.5	false

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Summary Quant Report

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Sample Name	KB80 IB	**Injection Vial**	2
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T16:37:35	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.08	99465.87	258.092197	965.4	false
d3-MeFOSAA	573.0 / 419.0	3.63	17478.19	329.846157	168.6	false
d5-EtFOSAA	589.0 / 419.0	3.79	17992.71	299.147377	210.0	false
13C5-PFHxA	318.0 / 273.0	1.88	59578.92	245.224501	533.3	false
13C4-PFHpA	367.0 / 322.0	2.30	76310.16	276.075863	877.0	false
13C8-PFOA	421.0 / 376.0	2.71	81619.66	242.739792	1414.7	false
13C9-PFNA	472.0 / 427.0	3.10	84686.59	220.574541	1007.0	false
13C6-PFDA	519.0 / 474.0	3.47	94947.53	244.537713	1028.6	false
13C7-PFUnA	570.0 / 525.0	3.79	94745.29	264.163124	1138.0	false
13C2-PFTeDA	715.0 / 670.0	4.55	79263.46	254.740674	1411.3	false
13C3-PFBS	302.0 / 99.0	1.55	25368.46	262.794432	439.0	false
13C3-PFHxS	402.0 / 99.0	2.32	21696.12	248.028928	292.0	false
13C8-PFOS	507.0 / 99.0	3.10	28466.87	288.075497	217.6	false

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Summary Quant Report

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Sample Name	CR986PB-FS(0)	**Injection Vial**	13
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:48:52	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	99365.43	259.307174	1253.1	false
d3-MeFOSAA	573.0 / 419.0	3.59	17063.81	312.353822	227.6	false
d5-EtFOSAA	589.0 / 419.0	3.75	20169.39	325.265037	257.3	false
13C5-PFHxA	318.0 / 273.0	1.86	65934.30	285.871806	485.0	false
13C4-PFHpA	367.0 / 322.0	2.27	75017.45	285.888786	1080.3	false
13C8-PFOA	421.0 / 376.0	2.68	98592.51	308.872227	1187.9	false
13C9-PFNA	472.0 / 427.0	3.08	91819.19	251.920141	6710.6	false
13C6-PFDA	519.0 / 474.0	3.43	97320.78	252.084518	923.9	false
13C7-PFUnA	570.0 / 525.0	3.75	86971.29	243.875910	981.7	false
13C2-PFTeDA	715.0 / 670.0	4.50	80005.15	258.595900	2242.7	false
13C3-PFBS	302.0 / 99.0	1.53	28068.85	282.034795	401.5	false
13C3-PFHxS	402.0 / 99.0	2.29	23420.35	259.698604	290.7	false
13C8-PFOS	507.0 / 99.0	3.07	25400.00	249.319532	195.8	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:07:20 AM

Sample Name	J8667-FS(0)	**Injection Vial**	15
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:10:37	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	107404.44	267.897451	1082.9	false
d3-MeFOSAA	573.0 / 419.0	3.59	16550.14	308.461095	161.8	false
d5-EtFOSAA	589.0 / 419.0	3.75	18183.89	298.579038	175.8	false
13C5-PFHxA	318.0 / 273.0	1.85	76825.10	271.430832	330.1	false
13C4-PFHpA	367.0 / 322.0	2.27	93772.50	291.210091	695.5	false
13C8-PFOA	421.0 / 376.0	2.68	86590.56	221.055619	774.5	false
13C9-PFNA	472.0 / 427.0	3.07	82083.60	183.519385	657.9	false
13C6-PFDA	519.0 / 474.0	3.43	97994.03	242.609255	13347.2	false
13C7-PFUnA	570.0 / 525.0	3.74	94556.33	253.425755	968.6	false
13C2-PFTeDA	715.0 / 670.0	4.49	92857.31	286.871199	1734.4	false
13C3-PFBS	302.0 / 99.0	1.52	44429.61	454.546653	368.7	false
13C3-PFHxS	402.0 / 99.0	2.29	28417.36	320.839571	363.8	false
13C8-PFOS	507.0 / 99.0	3.07	25843.11	258.282694	210.7	false

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Summary Quant Report

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Sample Name	J8667-FS-D(5)	**Injection Vial**	17
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:32:22	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	109522.47	295.130132	940.9	false
d3-MeFOSAA	573.0 / 419.0	3.59	18991.11	308.160864	218.3	false
d5-EtFOSAA	589.0 / 419.0	3.74	20768.82	296.901594	222.5	false
13C5-PFHxA	318.0 / 273.0	1.86	70763.59	273.361657	750.6	false
13C4-PFHpA	367.0 / 322.0	2.27	79366.61	269.488638	766.3	false
13C8-PFOA	421.0 / 376.0	2.68	93453.68	260.854999	887.9	false
13C9-PFNA	472.0 / 427.0	3.07	100134.86	244.783728	1669740.6	false
13C6-PFDA	519.0 / 474.0	3.43	103749.27	277.496040	892.1	false
13C7-PFUnA	570.0 / 525.0	3.74	96960.59	280.749728	1134.8	false
13C2-PFTeDA	715.0 / 670.0	4.49	96326.46	321.499604	1597.6	false
13C3-PFBS	302.0 / 99.0	1.53	28571.57	254.488595	309.1	false
13C3-PFHxS	402.0 / 99.0	2.29	24631.96	242.120388	460.3	false
13C8-PFOS	507.0 / 99.0	3.07	27108.71	235.878114	261.4	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:07:38 AM

Sample Name	J8668-FS(0)	**Injection Vial**	19
Sample ID	VC-CS12-DW01P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:54:05	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	109123.90	278.056343	1339.3	false
d3-MeFOSAA	573.0 / 419.0	3.58	18698.60	351.864304	212.1	false
d5-EtFOSAA	589.0 / 419.0	3.74	19465.88	322.710981	202.6	false
13C5-PFHxA	318.0 / 273.0	1.85	80332.52	300.084490	345.0	false
13C4-PFHpA	367.0 / 322.0	2.26	99337.21	326.166230	626.9	false
13C8-PFOA	421.0 / 376.0	2.67	83316.39	224.883509	2153.7	false
13C9-PFNA	472.0 / 427.0	3.07	85205.27	201.413287	607.9	false
13C6-PFDA	519.0 / 474.0	3.42	97151.01	245.709340	908.2	false
13C7-PFUnA	570.0 / 525.0	3.74	96265.42	263.570629	570.4	false
13C2-PFTeDA	715.0 / 670.0	4.49	90430.67	285.399475	1640.6	false
13C3-PFBS	302.0 / 99.0	1.53	41603.55	429.737909	363.2	false
13C3-PFHxS	402.0 / 99.0	2.29	28351.08	323.177555	274.8	false
13C8-PFOS	507.0 / 99.0	3.07	24392.82	246.138642	187.4	false

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Summary Quant Report

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Sample Name	J8668-FS-D(3)	**Injection Vial**	20
Sample ID	VC-CS12-DW01P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:04:57	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	118539.11	290.008297	1335.3	false
d3-MeFOSAA	573.0 / 419.0	3.58	19589.90	358.354904	233.7	false
d5-EtFOSAA	589.0 / 419.0	3.74	19020.19	306.527560	203.4	false
13C5-PFHxA	318.0 / 273.0	1.85	72896.34	295.797984	527.3	false
13C4-PFHpA	367.0 / 322.0	2.27	78953.36	281.601539	678.7	false
13C8-PFOA	421.0 / 376.0	2.68	96009.82	281.501138	2041.5	false
13C9-PFNA	472.0 / 427.0	3.07	98393.23	252.652870	7936997.2	false
13C6-PFDA	519.0 / 474.0	3.42	105094.79	255.206284	1097.7	false
13C7-PFUnA	570.0 / 525.0	3.74	106274.82	279.378449	953.2	false
13C2-PFTeDA	715.0 / 670.0	4.49	92962.15	281.695183	1525.1	false
13C3-PFBS	302.0 / 99.0	1.53	33004.98	331.411577	473.2	false
13C3-PFHxS	402.0 / 99.0	2.29	24138.87	267.487441	297.0	false
13C8-PFOS	507.0 / 99.0	3.07	27644.58	271.170711	187.2	false

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Summary Quant Report

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Printed: 01/11/2018 8:07:53 AM

Sample Name	J8669-FS(0)	**Injection Vial**	24
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:48:27	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	109688.54	298.608230	1213.6	false
d3-MeFOSAA	573.0 / 419.0	3.58	18729.28	365.173296	196.6	false
d5-EtFOSAA	589.0 / 419.0	3.74	17535.64	301.212606	217.1	false
13C5-PFHxA	318.0 / 273.0	1.85	81945.21	290.687117	270.7	false
13C4-PFHpA	367.0 / 322.0	2.26	96607.22	301.222016	567.1	false
13C8-PFOA	421.0 / 376.0	2.67	74195.86	190.176524	849.4	false
13C9-PFNA	472.0 / 427.0	3.07	85757.67	192.506195	729.5	false
13C6-PFDA	519.0 / 474.0	3.42	95108.69	256.993493	1621.4	false
13C7-PFUnA	570.0 / 525.0	3.73	102151.20	298.811839	1164.3	false
13C2-PFTeDA	715.0 / 670.0	4.48	88122.33	297.133091	1497.3	false
13C3-PFBS	302.0 / 99.0	1.52	42517.53	455.043740	297.4	false
13C3-PFHxS	402.0 / 99.0	2.28	27550.23	325.393238	261.3	false
13C8-PFOS	507.0 / 99.0	3.06	25642.88	268.099757	187.0	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:07:58 AM

Sample Name	J8669-FS-D(3)	**Injection Vial**	25
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:59:18	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	104951.05	286.327458	1027.1	false
d3-MeFOSAA	573.0 / 419.0	3.58	19858.92	374.753163	184.5	true
d5-EtFOSAA	589.0 / 419.0	3.74	21623.20	359.486945	203.1	false
13C5-PFHxA	318.0 / 273.0	1.85	66008.01	283.138428	455.0	false
13C4-PFHpA	367.0 / 322.0	2.27	77198.94	291.063950	750.6	false
13C8-PFOA	421.0 / 376.0	2.67	93819.38	290.783488	1064.5	false
13C9-PFNA	472.0 / 427.0	3.06	89550.66	243.075117	998.6	false
13C6-PFDA	519.0 / 474.0	3.42	104818.81	283.842110	2581.5	false
13C7-PFUnA	570.0 / 525.0	3.74	101297.35	296.953250	890.2	false
13C2-PFTeDA	715.0 / 670.0	4.48	89939.56	303.914544	1719.2	false
13C3-PFBS	302.0 / 99.0	1.53	35810.97	370.947797	438.1	false
13C3-PFHxS	402.0 / 99.0	2.29	27707.52	316.732478	310.0	false
13C8-PFOS	507.0 / 99.0	3.07	26955.96	272.769637	234.9	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:08:03 AM

Sample Name	J8669-FS-D(5)	**Injection Vial**	26
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:10:10	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	111441.91	257.927661	1357.2	false
d3-MeFOSAA	573.0 / 419.0	3.58	20851.32	325.577051	191.6	false
d5-EtFOSAA	589.0 / 419.0	3.74	21643.10	297.723744	249.1	false
13C5-PFHxA	318.0 / 273.0	1.85	73499.03	272.293046	619.3	false
13C4-PFHpA	367.0 / 322.0	2.26	80969.82	263.665305	1068.4	false
13C8-PFOA	421.0 / 376.0	2.67	92458.58	247.501102	1889.9	false
13C9-PFNA	472.0 / 427.0	3.07	98747.68	231.500192	235540.1	false
13C6-PFDA	519.0 / 474.0	3.42	107906.92	247.890607	1035.3	false
13C7-PFUnA	570.0 / 525.0	3.74	102650.82	255.285158	812.2	false
13C2-PFTeDA	715.0 / 670.0	4.48	98783.56	283.177373	1890.1	false
13C3-PFBS	302.0 / 99.0	1.52	30541.94	261.772559	387.6	false
13C3-PFHxS	402.0 / 99.0	2.28	26669.08	252.251482	342.4	false
13C8-PFOS	507.0 / 99.0	3.07	31054.35	260.012641	253.9	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:08:08 AM

Sample Name	J8670-FS(0)	**Injection Vial**	27
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:21:03	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	94208.49	255.135943	858.3	false
d3-MeFOSAA	573.0 / 419.0	3.58	18931.68	432.992866	189.5	true
d5-EtFOSAA	589.0 / 419.0	3.74	18953.79	381.910192	178.6	false
13C5-PFHxA	318.0 / 273.0	1.84	69276.61	181.694162	175.9	false
13C4-PFHpA	367.0 / 322.0	2.26	87389.34	201.459472	376.0	false
13C8-PFOA	421.0 / 376.0	2.67	72705.59	137.783485	438.4	false
13C9-PFNA	472.0 / 427.0	3.06	82522.01	136.959965	419.3	false
13C6-PFDA	519.0 / 474.0	3.42	94887.23	255.064947	518.5	false
13C7-PFUnA	570.0 / 525.0	3.74	96831.67	281.781726	817.4	false
13C2-PFTeDA	715.0 / 670.0	4.48	61610.24	206.661253	1297.3	false
13C3-PFBS	302.0 / 99.0	1.52	23485.72	294.850934	205.0	false
13C3-PFHxS	402.0 / 99.0	2.28	28258.55	391.513526	246.7	false
13C8-PFOS	507.0 / 99.0	3.06	23537.56	288.672039	161.9	false

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Summary Quant Report

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Printed: 01/11/2018 8:08:13 AM

Sample Name	J8670-FS-D(3)	**Injection Vial**	28
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:31:54	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	109794.02	275.904836	1329.9	false
d3-MeFOSAA	573.0 / 419.0	3.58	18723.23	333.779057	249.9	false
d5-EtFOSAA	589.0 / 419.0	3.74	20278.36	318.482056	248.2	false
13C5-PFHxA	318.0 / 273.0	1.85	73373.38	289.401049	333.0	false
13C4-PFHpA	367.0 / 322.0	2.26	88145.59	305.588527	710.0	false
13C8-PFOA	421.0 / 376.0	2.67	89314.63	254.541820	832.1	false
13C9-PFNA	472.0 / 427.0	3.07	89141.89	222.491245	875.3	false
13C6-PFDA	519.0 / 474.0	3.42	97498.34	243.186387	2364.7	false
13C7-PFUnA	570.0 / 525.0	3.74	88138.51	237.990789	478.9	false
13C2-PFTeDA	715.0 / 670.0	4.48	88252.34	274.682735	1974.1	false
13C3-PFBS	302.0 / 99.0	1.52	36740.10	359.522306	404.8	false
13C3-PFHxS	402.0 / 99.0	2.28	22970.30	248.056370	279.7	false
13C8-PFOS	507.0 / 99.0	3.06	28182.31	269.405646	223.3	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:08:18 AM

Sample Name	J8670-FS-D(5)	**Injection Vial**	29
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:42:46	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	108026.23	268.790485	1528.5	false
d3-MeFOSAA	573.0 / 419.0	3.58	18159.68	274.975303	241.1	false
d5-EtFOSAA	589.0 / 419.0	3.74	20660.38	275.611647	211.9	false
13C5-PFHxA	318.0 / 273.0	1.85	74998.28	274.435740	393.1	false
13C4-PFHpA	367.0 / 322.0	2.26	84688.23	272.387608	614.6	false
13C8-PFOA	421.0 / 376.0	2.68	87474.78	231.284890	1418.2	false
13C9-PFNA	472.0 / 427.0	3.07	92345.20	213.832256	2240.0	false
13C6-PFDA	519.0 / 474.0	3.42	98422.53	243.075178	1827.5	false
13C7-PFUnA	570.0 / 525.0	3.74	101494.98	271.358259	516.2	false
13C2-PFTeDA	715.0 / 670.0	4.48	92925.68	286.381484	1734.3	false
13C3-PFBS	302.0 / 99.0	1.52	34366.41	285.645136	434.2	false
13C3-PFHxS	402.0 / 99.0	2.29	25486.81	233.779517	283.7	false
13C8-PFOS	507.0 / 99.0	3.07	27444.00	222.835688	204.7	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:08:22 AM

Sample Name	J8683-FS(0)	**Injection Vial**	30
Sample ID	VC-CS10-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:53:38	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	106676.47	297.046475	1185.3	false
d3-MeFOSAA	573.0 / 419.0	3.58	23369.59	452.101198	260.6	false
d5-EtFOSAA	589.0 / 419.0	3.74	21518.64	366.752352	235.8	false
13C5-PFHxA	318.0 / 273.0	1.85	82056.78	322.343960	190.7	false
13C4-PFHpA	367.0 / 322.0	2.26	99258.67	342.727068	523.0	false
13C8-PFOA	421.0 / 376.0	2.67	82351.31	233.749418	685.0	false
13C9-PFNA	472.0 / 427.0	3.06	85398.64	212.288042	457.2	false
13C6-PFDA	519.0 / 474.0	3.42	99565.32	275.185311	944.1	false
13C7-PFUnA	570.0 / 525.0	3.73	100533.86	300.802829	536.8	false
13C2-PFTeDA	715.0 / 670.0	4.48	73218.66	252.523637	1773.5	false
13C3-PFBS	302.0 / 99.0	1.52	31493.89	334.439762	271.1	false
13C3-PFHxS	402.0 / 99.0	2.28	25700.41	301.182636	194.9	false
13C8-PFOS	507.0 / 99.0	3.06	22204.78	230.347097	156.0	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:08:27 AM

Sample Name	J8683-FS-D(3)	**Injection Vial**	31
Sample ID	VC-CS10-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:04:29	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	106860.63	298.110974	1170.6	false
d3-MeFOSAA	573.0 / 419.0	3.58	18853.75	340.475938	192.6	false
d5-EtFOSAA	589.0 / 419.0	3.74	18283.24	290.880931	220.5	false
13C5-PFHxA	318.0 / 273.0	1.85	70384.68	298.333192	301.9	false
13C4-PFHpA	367.0 / 322.0	2.26	80210.64	298.834207	496.2	false
13C8-PFOA	421.0 / 376.0	2.67	90704.75	277.797581	873.8	false
13C9-PFNA	472.0 / 427.0	3.06	90369.50	242.390084	801.9	false
13C6-PFDA	519.0 / 474.0	3.42	98542.30	272.862792	836.6	false
13C7-PFUnA	570.0 / 525.0	3.73	106591.66	319.519393	745.0	false
13C2-PFTeDA	715.0 / 670.0	4.48	88831.94	306.940281	1483.9	false
13C3-PFBS	302.0 / 99.0	1.52	34657.14	343.548778	403.1	false
13C3-PFHxS	402.0 / 99.0	2.29	23932.56	261.808144	288.8	false
13C8-PFOS	507.0 / 99.0	3.06	25104.67	243.105507	206.4	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:08:32 AM

Sample Name	J8684-FS(0)	**Injection Vial**	34
Sample ID	VC-CS10-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:37:05	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	93121.67	244.693754	1036.2	false
d3-MeFOSAA	573.0 / 419.0	3.57	17872.54	386.696230	218.2	false
d5-EtFOSAA	589.0 / 419.0	3.73	22540.58	429.657445	204.1	false
13C5-PFHxA	318.0 / 273.0	1.85	75776.86	315.580253	215.4	false
13C4-PFHpA	367.0 / 322.0	2.26	96997.93	355.067219	480.4	false
13C8-PFOA	421.0 / 376.0	2.67	76997.40	231.699049	643.6	false
13C9-PFNA	472.0 / 427.0	3.06	75248.70	198.308676	444.0	false
13C6-PFDA	519.0 / 474.0	3.41	92491.84	241.233137	898.9	false
13C7-PFUnA	570.0 / 525.0	3.73	95497.83	269.636960	773.6	false
13C2-PFTeDA	715.0 / 670.0	4.48	72464.59	235.842702	980.0	false
13C3-PFBS	302.0 / 99.0	1.52	32737.59	388.810025	247.8	false
13C3-PFHxS	402.0 / 99.0	2.28	25849.98	338.804513	188.8	false
13C8-PFOS	507.0 / 99.0	3.06	24185.63	280.603217	176.5	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:08:37 AM

Sample Name	J8684-FS-D(3)	**Injection Vial**	35
Sample ID	VC-CS10-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:47:57	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	101678.89	268.859962	1014.7	false
d3-MeFOSAA	573.0 / 419.0	3.58	18287.37	302.796479	231.2	false
d5-EtFOSAA	589.0 / 419.0	3.73	20223.31	295.002355	270.7	false
13C5-PFHxA	318.0 / 273.0	1.85	69187.48	284.803501	320.7	false
13C4-PFHpA	367.0 / 322.0	2.26	81832.27	296.085603	763.9	false
13C8-PFOA	421.0 / 376.0	2.67	81159.00	241.395684	824.5	false
13C9-PFNA	472.0 / 427.0	3.06	83072.90	216.394735	840.2	false
13C6-PFDA	519.0 / 474.0	3.42	97751.22	256.554077	1531.3	false
13C7-PFUnA	570.0 / 525.0	3.73	97672.22	277.510986	897.6	false
13C2-PFTeDA	715.0 / 670.0	4.48	86173.94	282.225179	1349.2	false
13C3-PFBS	302.0 / 99.0	1.52	35835.96	325.706020	373.1	false
13C3-PFHxS	402.0 / 99.0	2.28	25811.16	258.888304	320.1	false
13C8-PFOS	507.0 / 99.0	3.06	25170.91	223.485976	240.0	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:08:42 AM

Sample Name	J8685-FS(0)	**Injection Vial**	36
Sample ID	VC-CS10-DW02P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:58:48	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	102588.85	256.936982	760.8	false
d3-MeFOSAA	573.0 / 419.0	3.58	16482.00	315.200634	198.8	false
d5-EtFOSAA	589.0 / 419.0	3.73	20705.30	348.844963	211.3	false
13C5-PFHxA	318.0 / 273.0	1.85	82228.58	341.132742	280.7	false
13C4-PFHpA	367.0 / 322.0	2.26	97699.02	356.258899	565.5	false
13C8-PFOA	421.0 / 376.0	2.67	87823.60	263.261183	729.6	false
13C9-PFNA	472.0 / 427.0	3.06	80150.28	210.414245	527.1	false
13C6-PFDA	519.0 / 474.0	3.41	100786.93	250.548665	867.2	false
13C7-PFUnA	570.0 / 525.0	3.73	95641.40	257.386747	586.1	false
13C2-PFTeDA	715.0 / 670.0	4.47	83438.11	258.830480	1589.4	false
13C3-PFBS	302.0 / 99.0	1.52	32856.91	344.914239	336.4	true
13C3-PFHxS	402.0 / 99.0	2.28	28696.94	332.443762	254.9	false
13C8-PFOS	507.0 / 99.0	3.06	26132.46	267.984203	184.4	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:08:49 AM

Sample Name	J8686-FS(0)	**Injection Vial**	37
Sample ID	VC-CS10-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:09:39	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	97231.18	287.650065	883.8	false
d3-MeFOSAA	573.0 / 419.0	3.57	19535.77	410.752934	180.6	false
d5-EtFOSAA	589.0 / 419.0	3.73	24391.44	451.815685	252.6	false
13C5-PFHxA	318.0 / 273.0	1.85	80278.66	297.996116	189.0	false
13C4-PFHpA	367.0 / 322.0	2.26	92267.39	301.046525	474.9	false
13C8-PFOA	421.0 / 376.0	2.68	75501.13	202.506495	811.3	false
13C9-PFNA	472.0 / 427.0	3.06	78040.44	183.315714	455.4	false
13C6-PFDA	519.0 / 474.0	3.42	87555.06	257.099705	840.6	false
13C7-PFUnA	570.0 / 525.0	3.73	97515.60	309.989367	675.0	false
13C2-PFTeDA	715.0 / 670.0	4.48	61336.86	224.752723	1047.4	false
13C3-PFBS	302.0 / 99.0	1.52	29834.67	344.332956	284.5	true
13C3-PFHxS	402.0 / 99.0	2.28	25762.22	328.124685	200.3	false
13C8-PFOS	507.0 / 99.0	3.06	25477.26	287.246487	174.9	false

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Summary Quant Report

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Printed: 01/11/2018 8:08:55 AM

Sample Name	J8686-FS-D(3)	**Injection Vial**	38
Sample ID	VC-CS10-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:20:32	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	107860.99	292.206542	1005.1	false
d3-MeFOSAA	573.0 / 419.0	3.58	19433.55	313.471787	217.3	false
d5-EtFOSAA	589.0 / 419.0	3.73	21647.47	307.628909	284.6	false
13C5-PFHxA	318.0 / 273.0	1.85	67321.02	284.802716	353.5	false
13C4-PFHpA	367.0 / 322.0	2.26	77159.26	286.917081	539.0	false
13C8-PFOA	421.0 / 376.0	2.67	85707.01	261.990038	972.0	false
13C9-PFNA	472.0 / 427.0	3.06	87543.62	234.362144	1620.1	false
13C6-PFDA	519.0 / 474.0	3.41	101265.46	272.300378	1047.7	false
13C7-PFUnA	570.0 / 525.0	3.73	103997.65	302.735140	656.0	false
13C2-PFTeDA	715.0 / 670.0	4.47	89435.65	300.096329	1634.5	false
13C3-PFBS	302.0 / 99.0	1.52	31556.07	279.406402	347.3	false
13C3-PFHxS	402.0 / 99.0	2.28	23895.44	233.489168	356.7	false
13C8-PFOS	507.0 / 99.0	3.06	27257.81	235.770205	217.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:09:01 AM

Sample Name	J8687-FS(0)	**Injection Vial**	39
Sample ID	VC-CS10-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:31:23	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	103434.66	267.218287	692.5	false
d3-MeFOSAA	573.0 / 419.0	3.58	17205.95	288.495773	181.7	false
d5-EtFOSAA	589.0 / 419.0	3.73	19878.67	293.644431	198.4	false
13C5-PFHxA	318.0 / 273.0	1.85	83591.91	171.646704	189.5	false
13C4-PFHpA	367.0 / 322.0	2.26	98934.84	178.564584	538.0	false
13C8-PFOA	421.0 / 376.0	2.67	64145.62	95.172880	601.2	false
13C9-PFNA	472.0 / 427.0	3.06	85876.27	111.587073	489.6	false
13C6-PFDA	519.0 / 474.0	3.41	101703.25	260.793219	1568.6	false
13C7-PFUnA	570.0 / 525.0	3.73	104688.02	290.610196	660.0	false
13C2-PFTeDA	715.0 / 670.0	4.47	49559.00	158.579535	1120.9	false
13C3-PFBS	302.0 / 99.0	1.52	31224.93	287.388521	275.6	false
13C3-PFHxS	402.0 / 99.0	2.28	26060.37	264.695640	224.8	false
13C8-PFOS	507.0 / 99.0	3.06	24440.31	219.745164	193.9	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:09:15 AM

Sample Name	J8688-FS(0)	**Injection Vial**	44
Sample ID	VC-CS18-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:25:42	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	104479.93	498.657702	811.1	false
d3-MeFOSAA	573.0 / 419.0	3.57	20649.29	407.847706	201.7	false
d5-EtFOSAA	589.0 / 419.0	3.72	20302.14	353.271413	224.2	false
13C5-PFHxA	318.0 / 273.0	1.84	79408.26	480.285485	212.4	false
13C4-PFHpA	367.0 / 322.0	2.25	91373.00	485.765357	419.6	false
13C8-PFOA	421.0 / 376.0	2.67	54363.50	237.583437	592.5	false
13C9-PFNA	472.0 / 427.0	3.05	82775.21	316.813446	750.1	false
13C6-PFDA	519.0 / 474.0	3.41	54583.14	258.576833	581.3	false
13C7-PFUnA	570.0 / 525.0	3.72	98005.34	502.612383	599.9	false
13C2-PFTeDA	715.0 / 670.0	4.47	68940.79	407.540204	1715.6	false
13C3-PFBS	302.0 / 99.0	1.52	32958.73	357.330937	284.1	false
13C3-PFHxS	402.0 / 99.0	2.28	28195.00	337.342008	278.3	false
13C8-PFOS	507.0 / 99.0	3.05	24116.97	255.427420	193.6	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:09:20 AM

Sample Name	J8714-FS(0)	**Injection Vial**	45
Sample ID	VC-SO-FB11-10062018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:36:33	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	112337.84	306.407171	803.0	false
d3-MeFOSAA	573.0 / 419.0	3.57	19764.25	367.162535	240.6	false
d5-EtFOSAA	589.0 / 419.0	3.73	22366.09	366.051023	275.5	false
13C5-PFHxA	318.0 / 273.0	1.85	76110.19	321.799535	576.5	false
13C4-PFHpA	367.0 / 322.0	2.25	84160.61	312.770943	1033.0	false
13C8-PFOA	421.0 / 376.0	2.67	97216.85	297.001866	1035.8	false
13C9-PFNA	472.0 / 427.0	3.06	101183.38	270.720605	707.9	false
13C6-PFDA	519.0 / 474.0	3.41	105743.42	286.277768	2814.4	false
13C7-PFUnA	570.0 / 525.0	3.72	111627.32	327.157694	917.6	false
13C2-PFTeDA	715.0 / 670.0	4.47	95851.39	323.814131	1214.6	false
13C3-PFBS	302.0 / 99.0	1.52	32374.72	330.134733	484.8	false
13C3-PFHxS	402.0 / 99.0	2.28	25597.61	288.059873	396.7	false
13C8-PFOS	507.0 / 99.0	3.05	30872.16	307.536587	242.2	false

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Summary Quant Report

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Printed: 01/11/2018 8:09:24 AM

Sample Name	J8715-FS(0)	**Injection Vial**	46
Sample ID	VC-SO-EB11-10062018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:47:24	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	126020.33	325.883182	999.1	false
d3-MeFOSAA	573.0 / 419.0	3.57	20381.98	329.149223	232.6	false
d5-EtFOSAA	589.0 / 419.0	3.73	22677.80	322.642159	250.5	false
13C5-PFHxA	318.0 / 273.0	1.85	76076.43	271.310557	584.9	false
13C4-PFHpA	367.0 / 322.0	2.26	82292.39	257.959252	952.5	false
13C8-PFOA	421.0 / 376.0	2.67	104035.12	268.084372	1150.1	false
13C9-PFNA	472.0 / 427.0	3.06	105438.85	237.950556	844.2	false
13C6-PFDA	519.0 / 474.0	3.41	118211.85	303.419681	2034.2	false
13C7-PFUnA	570.0 / 525.0	3.73	115752.17	321.635708	1281.7	false
13C2-PFTeDA	715.0 / 670.0	4.47	105262.98	337.148704	1956.4	false
13C3-PFBS	302.0 / 99.0	1.52	32987.46	292.416950	425.9	false
13C3-PFHxS	402.0 / 99.0	2.28	25639.16	250.816242	333.6	false
13C8-PFOS	507.0 / 99.0	3.06	30253.61	261.984407	235.1	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:09:29 AM

Sample Name	J8716-FS(0)	**Injection Vial**	47
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:58:16	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	122149.53	279.600618	1157.7	false
d3-MeFOSAA	573.0 / 419.0	3.56	23883.00	601.365667	238.0	false
d5-EtFOSAA	589.0 / 419.0	3.72	25306.98	561.388779	203.9	false
13C5-PFHxA	318.0 / 273.0	1.84	100399.72	380.573575	183.9	false
13C4-PFHpA	367.0 / 322.0	2.25	111363.02	371.041081	474.1	false
13C8-PFOA	421.0 / 376.0	2.66	94931.27	260.010204	589.6	false
13C9-PFNA	472.0 / 427.0	3.05	71519.99	171.554872	417.3	false
13C6-PFDA	519.0 / 474.0	3.41	104864.54	238.251902	724.7	false
13C7-PFUnA	570.0 / 525.0	3.72	114187.43	280.852589	555.2	false
13C2-PFTeDA	715.0 / 670.0	4.47	106064.04	300.703866	1392.4	false
13C3-PFBS	302.0 / 99.0	1.52	37942.61	524.425806	243.2	false
13C3-PFHxS	402.0 / 99.0	2.27	33926.29	517.477511	252.8	false
13C8-PFOS	507.0 / 99.0	3.05	23130.44	312.309632	179.7	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:09:33 AM

Sample Name	J8716-FS-D(3)	**Injection Vial**	48
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:09:09	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	116464.79	303.157385	755.2	false
d3-MeFOSAA	573.0 / 419.0	3.57	21147.61	403.449856	216.0	false
d5-EtFOSAA	589.0 / 419.0	3.73	20832.13	350.135075	236.8	false
13C5-PFHxA	318.0 / 273.0	1.85	74139.13	292.926345	378.6	false
13C4-PFHpA	367.0 / 322.0	2.26	85038.38	295.325424	851.4	false
13C8-PFOA	421.0 / 376.0	2.67	98021.21	279.837560	1055.6	false
13C9-PFNA	472.0 / 427.0	3.06	88399.35	221.018972	826.6	false
13C6-PFDA	519.0 / 474.0	3.41	103251.34	266.766093	820.3	false
13C7-PFUnA	570.0 / 525.0	3.72	110801.89	309.909196	609.2	false
13C2-PFTeDA	715.0 / 670.0	4.47	94645.20	305.138236	1548.3	false
13C3-PFBS	302.0 / 99.0	1.52	37027.71	387.759429	490.6	false
13C3-PFHxS	402.0 / 99.0	2.28	25285.72	292.219420	289.2	false
13C8-PFOS	507.0 / 99.0	3.06	27136.27	277.606880	284.9	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:09:38 AM

Sample Name	J8717-FS(0)	**Injection Vial**	49
Sample ID	VC-CS00-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:20:02	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	106915.82	289.015873	912.1	false
d3-MeFOSAA	573.0 / 419.0	3.57	19468.95	413.853915	204.1	false
d5-EtFOSAA	589.0 / 419.0	3.73	24984.90	467.902843	230.8	false
13C5-PFHxA	318.0 / 273.0	1.84	69404.73	316.629281	144.4	false
13C4-PFHpA	367.0 / 322.0	2.25	89203.61	357.700298	317.2	false
13C8-PFOA	421.0 / 376.0	2.66	85518.40	281.900931	422.0	false
13C9-PFNA	472.0 / 427.0	3.06	86936.25	250.976128	375.6	false
13C6-PFDA	519.0 / 474.0	3.41	100674.75	270.123097	638.5	false
13C7-PFUnA	570.0 / 525.0	3.73	110702.98	321.553218	758.5	false
13C2-PFTeDA	715.0 / 670.0	4.47	74438.11	249.229570	1468.9	false
13C3-PFBS	302.0 / 99.0	1.52	19043.03	222.201792	202.6	false
13C3-PFHxS	402.0 / 99.0	2.28	25751.23	331.594824	193.2	false
13C8-PFOS	507.0 / 99.0	3.06	22091.03	251.809494	171.7	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:09:43 AM

Sample Name	J8718-FS(0)	**Injection Vial**	50
Sample ID	VC-CS00-DW02P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:30:53	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	89466.02	276.076415	964.0	false
d3-MeFOSAA	573.0 / 419.0	3.56	16515.86	406.406615	174.5	false
d5-EtFOSAA	589.0 / 419.0	3.72	19975.21	433.036579	199.0	false
13C5-PFHxA	318.0 / 273.0	1.84	57715.42	293.746137	209.5	false
13C4-PFHpA	367.0 / 322.0	2.25	81718.52	365.574346	298.6	false
13C8-PFOA	421.0 / 376.0	2.66	67914.37	249.756601	346.2	false
13C9-PFNA	472.0 / 427.0	3.05	73993.49	238.310597	365.2	false
13C6-PFDA	519.0 / 474.0	3.40	92047.62	281.932506	610.7	false
13C7-PFUnA	570.0 / 525.0	3.71	96221.88	319.050050	590.6	false
13C2-PFTeDA	715.0 / 670.0	4.46	60756.37	232.213534	1480.8	false
13C3-PFBS	302.0 / 99.0	1.51	17492.20	236.271360	236.4	false
13C3-PFHxS	402.0 / 99.0	2.27	23271.82	346.892901	188.5	true
13C8-PFOS	507.0 / 99.0	3.05	19904.08	262.635457	146.0	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:09:47 AM

Sample Name	J8719-FS(0)	**Injection Vial**	51
Sample ID	VC-CS00-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:41:45	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	90366.17	247.502714	885.3	false
d3-MeFOSAA	573.0 / 419.0	3.57	18539.06	374.104489	175.2	true
d5-EtFOSAA	589.0 / 419.0	3.73	18706.92	332.568426	191.8	false
13C5-PFHxA	318.0 / 273.0	1.84	63763.81	328.655234	182.0	false
13C4-PFHpA	367.0 / 322.0	2.25	84032.14	380.703299	277.0	false
13C8-PFOA	421.0 / 376.0	2.66	79026.09	294.314607	323.1	false
13C9-PFNA	472.0 / 427.0	3.05	85055.36	277.419825	383.6	false
13C6-PFDA	519.0 / 474.0	3.40	90718.84	246.622670	575.1	false
13C7-PFUnA	570.0 / 525.0	3.72	103807.13	305.502703	560.0	false
13C2-PFTeDA	715.0 / 670.0	4.47	74818.33	253.808745	1206.0	false
13C3-PFBS	302.0 / 99.0	1.51	18098.63	200.473973	193.0	false
13C3-PFHxS	402.0 / 99.0	2.27	25486.18	311.540992	178.7	false
13C8-PFOS	507.0 / 99.0	3.05	23209.37	251.142517	145.7	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:09:51 AM

Sample Name	J8720-FS(0)	**Injection Vial**	53
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:14:19	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	115243.95	288.646954	822.0	false
d3-MeFOSAA	573.0 / 419.0	3.57	21451.95	571.342452	239.0	false
d5-EtFOSAA	589.0 / 419.0	3.73	22489.29	527.690208	334.8	false
13C5-PFHxA	318.0 / 273.0	1.84	81166.17	321.579411	194.8	false
13C4-PFHpA	367.0 / 322.0	2.25	75877.76	264.242437	359.1	false
13C8-PFOA	421.0 / 376.0	2.66	76210.88	218.175098	485.7	false
13C9-PFNA	472.0 / 427.0	3.06	54394.12	136.374965	412.4	false
13C6-PFDA	519.0 / 474.0	3.41	97558.87	242.536436	712.8	false
13C7-PFUnA	570.0 / 525.0	3.72	99062.25	266.606547	644.0	false
13C2-PFTeDA	715.0 / 670.0	4.47	89032.44	276.198690	1693.4	false
13C3-PFBS	302.0 / 99.0	1.52	29387.91	429.640781	177.4	false
13C3-PFHxS	402.0 / 99.0	2.27	24197.73	390.399939	200.2	false
13C8-PFOS	507.0 / 99.0	3.06	14131.83	201.827259	106.3	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:09:56 AM

Sample Name	J8720-FS-D(3)	**Injection Vial**	54
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:25:10	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	108017.90	263.105446	899.8	false
d3-MeFOSAA	573.0 / 419.0	3.57	17219.69	373.849153	219.4	true
d5-EtFOSAA	589.0 / 419.0	3.73	18387.26	351.691391	194.4	false
13C5-PFHxA	318.0 / 273.0	1.84	75204.46	300.124997	368.3	false
13C4-PFHpA	367.0 / 322.0	2.25	87156.95	305.728193	1102.2	false
13C8-PFOA	421.0 / 376.0	2.67	79040.43	227.920219	1126.4	false
13C9-PFNA	472.0 / 427.0	3.05	82285.31	207.802332	1384.4	false
13C6-PFDA	519.0 / 474.0	3.41	94181.87	227.699892	1387.3	false
13C7-PFUnA	570.0 / 525.0	3.72	89300.86	233.724130	1484.0	false
13C2-PFTeDA	715.0 / 670.0	4.47	87276.97	263.304517	1528.6	false
13C3-PFBS	302.0 / 99.0	1.52	36588.29	436.034020	387.3	false
13C3-PFHxS	402.0 / 99.0	2.28	24072.36	316.588450	344.7	false
13C8-PFOS	507.0 / 99.0	3.05	21767.72	253.417029	196.6	false

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Summary Quant Report

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Sample Name	J8720-FS-D(5)	**Injection Vial**	1
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:36:01	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	97162.28	243.275141	1073.1	false
d3-MeFOSAA	573.0 / 419.0	3.57	17870.84	353.107825	270.6	false
d5-EtFOSAA	589.0 / 419.0	3.72	21540.02	374.957652	309.3	false
13C5-PFHxA	318.0 / 273.0	1.84	68266.06	290.045663	424.9	false
13C4-PFHpA	367.0 / 322.0	2.25	72175.41	269.541552	989.8	false
13C8-PFOA	421.0 / 376.0	2.66	82947.52	254.647804	956.5	false
13C9-PFNA	472.0 / 427.0	3.05	80592.18	216.682584	1042.8	false
13C6-PFDA	519.0 / 474.0	3.41	97138.26	241.408068	814.7	false
13C7-PFUnA	570.0 / 525.0	3.72	103424.01	278.250024	936.2	false
13C2-PFTeDA	715.0 / 670.0	4.47	86920.61	269.554951	1807.1	false
13C3-PFBS	302.0 / 99.0	1.52	35869.40	389.039497	430.5	false
13C3-PFHxS	402.0 / 99.0	2.28	23791.58	284.767887	358.1	false
13C8-PFOS	507.0 / 99.0	3.05	24071.06	255.040585	284.8	false

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Summary Quant Report

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Sample Name	J8721-FS(0)	**Injection Vial**	2
Sample ID	VC-CS00-DW05-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:46:54	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	121546.61	345.710307	1100.2	false
d3-MeFOSAA	573.0 / 419.0	3.57	22935.62	459.920002	223.0	false
d5-EtFOSAA	589.0 / 419.0	3.73	26602.17	469.961572	251.5	false
13C5-PFHxA	318.0 / 273.0	1.84	83961.57	365.226572	193.7	false
13C4-PFHpA	367.0 / 322.0	2.25	105717.02	404.204955	354.0	false
13C8-PFOA	421.0 / 376.0	2.66	93556.81	294.057461	548.8	false
13C9-PFNA	472.0 / 427.0	3.06	92486.15	254.582202	491.0	false
13C6-PFDA	519.0 / 474.0	3.41	92159.99	260.179652	1252.9	false
13C7-PFUnA	570.0 / 525.0	3.72	118457.81	362.032022	727.6	false
13C2-PFTeDA	715.0 / 670.0	4.47	83715.56	294.917256	1227.6	false
13C3-PFBS	302.0 / 99.0	1.51	28811.94	317.140197	260.4	false
13C3-PFHxS	402.0 / 99.0	2.28	29830.75	362.360813	227.5	false
13C8-PFOS	507.0 / 99.0	3.06	25412.48	273.256493	174.0	false

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Summary Quant Report

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Sample Name	J8722-FS(0)	**Injection Vial**	3
Sample ID		**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:57:47	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	108127.34	259.153478	1020.7	false
d3-MeFOSAA	573.0 / 419.0	3.56	19846.99	384.871517	241.1	false
d5-EtFOSAA	589.0 / 419.0	3.72	26117.22	446.191977	261.1	false
13C5-PFHxA	318.0 / 273.0	1.84	74801.57	300.161814	183.7	false
13C4-PFHpA	367.0 / 322.0	2.25	98507.33	347.446686	323.6	false
13C8-PFOA	421.0 / 376.0	2.66	92108.19	267.065612	465.9	false
13C9-PFNA	472.0 / 427.0	3.05	90590.36	230.036223	484.0	false
13C6-PFDA	519.0 / 474.0	3.40	120454.64	286.553999	994.5	false
13C7-PFUnA	570.0 / 525.0	3.72	114811.98	295.680382	660.0	false
13C2-PFTeDA	715.0 / 670.0	4.46	52796.19	156.728738	1212.5	false
13C3-PFBS	302.0 / 99.0	1.51	19763.78	210.376980	162.4	false
13C3-PFHxS	402.0 / 99.0	2.27	28896.32	339.444757	205.7	false
13C8-PFOS	507.0 / 99.0	3.05	24399.47	253.719170	150.0	false

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Summary Quant Report

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Sample Name	KB80 IB	**Injection Vial**	3
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T11:52:13	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	2967.74	3.140851	19.9	true
PFBS_2	298.9 / 99.0	1.55	1369.20	9.962311	21.8	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	3.10	728.71	< 0	14.4	false
PFOS_1	499.0 / 80.0	3.10	6869.95	13.110095	17.7	true
PFOS_2	499.0 / 99.0	3.08	1324.90	12.963742	12.5	false
PFDA_1	513.0 / 469.0	3.45	2091.15	< 0	15.1	false
PFDA_2	513.0 / 219.0	3.49	927.99	33.367701	16.2	false
PFUnA_1	563.0 / 519.0	3.77	1125.55	< 0	12.0	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.05	1323.16	< 0	21.5	false
PFDoA_2	613.0 / 319.0	3.79	261.15	< 0	10.6	false
PFTrDA_1	663.0 / 619.0	4.30	864.00	< 0	29.4	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.51	982.16	< 0	49.2	false
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	3.77	392.52	< 0	14.6	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	J8722-FS-D(3)	**Injection Vial**	7
Sample ID	VC-CS00-DW06-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:35:44	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	59582.10	129.898459	77.5	false
PFBS_2	298.9 / 99.0	1.54	18418.43	138.873112	106.4	false
PFHxA_1	313.0 / 269.0	1.86	331940.69	978.880363	52.0	false
PFHxA_2	313.0 / 119.0	1.86	23420.55	908.519471	56.0	false
PFHpA_1	363.0 / 319.0	2.27	70647.35	183.123015	37.9	false
PFHpA_2	363.0 / 169.0	2.28	1840.35	159.751285	40.6	false
PFHxS_1	399.0 / 80.0	2.30	1354045.87	3438.331275	509.8	false
PFHxS_2	399.0 / 99.0	2.30	397971.25	3620.573800	761.4	false
PFOA_1	413.0 / 369.0	2.68	294945.30	748.581717	158.2	false
PFOA_2	413.0 / 169.0	2.66	25287.31	993.880175	172.4	false
PFNA_1	463.0 / 419.0	3.08	16293.11	20.003559	43.7	false
PFNA_2	463.0 / 219.0	3.08	6364.48	37.849598	62.1	false
PFOS_1	499.0 / 80.0	3.08	9103703.88	14804.654715	521.4	false
PFOS_2	499.0 / 99.0	3.08	1548830.72	14507.406902	1559.5	false
PFDA_1	513.0 / 469.0	3.45	6483.89	< 0	31.4	false
PFDA_2	513.0 / 219.0	3.45	540.52	8.179153	13.8	false
PFUnA_1	563.0 / 519.0	3.76	3388.14	< 0	26.7	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.04	4630.78	< 0	50.4	false
PFDoA_2	613.0 / 319.0	4.04	474.56	< 0	10.3	true
PFTrDA_1	663.0 / 619.0	4.29	3447.88	< 0	59.9	false
PFTrDA_2	663.0 / 169.0	4.30	498.53	< 0	18.6	false
PFTeDA_1	713.0 / 669.0	4.50	3518.37	< 0	129.8	false
PFTeDA_2	713.0 / 169.0	4.50	407.85	< 0	38.0	false
NMeFOSAA_1	570.0 / 419.0	3.60	715.62	< 0	53.6	false
NMeFOSAA_2	570.0 / 512.0	3.59	877.82	< 0	19.3	false
NEtFOSAA_1	584.0 / 419.0	3.76	719.50	< 0	27.9	false
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8720-FS-D(7)	**Injection Vial**	8
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:46:35	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	315605.58	769.972838	307.0	false
PFBS_2	298.9 / 99.0	1.54	95788.24	797.771513	321.1	false
PFHxA_1	313.0 / 269.0	1.86	373408.17	1277.572159	81.8	false
PFHxA_2	313.0 / 119.0	1.86	22462.63	1008.348835	60.1	false
PFHpA_1	363.0 / 319.0	2.27	58293.51	176.417352	64.3	false
PFHpA_2	363.0 / 169.0	2.27	1338.72	122.959004	31.5	false
PFHxS_1	399.0 / 80.0	2.30	1822927.48	5149.907990	653.9	false
PFHxS_2	399.0 / 99.0	2.30	543749.98	5505.981311	1127.7	false
PFOA_1	413.0 / 369.0	2.68	149193.60	371.914933	164.7	false
PFOA_2	413.0 / 169.0	2.65	13735.51	534.324946	95.4	false
PFNA_1	463.0 / 419.0	3.08	9531.20	< 0	44.4	false
PFNA_2	463.0 / 219.0	3.08	2177.83	< 0	34.8	false
PFOS_1	499.0 / 80.0	3.08	3321041.69	5794.400212	454.0	false
PFOS_2	499.0 / 99.0	3.08	578796.60	5815.693499	783.8	false
PFDA_1	513.0 / 469.0	3.44	6272.05	< 0	41.7	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.76	1965.72	< 0	16.1	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.04	1026.73	< 0	16.4	false
PFDoA_2	613.0 / 319.0	4.03	1017.43	< 0	24.6	false
PFTrDA_1	663.0 / 619.0	4.29	1015.04	< 0	41.6	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.49	766.54	< 0	30.9	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	3.76	385.00	< 0	15.9	false
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8716-FS-D(5)	**Injection Vial**	9
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:57:26	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	22313.93	54.735094	34.5	true
PFBS_2	298.9 / 99.0	1.54	6799.94	58.855469	60.8	false
PFHxA_1	313.0 / 269.0	1.86	50519.28	159.511996	21.6	false
PFHxA_2	313.0 / 119.0	1.86	2922.16	99.275651	15.2	false
PFHpA_1	363.0 / 319.0	2.28	18755.19	50.328964	27.3	false
PFHpA_2	363.0 / 169.0	2.29	485.60	< 0	16.2	false
PFHxS_1	399.0 / 80.0	2.30	247295.82	713.372238	366.3	false
PFHxS_2	399.0 / 99.0	2.30	71153.29	731.637941	368.7	false
PFOA_1	413.0 / 369.0	2.69	90700.21	220.810838	114.6	false
PFOA_2	413.0 / 169.0	2.68	5747.08	215.817663	65.0	false
PFNA_1	463.0 / 419.0	3.08	9380.89	< 0	37.5	false
PFNA_2	463.0 / 219.0	3.09	3455.23	6.015529	39.8	false
PFOS_1	499.0 / 80.0	3.08	2987413.86	5036.923272	523.3	false
PFOS_2	499.0 / 99.0	3.08	546629.49	5307.462934	1226.4	false
PFDA_1	513.0 / 469.0	3.44	11426.55	5.599497	64.2	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.76	2516.77	< 0	16.3	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.03	1339.07	< 0	16.6	false
PFDoA_2	613.0 / 319.0	3.98	597.60	< 0	17.7	true
PFTrDA_1	663.0 / 619.0	4.28	819.80	< 0	18.9	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.48	420.20	< 0	24.9	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	3.62	447.07	< 0	14.5	false
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8688-FS-D(3)	**Injection Vial**	10
Sample ID	VC-CS18-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:08:19	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	175082.63	350.761844	102.2	false
PFBS_2	298.9 / 99.0	1.54	47577.16	325.992584	169.2	false
PFHxA_1	313.0 / 269.0	1.86	766810.26	2491.520072	89.4	false
PFHxA_2	313.0 / 119.0	1.86	56974.61	2468.496931	98.3	false
PFHpA_1	363.0 / 319.0	2.27	437621.06	1327.687664	199.5	false
PFHpA_2	363.0 / 169.0	2.27	8474.78	1143.628595	113.6	false
PFHxS_1	399.0 / 80.0	2.30	2759316.41	7634.546936	539.4	false
PFHxS_2	399.0 / 99.0	2.30	776289.98	7698.883294	1295.9	false
PFOA_1	413.0 / 369.0	2.68	1995949.12	5853.665051	405.7	false
PFOA_2	413.0 / 169.0	2.64	187871.80	8491.995223	313.1	false
PFNA_1	463.0 / 419.0	3.07	13865.52	13.269767	47.2	false
PFNA_2	463.0 / 219.0	3.07	5630.32	31.628758	50.1	false
PFOS_1	499.0 / 80.0	2.98	891866.83	1497.393598	122.6	false
PFOS_2	499.0 / 99.0	3.08	119794.11	1157.561588	303.9	true
PFDA_1	513.0 / 469.0	3.43	7690.92	1.098273	36.6	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.76	2649.68	< 0	16.9	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.03	1278.88	< 0	16.8	false
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.27	1027.81	< 0	24.3	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.48	509.40	< 0	22.0	true
PFTeDA_2	713.0 / 169.0	4.51	166.56	< 0	15.2	false
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8687-FS-D(7)	**Injection Vial**	11
Sample ID	VC-CS10-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:19:10	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	3723.87	4.526357	23.2	true
PFBS_2	298.9 / 99.0	1.52	1510.69	10.225007	22.7	true
PFHxA_1	313.0 / 269.0	1.87	36061.37	105.587641	18.6	false
PFHxA_2	313.0 / 119.0	1.86	3265.99	118.659595	12.6	false
PFHpA_1	363.0 / 319.0	2.27	21412.60	63.062846	33.7	false
PFHpA_2	363.0 / 169.0	2.27	813.32	58.344059	14.4	false
PFHxS_1	399.0 / 80.0	2.28	16556.63	27.581837	39.5	true
PFHxS_2	399.0 / 99.0	2.30	3884.94	14.816489	38.6	true
PFOA_1	413.0 / 369.0	2.68	1513772.43	4311.951458	511.2	false
PFOA_2	413.0 / 169.0	2.68	117653.89	5164.354239	341.0	false
PFNA_1	463.0 / 419.0	3.08	7391.85	< 0	40.3	false
PFNA_2	463.0 / 219.0	3.06	3725.73	13.649546	47.3	false
PFOS_1	499.0 / 80.0	3.07	8513.12	17.448156	15.1	false
PFOS_2	499.0 / 99.0	3.07	1463.18	15.890372	20.1	false
PFDA_1	513.0 / 469.0	3.44	5782.89	< 0	39.2	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.74	772.34	< 0	10.5	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.05	941.54	< 0	12.7	false
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.29	544.10	< 0	17.5	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.48	387.38	< 0	20.9	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	CR987LCS-FS(0)	**Injection Vial**	14
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:51:45	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	2159910.38	4845.134015	1102.2	false
PFBS_2	298.9 / 99.0	1.54	652294.72	4984.422727	817.6	false
PFHxA_1	313.0 / 269.0	1.87	1624203.75	4942.998628	223.6	false
PFHxA_2	313.0 / 119.0	1.86	120399.18	4902.640086	149.4	false
PFHpA_1	363.0 / 319.0	2.27	1486597.94	5059.328305	406.6	false
PFHpA_2	363.0 / 169.0	2.27	29205.22	4627.127746	269.6	false
PFHxS_1	399.0 / 80.0	2.30	2047982.72	5115.089218	954.5	false
PFHxS_2	399.0 / 99.0	2.30	575638.76	5151.778733	1341.8	false
PFOA_1	413.0 / 369.0	2.68	2223370.15	5854.057572	553.7	false
PFOA_2	413.0 / 169.0	2.68	132577.11	5374.729542	451.0	false
PFNA_1	463.0 / 419.0	3.08	1986273.40	5882.329258	741.0	false
PFNA_2	463.0 / 219.0	3.08	624731.00	5999.332720	782.6	false
PFOS_1	499.0 / 80.0	3.08	2983408.65	5026.943694	439.4	false
PFOS_2	499.0 / 99.0	3.08	523682.94	5081.416309	990.6	false
PFDA_1	513.0 / 469.0	3.43	2223329.41	5023.286656	927.5	false
PFDA_2	513.0 / 219.0	3.43	100513.09	5512.628129	514.7	false
PFUnA_1	563.0 / 519.0	3.75	2312959.06	5137.521138	698.5	false
PFUnA_2	563.0 / 269.0	3.75	120172.61	5372.050455	343.0	false
PFDoA_1	613.0 / 569.0	4.03	2173134.83	5040.629854	657.5	false
PFDoA_2	613.0 / 319.0	4.03	355458.40	5289.943299	598.2	false
PFTrDA_1	663.0 / 619.0	4.27	2040325.65	5366.263842	1266.5	false
PFTrDA_2	663.0 / 169.0	4.27	132882.41	5317.331399	746.0	false
PFTeDA_1	713.0 / 669.0	4.49	2227254.42	5165.738483	2196.3	false
PFTeDA_2	713.0 / 169.0	4.48	110463.34	5291.072299	1037.8	false
NMeFOSAA_1	570.0 / 419.0	3.59	452372.06	5333.846597	1165.0	false
NMeFOSAA_2	570.0 / 512.0	3.59	259916.11	5640.486798	1110.5	false
NEtFOSAA_1	584.0 / 419.0	3.74	452234.08	5536.278333	907.3	false
NEtFOSAA_2	584.0 / 483.0	3.74	26511.26	5534.105054	610.5	false

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Summary Quant Report

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Sample Name	J8667-FS-D(3)	**Injection Vial**	15
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:02:37	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	349666.45	739.434188	297.2	false
PFBS_2	298.9 / 99.0	1.54	111357.26	804.163736	279.7	false
PFHxA_1	313.0 / 269.0	1.86	1054915.05	3621.402192	131.0	false
PFHxA_2	313.0 / 119.0	1.86	79905.65	3666.638783	122.1	false
PFHpA_1	363.0 / 319.0	2.27	301701.53	1006.873414	178.3	false
PFHpA_2	363.0 / 169.0	2.27	6596.14	971.083690	107.1	false
PFHxS_1	399.0 / 80.0	2.30	3080729.44	9190.153305	952.0	false
PFHxS_2	399.0 / 99.0	2.30	841233.48	8995.386524	1321.6	false
PFOA_1	413.0 / 369.0	2.68	1487938.85	3891.568538	498.3	false
PFOA_2	413.0 / 169.0	2.64	139435.98	5623.075536	326.1	false
PFNA_1	463.0 / 419.0	3.08	15455.92	16.396189	51.5	false
PFNA_2	463.0 / 219.0	3.08	5485.64	27.599258	59.7	false
PFOS_1	499.0 / 80.0	3.05	6889431.20	13256.561762	519.2	false
PFOS_2	499.0 / 99.0	3.08	1159000.34	12844.941967	1010.7	false
PFDA_1	513.0 / 469.0	3.43	10536.13	2.036509	49.8	false
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	3.76	6241.23	4.378872	38.2	false
PFUnA_2	563.0 / 269.0	3.76	698.86	32.369591	18.1	true
PFDoA_1	613.0 / 569.0	4.03	5068.23	< 0	54.5	false
PFDoA_2	613.0 / 319.0	4.01	2148.09	< 0	33.4	false
PFTrDA_1	663.0 / 619.0	4.27	4382.63	< 0	102.3	false
PFTrDA_2	663.0 / 169.0	4.26	295.30	< 0	14.2	false
PFTeDA_1	713.0 / 669.0	4.48	7289.69	< 0	127.3	false
PFTeDA_2	713.0 / 169.0	4.49	228.26	< 0	16.9	false
NMeFOSAA_1	570.0 / 419.0	3.59	1271.41	< 0	31.6	false
NMeFOSAA_2	570.0 / 512.0	3.58	754.38	< 0	17.2	false
NEtFOSAA_1	584.0 / 419.0	3.75	992.03	< 0	44.9	false
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

Created with Analyst Reporter
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Sample Name	KB80 IB	**Injection Vial**	3
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T11:52:13	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_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	101281.43	243.821784	1180.2	false
d3-MeFOSAA	573.0 / 419.0	3.60	16567.24	230.398530	165.6	false
d5-EtFOSAA	589.0 / 419.0	3.76	21862.26	267.854110	223.6	false
13C5-PFHxA	318.0 / 273.0	1.86	63936.71	237.598307	627.2	false
13C4-PFHpA	367.0 / 322.0	2.28	78224.38	255.511279	933.7	false
13C8-PFOA	421.0 / 376.0	2.69	96172.48	258.237241	1345.0	false
13C9-PFNA	472.0 / 427.0	3.08	98316.57	231.200767	962.3	false
13C6-PFDA	519.0 / 474.0	3.44	94696.61	226.276028	852.9	false
13C7-PFUnA	570.0 / 525.0	3.76	88201.94	228.157435	662.9	false
13C2-PFTeDA	715.0 / 670.0	4.51	89704.15	267.472868	2183.1	false
13C3-PFBS	302.0 / 99.0	1.54	27223.13	207.813992	335.4	false
13C3-PFHxS	402.0 / 99.0	2.30	24272.93	204.482967	314.4	false
13C8-PFOS	507.0 / 99.0	3.08	29949.25	223.340396	241.5	false

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Summary Quant Report

Created with Analyst Reporter
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Sample Name	J8722-FS-D(3)	**Injection Vial**	7
Sample ID	VC-CS00-DW06-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:35:44	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	114519.47	315.922735	1012.5	false
d3-MeFOSAA	573.0 / 419.0	3.59	22840.13	397.634547	253.1	true
d5-EtFOSAA	589.0 / 419.0	3.75	23560.21	361.358560	310.2	false
13C5-PFHxA	318.0 / 273.0	1.85	83190.08	324.735665	360.5	false
13C4-PFHpA	367.0 / 322.0	2.26	99482.47	341.334281	557.8	false
13C8-PFOA	421.0 / 376.0	2.68	96277.66	271.555738	1419.0	false
13C9-PFNA	472.0 / 427.0	3.07	93223.10	230.277512	730.3	false
13C6-PFDA	519.0 / 474.0	3.43	98572.06	269.908649	1048.7	false
13C7-PFUnA	570.0 / 525.0	3.74	99471.72	294.859413	1162.2	false
13C2-PFTeDA	715.0 / 670.0	4.50	92884.36	317.372036	1742.5	false
13C3-PFBS	302.0 / 99.0	1.52	35133.99	335.753235	380.3	false
13C3-PFHxS	402.0 / 99.0	2.28	27678.89	291.903684	257.8	false
13C8-PFOS	507.0 / 99.0	3.07	30651.08	286.143004	300.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:15:44 AM

Sample Name	J8720-FS-D(7)	**Injection Vial**	8
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:46:35	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	116398.24	306.689417	1360.4	false
d3-MeFOSAA	573.0 / 419.0	3.59	20611.44	361.478188	230.0	false
d5-EtFOSAA	589.0 / 419.0	3.74	23288.82	359.828002	243.1	false
13C5-PFHxA	318.0 / 273.0	1.85	72267.85	275.781278	692.8	false
13C4-PFHpA	367.0 / 322.0	2.27	84899.30	284.772862	528.7	false
13C8-PFOA	421.0 / 376.0	2.68	96091.84	264.960504	3607.0	false
13C9-PFNA	472.0 / 427.0	3.07	100085.67	241.691320	1121.1	false
13C6-PFDA	519.0 / 474.0	3.43	108947.08	284.924222	2402.5	false
13C7-PFUnA	570.0 / 525.0	3.74	101693.23	287.910976	968.4	false
13C2-PFTeDA	715.0 / 670.0	4.49	98672.23	322.011836	2447.3	false
13C3-PFBS	302.0 / 99.0	1.53	32507.36	312.941194	439.6	false
13C3-PFHxS	402.0 / 99.0	2.29	24764.38	263.091379	500.1	false
13C8-PFOS	507.0 / 99.0	3.07	28255.89	265.726315	247.1	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:15:49 AM

Sample Name	J8716-FS-D(5)	**Injection Vial**	9
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:57:26	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	102369.01	253.003300	1377.0	false
d3-MeFOSAA	573.0 / 419.0	3.58	20654.66	314.811503	230.5	false
d5-EtFOSAA	589.0 / 419.0	3.74	20546.28	275.892140	284.4	false
13C5-PFHxA	318.0 / 273.0	1.85	66314.67	229.077642	542.5	false
13C4-PFHpA	367.0 / 322.0	2.26	76804.90	233.204514	740.1	false
13C8-PFOA	421.0 / 376.0	2.68	95825.79	239.183103	5513.9	false
13C9-PFNA	472.0 / 427.0	3.07	96739.46	211.468786	1635.3	false
13C6-PFDA	519.0 / 474.0	3.42	101149.54	248.132124	795.7	false
13C7-PFUnA	570.0 / 525.0	3.74	98666.31	262.023569	638.9	false
13C2-PFTeDA	715.0 / 670.0	4.49	97198.81	297.538479	2455.0	false
13C3-PFBS	302.0 / 99.0	1.52	29558.50	247.298873	493.3	false
13C3-PFHxS	402.0 / 99.0	2.29	23737.41	219.165057	288.5	false
13C8-PFOS	507.0 / 99.0	3.07	29745.42	243.110868	244.4	false

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Summary Quant Report

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Printed: 01/11/2018 8:15:54 AM

Sample Name	J8688-FS-D(3)	**Injection Vial**	10
Sample ID	VC-CS18-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:08:19	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	110378.21	342.774018	853.0	false
d3-MeFOSAA	573.0 / 419.0	3.58	20949.89	325.741456	222.6	false
d5-EtFOSAA	589.0 / 419.0	3.74	23174.66	317.452126	222.7	false
13C5-PFHxA	318.0 / 273.0	1.85	77066.41	313.114653	328.7	false
13C4-PFHpA	367.0 / 322.0	2.26	92593.35	330.668611	536.9	false
13C8-PFOA	421.0 / 376.0	2.67	84786.77	248.909454	1087.1	false
13C9-PFNA	472.0 / 427.0	3.07	90943.83	233.819663	1430.9	false
13C6-PFDA	519.0 / 474.0	3.42	81607.13	251.544068	819.5	false
13C7-PFUnA	570.0 / 525.0	3.74	102214.29	341.075037	1474.3	false
13C2-PFTeDA	715.0 / 670.0	4.48	96915.26	372.770222	1390.7	true
13C3-PFBS	302.0 / 99.0	1.52	39249.40	334.989675	424.5	false
13C3-PFHxS	402.0 / 99.0	2.29	25319.27	238.477686	291.7	false
13C8-PFOS	507.0 / 99.0	3.06	29459.94	245.626319	276.9	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:15:59 AM

Sample Name	J8687-FS-D(7)	**Injection Vial**	11
Sample ID	VC-CS10-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:19:10	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	99496.12	271.997116	951.5	false
d3-MeFOSAA	573.0 / 419.0	3.58	19039.75	332.885382	256.5	false
d5-EtFOSAA	589.0 / 419.0	3.74	20987.71	323.275047	233.1	false
13C5-PFHxA	318.0 / 273.0	1.85	65643.95	274.306304	556.6	false
13C4-PFHpA	367.0 / 322.0	2.26	74124.34	272.255584	801.1	false
13C8-PFOA	421.0 / 376.0	2.68	87215.24	263.334917	1011.4	false
13C9-PFNA	472.0 / 427.0	3.07	85602.30	226.358109	454.4	false
13C6-PFDA	519.0 / 474.0	3.42	89480.03	242.798313	1192.1	false
13C7-PFUnA	570.0 / 525.0	3.74	91166.21	267.797081	561.9	false
13C2-PFTeDA	715.0 / 670.0	4.49	89598.09	303.376135	2313.1	false
13C3-PFBS	302.0 / 99.0	1.53	29470.35	282.830223	446.1	false
13C3-PFHxS	402.0 / 99.0	2.28	24711.29	261.718421	293.2	false
13C8-PFOS	507.0 / 99.0	3.06	26796.30	251.223340	235.9	false

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Summary Quant Report

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Printed: 01/11/2018 8:16:04 AM

Sample Name	CR987LCS-FS(0)	**Injection Vial**	14
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:51:45	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	118448.67	300.207940	1664.2	false
d3-MeFOSAA	573.0 / 419.0	3.58	22073.03	373.340942	223.7	true
d5-EtFOSAA	589.0 / 419.0	3.74	22390.32	333.639608	200.9	false
13C5-PFHxA	318.0 / 273.0	1.85	82829.95	324.408853	667.5	false
13C4-PFHpA	367.0 / 322.0	2.26	83422.62	287.186462	845.4	false
13C8-PFOA	421.0 / 376.0	2.67	94441.17	267.264720	1521.6	false
13C9-PFNA	472.0 / 427.0	3.06	101340.19	251.163486	905.3	false
13C6-PFDA	519.0 / 474.0	3.42	105948.79	266.532040	890.3	false
13C7-PFUnA	570.0 / 525.0	3.73	107048.67	291.532556	916.4	false
13C2-PFTeDA	715.0 / 670.0	4.48	99158.57	311.276819	1553.2	false
13C3-PFBS	302.0 / 99.0	1.53	35569.08	330.235277	522.8	false
13C3-PFHxS	402.0 / 99.0	2.28	28224.58	289.185601	325.7	false
13C8-PFOS	507.0 / 99.0	3.06	29075.02	263.703284	242.6	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:16:09 AM

Sample Name	J8667-FS-D(3)	**Injection Vial**	15
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:02:37	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	107925.53	258.123963	1053.9	false
d3-MeFOSAA	573.0 / 419.0	3.58	19552.82	312.871005	213.9	false
d5-EtFOSAA	589.0 / 419.0	3.74	20804.29	293.280074	275.6	false
13C5-PFHxA	318.0 / 273.0	1.85	73249.02	273.699384	485.0	false
13C4-PFHpA	367.0 / 322.0	2.26	83792.58	275.202555	753.3	false
13C8-PFOA	421.0 / 376.0	2.67	94951.48	256.359084	2053.7	false
13C9-PFNA	472.0 / 427.0	3.06	94925.21	224.451791	763.2	false
13C6-PFDA	519.0 / 474.0	3.42	107351.59	254.843764	780.2	false
13C7-PFUnA	570.0 / 525.0	3.74	104204.35	267.795819	620.7	false
13C2-PFTeDA	715.0 / 670.0	4.48	98455.56	291.654640	2248.6	false
13C3-PFBS	302.0 / 99.0	1.52	37491.96	329.307216	517.5	false
13C3-PFHxS	402.0 / 99.0	2.28	23636.62	229.111417	396.9	false
13C8-PFOS	507.0 / 99.0	3.06	25618.71	219.818863	227.8	false

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Summary Ion Ratio Report

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Printed: 01/11/2018 8:20:22 AM

Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:02:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.57	PFBS			
PFBS_2	298.9 / 99.0	1.57	PFBS	0.410	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.025	ü
PFHxS_1	399.0 / 80.0	N/A	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	PFHxS	N/A	0.282	ü
PFOA_1	413.0 / 369.0	N/A	PFOA			
PFOA_2	413.0 / 169.0	N/A	PFOA	N/A	0.065	ü
PFNA_1	463.0 / 419.0	3.11	PFNA			
PFNA_2	463.0 / 219.0	3.11	PFNA	0.280	0.306	ü
PFOS_1	499.0 / 80.0	3.10	PFOS			
PFOS_2	499.0 / 99.0	3.11	PFOS	0.210	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	ü
PFDoA_1	613.0 / 569.0	4.08	PFDoA			
PFDoA_2	613.0 / 319.0	4.08	PFDoA	0.160	0.160	ü
PFTrDA_1	663.0 / 619.0	4.32	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.34	PFTrDA	0.080	0.066	ü
PFTeDA_1	713.0 / 669.0	4.54	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.54	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.63	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.61	NMeFOSAA	0.510	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Printed: 01/11/2018 8:20:28 AM

Sample Name	KB80 IB	**Injection Vial**	2
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T16:37:35	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.57	PFBS			
PFBS_2	298.9 / 99.0	1.57	PFBS	0.390	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.025	ü
PFHxS_1	399.0 / 80.0	N/A	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	PFHxS	N/A	0.282	ü
PFOA_1	413.0 / 369.0	2.73	PFOA			
PFOA_2	413.0 / 169.0	N/A	PFOA	N/A	0.065	
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	N/A	PFOS			
PFOS_2	499.0 / 99.0	N/A	PFOS	N/A	0.174	ü
PFDA_1	513.0 / 469.0	3.48	PFDA			
PFDA_2	513.0 / 219.0	3.46	PFDA	0.140	0.041	
PFUnA_1	563.0 / 519.0	3.81	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.09	PFDoA			
PFDoA_2	613.0 / 319.0	4.07	PFDoA	0.140	0.160	ü
PFTrDA_1	663.0 / 619.0	4.34	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.33	PFTrDA	0.330	0.066	
PFTeDA_1	713.0 / 669.0	4.56	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.57	PFTeDA	0.150	0.049	
NMeFOSAA_1	570.0 / 419.0	3.63	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	CR986PB-FS(0)	**Injection Vial**	13
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:48:52	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	ü
PFHpA_1	363.0 / 319.0	2.28	PFHpA			
PFHpA_2	363.0 / 169.0	2.28	PFHpA	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	N/A	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	PFHxS	N/A	0.282	ü
PFOA_1	413.0 / 369.0	2.69	PFOA			
PFOA_2	413.0 / 169.0	2.70	PFOA	0.070	0.065	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.10	PFNA	0.240	0.306	ü
PFOS_1	499.0 / 80.0	N/A	PFOS			
PFOS_2	499.0 / 99.0	3.09	PFOS	N/A	0.174	
PFDA_1	513.0 / 469.0	3.44	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.100	0.041	
PFUnA_1	563.0 / 519.0	3.75	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	ü
PFTrDA_1	663.0 / 619.0	4.28	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8667-FS(0)	**Injection Vial**	15
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:10:37	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.86	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	0.025	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.310	0.282	ü
PFOA_1	413.0 / 369.0	2.69	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.100	0.065	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.370	0.306	ü
PFOS_1	499.0 / 80.0	3.05	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.160	0.174	ü
PFDA_1	513.0 / 469.0	3.44	PFDA			
PFDA_2	513.0 / 219.0	3.43	PFDA	0.020	0.041	
PFUnA_1	563.0 / 519.0	3.76	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.04	PFDoA			
PFDoA_2	613.0 / 319.0	4.05	PFDoA	0.150	0.160	ü
PFTrDA_1	663.0 / 619.0	4.28	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	
NMeFOSAA_1	570.0 / 419.0	3.59	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	
NEtFOSAA_1	584.0 / 419.0	3.75	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	

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Summary Ion Ratio Report

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Sample Name	J8667-FS-D(5)	**Injection Vial**	17
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:32:22	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.320	0.292	ü
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	2.26	PFHpA	0.040	0.025	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.270	0.282	ü
PFOA_1	413.0 / 369.0	2.69	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.080	0.065	ü
PFNA_1	463.0 / 419.0	3.09	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.420	0.306	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.160	0.174	ü
PFDA_1	513.0 / 469.0	3.44	PFDA			
PFDA_2	513.0 / 219.0	3.45	PFDA	0.090	0.041	
PFUnA_1	563.0 / 519.0	3.78	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	

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Summary Ion Ratio Report

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Printed: 01/11/2018 8:21:00 AM

Sample Name	J8668-FS(0)	**Injection Vial**	19
Sample ID	VC-CS12-DW01P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:54:05	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.86	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	0.025	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.310	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.090	0.065	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.390	0.306	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.160	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.030	0.041	ü
PFUnA_1	563.0 / 519.0	3.75	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.03	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	
PFTrDA_1	663.0 / 619.0	4.28	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 01/11/2018 8:21:05 AM

Sample Name	J8668-FS-D(3)	**Injection Vial**	20
Sample ID	VC-CS12-DW01P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:04:57	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.090	0.065	ü
PFNA_1	463.0 / 419.0	3.09	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.44	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	
PFUnA_1	563.0 / 519.0	3.75	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8669-FS(0)	**Injection Vial**	24
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:48:27	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	PFHpA	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.270	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.63	PFOA	0.100	0.065	
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.240	0.306	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	
PFUnA_1	563.0 / 519.0	3.76	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.03	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.070	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.60	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.59	NMeFOSAA	0.670	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.76	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	

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Summary Ion Ratio Report

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Sample Name	J8669-FS-D(3)	**Injection Vial**	25
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:59:18	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.86	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.23	PFHpA	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.63	PFOA	0.100	0.065	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.09	PFNA	0.190	0.306	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	ü
PFDoA_1	613.0 / 569.0	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	
PFTrDA_1	663.0 / 619.0	4.30	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8669-FS-D(5)	**Injection Vial**	26
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:10:10	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	0.450	0.292	
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.63	PFOA	0.090	0.065	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.360	0.306	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.190	0.174	ü
PFDA_1	513.0 / 469.0	3.44	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.220	0.041	
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	ü
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.510	0.160	
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8670-FS(0)	**Injection Vial**	27
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:21:03	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	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	2.25	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.320	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.63	PFOA	0.120	0.065	
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.210	0.306	ü
PFOS_1	499.0 / 80.0	3.05	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.150	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.43	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.75	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.04	PFDoA			
PFDoA_2	613.0 / 319.0	4.02	PFDoA	0.270	0.160	
PFTrDA_1	663.0 / 619.0	4.30	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.72	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	

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Summary Ion Ratio Report

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Sample Name	J8670-FS-D(3)	**Injection Vial**	28
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:31:54	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.86	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	2.26	PFHpA	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.270	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.090	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.180	0.306	ü
PFOS_1	499.0 / 80.0	3.05	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	ü
PFTrDA_1	663.0 / 619.0	4.28	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8670-FS-D(5)	**Injection Vial**	29
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:42:46	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.86	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	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.090	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.170	0.306	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.160	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8683-FS(0)	**Injection Vial**	30
Sample ID	VC-CS10-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:53:38	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	0.240	0.292	ü
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	0.025	ü
PFHxS_1	399.0 / 80.0	2.26	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.230	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.090	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.370	0.306	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	
PFUnA_1	563.0 / 519.0	3.75	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.03	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8683-FS-D(3)	**Injection Vial**	31
Sample ID	VC-CS10-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:04:29	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	0.270	0.292	ü
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	2.26	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.26	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.240	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.090	0.065	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.380	0.306	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8684-FS(0)	**Injection Vial**	34
Sample ID	VC-CS10-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:37:05	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	0.250	0.292	ü
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	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.270	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.090	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.75	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.03	PFDoA			
PFDoA_2	613.0 / 319.0	4.03	PFDoA	0.220	0.160	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.59	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	
NEtFOSAA_1	584.0 / 419.0	3.74	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	

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Summary Ion Ratio Report

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Sample Name	J8684-FS-D(3)	**Injection Vial**	35
Sample ID	VC-CS10-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:47:57	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	0.240	0.292	ü
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	2.28	PFHpA	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.260	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.090	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.45	PFDA	0.080	0.041	
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	4.02	PFDoA	0.400	0.160	
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8685-FS(0)	**Injection Vial**	36
Sample ID	VC-CS10-DW02P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:58:48	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	0.270	0.292	ü
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	0.025	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.270	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.080	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.420	0.306	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.150	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.150	0.041	
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.03	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.62	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	

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Summary Ion Ratio Report

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Sample Name	J8686-FS(0)	**Injection Vial**	37
Sample ID	VC-CS10-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:09:39	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.260	0.292	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.260	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.100	0.065	
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.230	0.306	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.43	PFDA	0.070	0.041	
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.03	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8686-FS-D(3)	**Injection Vial**	38
Sample ID	VC-CS10-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:20:32	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	0.270	0.292	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.010	0.025	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.260	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.63	PFOA	0.100	0.065	
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.02	PFNA	0.660	0.306	
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.43	PFDA	0.060	0.041	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	ü
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8687-FS(0)	**Injection Vial**	39
Sample ID	VC-CS10-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:31:23	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	0.220	0.292	ü
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	0.025	ü
PFHxS_1	399.0 / 80.0	2.24	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.230	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.150	0.065	
PFNA_1	463.0 / 419.0	3.00	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.130	0.306	
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.060	0.041	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8688-FS(0)	**Injection Vial**	44
Sample ID	VC-CS18-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:25:42	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.54	PFBS	0.240	0.292	ü
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	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.290	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.62	PFOA	0.110	0.065	
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.240	0.306	ü
PFOS_1	499.0 / 80.0	2.97	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.130	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.38	PFDA	0.180	0.041	
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.370	0.160	
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8714-FS(0)	**Injection Vial**	45
Sample ID	VC-SO-FB11-10062018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:36:33	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.54	PFBS	0.510	0.292	
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	N/A	0.077	
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.025	
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.310	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.070	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.460	0.306	ü
PFOS_1	499.0 / 80.0	3.03	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.190	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	4.02	PFDoA	N/A	0.160	
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Printed: 01/11/2018 8:22:39 AM

Sample Name	J8715-FS(0)	**Injection Vial**	46
Sample ID	VC-SO-EB11-10062018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:47:24	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.50	PFBS	N/A	0.292	
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.050	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.025	
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.31	PFHxS	0.370	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.190	0.306	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.220	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.44	PFDA	0.260	0.041	
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	ü
PFDoA_1	613.0 / 569.0	4.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.02	PFDoA	0.240	0.160	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.75	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	

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Summary Ion Ratio Report

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Sample Name	J8716-FS(0)	**Injection Vial**	47
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:58:16	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.53	PFBS	0.220	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.290	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.080	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.330	0.306	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.260	0.174	
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8716-FS-D(3)	**Injection Vial**	48
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:09:09	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.54	PFBS	0.220	0.292	ü
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	2.25	PFHpA	0.040	0.025	
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.290	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.080	0.065	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.190	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8717-FS(0)	**Injection Vial**	49
Sample ID	VC-CS00-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:20:02	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.53	PFBS	0.190	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.080	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.330	0.306	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.45	PFDA	0.100	0.041	
PFUnA_1	563.0 / 519.0	3.75	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8718-FS(0)	**Injection Vial**	50
Sample ID	VC-CS00-DW02P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:30:53	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.51	PFBS			
PFBS_2	298.9 / 99.0	1.52	PFBS	0.230	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.270	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.080	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.280	0.306	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.070	0.041	
PFUnA_1	563.0 / 519.0	3.71	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.72	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	

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Summary Ion Ratio Report

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Sample Name	J8719-FS(0)	**Injection Vial**	51
Sample ID	VC-CS00-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:41:45	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.49	PFBS	N/A	0.292	
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.270	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.070	0.065	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.360	0.306	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.39	PFDA	0.100	0.041	
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8720-FS(0)	**Injection Vial**	53
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:14:19	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.23	PFHpA	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.25	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.580	0.282	
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.61	PFOA	0.100	0.065	
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.320	0.306	ü
PFOS_1	499.0 / 80.0	2.98	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.340	0.174	
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.250	0.160	
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.72	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.75	NEtFOSAA	0.190	0.062	

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Summary Ion Ratio Report

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Sample Name	J8720-FS-D(3)	**Injection Vial**	54
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:25:10	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.310	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.61	PFOA	0.100	0.065	
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.350	0.306	ü
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.45	PFDA	0.070	0.041	
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.79	PFUnA	0.070	0.049	ü
PFDoA_1	613.0 / 569.0	N/A	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	ü
PFTrDA_1	663.0 / 619.0	4.28	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 01/11/2018 8:23:19 AM

Sample Name	J8720-FS-D(5)	**Injection Vial**	1
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:36:01	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	1.86	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.290	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.62	PFOA	0.100	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.340	0.306	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.45	PFDA	0.070	0.041	
PFUnA_1	563.0 / 519.0	3.75	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8721-FS(0)	**Injection Vial**	2
Sample ID	VC-CS00-DW05-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:46:54	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	0.220	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.010	0.025	
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.250	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.470	0.306	
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.030	0.041	ü
PFUnA_1	563.0 / 519.0	3.70	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8722-FS(0)	**Injection Vial**	3
Sample ID	VC-CS00-DW06-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:57:47	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	0.260	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.290	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.090	0.065	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.290	0.306	ü
PFOS_1	499.0 / 80.0	3.03	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.070	0.041	
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	KB80 IB	**Injection Vial**	3
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T11:52:13	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.460	0.292	
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	0.025	ü
PFHxS_1	399.0 / 80.0	N/A	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	PFHxS	N/A	0.282	ü
PFOA_1	413.0 / 369.0	N/A	PFOA			
PFOA_2	413.0 / 169.0	N/A	PFOA	N/A	0.065	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	3.10	PFNA	N/A	0.306	
PFOS_1	499.0 / 80.0	3.10	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.190	0.174	ü
PFDA_1	513.0 / 469.0	3.45	PFDA			
PFDA_2	513.0 / 219.0	3.49	PFDA	0.440	0.041	
PFUnA_1	563.0 / 519.0	3.77	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.05	PFDoA			
PFDoA_2	613.0 / 319.0	3.79	PFDoA	0.200	0.160	ü
PFTrDA_1	663.0 / 619.0	4.30	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	4.51	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.77	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	

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Summary Ion Ratio Report

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Sample Name	J8722-FS-D(3)	**Injection Vial**	7
Sample ID	VC-CS00-DW06-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:35:44	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
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	1.86	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.28	PFHpA	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.290	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.090	0.065	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.390	0.306	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.45	PFDA			
PFDA_2	513.0 / 219.0	3.45	PFDA	0.080	0.041	
PFUnA_1	563.0 / 519.0	3.76	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.04	PFDoA			
PFDoA_2	613.0 / 319.0	4.04	PFDoA	0.100	0.160	ü
PFTrDA_1	663.0 / 619.0	4.29	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.30	PFTrDA	0.140	0.066	
PFTeDA_1	713.0 / 669.0	4.50	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.50	PFTeDA	0.120	0.049	
NMeFOSAA_1	570.0 / 419.0	3.60	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.59	NMeFOSAA	1.230	0.551	
NEtFOSAA_1	584.0 / 419.0	3.76	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	

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Summary Ion Ratio Report

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Sample Name	J8720-FS-D(7)	**Injection Vial**	8
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:46:35	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
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	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.300	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.090	0.065	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.230	0.306	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.44	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	
PFUnA_1	563.0 / 519.0	3.76	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.04	PFDoA			
PFDoA_2	613.0 / 319.0	4.03	PFDoA	0.990	0.160	
PFTrDA_1	663.0 / 619.0	4.29	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.76	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	

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Summary Ion Ratio Report

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Sample Name	J8716-FS-D(5)	**Injection Vial**	9
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:57:26	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
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	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.28	PFHpA			
PFHpA_2	363.0 / 169.0	2.29	PFHpA	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.290	0.282	ü
PFOA_1	413.0 / 369.0	2.69	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.09	PFNA	0.370	0.306	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.44	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	
PFUnA_1	563.0 / 519.0	3.76	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.03	PFDoA			
PFDoA_2	613.0 / 319.0	3.98	PFDoA	0.450	0.160	
PFTrDA_1	663.0 / 619.0	4.28	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.62	NMeFOSAA	N/A	0.551	
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8688-FS-D(3)	**Injection Vial**	10
Sample ID	VC-CS18-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:08:19	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
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	0.270	0.292	ü
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	0.025	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.090	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.410	0.306	ü
PFOS_1	499.0 / 80.0	2.98	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.130	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	
PFUnA_1	563.0 / 519.0	3.76	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.03	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.51	PFTeDA	0.330	0.049	
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8687-FS-D(7)	**Injection Vial**	11
Sample ID	VC-CS10-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:19:10	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.52	PFBS	0.410	0.292	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.090	0.077	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.040	0.025	
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.230	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.080	0.065	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.500	0.306	
PFOS_1	499.0 / 80.0	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.44	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.05	PFDoA			
PFDoA_2	613.0 / 319.0	N/A	PFDoA	N/A	0.160	
PFTrDA_1	663.0 / 619.0	4.29	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.066	
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.551	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	ü

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Summary Ion Ratio Report

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Sample Name	CR987LCS-FS(0)	**Injection Vial**	14
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:51:45	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
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	1.87	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	0.025	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	3.43	PFDA	0.050	0.041	ü
PFUnA_1	563.0 / 519.0	3.75	PFUnA			
PFUnA_2	563.0 / 269.0	3.75	PFUnA	0.050	0.049	ü
PFDoA_1	613.0 / 569.0	4.03	PFDoA			
PFDoA_2	613.0 / 319.0	4.03	PFDoA	0.160	0.160	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.59	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.59	NMeFOSAA	0.570	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.74	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.74	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

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Sample Name	J8667-FS-D(3)	**Injection Vial**	15
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:02:37	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.320	0.292	ü
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	0.025	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.30	PFHxS	0.270	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.090	0.065	ü
PFNA_1	463.0 / 419.0	3.08	PFNA			
PFNA_2	463.0 / 219.0	3.08	PFNA	0.350	0.306	ü
PFOS_1	499.0 / 80.0	3.05	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.170	0.174	ü
PFDA_1	513.0 / 469.0	3.43	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	
PFUnA_1	563.0 / 519.0	3.76	PFUnA			
PFUnA_2	563.0 / 269.0	3.76	PFUnA	0.110	0.049	
PFDoA_1	613.0 / 569.0	4.03	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.420	0.160	
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.49	PFTeDA	0.030	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.59	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.58	NMeFOSAA	0.590	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.75	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.062	

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Summary Internal Standard Report

Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:02:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.57	13C3-PFBS	302.0 / 99.0	25201.92	232.25
PFBS_2	298.9 / 99.0	1.57	13C3-PFBS	302.0 / 99.0	25201.92	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	61987.66	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	61987.66	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	70438.43	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	70438.43	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	24683.15	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	24683.15	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	88535.23	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	88535.23	250.00
PFNA_1	463.0 / 419.0	3.11	13C9-PFNA	472.0 / 427.0	100138.19	250.00
PFNA_2	463.0 / 219.0	3.11	13C9-PFNA	472.0 / 427.0	100138.19	250.00
PFOS_1	499.0 / 80.0	3.10	13C8-PFOS	507.0 / 99.0	26769.68	239.25
PFOS_2	499.0 / 99.0	3.11	13C8-PFOS	507.0 / 99.0	26769.68	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	97258.51	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	97258.51	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	88898.52	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	88898.52	250.00
PFDoA_1	613.0 / 569.0	4.08	13C2-PFDoA	615.0 / 570.0	91698.47	250.00
PFDoA_2	613.0 / 319.0	4.08	13C2-PFDoA	615.0 / 570.0	91698.47	250.00
PFTrDA_1	663.0 / 619.0	4.32	13C2-PFTeDA	715.0 / 670.0	70451.22	250.00
PFTrDA_2	663.0 / 169.0	4.34	13C2-PFTeDA	715.0 / 670.0	70451.22	250.00
PFTeDA_1	713.0 / 669.0	4.54	13C2-PFTeDA	715.0 / 670.0	70451.22	250.00
PFTeDA_2	713.0 / 169.0	4.54	13C2-PFTeDA	715.0 / 670.0	70451.22	250.00
NMeFOSAA_1	570.0 / 419.0	3.63	d3-MeFOSAA	573.0 / 419.0	16454.46	250.00
NMeFOSAA_2	570.0 / 512.0	3.61	d3-MeFOSAA	573.0 / 419.0	16454.46	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17612.55	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17612.55	250.00

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Summary Internal Standard Report

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Sample Name	KB80 IB	**Injection Vial**	2
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T16:37:35	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.57	13C3-PFBS	302.0 / 99.0	25368.46	232.25
PFBS_2	298.9 / 99.0	1.57	13C3-PFBS	302.0 / 99.0	25368.46	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	59578.92	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	59578.92	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	76310.16	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	76310.16	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	21643.45	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	21643.45	236.50
PFOA_1	413.0 / 369.0	2.73	13C8-PFOA	421.0 / 376.0	81619.66	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	81619.66	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	84686.59	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	84686.59	250.00
PFOS_1	499.0 / 80.0	N/A	13C8-PFOS	507.0 / 99.0	28500.89	239.25
PFOS_2	499.0 / 99.0	N/A	13C8-PFOS	507.0 / 99.0	28500.89	239.25
PFDA_1	513.0 / 469.0	3.48	13C6-PFDA	519.0 / 474.0	94947.53	250.00
PFDA_2	513.0 / 219.0	3.46	13C6-PFDA	519.0 / 474.0	94947.53	250.00
PFUnA_1	563.0 / 519.0	3.81	13C7-PFUnA	570.0 / 525.0	94745.29	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	94745.29	250.00
PFDoA_1	613.0 / 569.0	4.09	13C2-PFDoA	615.0 / 570.0	99465.87	250.00
PFDoA_2	613.0 / 319.0	4.07	13C2-PFDoA	615.0 / 570.0	99465.87	250.00
PFTrDA_1	663.0 / 619.0	4.34	13C2-PFTeDA	715.0 / 670.0	79263.46	250.00
PFTrDA_2	663.0 / 169.0	4.33	13C2-PFTeDA	715.0 / 670.0	79263.46	250.00
PFTeDA_1	713.0 / 669.0	4.56	13C2-PFTeDA	715.0 / 670.0	79263.46	250.00
PFTeDA_2	713.0 / 169.0	4.57	13C2-PFTeDA	715.0 / 670.0	79263.46	250.00
NMeFOSAA_1	570.0 / 419.0	3.63	d3-MeFOSAA	573.0 / 419.0	17385.14	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	17385.14	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18626.54	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18626.54	250.00

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Summary Internal Standard Report

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Sample Name	CR986PB-FS(0)	**Injection Vial**	13
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:48:52	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	28068.85	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	28068.85	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	65934.30	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	65934.30	250.00
PFHpA_1	363.0 / 319.0	2.28	13C4-PFHpA	367.0 / 322.0	75017.45	250.00
PFHpA_2	363.0 / 169.0	2.28	13C4-PFHpA	367.0 / 322.0	75017.45	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	23224.24	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	23224.24	236.50
PFOA_1	413.0 / 369.0	2.69	13C8-PFOA	421.0 / 376.0	98592.51	250.00
PFOA_2	413.0 / 169.0	2.70	13C8-PFOA	421.0 / 376.0	98592.51	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	91819.19	250.00
PFNA_2	463.0 / 219.0	3.10	13C9-PFNA	472.0 / 427.0	91819.19	250.00
PFOS_1	499.0 / 80.0	N/A	13C8-PFOS	507.0 / 99.0	26034.10	239.25
PFOS_2	499.0 / 99.0	3.09	13C8-PFOS	507.0 / 99.0	26034.10	239.25
PFDA_1	513.0 / 469.0	3.44	13C6-PFDA	519.0 / 474.0	97320.78	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	97320.78	250.00
PFUnA_1	563.0 / 519.0	3.75	13C7-PFUnA	570.0 / 525.0	86971.29	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	86971.29	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	99365.43	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	99365.43	250.00
PFTrDA_1	663.0 / 619.0	4.28	13C2-PFTeDA	715.0 / 670.0	80005.15	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	80005.15	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	80005.15	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	80005.15	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	17285.44	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	17285.44	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20792.42	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20792.42	250.00

Sample Name	J8667-FS(0)	**Injection Vial**	15
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:10:37	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	44429.61	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	44429.61	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	76825.10	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	76825.10	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	93772.50	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	93772.50	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	27651.62	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	27651.62	236.50
PFOA_1	413.0 / 369.0	2.69	13C8-PFOA	421.0 / 376.0	86590.56	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	86590.56	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	82083.60	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	82083.60	250.00
PFOS_1	499.0 / 80.0	3.05	13C8-PFOS	507.0 / 99.0	26421.61	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	26421.61	239.25
PFDA_1	513.0 / 469.0	3.44	13C6-PFDA	519.0 / 474.0	97994.03	250.00
PFDA_2	513.0 / 219.0	3.43	13C6-PFDA	519.0 / 474.0	97994.03	250.00
PFUnA_1	563.0 / 519.0	3.76	13C7-PFUnA	570.0 / 525.0	94556.33	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	94556.33	250.00
PFDoA_1	613.0 / 569.0	4.04	13C2-PFDoA	615.0 / 570.0	107404.44	250.00
PFDoA_2	613.0 / 319.0	4.05	13C2-PFDoA	615.0 / 570.0	107404.44	250.00
PFTrDA_1	663.0 / 619.0	4.28	13C2-PFTeDA	715.0 / 670.0	92857.31	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	92857.31	250.00
PFTeDA_1	713.0 / 669.0	4.49	13C2-PFTeDA	715.0 / 670.0	92857.31	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	92857.31	250.00
NMeFOSAA_1	570.0 / 419.0	3.59	d3-MeFOSAA	573.0 / 419.0	17273.28	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	17273.28	250.00
NEtFOSAA_1	584.0 / 419.0	3.75	d5-EtFOSAA	589.0 / 419.0	18914.99	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18914.99	250.00

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Summary Internal Standard Report

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Sample Name	J8667-FS-D(5)	**Injection Vial**	17
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:32:22	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	28571.57	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	28571.57	232.25
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	70763.59	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	70763.59	250.00
PFHpA_1	363.0 / 319.0	2.28	13C4-PFHpA	367.0 / 322.0	79366.61	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	79366.61	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	24557.26	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	24557.26	236.50
PFOA_1	413.0 / 369.0	2.69	13C8-PFOA	421.0 / 376.0	93453.68	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	93453.68	250.00
PFNA_1	463.0 / 419.0	3.09	13C9-PFNA	472.0 / 427.0	100134.86	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	100134.86	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	27081.45	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	27081.45	239.25
PFDA_1	513.0 / 469.0	3.44	13C6-PFDA	519.0 / 474.0	103749.27	250.00
PFDA_2	513.0 / 219.0	3.45	13C6-PFDA	519.0 / 474.0	103749.27	250.00
PFUnA_1	563.0 / 519.0	3.78	13C7-PFUnA	570.0 / 525.0	96960.59	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	96960.59	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	109522.47	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	109522.47	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	96326.46	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	96326.46	250.00
PFTeDA_1	713.0 / 669.0	4.49	13C2-PFTeDA	715.0 / 670.0	96326.46	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	96326.46	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	19538.00	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	19538.00	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	20943.12	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20943.12	250.00

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Summary Internal Standard Report

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Sample Name	J8668-FS(0)	**Injection Vial**	19
Sample ID	VC-CS12-DW01P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:54:05	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	41603.55	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	41603.55	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	80332.52	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	80332.52	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	99337.21	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	99337.21	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	27513.79	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	27513.79	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	83316.39	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	83316.39	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	85205.27	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	85205.27	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	24907.22	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	24907.22	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	97151.01	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	97151.01	250.00
PFUnA_1	563.0 / 519.0	3.75	13C7-PFUnA	570.0 / 525.0	96265.42	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	96265.42	250.00
PFDoA_1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	109123.90	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	109123.90	250.00
PFTrDA_1	663.0 / 619.0	4.28	13C2-PFTeDA	715.0 / 670.0	90430.67	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	90430.67	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	90430.67	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	90430.67	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	18985.66	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	18985.66	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	19635.41	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	19635.41	250.00

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Summary Internal Standard Report

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Sample Name	J8668-FS-D(3)	**Injection Vial**	20
Sample ID	VC-CS12-DW01P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:04:57	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	33004.98	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	33004.98	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	72896.34	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	72896.34	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	78953.36	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	78953.36	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	23750.45	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	23750.45	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	96009.82	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	96009.82	250.00
PFNA_1	463.0 / 419.0	3.09	13C9-PFNA	472.0 / 427.0	98393.23	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	98393.23	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	27550.11	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	27550.11	239.25
PFDA_1	513.0 / 469.0	3.44	13C6-PFDA	519.0 / 474.0	105094.79	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	105094.79	250.00
PFUnA_1	563.0 / 519.0	3.75	13C7-PFUnA	570.0 / 525.0	106274.82	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	106274.82	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	118539.11	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	118539.11	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	92962.15	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	92962.15	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	92962.15	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	92962.15	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	20039.55	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	20039.55	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	19253.43	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	19253.43	250.00

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Summary Internal Standard Report

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Sample Name	J8669-FS(0)	**Injection Vial**	24
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:48:27	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	42517.53	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	42517.53	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	81945.21	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	81945.21	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	96607.22	250.00
PFHpA_2	363.0 / 169.0	2.24	13C4-PFHpA	367.0 / 322.0	96607.22	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	27101.57	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	27101.57	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	74195.86	250.00
PFOA_2	413.0 / 169.0	2.63	13C8-PFOA	421.0 / 376.0	74195.86	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	85757.67	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	85757.67	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	26109.71	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	26109.71	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	95108.69	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	95108.69	250.00
PFUnA_1	563.0 / 519.0	3.76	13C7-PFUnA	570.0 / 525.0	102151.20	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	102151.20	250.00
PFDoA_1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	109688.54	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	109688.54	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	88122.33	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	88122.33	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	88122.33	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	88122.33	250.00
NMeFOSAA_1	570.0 / 419.0	3.60	d3-MeFOSAA	573.0 / 419.0	18917.64	250.00
NMeFOSAA_2	570.0 / 512.0	3.59	d3-MeFOSAA	573.0 / 419.0	18917.64	250.00
NEtFOSAA_1	584.0 / 419.0	3.76	d5-EtFOSAA	589.0 / 419.0	17516.26	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17516.26	250.00

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Summary Internal Standard Report

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Sample Name	J8669-FS-D(3)	**Injection Vial**	25
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:59:18	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	35810.97	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	35810.97	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	66008.01	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	66008.01	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	77198.94	250.00
PFHpA_2	363.0 / 169.0	2.23	13C4-PFHpA	367.0 / 322.0	77198.94	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	27612.75	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	27612.75	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	93819.38	250.00
PFOA_2	413.0 / 169.0	2.63	13C8-PFOA	421.0 / 376.0	93819.38	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	89550.66	250.00
PFNA_2	463.0 / 219.0	3.09	13C9-PFNA	472.0 / 427.0	89550.66	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	27322.86	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	27322.86	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	104818.81	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	104818.81	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	101297.35	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	101297.35	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	104951.05	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	104951.05	250.00
PFTrDA_1	663.0 / 619.0	4.30	13C2-PFTeDA	715.0 / 670.0	89939.56	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89939.56	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	89939.56	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89939.56	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	20460.59	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	20460.59	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20605.04	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20605.04	250.00

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Summary Internal Standard Report

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Sample Name	J8669-FS-D(5)	**Injection Vial**	26
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:10:10	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	30541.94	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	30541.94	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	73499.03	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	73499.03	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	80969.82	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	80969.82	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	26218.07	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	26218.07	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	92458.58	250.00
PFOA_2	413.0 / 169.0	2.63	13C8-PFOA	421.0 / 376.0	92458.58	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	98747.68	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	98747.68	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	31793.25	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	31793.25	239.25
PFDA_1	513.0 / 469.0	3.44	13C6-PFDA	519.0 / 474.0	107906.92	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	107906.92	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	102650.82	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	102650.82	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	111441.91	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	111441.91	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	98783.56	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	98783.56	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	98783.56	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	98783.56	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	20793.94	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	20793.94	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	21632.62	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	21632.62	250.00

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Summary Internal Standard Report

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Sample Name	J8670-FS(0)	**Injection Vial**	27
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:21:03	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	23485.72	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	23485.72	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	69276.61	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	69276.61	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	87389.34	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	87389.34	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	27049.09	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	27049.09	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	72705.59	250.00
PFOA_2	413.0 / 169.0	2.63	13C8-PFOA	421.0 / 376.0	72705.59	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	82522.01	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	82522.01	250.00
PFOS_1	499.0 / 80.0	3.05	13C8-PFOS	507.0 / 99.0	23911.25	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	23911.25	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	94887.23	250.00
PFDA_2	513.0 / 219.0	3.43	13C6-PFDA	519.0 / 474.0	94887.23	250.00
PFUnA_1	563.0 / 519.0	3.75	13C7-PFUnA	570.0 / 525.0	96831.67	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	96831.67	250.00
PFDoA_1	613.0 / 569.0	4.04	13C2-PFDoA	615.0 / 570.0	94208.49	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	94208.49	250.00
PFTrDA_1	663.0 / 619.0	4.30	13C2-PFTeDA	715.0 / 670.0	61610.24	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	61610.24	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	61610.24	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	61610.24	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	19964.30	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	19964.30	250.00
NEtFOSAA_1	584.0 / 419.0	3.72	d5-EtFOSAA	589.0 / 419.0	18647.72	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18647.72	250.00

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Summary Internal Standard Report

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Sample Name	J8670-FS-D(3)	**Injection Vial**	28
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:31:54	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	36740.10	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	36740.10	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	73373.38	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	73373.38	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	88145.59	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	88145.59	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	22003.77	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	22003.77	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	89314.63	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	89314.63	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	89141.89	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	89141.89	250.00
PFOS_1	499.0 / 80.0	3.05	13C8-PFOS	507.0 / 99.0	28943.24	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	28943.24	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	97498.34	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	97498.34	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	88138.51	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	88138.51	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	109794.02	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	109794.02	250.00
PFTrDA_1	663.0 / 619.0	4.28	13C2-PFTeDA	715.0 / 670.0	88252.34	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	88252.34	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	88252.34	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	88252.34	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	18896.29	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	18896.29	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20507.02	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20507.02	250.00

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Summary Internal Standard Report

Sample Name	J8670-FS-D(5)	**Injection Vial**	29
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:42:46	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	34366.41	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	34366.41	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	74998.28	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	74998.28	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	84688.23	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	84688.23	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	25144.17	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	25144.17	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	87474.78	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	87474.78	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	92345.20	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	92345.20	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	27679.89	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	27679.89	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	98422.53	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	98422.53	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	101494.98	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	101494.98	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	108026.23	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	108026.23	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	92925.68	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	92925.68	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	92925.68	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	92925.68	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	18600.41	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	18600.41	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20958.81	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20958.81	250.00

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Summary Internal Standard Report

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Sample Name	J8683-FS(0)	**Injection Vial**	30
Sample ID	VC-CS10-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:53:38	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	31493.89	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	31493.89	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	82056.78	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	82056.78	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	99258.67	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	99258.67	250.00
PFHxS_1	399.0 / 80.0	2.26	13C3-PFHxS	402.0 / 99.0	25337.60	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	25337.60	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	82351.31	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	82351.31	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	85398.64	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	85398.64	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	22746.19	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	22746.19	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	99565.32	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	99565.32	250.00
PFUnA_1	563.0 / 519.0	3.75	13C7-PFUnA	570.0 / 525.0	100533.86	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	100533.86	250.00
PFDoA_1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	106676.47	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	106676.47	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	73218.66	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	73218.66	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	73218.66	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	73218.66	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	23637.96	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	23637.96	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	21777.21	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	21777.21	250.00

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Summary Internal Standard Report

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Sample Name	J8683-FS-D(3)	**Injection Vial**	31
Sample ID	VC-CS10-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:04:29	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	34657.14	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	34657.14	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	70384.68	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	70384.68	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	80210.64	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	80210.64	250.00
PFHxS_1	399.0 / 80.0	2.26	13C3-PFHxS	402.0 / 99.0	23436.52	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	23436.52	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	90704.75	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	90704.75	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	90369.50	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	90369.50	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	25498.54	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	25498.54	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	98542.30	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	98542.30	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	106591.66	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	106591.66	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	106860.63	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	106860.63	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	88831.94	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	88831.94	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	88831.94	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	88831.94	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	19049.94	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	19049.94	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18428.47	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18428.47	250.00

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Summary Internal Standard Report

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Sample Name	J8684-FS(0)	**Injection Vial**	34
Sample ID	VC-CS10-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:37:05	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	32737.59	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	32737.59	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	75776.86	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	75776.86	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	96997.93	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	96997.93	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	25719.24	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	25719.24	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	76997.40	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	76997.40	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	75248.70	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	75248.70	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	24113.58	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	24113.58	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	92491.84	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	92491.84	250.00
PFUnA_1	563.0 / 519.0	3.75	13C7-PFUnA	570.0 / 525.0	95497.83	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	95497.83	250.00
PFDoA_1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	93121.67	250.00
PFDoA_2	613.0 / 319.0	4.03	13C2-PFDoA	615.0 / 570.0	93121.67	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	72464.59	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	72464.59	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	72464.59	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	72464.59	250.00
NMeFOSAA_1	570.0 / 419.0	3.59	d3-MeFOSAA	573.0 / 419.0	18148.15	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	18148.15	250.00
NEtFOSAA_1	584.0 / 419.0	3.74	d5-EtFOSAA	589.0 / 419.0	22532.00	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	22532.00	250.00

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Summary Internal Standard Report

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Sample Name	J8684-FS-D(3)	**Injection Vial**	35
Sample ID	VC-CS10-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:47:57	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	35835.96	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	35835.96	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	69187.48	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	69187.48	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	81832.27	250.00
PFHpA_2	363.0 / 169.0	2.28	13C4-PFHpA	367.0 / 322.0	81832.27	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	25588.86	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	25588.86	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	81159.00	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	81159.00	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	83072.90	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	83072.90	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	25714.43	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	25714.43	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	97751.22	250.00
PFDA_2	513.0 / 219.0	3.45	13C6-PFDA	519.0 / 474.0	97751.22	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	97672.22	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	97672.22	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	101678.89	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	101678.89	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	86173.94	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	86173.94	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	86173.94	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	86173.94	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	18460.11	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	18460.11	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20379.39	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20379.39	250.00

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Summary Internal Standard Report

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Sample Name	J8685-FS(0)	**Injection Vial**	36
Sample ID	VC-CS10-DW02P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:58:48	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	33355.03	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	33355.03	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	82228.58	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	82228.58	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	97699.02	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	97699.02	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	28358.26	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	28358.26	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	87823.60	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	87823.60	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	80150.28	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	80150.28	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	26806.42	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	26806.42	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	100786.93	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	100786.93	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	95641.40	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	95641.40	250.00
PFDoA_1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	102588.85	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	102588.85	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	83438.11	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	83438.11	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	83438.11	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	83438.11	250.00
NMeFOSAA_1	570.0 / 419.0	3.62	d3-MeFOSAA	573.0 / 419.0	16795.13	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16795.13	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	20161.86	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20161.86	250.00

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Summary Internal Standard Report

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Sample Name	J8686-FS(0)	**Injection Vial**	37
Sample ID	VC-CS10-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:09:39	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	30412.05	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	30412.05	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	80278.66	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	80278.66	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	92267.39	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	92267.39	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	24821.51	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	24821.51	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	75501.13	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	75501.13	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	78040.44	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	78040.44	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	26440.91	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	26440.91	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	87555.06	250.00
PFDA_2	513.0 / 219.0	3.43	13C6-PFDA	519.0 / 474.0	87555.06	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	97515.60	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	97515.60	250.00
PFDoA_1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	97231.18	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	97231.18	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	61336.86	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	61336.86	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	61336.86	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	61336.86	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	19857.78	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	19857.78	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	24313.11	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	24313.11	250.00

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Summary Internal Standard Report

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Sample Name	J8686-FS-D(3)	**Injection Vial**	38
Sample ID	VC-CS10-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:20:32	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	31556.07	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	31556.07	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	67321.02	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	67321.02	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	77159.26	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	77159.26	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	23646.97	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	23646.97	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	85707.01	250.00
PFOA_2	413.0 / 169.0	2.63	13C8-PFOA	421.0 / 376.0	85707.01	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	87543.62	250.00
PFNA_2	463.0 / 219.0	3.02	13C9-PFNA	472.0 / 427.0	87543.62	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	27789.56	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	27789.56	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	101265.46	250.00
PFDA_2	513.0 / 219.0	3.43	13C6-PFDA	519.0 / 474.0	101265.46	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	103997.65	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	103997.65	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	107860.99	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	107860.99	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	89435.65	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89435.65	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	89435.65	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89435.65	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	19906.20	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	19906.20	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	21406.15	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	21406.15	250.00

Sample Name	J8687-FS(0)	**Injection Vial**	39
Sample ID	VC-CS10-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:31:23	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	31224.93	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	31224.93	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	83591.91	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	83591.91	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	98934.84	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	98934.84	250.00
PFHxS_1	399.0 / 80.0	2.24	13C3-PFHxS	402.0 / 99.0	25909.93	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	25909.93	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	64145.62	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	64145.62	250.00
PFNA_1	463.0 / 419.0	3.00	13C9-PFNA	472.0 / 427.0	85876.27	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	85876.27	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	24918.73	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	24918.73	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	101703.25	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	101703.25	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	104688.02	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	104688.02	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	103434.66	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	103434.66	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	49559.00	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	49559.00	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	49559.00	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	49559.00	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	17527.32	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	17527.32	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20353.07	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20353.07	250.00

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Sample Name	J8688-FS(0)	**Injection Vial**	44
Sample ID	VC-CS18-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:25:42	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	32958.73	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	32958.73	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	79408.26	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	79408.26	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	91373.00	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	91373.00	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	28046.56	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	28046.56	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	54363.50	250.00
PFOA_2	413.0 / 169.0	2.62	13C8-PFOA	421.0 / 376.0	54363.50	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	82775.21	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	82775.21	250.00
PFOS_1	499.0 / 80.0	2.97	13C8-PFOS	507.0 / 99.0	24275.77	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	24275.77	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	54583.14	250.00
PFDA_2	513.0 / 219.0	3.38	13C6-PFDA	519.0 / 474.0	54583.14	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	98005.34	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	98005.34	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	104479.93	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	104479.93	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	68940.79	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	68940.79	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	68940.79	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	68940.79	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	20896.64	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	20896.64	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20333.56	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20333.56	250.00

Sample Name	J8714-FS(0)	**Injection Vial**	45
Sample ID	VC-SO-FB11-10062018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:36:33	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	32374.72	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	32374.72	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	76110.19	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	76110.19	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	84160.61	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	84160.61	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	24960.13	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	24960.13	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	97216.85	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	97216.85	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	101183.38	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	101183.38	250.00
PFOS_1	499.0 / 80.0	3.03	13C8-PFOS	507.0 / 99.0	30257.90	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	30257.90	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	105743.42	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	105743.42	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	111627.32	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	111627.32	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	112337.84	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	112337.84	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	95851.39	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	95851.39	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	95851.39	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	95851.39	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	20086.74	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	20086.74	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	22694.34	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	22694.34	250.00

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Sample Name	J8715-FS(0)	**Injection Vial**	46
Sample ID	VC-SO-EB11-10062018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:47:24	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	32987.46	232.25
PFBS_2	298.9 / 99.0	1.50	13C3-PFBS	302.0 / 99.0	32987.46	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	76076.43	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	76076.43	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	82292.39	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	82292.39	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	25421.99	236.50
PFHxS_2	399.0 / 99.0	2.31	13C3-PFHxS	402.0 / 99.0	25421.99	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	104035.12	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	104035.12	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	105438.85	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	105438.85	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	29893.64	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	29893.64	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	118211.85	250.00
PFDA_2	513.0 / 219.0	3.44	13C6-PFDA	519.0 / 474.0	118211.85	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	115752.17	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	115752.17	250.00
PFDoA_1	613.0 / 569.0	4.00	13C2-PFDoA	615.0 / 570.0	126020.33	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	126020.33	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	105262.98	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	105262.98	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	105262.98	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	105262.98	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	21113.84	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	21113.84	250.00
NEtFOSAA_1	584.0 / 419.0	3.75	d5-EtFOSAA	589.0 / 419.0	22291.47	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	22291.47	250.00

Sample Name	J8716-FS(0)	**Injection Vial**	47
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:58:16	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	37942.61	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	37942.61	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	100399.72	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	100399.72	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	111363.02	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	111363.02	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	32510.06	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	32510.06	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	94931.27	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	94931.27	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	71519.99	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	71519.99	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	22912.14	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	22912.14	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	104864.54	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	104864.54	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	114187.43	250.00
PFUnA_2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	114187.43	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	122149.53	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	122149.53	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	106064.04	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	106064.04	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	106064.04	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	106064.04	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	24213.41	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	24213.41	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	25505.78	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	25505.78	250.00

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Sample Name	J8716-FS-D(3)	**Injection Vial**	48
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:09:09	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	37027.71	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	37027.71	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	74139.13	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	74139.13	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	85038.38	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	85038.38	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	24763.54	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	24763.54	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	98021.21	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	98021.21	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	88399.35	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	88399.35	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	27236.81	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	27236.81	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	103251.34	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	103251.34	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	110801.89	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	110801.89	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	116464.79	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	116464.79	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	94645.20	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	94645.20	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	94645.20	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	94645.20	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	21700.16	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	21700.16	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20321.36	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20321.36	250.00

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Summary Internal Standard Report

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Sample Name	J8717-FS(0)	**Injection Vial**	49
Sample ID	VC-CS00-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:20:02	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	19043.03	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	19043.03	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	69404.73	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	69404.73	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	89203.61	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	89203.61	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	25623.06	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	25623.06	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	85518.40	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	85518.40	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	86936.25	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	86936.25	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	22943.78	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	22943.78	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	100674.75	250.00
PFDA_2	513.0 / 219.0	3.45	13C6-PFDA	519.0 / 474.0	100674.75	250.00
PFUnA_1	563.0 / 519.0	3.75	13C7-PFUnA	570.0 / 525.0	110702.98	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	110702.98	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	106915.82	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	106915.82	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	74438.11	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	74438.11	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	74438.11	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	74438.11	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	19835.49	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	19835.49	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	25219.81	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	25219.81	250.00

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Summary Internal Standard Report

Sample Name	J8718-FS(0)	**Injection Vial**	50
Sample ID	VC-CS00-DW02P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:30:53	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.51	13C3-PFBS	302.0 / 99.0	17492.20	232.25
PFBS_2	298.9 / 99.0	1.52	13C3-PFBS	302.0 / 99.0	17492.20	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	57715.42	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	57715.42	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	81718.52	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	81718.52	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	23180.91	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	23180.91	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	67914.37	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	67914.37	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	73993.49	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	73993.49	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	20886.22	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	20886.22	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	92047.62	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	92047.62	250.00
PFUnA_1	563.0 / 519.0	3.71	13C7-PFUnA	570.0 / 525.0	96221.88	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	96221.88	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	89466.02	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	89466.02	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	60756.37	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	60756.37	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	60756.37	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	60756.37	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16775.54	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16775.54	250.00
NEtFOSAA_1	584.0 / 419.0	3.72	d5-EtFOSAA	589.0 / 419.0	19864.01	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	19864.01	250.00

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Summary Internal Standard Report

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Sample Name	J8719-FS(0)	**Injection Vial**	51
Sample ID	VC-CS00-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:41:45	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	18098.63	232.25
PFBS_2	298.9 / 99.0	1.49	13C3-PFBS	302.0 / 99.0	18098.63	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	63763.81	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	63763.81	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	84032.14	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	84032.14	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	25234.00	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	25234.00	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	79026.09	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	79026.09	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	85055.36	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	85055.36	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	23040.10	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	23040.10	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	90718.84	250.00
PFDA_2	513.0 / 219.0	3.39	13C6-PFDA	519.0 / 474.0	90718.84	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	103807.13	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	103807.13	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	90366.17	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	90366.17	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	74818.33	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	74818.33	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	74818.33	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	74818.33	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	19273.30	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	19273.30	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18968.91	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18968.91	250.00

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Summary Internal Standard Report

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Sample Name	J8720-FS(0)	**Injection Vial**	53
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:14:19	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	29387.91	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	29387.91	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	81166.17	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	81166.17	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	75877.76	250.00
PFHpA_2	363.0 / 169.0	2.23	13C4-PFHpA	367.0 / 322.0	75877.76	250.00
PFHxS_1	399.0 / 80.0	2.25	13C3-PFHxS	402.0 / 99.0	23858.21	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	23858.21	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	76210.88	250.00
PFOA_2	413.0 / 169.0	2.61	13C8-PFOA	421.0 / 376.0	76210.88	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	54394.12	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	54394.12	250.00
PFOS_1	499.0 / 80.0	2.98	13C8-PFOS	507.0 / 99.0	14783.00	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	14783.00	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	97558.87	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	97558.87	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	99062.25	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	99062.25	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	115243.95	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	115243.95	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	89032.44	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89032.44	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	89032.44	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89032.44	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	21794.46	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	21794.46	250.00
NEtFOSAA_1	584.0 / 419.0	3.72	d5-EtFOSAA	589.0 / 419.0	22598.29	250.00
NEtFOSAA_2	584.0 / 483.0	3.75	d5-EtFOSAA	589.0 / 419.0	22598.29	250.00

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Summary Internal Standard Report

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Sample Name	J8720-FS-D(3)	**Injection Vial**	54
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:25:10	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	36588.29	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	36588.29	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	75204.46	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	75204.46	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	87156.95	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	87156.95	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	23166.64	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	23166.64	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	79040.43	250.00
PFOA_2	413.0 / 169.0	2.61	13C8-PFOA	421.0 / 376.0	79040.43	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	82285.31	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	82285.31	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	21166.74	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	21166.74	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	94181.87	250.00
PFDA_2	513.0 / 219.0	3.45	13C6-PFDA	519.0 / 474.0	94181.87	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	89300.86	250.00
PFUnA_2	563.0 / 269.0	3.79	13C7-PFUnA	570.0 / 525.0	89300.86	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	108017.90	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	108017.90	250.00
PFTrDA_1	663.0 / 619.0	4.28	13C2-PFTeDA	715.0 / 670.0	87276.97	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	87276.97	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	87276.97	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	87276.97	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	17788.64	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	17788.64	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18659.93	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18659.93	250.00

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Summary Internal Standard Report

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Sample Name	J8720-FS-D(5)	**Injection Vial**	1
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:36:01	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	35869.40	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	35869.40	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	68266.06	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	68266.06	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	72175.41	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	72175.41	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	23593.60	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	23593.60	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	82947.52	250.00
PFOA_2	413.0 / 169.0	2.62	13C8-PFOA	421.0 / 376.0	82947.52	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	80592.18	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	80592.18	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	25118.94	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	25118.94	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	97138.26	250.00
PFDA_2	513.0 / 219.0	3.45	13C6-PFDA	519.0 / 474.0	97138.26	250.00
PFUnA_1	563.0 / 519.0	3.75	13C7-PFUnA	570.0 / 525.0	103424.01	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	103424.01	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	97162.28	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	97162.28	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	86920.61	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	86920.61	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	86920.61	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	86920.61	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	18145.21	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	18145.21	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	21121.43	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	21121.43	250.00

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Summary Internal Standard Report

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Sample Name	J8721-FS(0)	**Injection Vial**	2
Sample ID	VC-CS00-DW05-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:46:54	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	28811.94	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	28811.94	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	83961.57	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	83961.57	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	105717.02	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	105717.02	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	29496.63	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	29496.63	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	93556.81	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	93556.81	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	92486.15	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	92486.15	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	26237.46	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	26237.46	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	92159.99	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	92159.99	250.00
PFUnA_1	563.0 / 519.0	3.70	13C7-PFUnA	570.0 / 525.0	118457.81	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	118457.81	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	121546.61	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	121546.61	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	83715.56	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	83715.56	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	83715.56	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	83715.56	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	23470.97	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	23470.97	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	25737.32	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	25737.32	250.00

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Sample Name	J8722-FS(0)	**Injection Vial**	3
Sample ID	VC-CS00-DW06-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:57:47	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
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	19763.78	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	19763.78	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	74801.57	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	74801.57	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	98507.33	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	98507.33	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	28255.43	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	28255.43	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	92108.19	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	92108.19	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	90590.36	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	90590.36	250.00
PFOS_1	499.0 / 80.0	3.03	13C8-PFOS	507.0 / 99.0	25192.25	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	25192.25	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	120454.64	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	120454.64	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	114811.98	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	114811.98	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	108127.34	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	108127.34	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	52796.19	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	52796.19	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	52796.19	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	52796.19	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	20271.76	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	20271.76	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	26038.95	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	26038.95	250.00

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Summary Internal Standard Report

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Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:02:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	4.07	13C2-PFDA	515.0 / 470.0	96280.28	250.00
d3-MeFOSAA	573.0 / 419.0	3.61	13C4-PFOS	503.0 / 99.0	29371.12	239.25
d5-EtFOSAA	589.0 / 419.0	3.78	13C4-PFOS	503.0 / 99.0	29371.12	239.25
13C5-PFHxA	318.0 / 273.0	1.87	13C2-PFOA	415.0 / 370.0	85730.94	250.00
13C4-PFHpA	367.0 / 322.0	2.28	13C2-PFOA	415.0 / 370.0	85730.94	250.00
13C8-PFOA	421.0 / 376.0	2.70	13C2-PFOA	415.0 / 370.0	85730.94	250.00
13C9-PFNA	472.0 / 427.0	3.09	13C2-PFOA	415.0 / 370.0	85730.94	250.00
13C6-PFDA	519.0 / 474.0	3.45	13C2-PFDA	515.0 / 470.0	96280.28	250.00
13C7-PFUnA	570.0 / 525.0	3.78	13C2-PFDA	515.0 / 470.0	96280.28	250.00
13C2-PFTeDA	715.0 / 670.0	4.54	13C2-PFDA	515.0 / 470.0	96280.28	250.00
13C3-PFBS	302.0 / 99.0	1.55	13C4-PFOS	503.0 / 99.0	29371.12	239.25
13C3-PFHxS	402.0 / 99.0	2.31	13C4-PFOS	503.0 / 99.0	29371.12	239.25
13C8-PFOS	507.0 / 99.0	3.09	13C4-PFOS	503.0 / 99.0	29371.12	239.25

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Summary Internal Standard Report

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Sample Name	KB80 IB	**Injection Vial**	2
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T16:37:35	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	4.08	13C2-PFDA	515.0 / 470.0	98812.53	250.00
d3-MeFOSAA	573.0 / 419.0	3.63	13C4-PFOS	503.0 / 99.0	24821.18	239.25
d5-EtFOSAA	589.0 / 419.0	3.79	13C4-PFOS	503.0 / 99.0	24821.18	239.25
13C5-PFHxA	318.0 / 273.0	1.88	13C2-PFOA	415.0 / 370.0	82086.71	250.00
13C4-PFHpA	367.0 / 322.0	2.30	13C2-PFOA	415.0 / 370.0	82086.71	250.00
13C8-PFOA	421.0 / 376.0	2.71	13C2-PFOA	415.0 / 370.0	82086.71	250.00
13C9-PFNA	472.0 / 427.0	3.10	13C2-PFOA	415.0 / 370.0	82086.71	250.00
13C6-PFDA	519.0 / 474.0	3.47	13C2-PFDA	515.0 / 470.0	98812.53	250.00
13C7-PFUnA	570.0 / 525.0	3.79	13C2-PFDA	515.0 / 470.0	98812.53	250.00
13C2-PFTeDA	715.0 / 670.0	4.55	13C2-PFDA	515.0 / 470.0	98812.53	250.00
13C3-PFBS	302.0 / 99.0	1.55	13C4-PFOS	503.0 / 99.0	24821.18	239.25
13C3-PFHxS	402.0 / 99.0	2.32	13C4-PFOS	503.0 / 99.0	24821.18	239.25
13C8-PFOS	507.0 / 99.0	3.10	13C4-PFOS	503.0 / 99.0	24821.18	239.25

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Summary Internal Standard Report

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Sample Name	CR986PB-FS(0)	**Injection Vial**	13
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:48:52	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.03	13C2-PFDA	515.0 / 470.0	98250.23	250.00
d3-MeFOSAA	573.0 / 419.0	3.59	13C4-PFOS	503.0 / 99.0	25589.78	239.25
d5-EtFOSAA	589.0 / 419.0	3.75	13C4-PFOS	503.0 / 99.0	25589.78	239.25
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	77926.31	250.00
13C4-PFHpA	367.0 / 322.0	2.27	13C2-PFOA	415.0 / 370.0	77926.31	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	77926.31	250.00
13C9-PFNA	472.0 / 427.0	3.08	13C2-PFOA	415.0 / 370.0	77926.31	250.00
13C6-PFDA	519.0 / 474.0	3.43	13C2-PFDA	515.0 / 470.0	98250.23	250.00
13C7-PFUnA	570.0 / 525.0	3.75	13C2-PFDA	515.0 / 470.0	98250.23	250.00
13C2-PFTeDA	715.0 / 670.0	4.50	13C2-PFDA	515.0 / 470.0	98250.23	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	25589.78	239.25
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	25589.78	239.25
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	25589.78	239.25

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Summary Internal Standard Report

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Sample Name	J8667-FS(0)	**Injection Vial**	15
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:10:37	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.03	13C2-PFDA	515.0 / 470.0	102793.69	250.00
d3-MeFOSAA	573.0 / 419.0	3.59	13C4-PFOS	503.0 / 99.0	25132.67	239.25
d5-EtFOSAA	589.0 / 419.0	3.75	13C4-PFOS	503.0 / 99.0	25132.67	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	95628.65	250.00
13C4-PFHpA	367.0 / 322.0	2.27	13C2-PFOA	415.0 / 370.0	95628.65	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	95628.65	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	95628.65	250.00
13C6-PFDA	519.0 / 474.0	3.43	13C2-PFDA	515.0 / 470.0	102793.69	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	102793.69	250.00
13C2-PFTeDA	715.0 / 670.0	4.49	13C2-PFDA	515.0 / 470.0	102793.69	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	25132.67	239.25
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	25132.67	239.25
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	25132.67	239.25

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Summary Internal Standard Report

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Sample Name	J8667-FS-D(5)	**Injection Vial**	17
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:32:22	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.03	13C2-PFDA	515.0 / 470.0	95148.62	250.00
d3-MeFOSAA	573.0 / 419.0	3.59	13C4-PFOS	503.0 / 99.0	28867.58	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	28867.58	239.25
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	87461.37	250.00
13C4-PFHpA	367.0 / 322.0	2.27	13C2-PFOA	415.0 / 370.0	87461.37	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	87461.37	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	87461.37	250.00
13C6-PFDA	519.0 / 474.0	3.43	13C2-PFDA	515.0 / 470.0	95148.62	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	95148.62	250.00
13C2-PFTeDA	715.0 / 670.0	4.49	13C2-PFDA	515.0 / 470.0	95148.62	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	28867.58	239.25
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	28867.58	239.25
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	28867.58	239.25

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Summary Internal Standard Report

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Sample Name	J8668-FS(0)	**Injection Vial**	19
Sample ID	VC-CS12-DW01P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:54:05	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.03	13C2-PFDA	515.0 / 470.0	100623.61	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	24892.66	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	24892.66	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	90446.52	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	90446.52	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	90446.52	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	90446.52	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	100623.61	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	100623.61	250.00
13C2-PFTeDA	715.0 / 670.0	4.49	13C2-PFDA	515.0 / 470.0	100623.61	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	24892.66	239.25
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	24892.66	239.25
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	24892.66	239.25

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Summary Internal Standard Report

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Sample Name	J8668-FS-D(3)	**Injection Vial**	20
Sample ID	VC-CS12-DW01P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:04:57	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.03	13C2-PFDA	515.0 / 470.0	104800.67	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	25606.86	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	25606.86	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	83263.48	250.00
13C4-PFHpA	367.0 / 322.0	2.27	13C2-PFOA	415.0 / 370.0	83263.48	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	83263.48	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	83263.48	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	104800.67	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	104800.67	250.00
13C2-PFTeDA	715.0 / 670.0	4.49	13C2-PFDA	515.0 / 470.0	104800.67	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	25606.86	239.25
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	25606.86	239.25
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	25606.86	239.25

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Sample Name	J8669-FS(0)	**Injection Vial**	24
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:48:27	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	94182.94	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	24024.78	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	24024.78	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	95244.92	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	95244.92	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	95244.92	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	95244.92	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	94182.94	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	94182.94	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	94182.94	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	24024.78	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	24024.78	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	24024.78	239.25

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Summary Internal Standard Report

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Sample Name	J8669-FS-D(3)	**Injection Vial**	25
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:59:18	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	93980.25	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	24822.63	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	24822.63	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	78766.56	250.00
13C4-PFHpA	367.0 / 322.0	2.27	13C2-PFOA	415.0 / 370.0	78766.56	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	78766.56	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	78766.56	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	93980.25	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	93980.25	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	93980.25	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	24822.63	239.25
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	24822.63	239.25
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	24822.63	239.25

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Summary Internal Standard Report

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Sample Name	J8669-FS-D(5)	**Injection Vial**	26
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:10:10	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	110780.53	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	29999.71	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	29999.71	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	91198.79	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	91198.79	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	91198.79	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	91198.79	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	110780.53	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	110780.53	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	110780.53	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	29999.71	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	29999.71	239.25
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	29999.71	239.25

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Summary Internal Standard Report

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Sample Name	J8670-FS(0)	**Injection Vial**	27
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:21:03	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	94674.10	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	20480.75	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	20480.75	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	128821.90	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	128821.90	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	128821.90	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	128821.90	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	94674.10	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	94674.10	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	94674.10	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	20480.75	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	20480.75	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	20480.75	239.25

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Summary Internal Standard Report

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Sample Name	J8670-FS-D(3)	**Injection Vial**	28
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:31:54	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	102031.00	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	26275.98	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	26275.98	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	85660.87	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	85660.87	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	85660.87	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	85660.87	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	102031.00	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	102031.00	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	102031.00	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	26275.98	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	26275.98	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	26275.98	239.25

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Summary Internal Standard Report

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Sample Name	J8670-FS-D(5)	**Injection Vial**	29
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:42:46	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	103045.28	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	30935.12	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	30935.12	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	92332.51	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	92332.51	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	92332.51	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	92332.51	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	103045.28	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	103045.28	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	103045.28	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	30935.12	239.25
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	30935.12	239.25
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	30935.12	239.25

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Summary Internal Standard Report

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Sample Name	J8683-FS(0)	**Injection Vial**	30
Sample ID	VC-CS10-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:53:38	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	92078.25	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	24213.24	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	24213.24	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	86008.03	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	86008.03	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	86008.03	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	86008.03	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	92078.25	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	92078.25	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	92078.25	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	24213.24	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	24213.24	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	24213.24	239.25

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Summary Internal Standard Report

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Sample Name	J8683-FS-D(3)	**Injection Vial**	31
Sample ID	VC-CS10-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:04:29	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	91907.84	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	25938.74	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	25938.74	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	79711.43	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	79711.43	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	79711.43	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	79711.43	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	91907.84	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	91907.84	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	91907.84	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	25938.74	239.25
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	25938.74	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	25938.74	239.25

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Summary Internal Standard Report

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Sample Name	J8684-FS(0)	**Injection Vial**	34
Sample ID	VC-CS10-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:37:05	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	97575.48	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	21649.80	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	21649.80	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	81128.01	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	81128.01	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	81128.01	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	81128.01	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	97575.48	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	97575.48	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	97575.48	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	21649.80	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	21649.80	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	21649.80	239.25

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Summary Internal Standard Report

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Sample Name	J8684-FS-D(3)	**Injection Vial**	35
Sample ID	VC-CS10-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:47:57	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	96965.55	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	28290.32	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	28290.32	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	82077.90	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	82077.90	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	82077.90	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	82077.90	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	96965.55	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	96965.55	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	96965.55	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	28290.32	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	28290.32	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	28290.32	239.25

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Summary Internal Standard Report

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Sample Name	J8685-FS(0)	**Injection Vial**	36
Sample ID	VC-CS10-DW02P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:58:48	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	102373.21	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	24494.03	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	24494.03	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	81441.06	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	81441.06	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	81441.06	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	81441.06	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	102373.21	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	102373.21	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	102373.21	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	24494.03	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	24494.03	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	24494.03	239.25

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Summary Internal Standard Report

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Sample Name	J8686-FS(0)	**Injection Vial**	37
Sample ID	VC-CS10-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:09:39	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	86667.02	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	22278.56	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	22278.56	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	91019.31	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	91019.31	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	91019.31	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	91019.31	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	86667.02	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	86667.02	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	86667.02	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	22278.56	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	22278.56	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	22278.56	239.25

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Summary Internal Standard Report

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Sample Name	J8686-FS-D(3)	**Injection Vial**	38
Sample ID	VC-CS10-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:20:32	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	94642.73	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	29039.63	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	29039.63	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	79863.91	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	79863.91	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	79863.91	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	79863.91	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	94642.73	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	94642.73	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	94642.73	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	29039.63	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	29039.63	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	29039.63	239.25

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Summary Internal Standard Report

Sample Name	J8687-FS(0)	**Injection Vial**	39
Sample ID	VC-CS10-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:31:23	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	99245.94	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	27936.79	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	27936.79	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	164540.51	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	164540.51	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	164540.51	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	164540.51	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	99245.94	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	99245.94	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	99245.94	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	27936.79	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	27936.79	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	27936.79	239.25

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Summary Internal Standard Report

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Sample Name	J8688-FS(0)	**Injection Vial**	44
Sample ID	VC-CS18-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:25:42	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	53720.88	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	23716.16	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	23716.16	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	55861.20	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	55861.20	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	55861.20	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	55861.20	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	53720.88	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	53720.88	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	53720.88	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	23716.16	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	23716.16	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	23716.16	239.25

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Summary Internal Standard Report

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Sample Name	J8714-FS(0)	**Injection Vial**	45
Sample ID	VC-SO-FB11-10062018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:36:33	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	94002.61	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	25215.02	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	25215.02	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	79910.05	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	79910.05	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	79910.05	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	79910.05	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	94002.61	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	94002.61	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	94002.61	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	25215.02	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	25215.02	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	25215.02	239.25

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Summary Internal Standard Report

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Sample Name	J8715-FS(0)	**Injection Vial**	46
Sample ID	VC-SO-EB11-10062018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:47:24	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	99149.71	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	29006.20	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	29006.20	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	94738.72	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	94738.72	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	94738.72	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	94738.72	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	99149.71	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	99149.71	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	99149.71	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	29006.20	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	29006.20	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	29006.20	239.25

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Summary Internal Standard Report

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Sample Name	J8716-FS(0)	**Injection Vial**	47
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:58:16	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	112012.49	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	18603.20	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	18603.20	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	89132.88	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	89132.88	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	89132.88	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	89132.88	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	112012.49	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	112012.49	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	112012.49	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	18603.20	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	18603.20	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	18603.20	239.25

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Summary Internal Standard Report

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Sample Name	J8716-FS-D(3)	**Injection Vial**	48
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:09:09	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	98500.69	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	24553.25	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	24553.25	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	85513.19	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	85513.19	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	85513.19	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	85513.19	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	98500.69	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	98500.69	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	98500.69	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	24553.25	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	24553.25	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	24553.25	239.25

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Summary Internal Standard Report

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Sample Name	J8717-FS(0)	**Injection Vial**	49
Sample ID	VC-CS00-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:20:02	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	94849.07	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	22036.01	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	22036.01	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	74059.72	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	74059.72	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	74059.72	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	74059.72	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	94849.07	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	94849.07	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	94849.07	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	22036.01	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	22036.01	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	22036.01	239.25

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Sample Name	J8718-FS(0)	**Injection Vial**	50
Sample ID	VC-CS00-DW02P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:30:53	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	83088.63	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	19036.09	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	19036.09	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	66384.05	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	66384.05	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	66384.05	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	66384.05	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	83088.63	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	83088.63	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	83088.63	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	19036.09	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	19036.09	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	19036.09	239.25

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Summary Internal Standard Report

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Sample Name	J8719-FS(0)	**Injection Vial**	51
Sample ID	VC-CS00-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:41:45	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	93613.55	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	23213.05	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	23213.05	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	65550.76	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	65550.76	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	65550.76	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	65550.76	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	93613.55	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	93613.55	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	93613.55	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	23213.05	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	23213.05	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	23213.05	239.25

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Summary Internal Standard Report

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Sample Name	J8720-FS(0)	**Injection Vial**	53
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:14:19	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	102367.94	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	17587.65	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	17587.65	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	85276.79	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	85276.79	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	85276.79	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	85276.79	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	102367.94	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	102367.94	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	102367.94	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	17587.65	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	17587.65	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	17587.65	239.25

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Summary Internal Standard Report

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Sample Name	J8720-FS-D(3)	**Injection Vial**	54
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:25:10	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	105263.71	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	21575.77	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	21575.77	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	84661.40	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	84661.40	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	84661.40	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	84661.40	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	105263.71	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	105263.71	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	105263.71	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	21575.77	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	21575.77	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	21575.77	239.25

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Summary Internal Standard Report

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Sample Name	J8720-FS-D(5)	**Injection Vial**	1
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:36:01	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	102403.01	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	23706.91	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	23706.91	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	79521.12	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	79521.12	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	79521.12	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	79521.12	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	102403.01	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	102403.01	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	102403.01	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	23706.91	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	23706.91	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	23706.91	239.25

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Summary Internal Standard Report

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Sample Name	J8721-FS(0)	**Injection Vial**	2
Sample ID	VC-CS00-DW05-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:46:54	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	90145.34	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	23359.62	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	23359.62	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	77671.60	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	77671.60	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	77671.60	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	77671.60	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	90145.34	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	90145.34	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	90145.34	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	23359.62	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	23359.62	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	23359.62	239.25

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Summary Internal Standard Report

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Sample Name	J8722-FS(0)	**Injection Vial**	3
Sample ID		**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:57:47	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_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	106977.21	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	24155.51	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	24155.51	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	84197.52	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	84197.52	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	84197.52	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	84197.52	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	106977.21	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	106977.21	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	106977.21	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	24155.51	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	24155.51	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	24155.51	239.25

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Summary Internal Standard Report

Sample Name	KB80 IB	**Injection Vial**	3
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T11:52:13	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
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	27223.13	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	27223.13	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	63936.71	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	63936.71	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	78224.38	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	78224.38	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	24061.93	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	24061.93	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	96172.48	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	96172.48	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	98316.57	250.00
PFNA_2	463.0 / 219.0	3.10	13C9-PFNA	472.0 / 427.0	98316.57	250.00
PFOS_1	499.0 / 80.0	3.10	13C8-PFOS	507.0 / 99.0	30304.71	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	30304.71	239.25
PFDA_1	513.0 / 469.0	3.45	13C6-PFDA	519.0 / 474.0	94696.61	250.00
PFDA_2	513.0 / 219.0	3.49	13C6-PFDA	519.0 / 474.0	94696.61	250.00
PFUnA_1	563.0 / 519.0	3.77	13C7-PFUnA	570.0 / 525.0	88201.94	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	88201.94	250.00
PFDoA_1	613.0 / 569.0	4.05	13C2-PFDoA	615.0 / 570.0	101281.43	250.00
PFDoA_2	613.0 / 319.0	3.79	13C2-PFDoA	615.0 / 570.0	101281.43	250.00
PFTrDA_1	663.0 / 619.0	4.30	13C2-PFTeDA	715.0 / 670.0	89704.15	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89704.15	250.00
PFTeDA_1	713.0 / 669.0	4.51	13C2-PFTeDA	715.0 / 670.0	89704.15	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89704.15	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16819.96	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16819.96	250.00
NEtFOSAA_1	584.0 / 419.0	3.77	d5-EtFOSAA	589.0 / 419.0	22502.20	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	22502.20	250.00

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Summary Internal Standard Report

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Sample Name	J8722-FS-D(3)	**Injection Vial**	7
Sample ID	VC-CS00-DW06-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:35:44	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
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	35133.99	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	35133.99	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	83190.08	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	83190.08	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	99482.47	250.00
PFHpA_2	363.0 / 169.0	2.28	13C4-PFHpA	367.0 / 322.0	99482.47	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	27198.18	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	27198.18	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	96277.66	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	96277.66	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	93223.10	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	93223.10	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	30711.45	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	30711.45	239.25
PFDA_1	513.0 / 469.0	3.45	13C6-PFDA	519.0 / 474.0	98572.06	250.00
PFDA_2	513.0 / 219.0	3.45	13C6-PFDA	519.0 / 474.0	98572.06	250.00
PFUnA_1	563.0 / 519.0	3.76	13C7-PFUnA	570.0 / 525.0	99471.72	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	99471.72	250.00
PFDoA_1	613.0 / 569.0	4.04	13C2-PFDoA	615.0 / 570.0	114519.47	250.00
PFDoA_2	613.0 / 319.0	4.04	13C2-PFDoA	615.0 / 570.0	114519.47	250.00
PFTrDA_1	663.0 / 619.0	4.29	13C2-PFTeDA	715.0 / 670.0	92884.36	250.00
PFTrDA_2	663.0 / 169.0	4.30	13C2-PFTeDA	715.0 / 670.0	92884.36	250.00
PFTeDA_1	713.0 / 669.0	4.50	13C2-PFTeDA	715.0 / 670.0	92884.36	250.00
PFTeDA_2	713.0 / 169.0	4.50	13C2-PFTeDA	715.0 / 670.0	92884.36	250.00
NMeFOSAA_1	570.0 / 419.0	3.60	d3-MeFOSAA	573.0 / 419.0	24286.04	250.00
NMeFOSAA_2	570.0 / 512.0	3.59	d3-MeFOSAA	573.0 / 419.0	24286.04	250.00
NEtFOSAA_1	584.0 / 419.0	3.76	d5-EtFOSAA	589.0 / 419.0	23724.35	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	23724.35	250.00

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Sample Name	J8720-FS-D(7)	**Injection Vial**	8
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:46:35	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
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	32507.36	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	32507.36	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	72267.85	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	72267.85	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	84899.30	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	84899.30	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	24494.24	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	24494.24	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	96091.84	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	96091.84	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	100085.67	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	100085.67	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	28630.43	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	28630.43	239.25
PFDA_1	513.0 / 469.0	3.44	13C6-PFDA	519.0 / 474.0	108947.08	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	108947.08	250.00
PFUnA_1	563.0 / 519.0	3.76	13C7-PFUnA	570.0 / 525.0	101693.23	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	101693.23	250.00
PFDoA_1	613.0 / 569.0	4.04	13C2-PFDoA	615.0 / 570.0	116398.24	250.00
PFDoA_2	613.0 / 319.0	4.03	13C2-PFDoA	615.0 / 570.0	116398.24	250.00
PFTrDA_1	663.0 / 619.0	4.29	13C2-PFTeDA	715.0 / 670.0	98672.23	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	98672.23	250.00
PFTeDA_1	713.0 / 669.0	4.49	13C2-PFTeDA	715.0 / 670.0	98672.23	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	98672.23	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	21188.47	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	21188.47	250.00
NEtFOSAA_1	584.0 / 419.0	3.76	d5-EtFOSAA	589.0 / 419.0	23901.32	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	23901.32	250.00

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Sample Name	J8716-FS-D(5)	**Injection Vial**	9
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:57:26	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
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	29558.50	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	29558.50	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	66314.67	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	66314.67	250.00
PFHpA_1	363.0 / 319.0	2.28	13C4-PFHpA	367.0 / 322.0	76804.90	250.00
PFHpA_2	363.0 / 169.0	2.29	13C4-PFHpA	367.0 / 322.0	76804.90	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	23421.57	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	23421.57	236.50
PFOA_1	413.0 / 369.0	2.69	13C8-PFOA	421.0 / 376.0	95825.79	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	95825.79	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	96739.46	250.00
PFNA_2	463.0 / 219.0	3.09	13C9-PFNA	472.0 / 427.0	96739.46	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	29628.68	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	29628.68	239.25
PFDA_1	513.0 / 469.0	3.44	13C6-PFDA	519.0 / 474.0	101149.54	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	101149.54	250.00
PFUnA_1	563.0 / 519.0	3.76	13C7-PFUnA	570.0 / 525.0	98666.31	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	98666.31	250.00
PFDoA_1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	102369.01	250.00
PFDoA_2	613.0 / 319.0	3.98	13C2-PFDoA	615.0 / 570.0	102369.01	250.00
PFTrDA_1	663.0 / 619.0	4.28	13C2-PFTeDA	715.0 / 670.0	97198.81	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	97198.81	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	97198.81	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	97198.81	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	21157.93	250.00
NMeFOSAA_2	570.0 / 512.0	3.62	d3-MeFOSAA	573.0 / 419.0	21157.93	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20900.60	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20900.60	250.00

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Sample Name	J8688-FS-D(3)	**Injection Vial**	10
Sample ID	VC-CS18-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:08:19	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
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	39249.40	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	39249.40	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	77066.41	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	77066.41	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	92593.35	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	92593.35	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	25041.61	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	25041.61	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	84786.77	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	84786.77	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	90943.83	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	90943.83	250.00
PFOS_1	499.0 / 80.0	2.98	13C8-PFOS	507.0 / 99.0	29779.08	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	29779.08	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	81607.13	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	81607.13	250.00
PFUnA_1	563.0 / 519.0	3.76	13C7-PFUnA	570.0 / 525.0	102214.29	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	102214.29	250.00
PFDoA_1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	110378.21	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	110378.21	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	97941.67	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	97941.67	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	97941.67	250.00
PFTeDA_2	713.0 / 169.0	4.51	13C2-PFTeDA	715.0 / 670.0	97941.67	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	21534.59	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	21534.59	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	23363.15	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	23363.15	250.00

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Summary Internal Standard Report

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Sample Name	J8687-FS-D(7)	**Injection Vial**	11
Sample ID	VC-CS10-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:19:10	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
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	29470.35	232.25
PFBS_2	298.9 / 99.0	1.52	13C3-PFBS	302.0 / 99.0	29470.35	232.25
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	65643.95	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	65643.95	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	74124.34	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	74124.34	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	24118.73	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	24118.73	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	87215.24	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	87215.24	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	85602.30	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	85602.30	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	27149.44	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	27149.44	239.25
PFDA_1	513.0 / 469.0	3.44	13C6-PFDA	519.0 / 474.0	89480.03	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	89480.03	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	91166.21	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	91166.21	250.00
PFDoA_1	613.0 / 569.0	4.05	13C2-PFDoA	615.0 / 570.0	99496.12	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	99496.12	250.00
PFTrDA_1	663.0 / 619.0	4.29	13C2-PFTeDA	715.0 / 670.0	89598.09	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89598.09	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	89598.09	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89598.09	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	19102.18	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	19102.18	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	21061.36	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	21061.36	250.00

Sample Name	CR987LCS-FS(0)	**Injection Vial**	14
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:51:45	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
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	35569.08	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	35569.08	232.25
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	82829.95	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	82829.95	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	83422.62	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	83422.62	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	27704.84	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	27704.84	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	94441.17	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	94441.17	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	101340.19	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	101340.19	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	29647.72	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	29647.72	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	105948.79	250.00
PFDA_2	513.0 / 219.0	3.43	13C6-PFDA	519.0 / 474.0	105948.79	250.00
PFUnA_1	563.0 / 519.0	3.75	13C7-PFUnA	570.0 / 525.0	107048.67	250.00
PFUnA_2	563.0 / 269.0	3.75	13C7-PFUnA	570.0 / 525.0	107048.67	250.00
PFDoA_1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	118448.67	250.00
PFDoA_2	613.0 / 319.0	4.03	13C2-PFDoA	615.0 / 570.0	118448.67	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	99158.57	250.00
PFTrDA_2	663.0 / 169.0	4.27	13C2-PFTeDA	715.0 / 670.0	99158.57	250.00
PFTeDA_1	713.0 / 669.0	4.49	13C2-PFTeDA	715.0 / 670.0	99158.57	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	99158.57	250.00
NMeFOSAA_1	570.0 / 419.0	3.59	d3-MeFOSAA	573.0 / 419.0	22442.57	250.00
NMeFOSAA_2	570.0 / 512.0	3.59	d3-MeFOSAA	573.0 / 419.0	22442.57	250.00
NEtFOSAA_1	584.0 / 419.0	3.74	d5-EtFOSAA	589.0 / 419.0	22593.32	250.00
NEtFOSAA_2	584.0 / 483.0	3.74	d5-EtFOSAA	589.0 / 419.0	22593.32	250.00

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Summary Internal Standard Report

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Sample Name	J8667-FS-D(3)	**Injection Vial**	15
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:02:37	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
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	37491.96	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	37491.96	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	73249.02	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	73249.02	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	83792.58	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	83792.58	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	23236.35	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	23236.35	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	94951.48	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	94951.48	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	94925.21	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	94925.21	250.00
PFOS_1	499.0 / 80.0	3.05	13C8-PFOS	507.0 / 99.0	25956.08	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	25956.08	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	107351.59	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	107351.59	250.00
PFUnA_1	563.0 / 519.0	3.76	13C7-PFUnA	570.0 / 525.0	104204.35	250.00
PFUnA_2	563.0 / 269.0	3.76	13C7-PFUnA	570.0 / 525.0	104204.35	250.00
PFDoA_1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	107925.53	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	107925.53	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	98455.56	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	98455.56	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	98455.56	250.00
PFTeDA_2	713.0 / 169.0	4.49	13C2-PFTeDA	715.0 / 670.0	98455.56	250.00
NMeFOSAA_1	570.0 / 419.0	3.59	d3-MeFOSAA	573.0 / 419.0	20274.85	250.00
NMeFOSAA_2	570.0 / 512.0	3.58	d3-MeFOSAA	573.0 / 419.0	20274.85	250.00
NEtFOSAA_1	584.0 / 419.0	3.75	d5-EtFOSAA	589.0 / 419.0	20945.79	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20945.79	250.00

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Summary Internal Standard Report

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Sample Name	KB80 IB	**Injection Vial**	3
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T11:52:13	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_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	106505.03	250.00
d3-MeFOSAA	573.0 / 419.0	3.60	13C4-PFOS	503.0 / 99.0	33682.77	239.25
d5-EtFOSAA	589.0 / 419.0	3.76	13C4-PFOS	503.0 / 99.0	33682.77	239.25
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	90918.23	250.00
13C4-PFHpA	367.0 / 322.0	2.28	13C2-PFOA	415.0 / 370.0	90918.23	250.00
13C8-PFOA	421.0 / 376.0	2.69	13C2-PFOA	415.0 / 370.0	90918.23	250.00
13C9-PFNA	472.0 / 427.0	3.08	13C2-PFOA	415.0 / 370.0	90918.23	250.00
13C6-PFDA	519.0 / 474.0	3.44	13C2-PFDA	515.0 / 470.0	106505.03	250.00
13C7-PFUnA	570.0 / 525.0	3.76	13C2-PFDA	515.0 / 470.0	106505.03	250.00
13C2-PFTeDA	715.0 / 670.0	4.51	13C2-PFDA	515.0 / 470.0	106505.03	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	33682.77	239.25
13C3-PFHxS	402.0 / 99.0	2.30	13C4-PFOS	503.0 / 99.0	33682.77	239.25
13C8-PFOS	507.0 / 99.0	3.08	13C4-PFOS	503.0 / 99.0	33682.77	239.25

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Summary Internal Standard Report

Sample Name	J8722-FS-D(3)	**Injection Vial**	7
Sample ID	VC-CS00-DW06-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:35:44	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.03	13C2-PFDA	515.0 / 470.0	92941.83	250.00
d3-MeFOSAA	573.0 / 419.0	3.59	13C4-PFOS	503.0 / 99.0	26906.17	239.25
d5-EtFOSAA	589.0 / 419.0	3.75	13C4-PFOS	503.0 / 99.0	26906.17	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	86553.69	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	86553.69	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	86553.69	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	86553.69	250.00
13C6-PFDA	519.0 / 474.0	3.43	13C2-PFDA	515.0 / 470.0	92941.83	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	92941.83	250.00
13C2-PFTeDA	715.0 / 670.0	4.50	13C2-PFDA	515.0 / 470.0	92941.83	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	26906.17	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	26906.17	239.25
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	26906.17	239.25

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Summary Internal Standard Report

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Sample Name	J8720-FS-D(7)	**Injection Vial**	8
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:46:35	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.03	13C2-PFDA	515.0 / 470.0	97310.66	250.00
d3-MeFOSAA	573.0 / 419.0	3.59	13C4-PFOS	503.0 / 99.0	26709.36	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	26709.36	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	88536.92	250.00
13C4-PFHpA	367.0 / 322.0	2.27	13C2-PFOA	415.0 / 370.0	88536.92	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	88536.92	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	88536.92	250.00
13C6-PFDA	519.0 / 474.0	3.43	13C2-PFDA	515.0 / 470.0	97310.66	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	97310.66	250.00
13C2-PFTeDA	715.0 / 670.0	4.49	13C2-PFDA	515.0 / 470.0	97310.66	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	26709.36	239.25
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	26709.36	239.25
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	26709.36	239.25

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Summary Internal Standard Report

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Sample Name	J8716-FS-D(5)	**Injection Vial**	9
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:57:26	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.03	13C2-PFDA	515.0 / 470.0	103742.12	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	30732.99	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	30732.99	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	97807.22	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	97807.22	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	97807.22	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	97807.22	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	103742.12	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	103742.12	250.00
13C2-PFTeDA	715.0 / 670.0	4.49	13C2-PFDA	515.0 / 470.0	103742.12	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	30732.99	239.25
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	30732.99	239.25
13C8-PFOS	507.0 / 99.0	3.07	13C4-PFOS	503.0 / 99.0	30732.99	239.25

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Summary Internal Standard Report

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Sample Name	J8688-FS-D(3)	**Injection Vial**	10
Sample ID	VC-CS18-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:08:19	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	82563.53	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	30126.32	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	30126.32	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	83158.33	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	83158.33	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	83158.33	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	83158.33	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	82563.53	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	82563.53	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	82563.53	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	30126.32	239.25
13C3-PFHxS	402.0 / 99.0	2.29	13C4-PFOS	503.0 / 99.0	30126.32	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	30126.32	239.25

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Summary Internal Standard Report

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Sample Name	J8687-FS-D(7)	**Injection Vial**	11
Sample ID	VC-CS10-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:19:10	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	93789.59	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	26791.93	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	26791.93	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	80854.27	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	80854.27	250.00
13C8-PFOA	421.0 / 376.0	2.68	13C2-PFOA	415.0 / 370.0	80854.27	250.00
13C9-PFNA	472.0 / 427.0	3.07	13C2-PFOA	415.0 / 370.0	80854.27	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	93789.59	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	93789.59	250.00
13C2-PFTeDA	715.0 / 670.0	4.49	13C2-PFDA	515.0 / 470.0	93789.59	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	26791.93	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	26791.93	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	26791.93	239.25

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Summary Internal Standard Report

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Sample Name	CR987LCS-FS(0)	**Injection Vial**	14
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:51:45	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	101162.79	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	27694.51	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	27694.51	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	86265.82	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	86265.82	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	86265.82	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	86265.82	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	101162.79	250.00
13C7-PFUnA	570.0 / 525.0	3.73	13C2-PFDA	515.0 / 470.0	101162.79	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	101162.79	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	27694.51	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	27694.51	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	27694.51	239.25

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Summary Internal Standard Report

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Sample Name	J8667-FS-D(3)	**Injection Vial**	15
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:02:37	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C2-PFDoA	615.0 / 570.0	4.02	13C2-PFDA	515.0 / 470.0	107203.42	250.00
d3-MeFOSAA	573.0 / 419.0	3.58	13C4-PFOS	503.0 / 99.0	29273.96	239.25
d5-EtFOSAA	589.0 / 419.0	3.74	13C4-PFOS	503.0 / 99.0	29273.96	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	90421.57	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	90421.57	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	90421.57	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	90421.57	250.00
13C6-PFDA	519.0 / 474.0	3.42	13C2-PFDA	515.0 / 470.0	107203.42	250.00
13C7-PFUnA	570.0 / 525.0	3.74	13C2-PFDA	515.0 / 470.0	107203.42	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	107203.42	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	29273.96	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	29273.96	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	29273.96	239.25

Chromatograms

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Chromatogram Report

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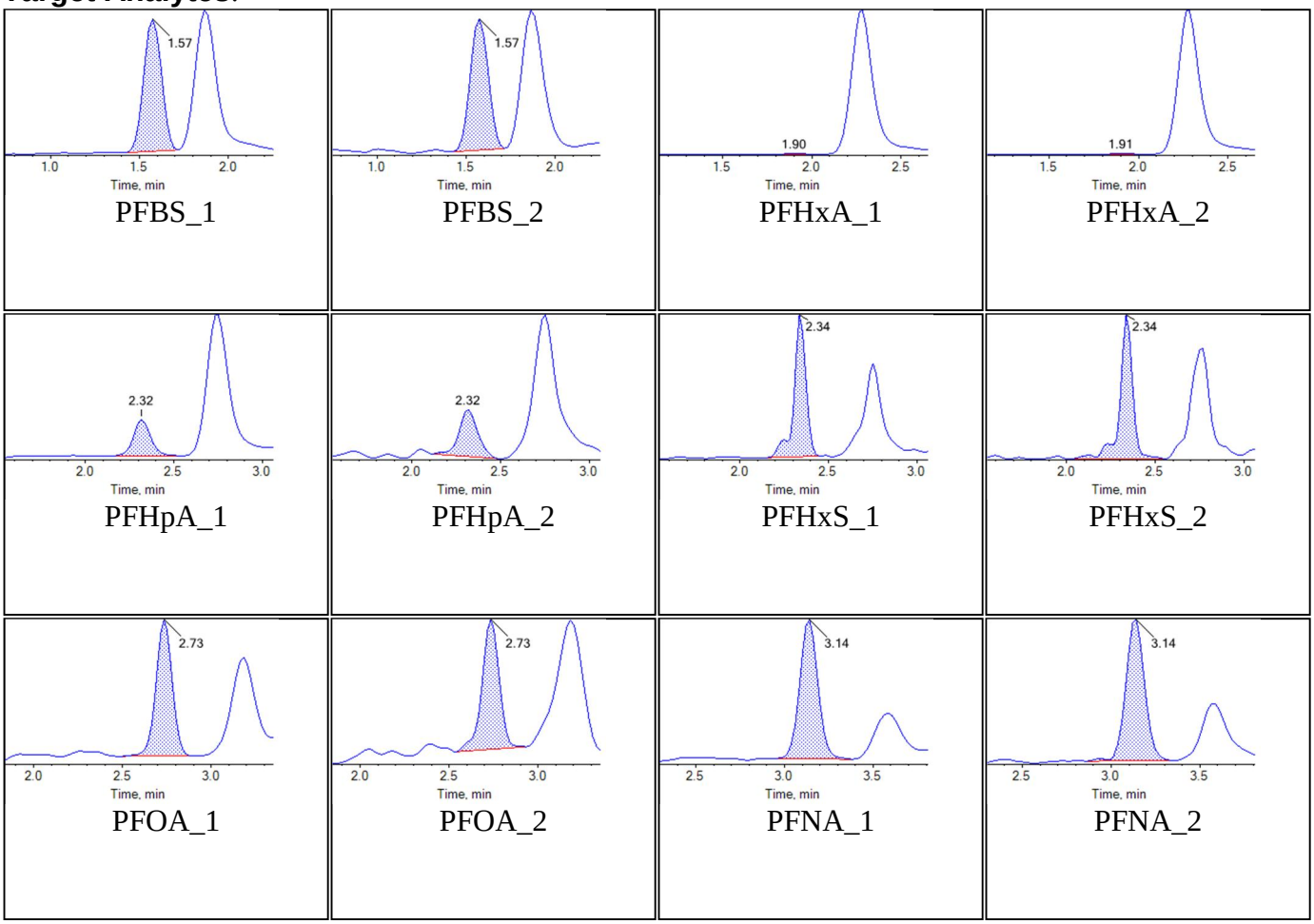
Sample Name	KB73	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T19:46:52	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

Target Analytes:



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Chromatogram Report

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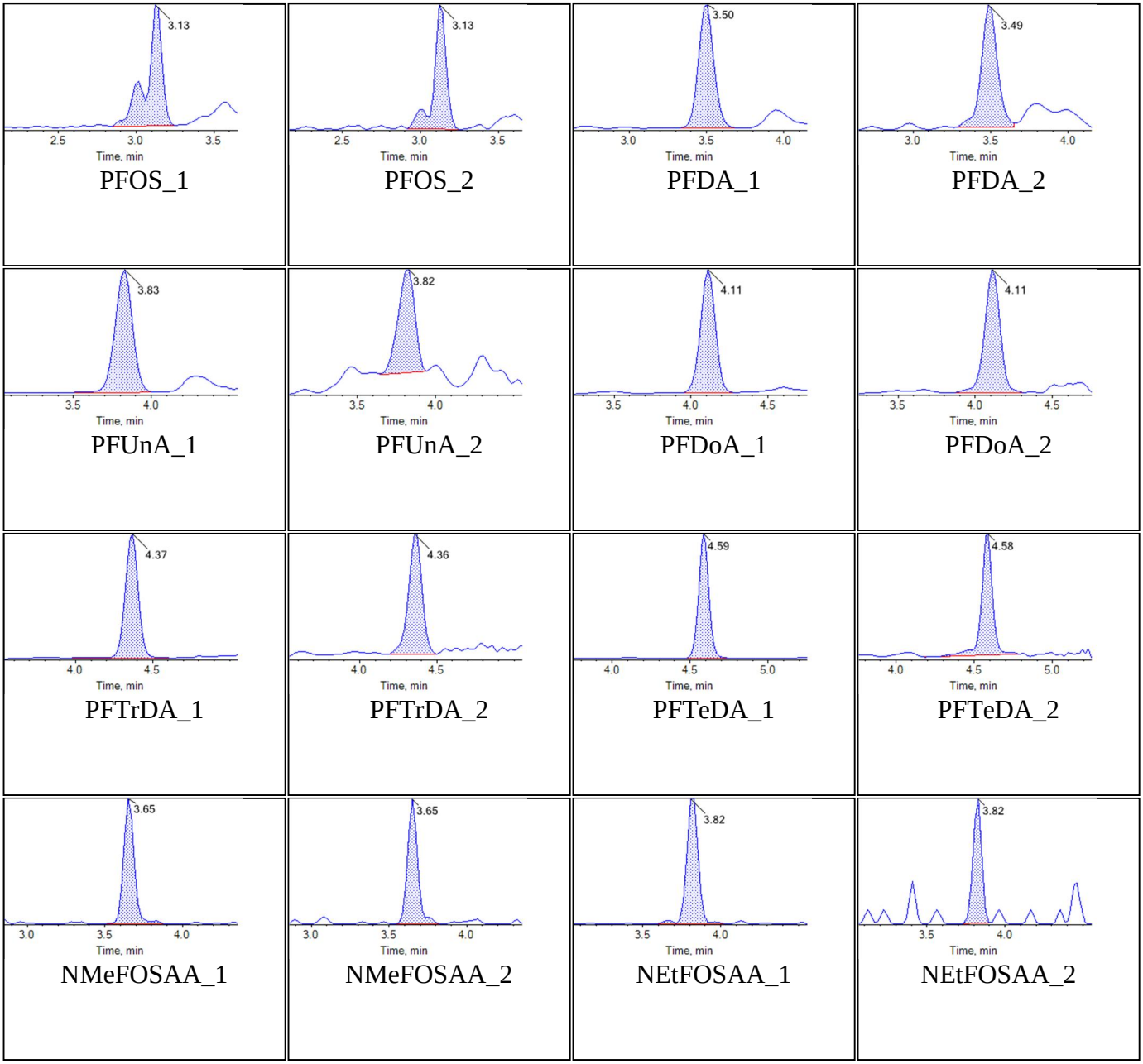

Internal Standards:

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Chromatogram Report

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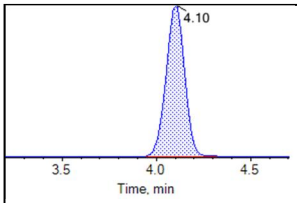
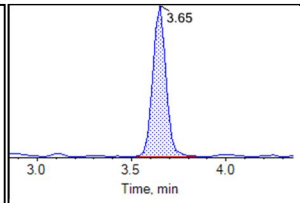


13C2-PFDoA



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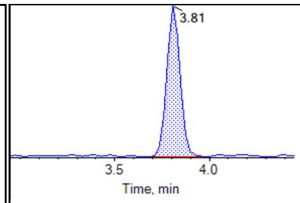

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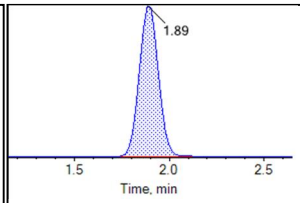

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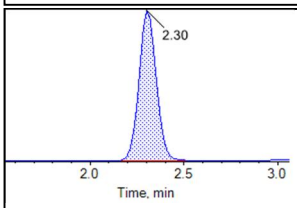

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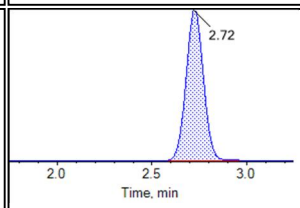

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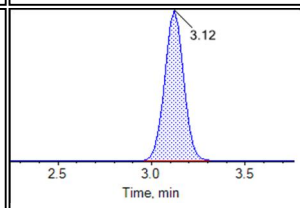
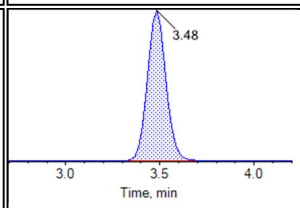
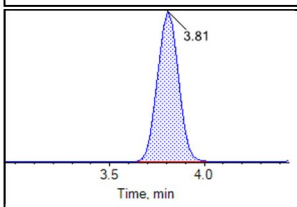


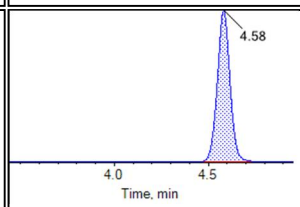
13C9-PFNA



13C6-PFDA



13C7-PFUnA



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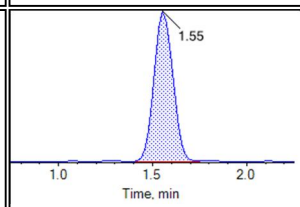
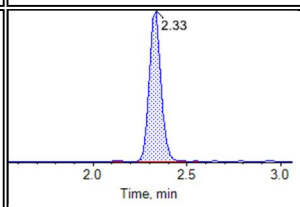
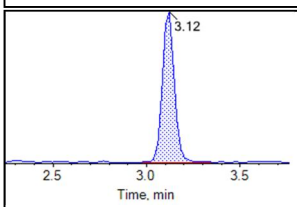


13C3-PFBS



13C3-PFHxS



13C8-PFOS

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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	2018-10-17T19:57:45	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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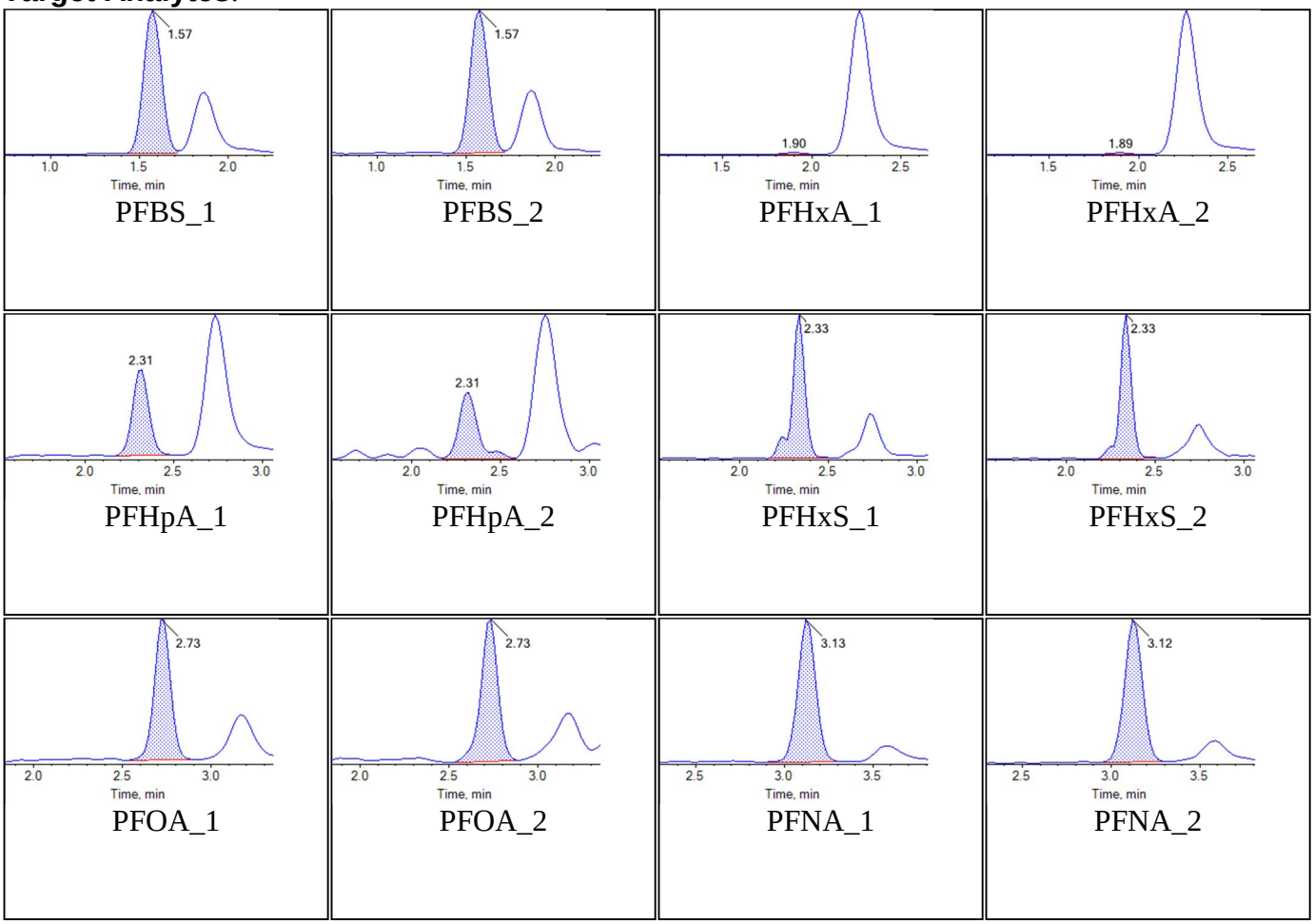

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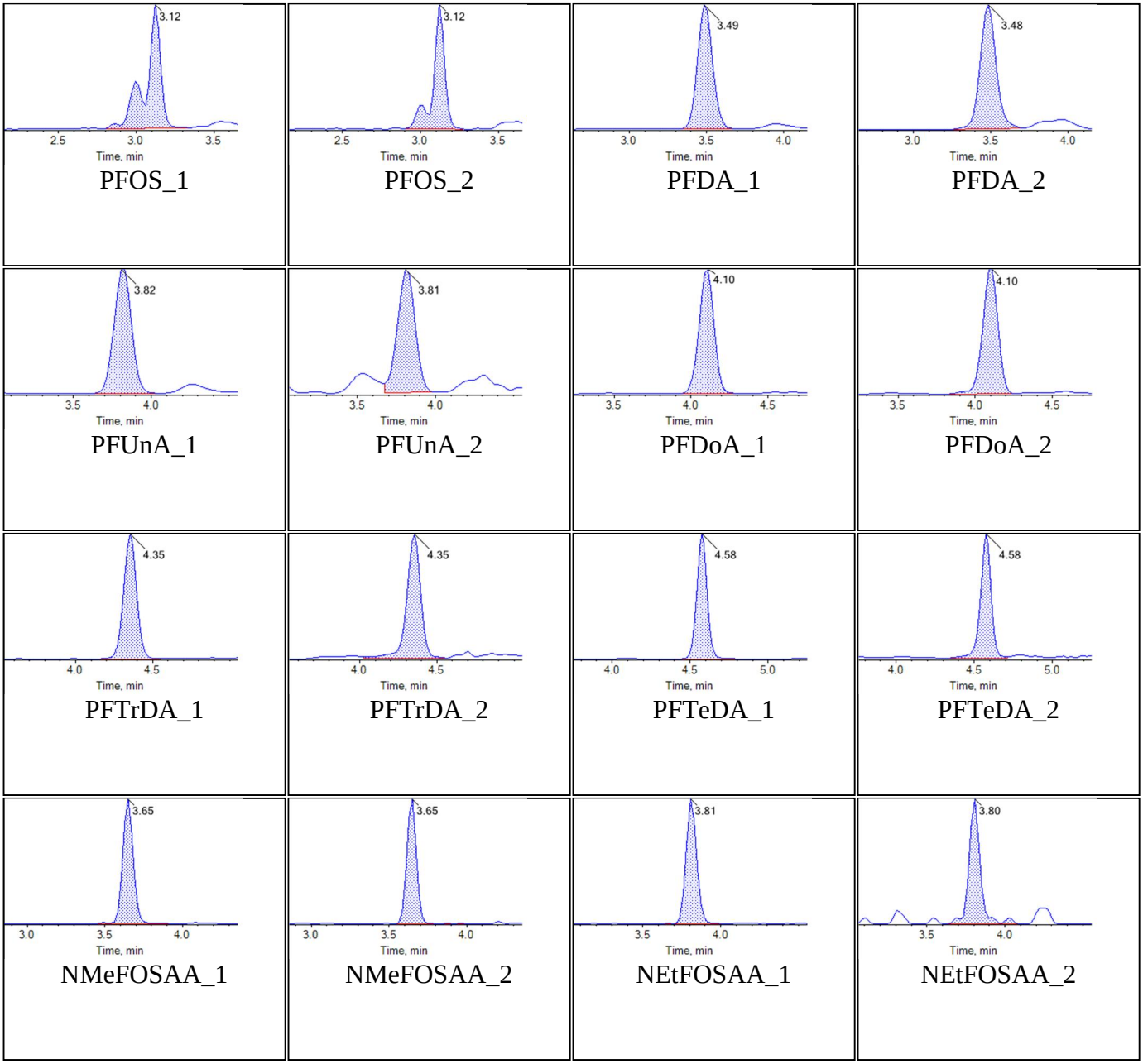
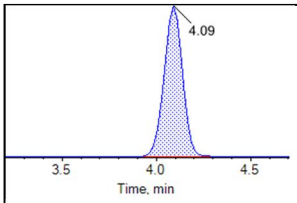


Internal Standards:

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:41:48 AM



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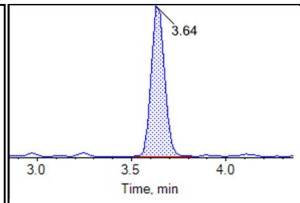

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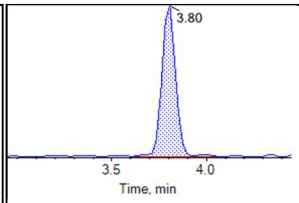
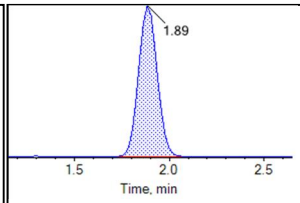


d5-EtFOSAA



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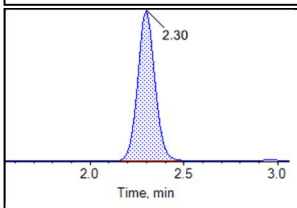

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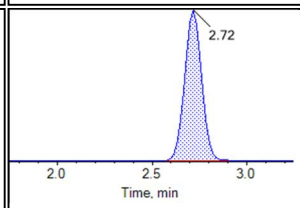

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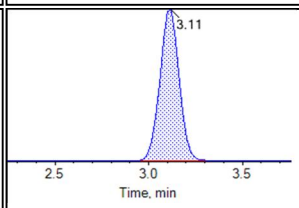
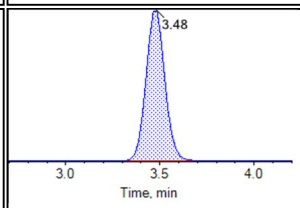
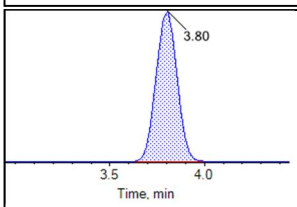


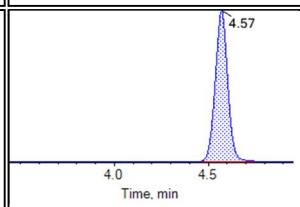
13C9-PFNA



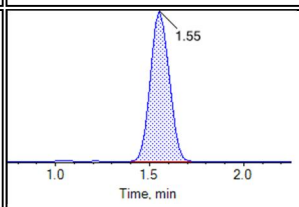
13C6-PFDA



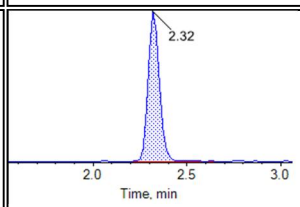
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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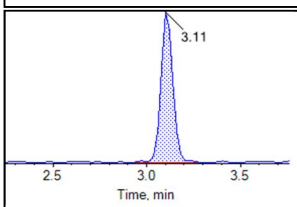

13C8-PFOS

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Chromatogram Report

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Printed: 01/11/2018 8:41:54 AM

Sample Name	KB75	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T20:08:39	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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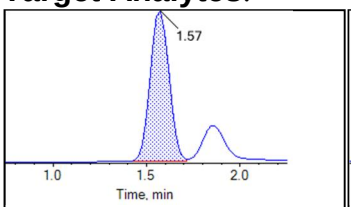

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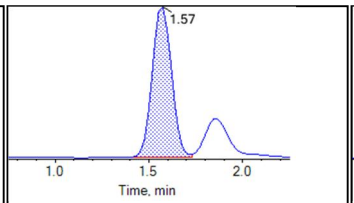

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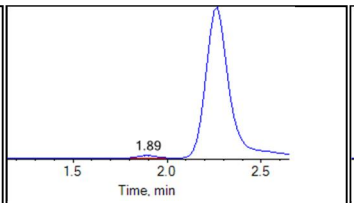

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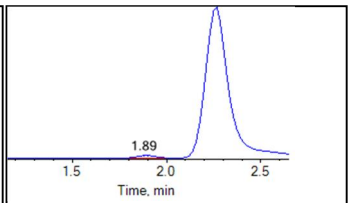

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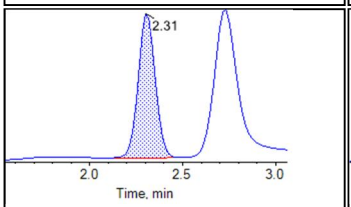
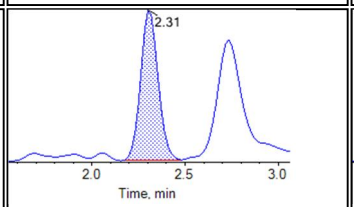
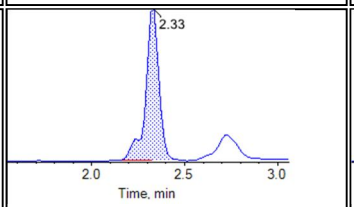


PFHpA_1



PFHpA_2



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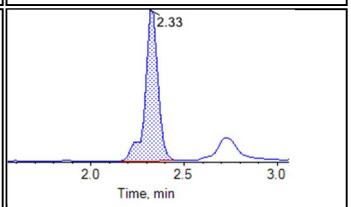
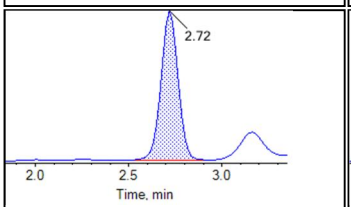


PFHxS_2



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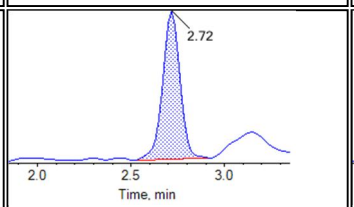

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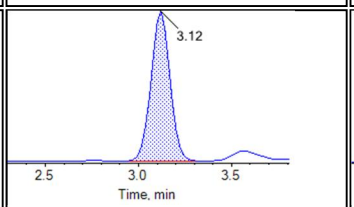

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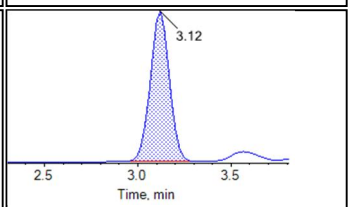

PFNA_2

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Chromatogram Report

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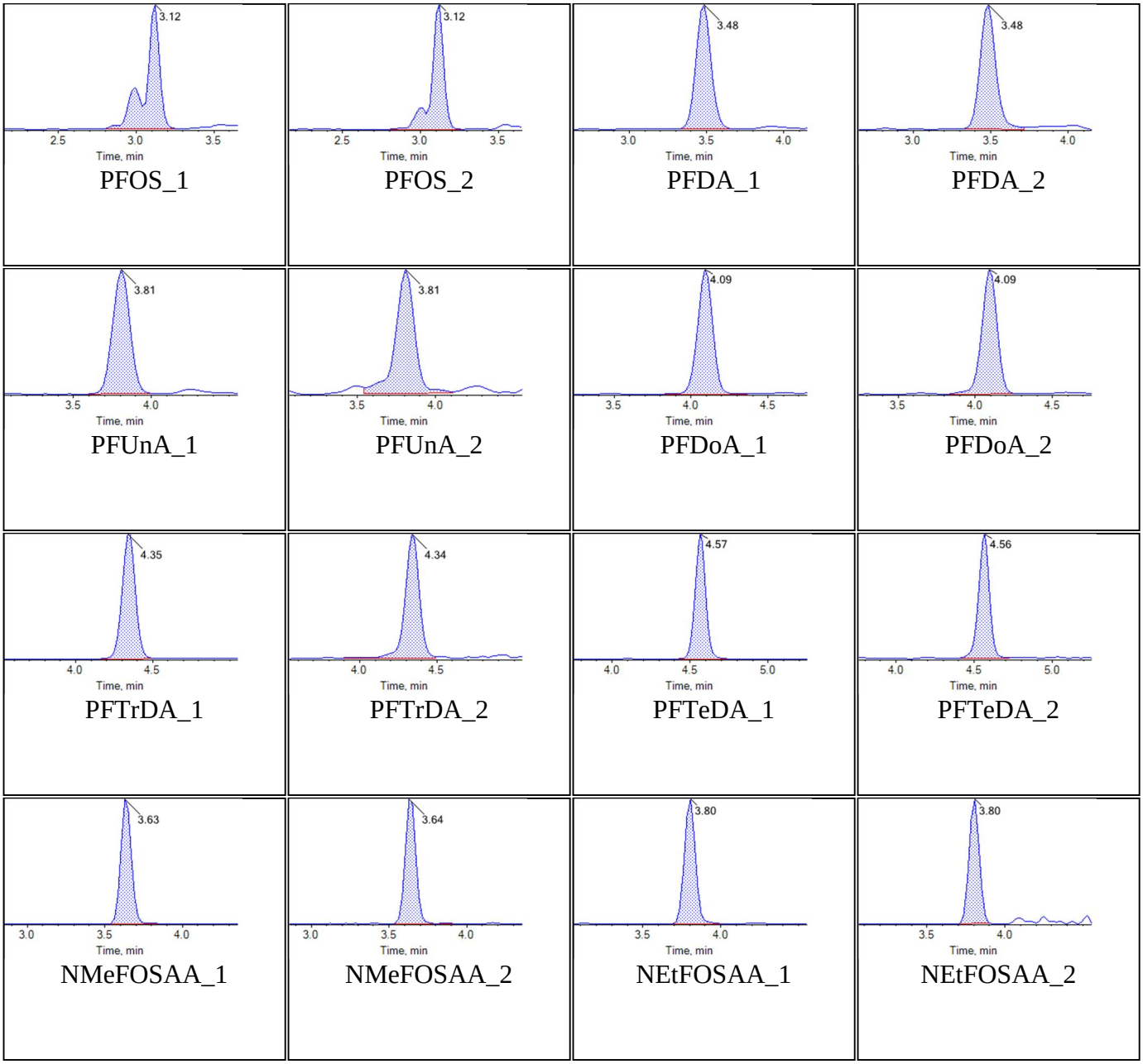

Internal Standards:

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Chromatogram Report

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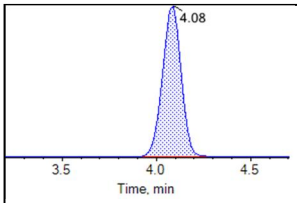

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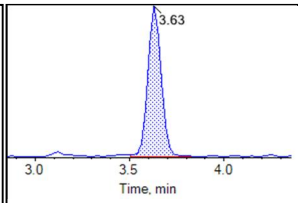
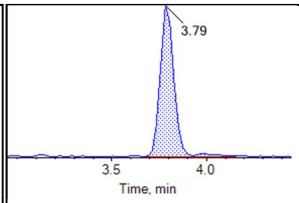
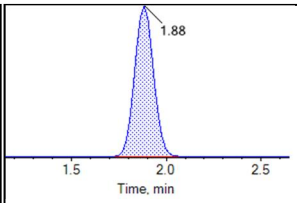


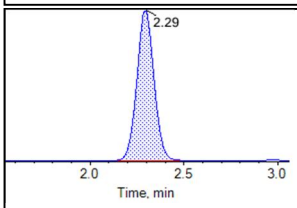
d3-MeFOSAA



d5-EtFOSAA



13C5-PFHxA



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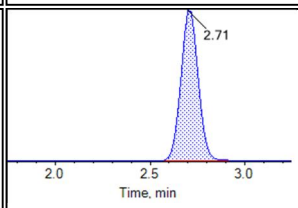

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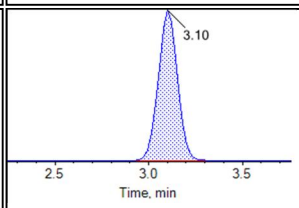
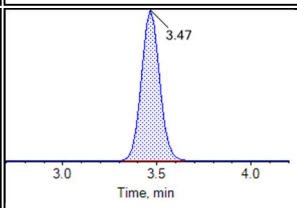


13C9-PFNA



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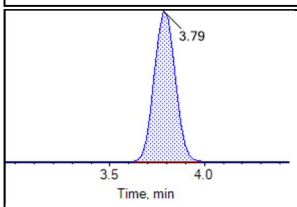

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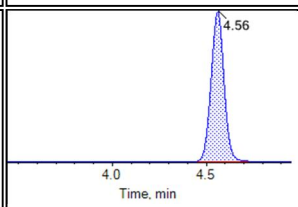
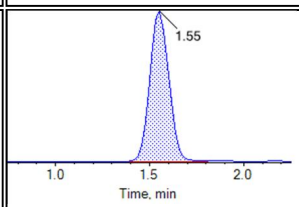
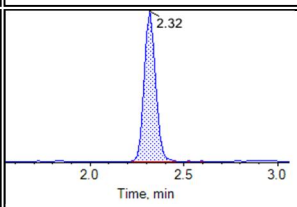


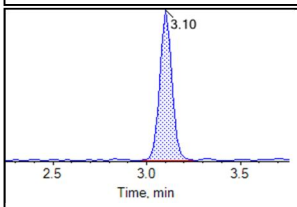
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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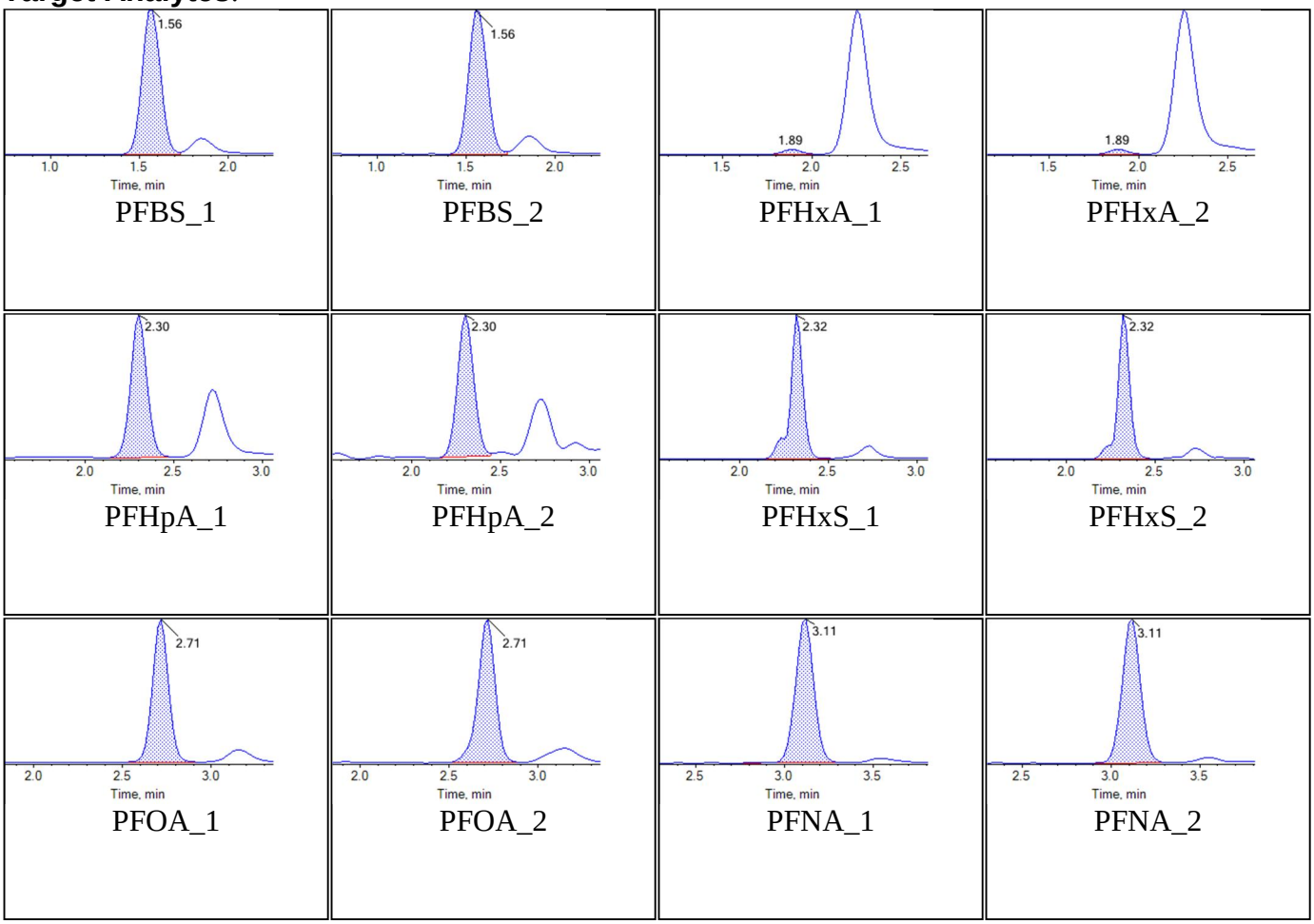
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:42:00 AM

Sample Name	KB76	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T20:19:32	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

Target Analytes:



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Chromatogram Report

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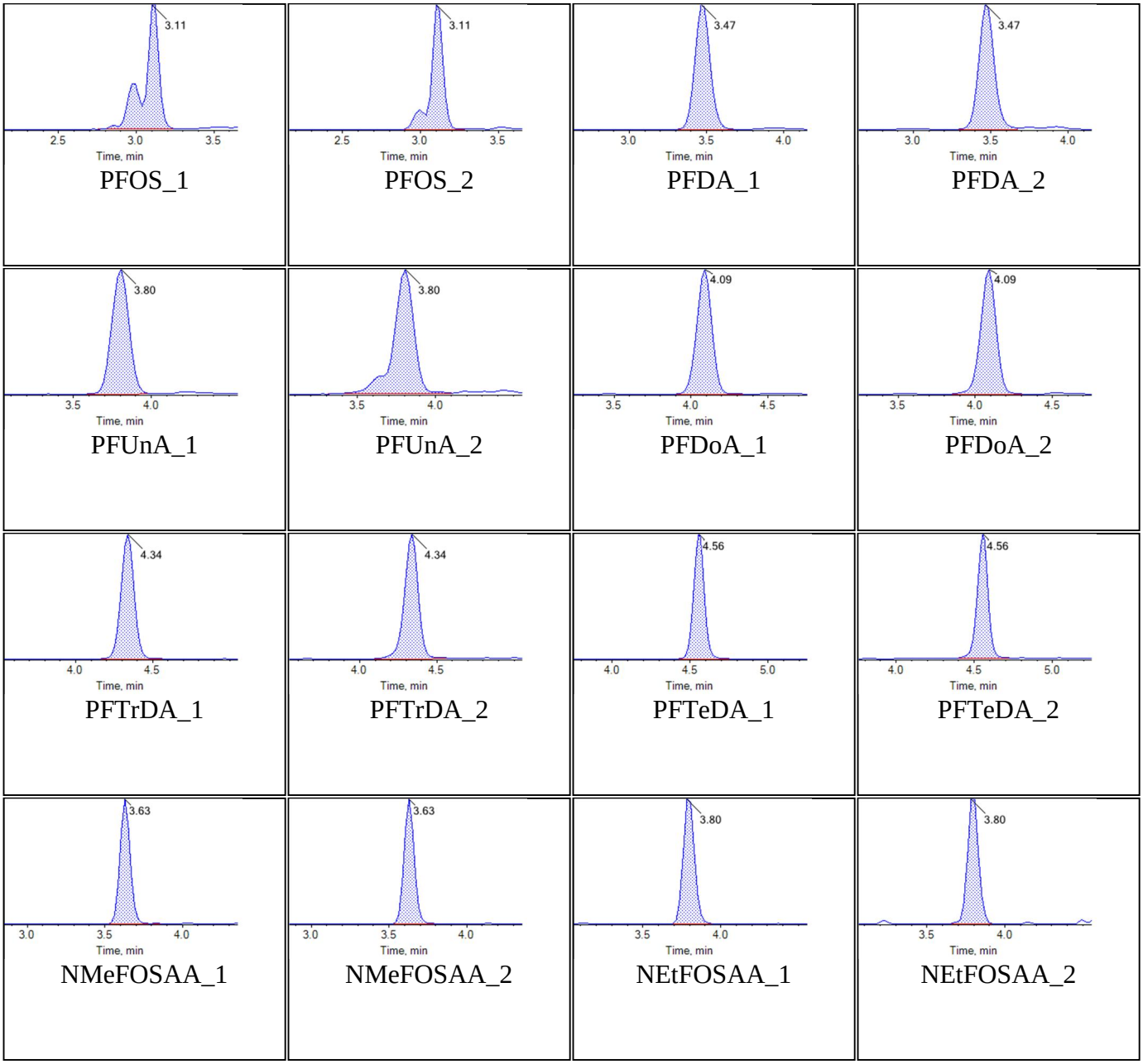
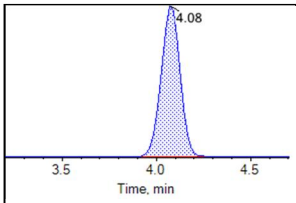


Internal Standards:

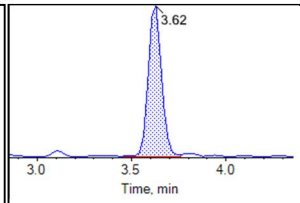
BATTELLE

Chromatogram Report

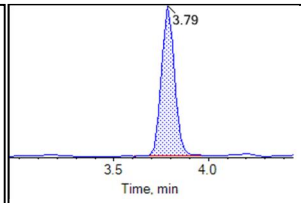
Created with Analyst Reporter
Printed: 01/11/2018 8:42:00 AM



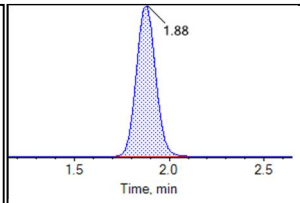
13C2-PFDoA



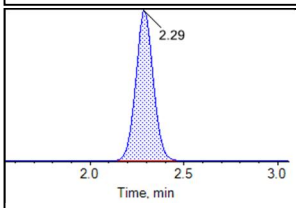
d3-MeFOSAA



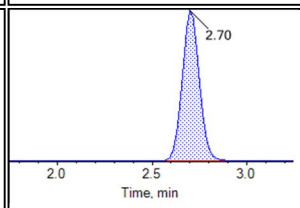
d5-EtFOSAA



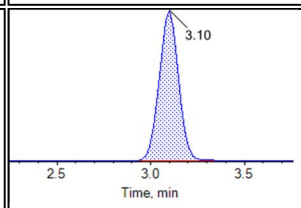
13C5-PFHxA



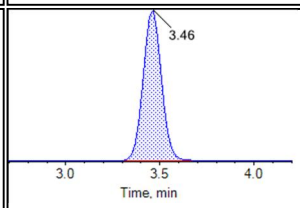
13C4-PFHpA



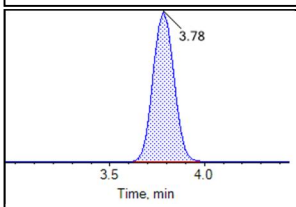
13C8-PFOA



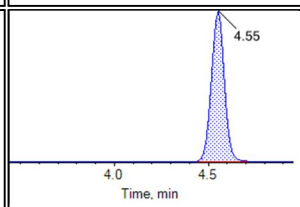
13C9-PFNA



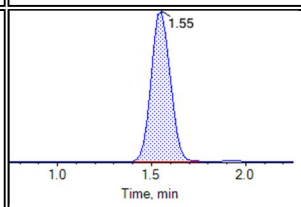
13C6-PFDA



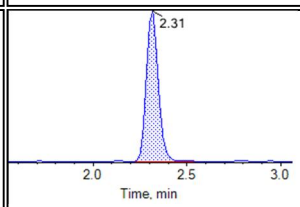
13C7-PFUnA



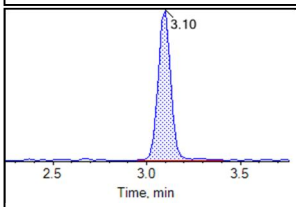
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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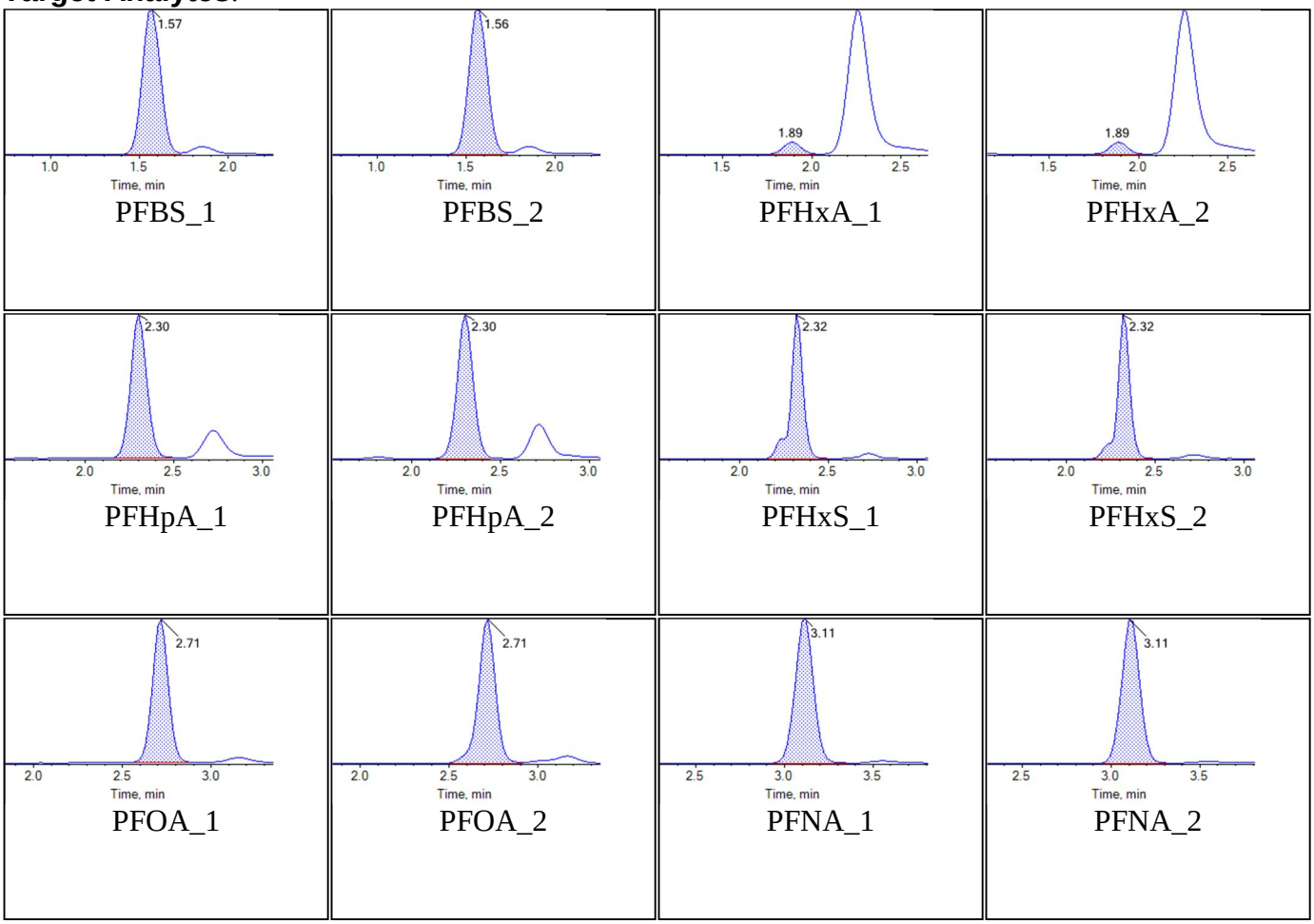
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:42:06 AM

Sample Name	KB77	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T20:30:23	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

Target Analytes:



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Chromatogram Report

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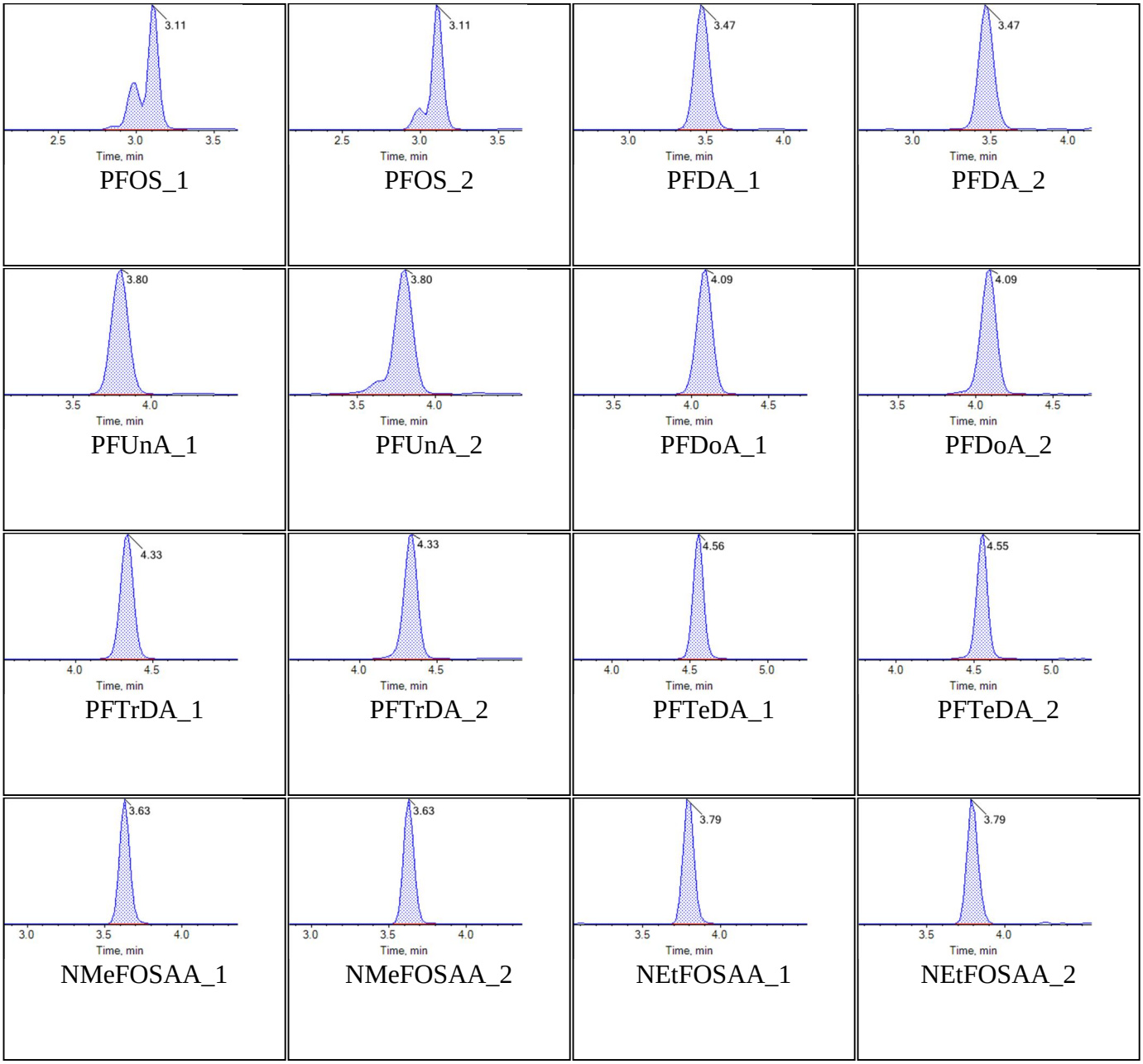
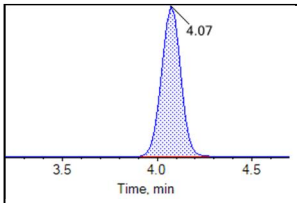


Internal Standards:

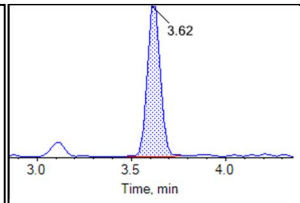
BATTELLE

Chromatogram Report

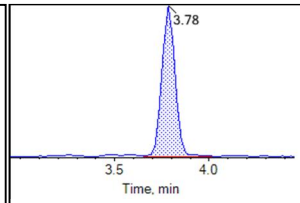
Created with Analyst Reporter
Printed: 01/11/2018 8:42:06 AM



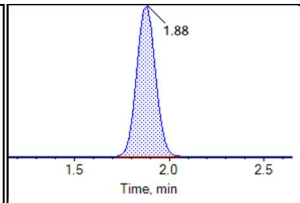
13C2-PFDoA



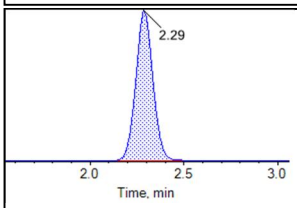
d3-MeFOSAA



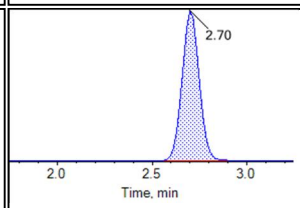
d5-EtFOSAA



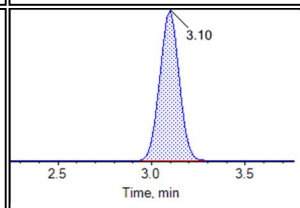
13C5-PFHxA



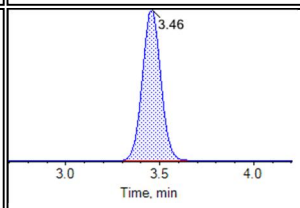
13C4-PFHpA



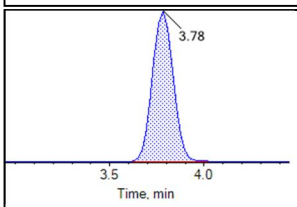
13C8-PFOA



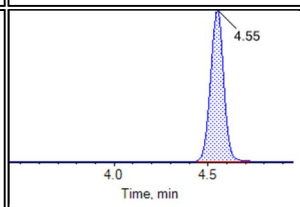
13C9-PFNA



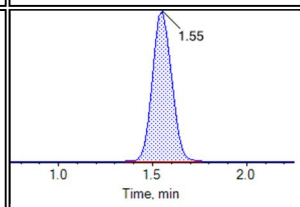
13C6-PFDA



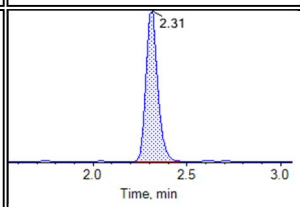
13C7-PFUnA



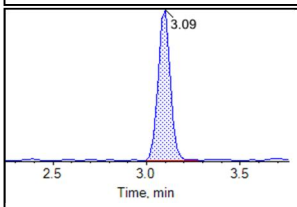
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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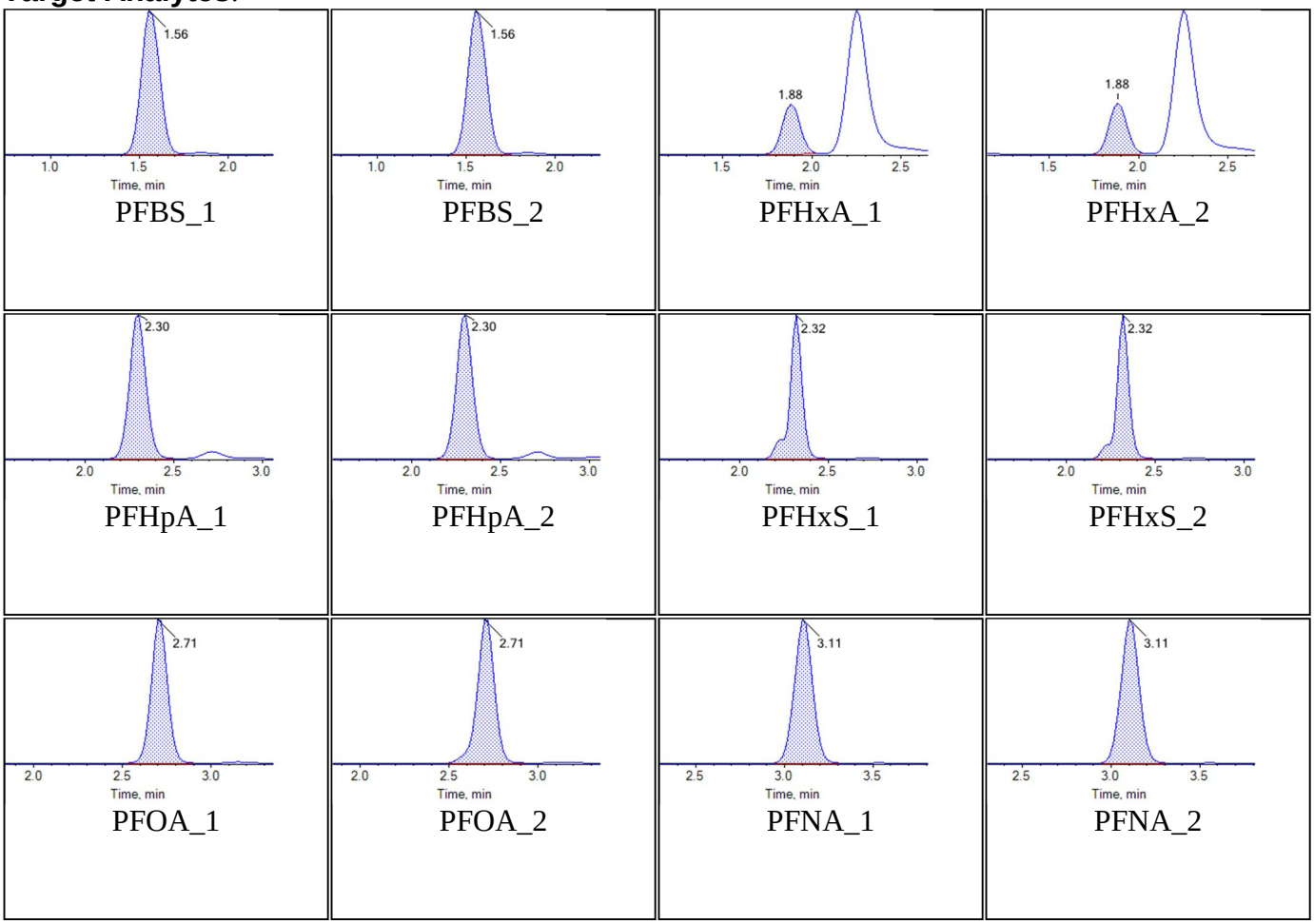
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:42:12 AM

Sample Name	KB78	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T20:41:14	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

Target Analytes:



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Chromatogram Report

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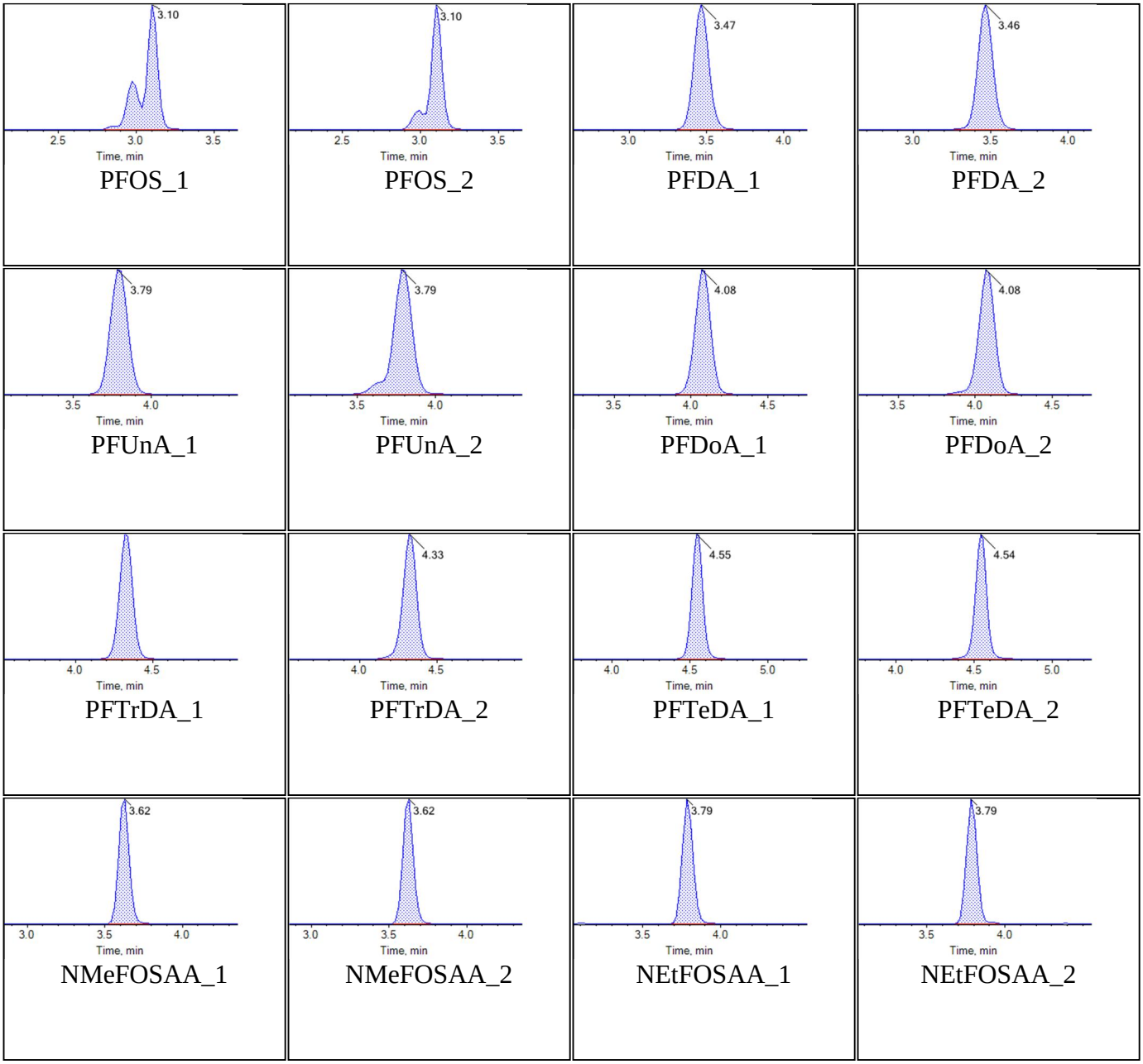

Internal Standards:

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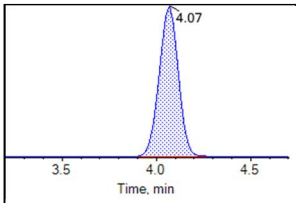
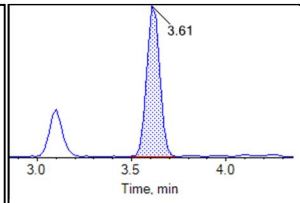
Chromatogram Report

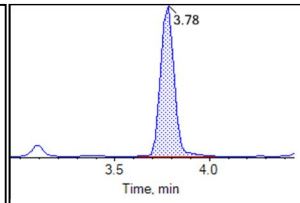
Created with Analyst Reporter
Printed: 01/11/2018 8:42:12 AM



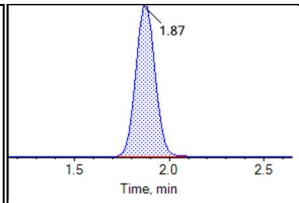
13C2-PFDoA



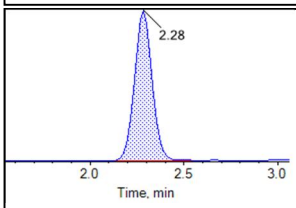
d3-MeFOSAA



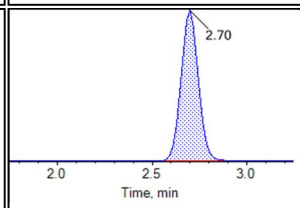
d5-EtFOSAA



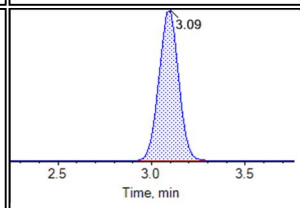
13C5-PFHxA



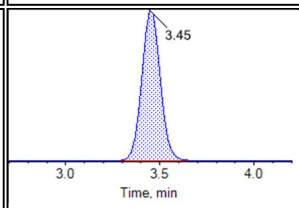
13C4-PFHpA



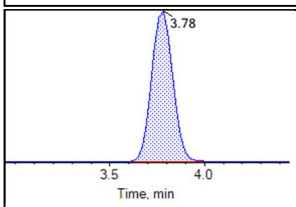
13C8-PFOA



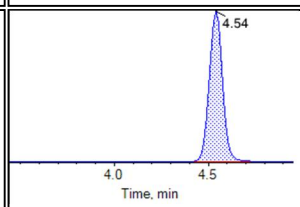
13C9-PFNA



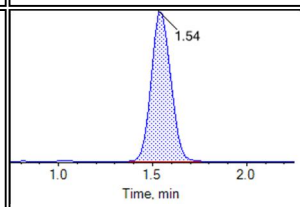
13C6-PFDA



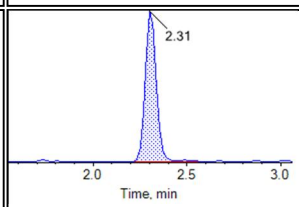
13C7-PFUnA



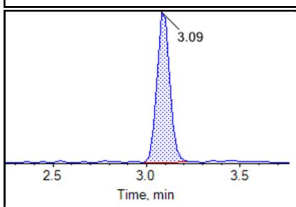
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

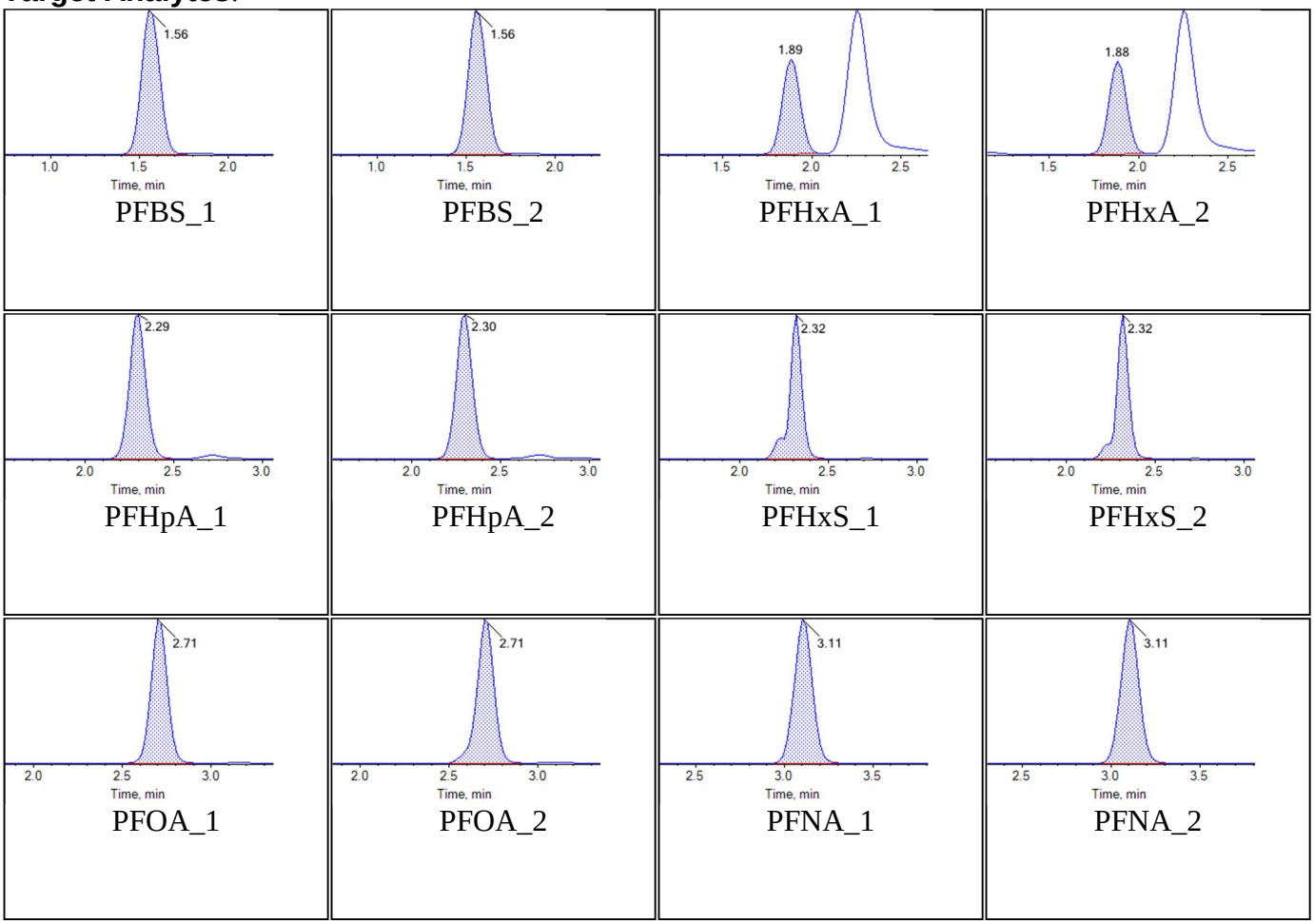
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:42:18 AM

Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T20:52:06	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

Target Analytes:



BATTELLE

Chromatogram Report

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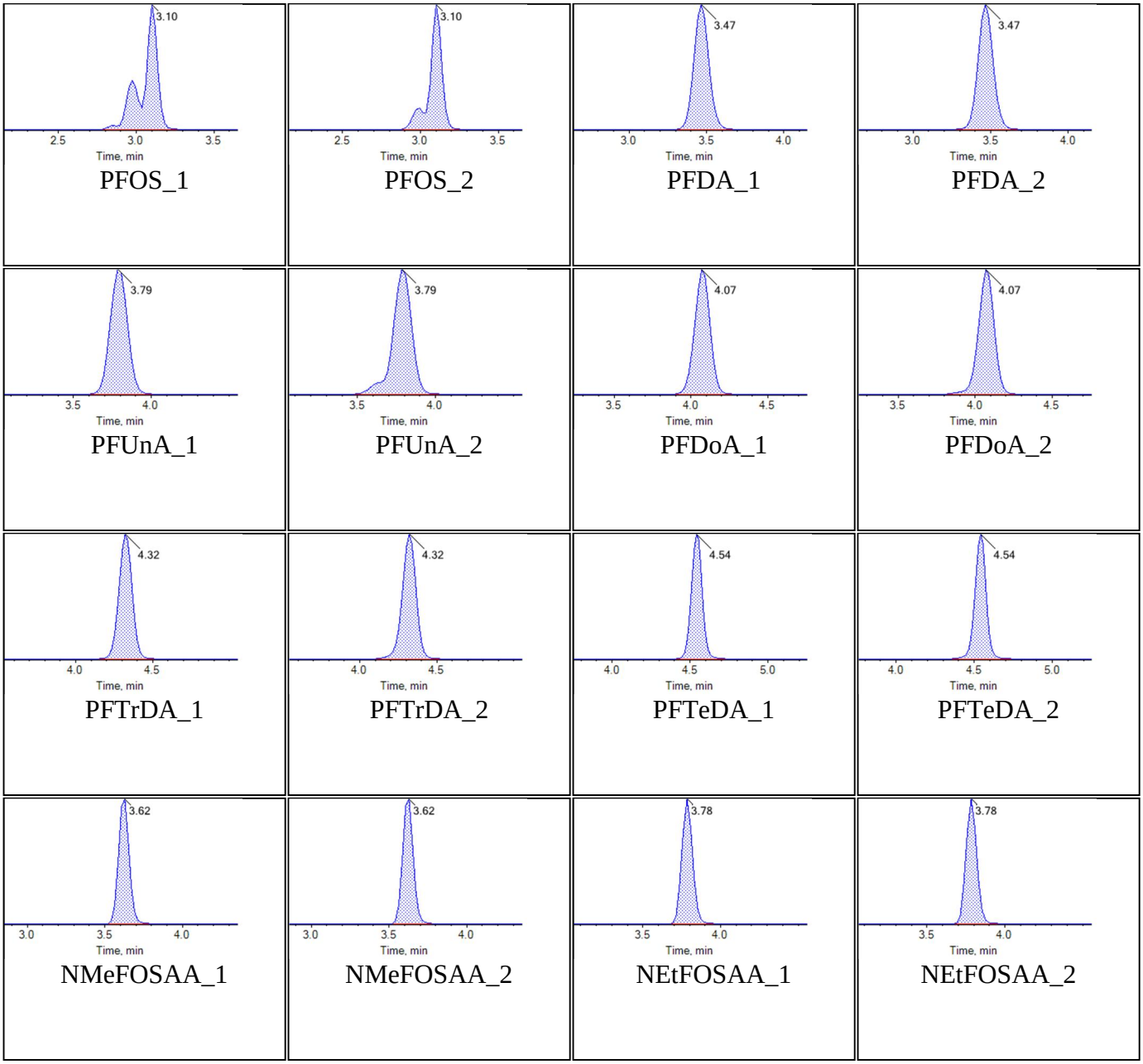
Printed: 01/11/2018 8:42:18 AM



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Chromatogram Report

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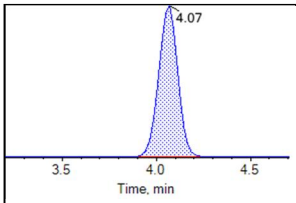

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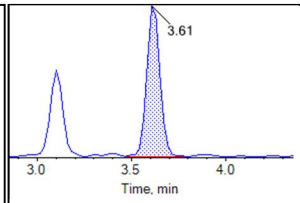

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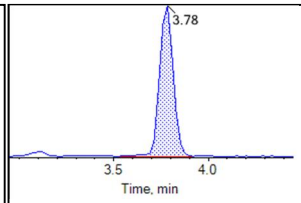

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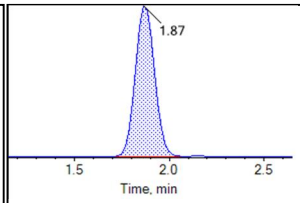

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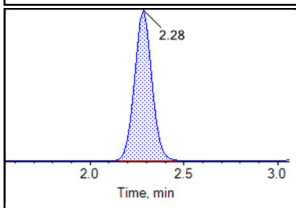

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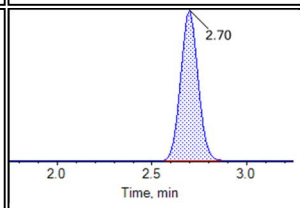

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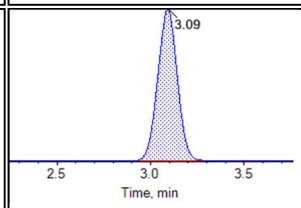

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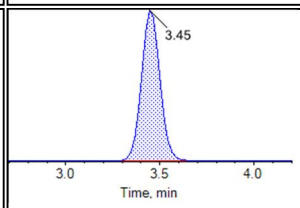

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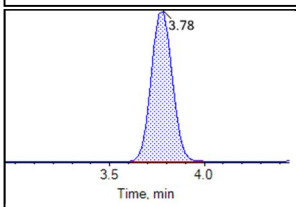

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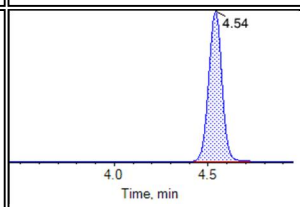

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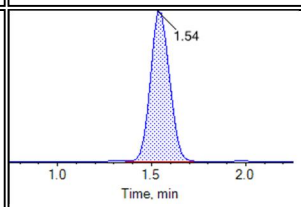
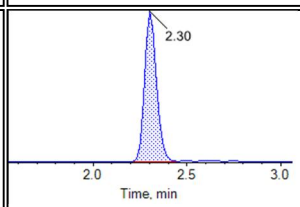


13C3-PFBS



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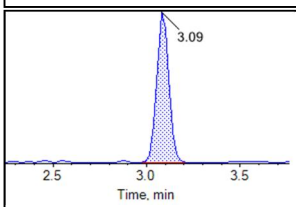

13C8-PFOS

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Chromatogram Report

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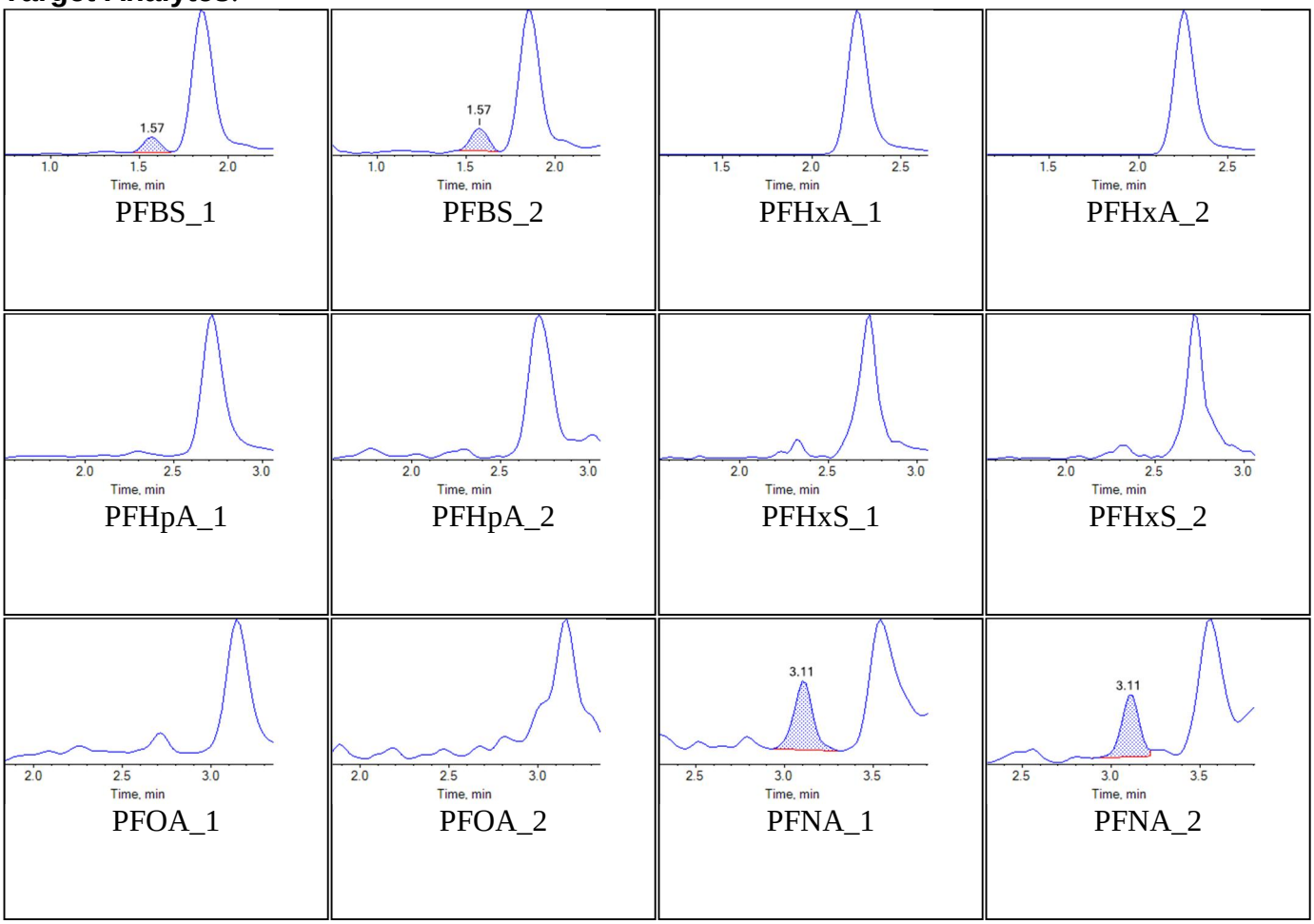
Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:02:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

Target Analytes:



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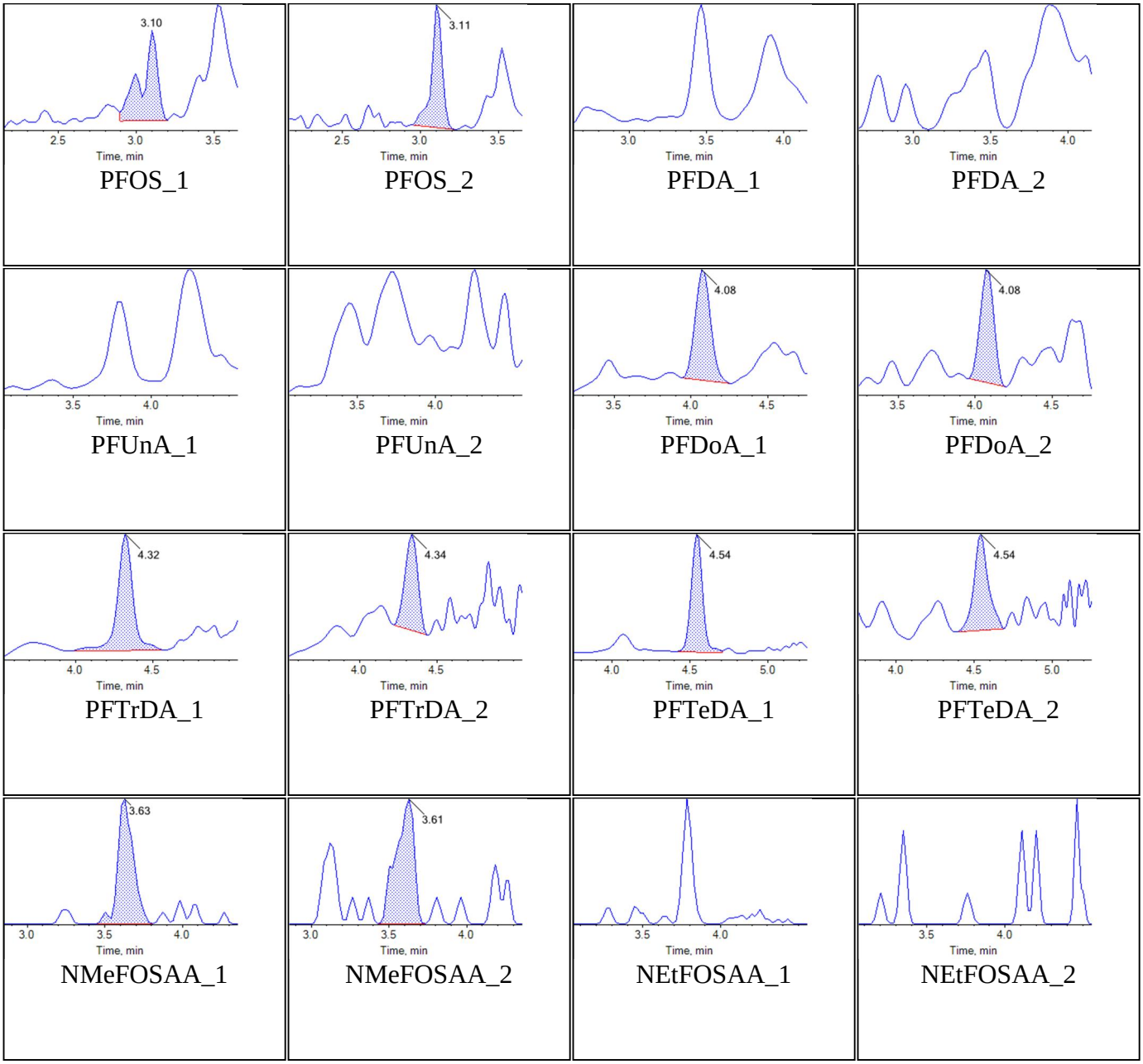

Internal Standards:

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Chromatogram Report

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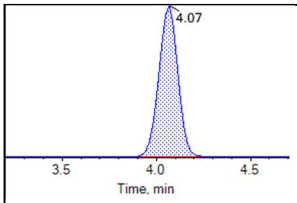

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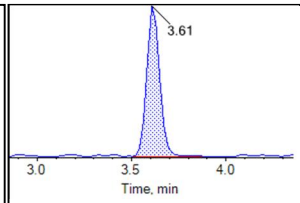

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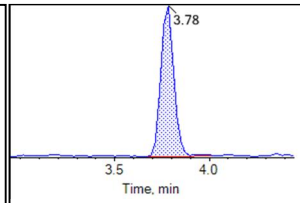

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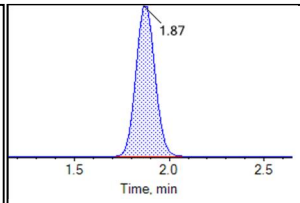

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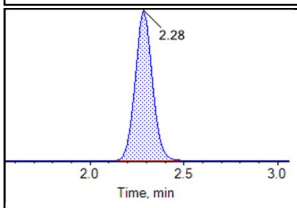

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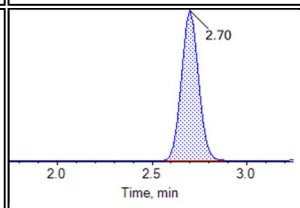

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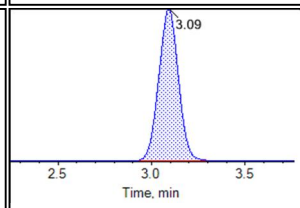

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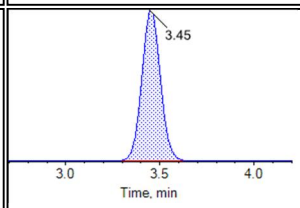

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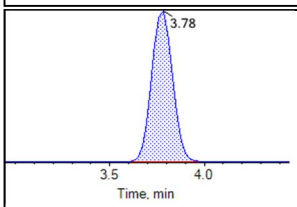

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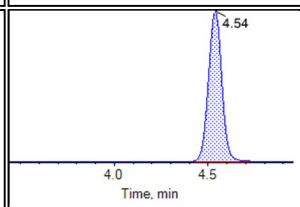

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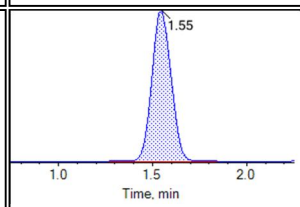

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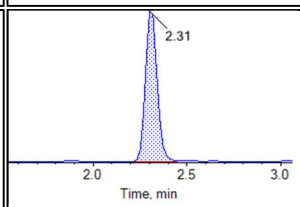

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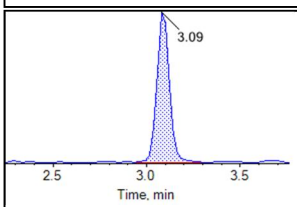

13C8-PFOS

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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	2018-10-17T21:13:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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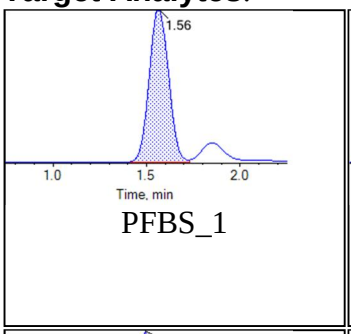

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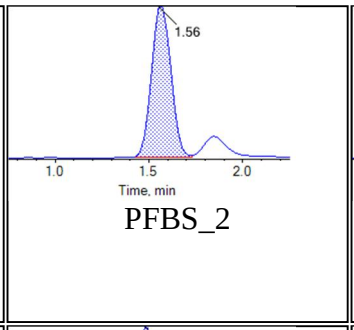

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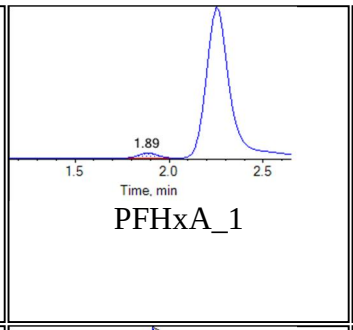

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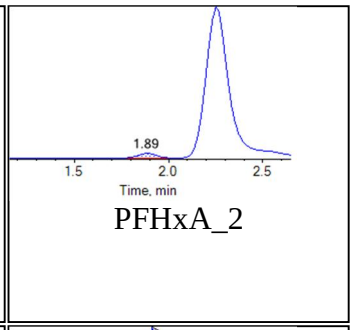

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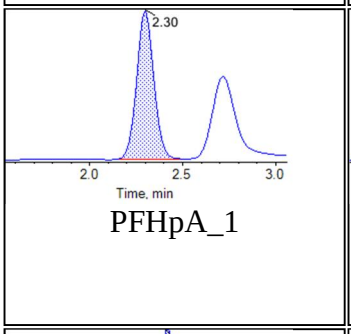

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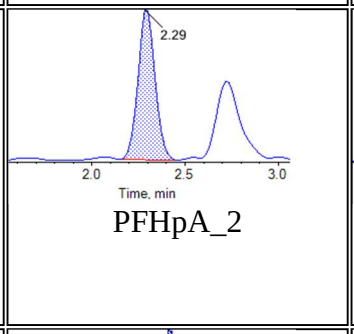

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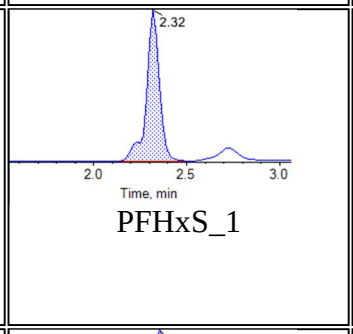

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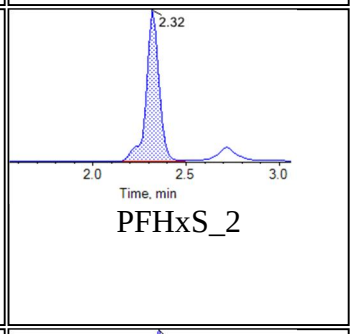

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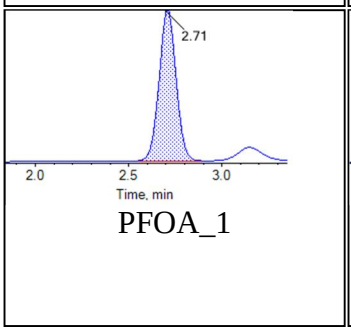

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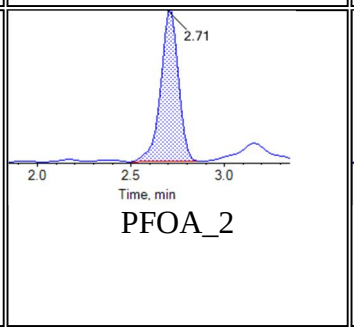

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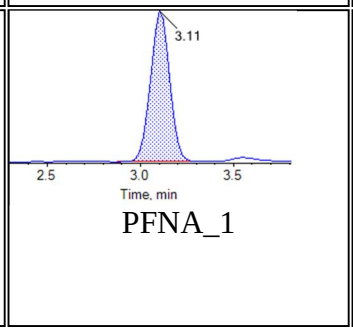

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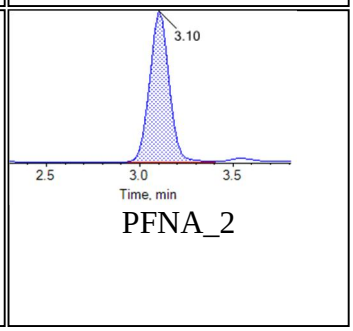

PFNA_2

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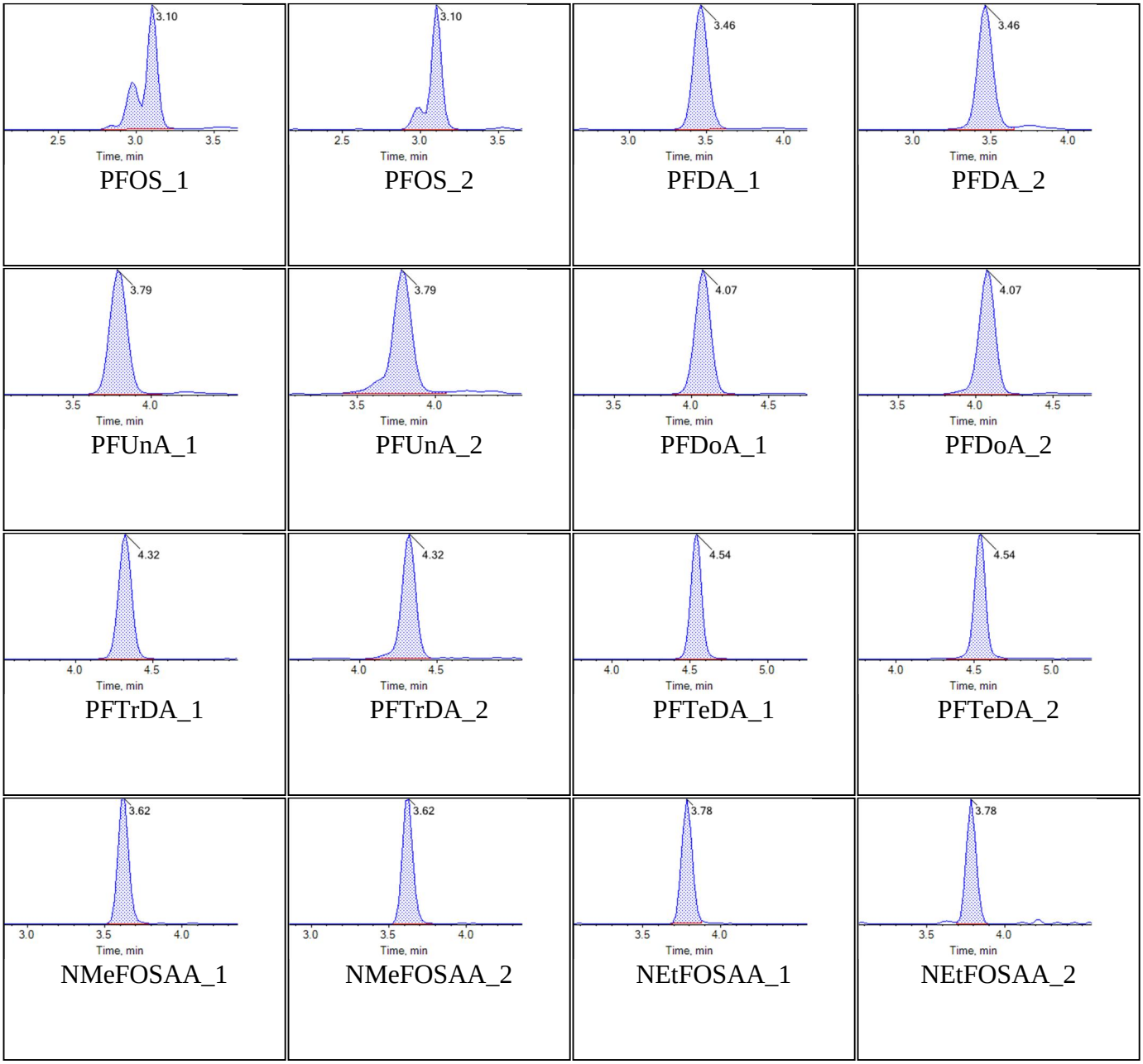

Internal Standards:

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Chromatogram Report

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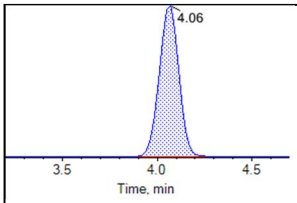

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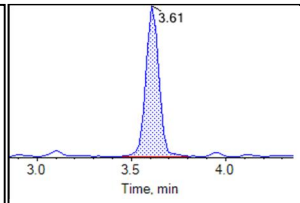

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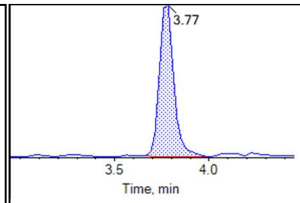
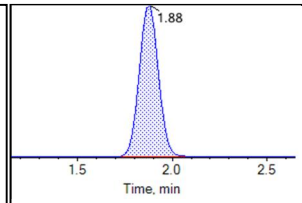


d5-EtFOSAA



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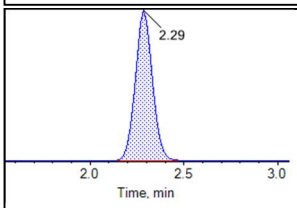

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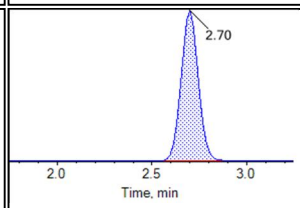

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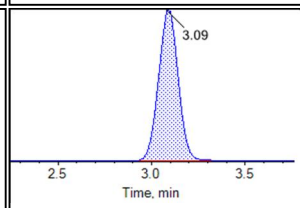

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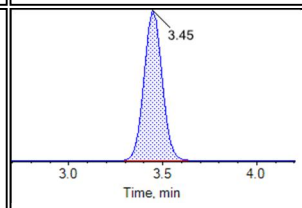

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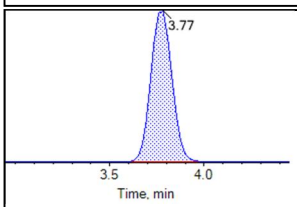

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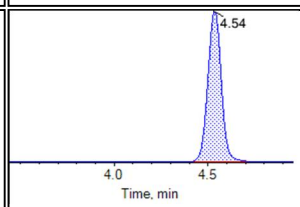
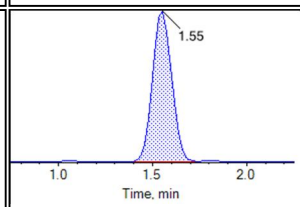
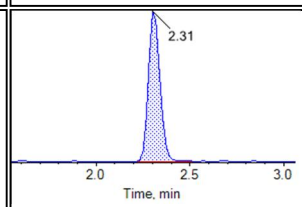


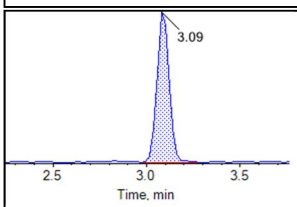
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

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Printed: 01/11/2018 8:42:42 AM

Sample Name	KB75 ISC	**Injection Vial**	1
Sample ID	ISC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T16:26:43	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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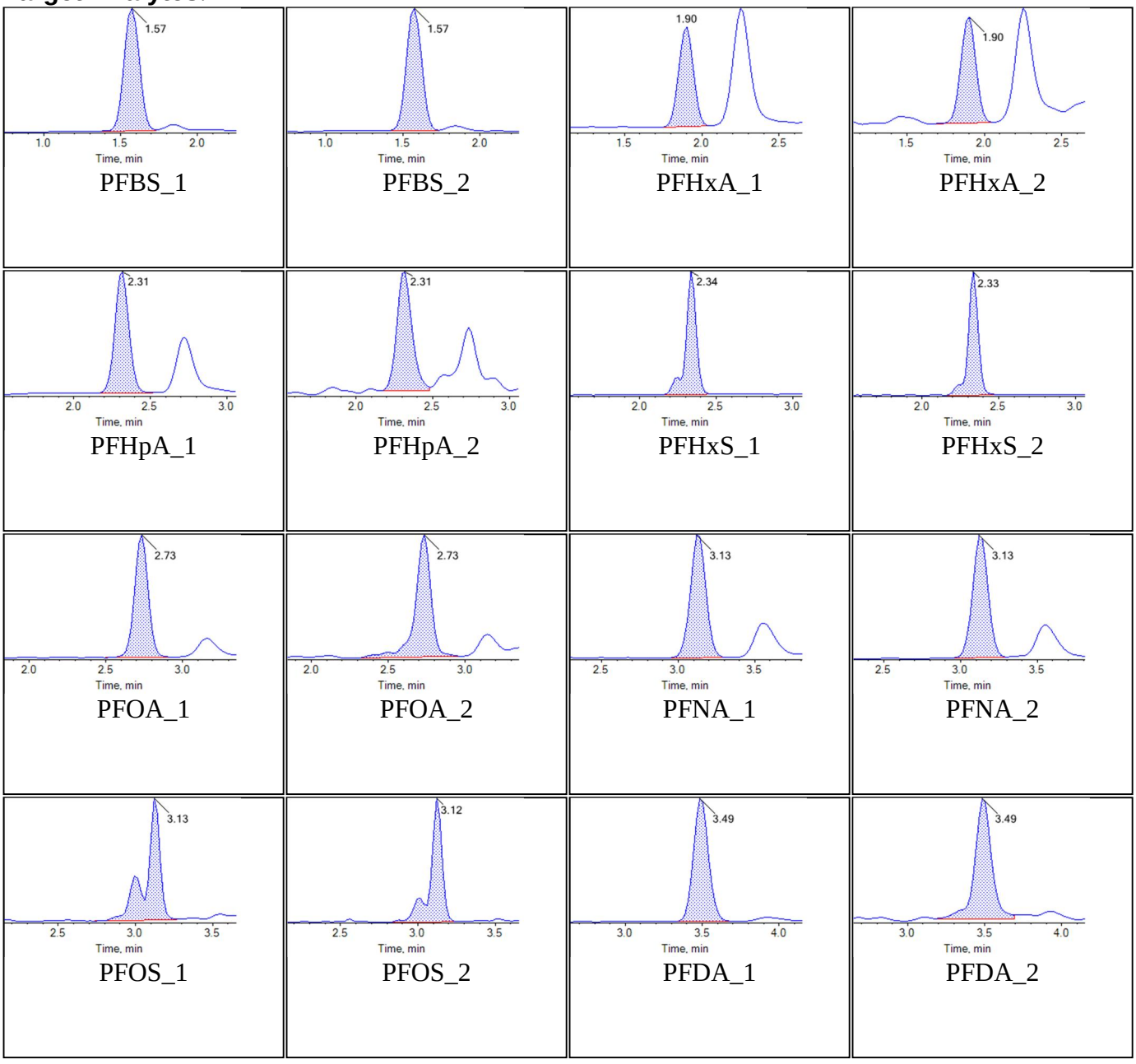

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Chromatogram Report

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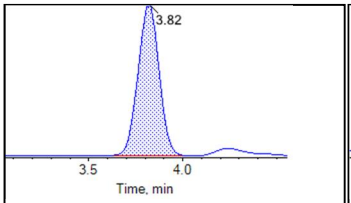

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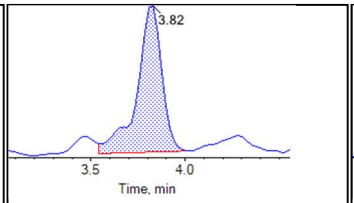
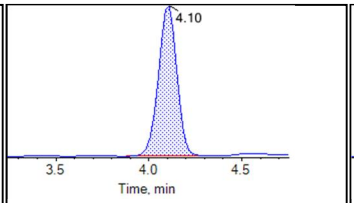


PFUnA_2



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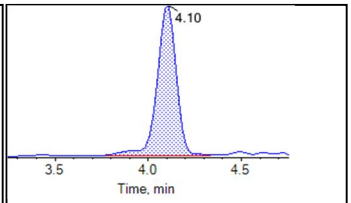
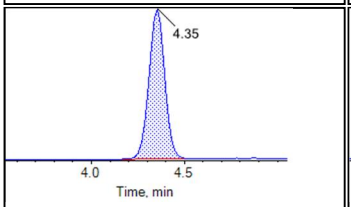
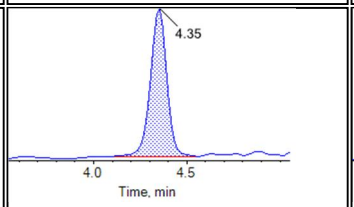


PFDoA_2



PFTrDA_1



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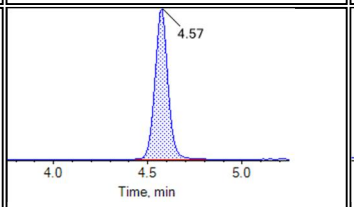

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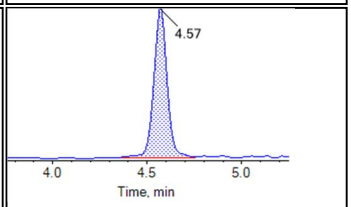

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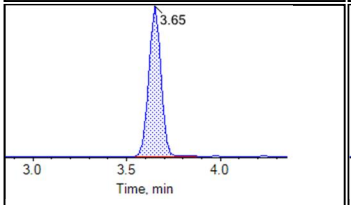
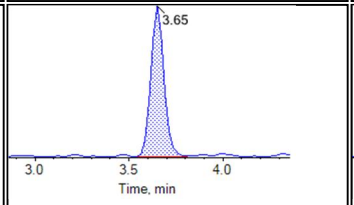


NMeFOSAA_1



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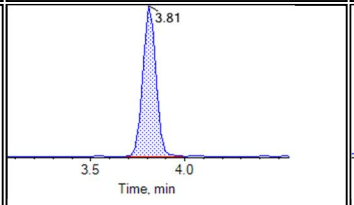
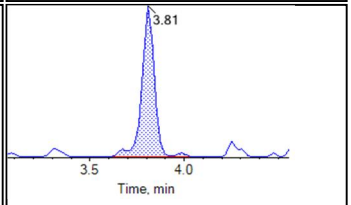
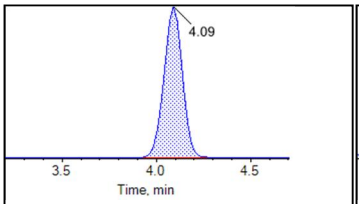


NEtFOSAA_1

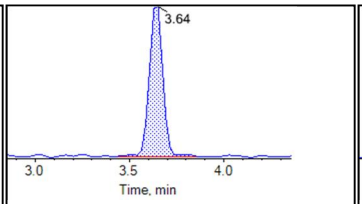


NEtFOSAA_2

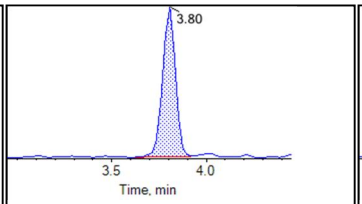
Internal Standards:



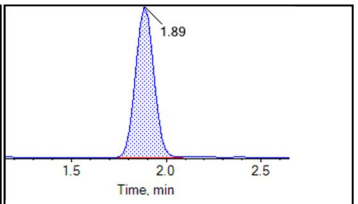
13C2-PFDoA



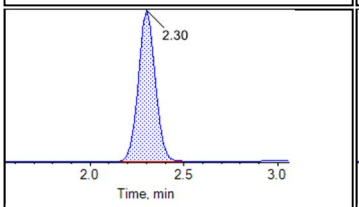
d3-MeFOSAA



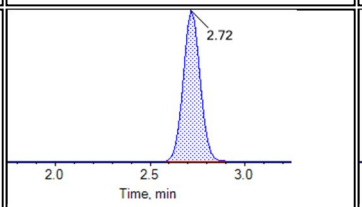
d5-EtFOSAA



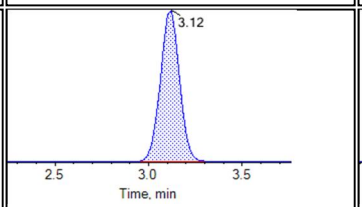
13C5-PFHxA



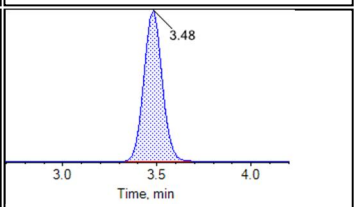
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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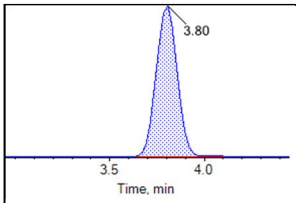
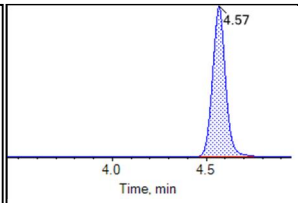
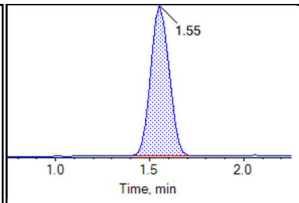


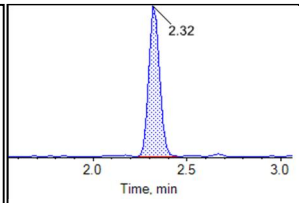
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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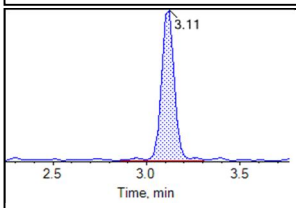

13C8-PFOS

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:42:48 AM

Sample Name	KB80 IB	**Injection Vial**	2
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T16:37:35	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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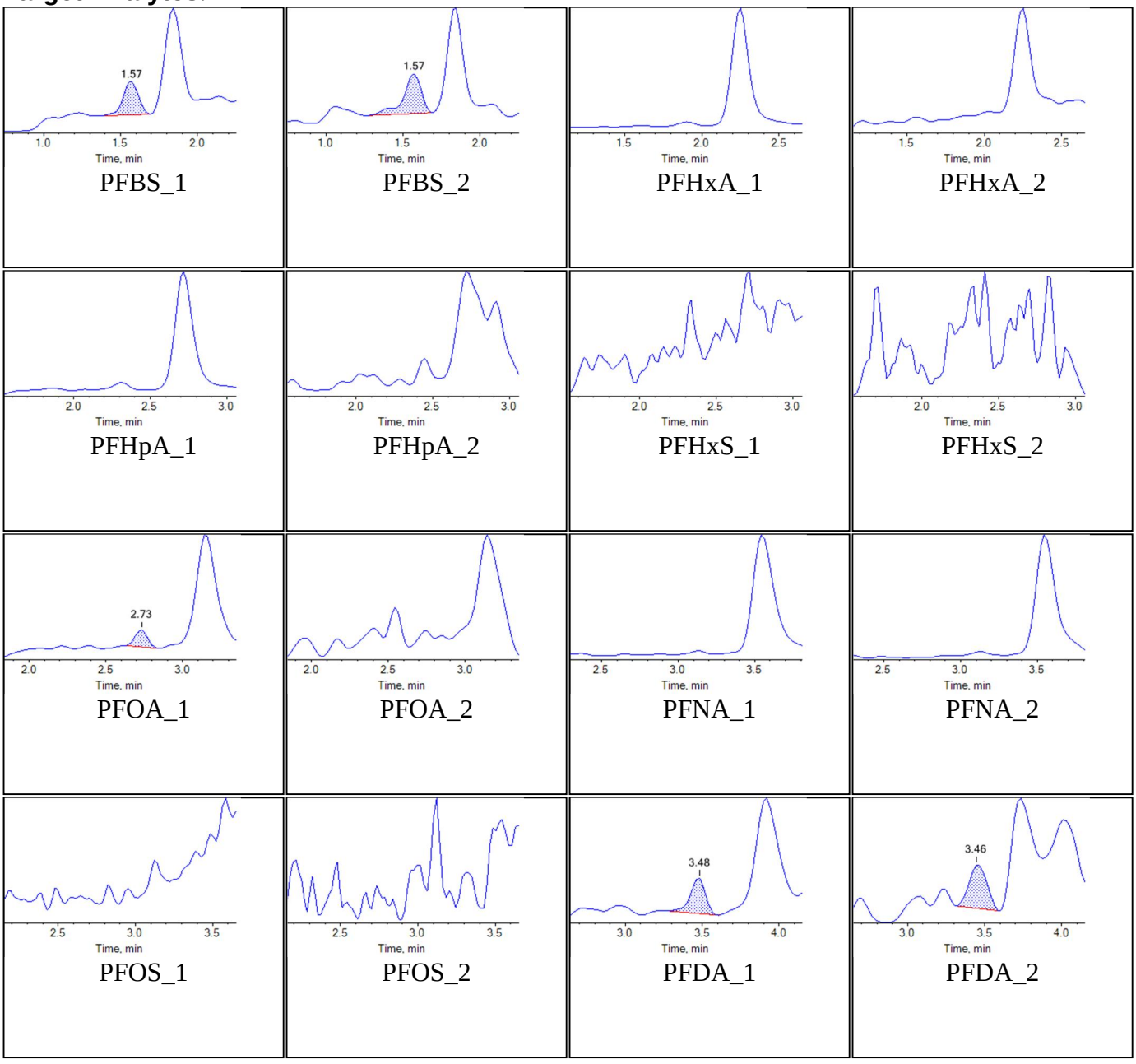

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Chromatogram Report

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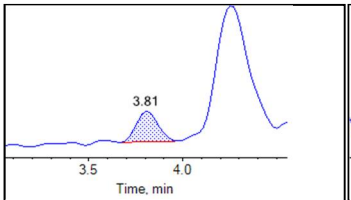
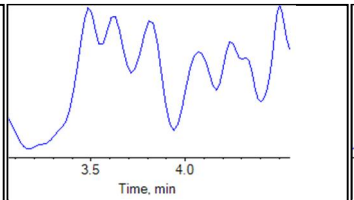
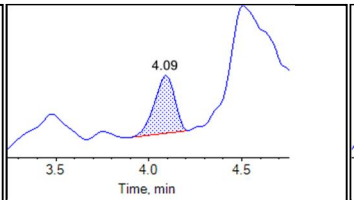


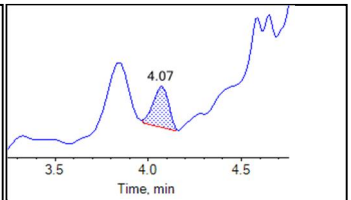
PFUnA_1



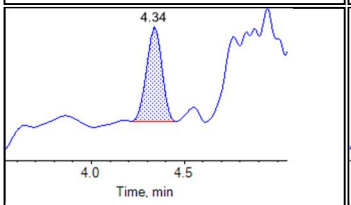
PFUnA_2



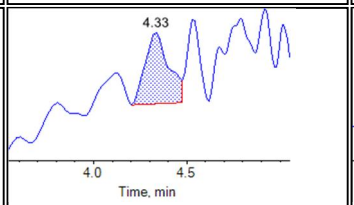
PFDoA_1



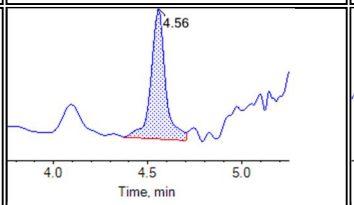
PFDoA_2



PFTrDA_1



PFTrDA_2



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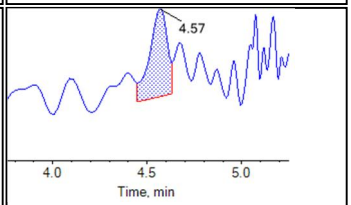

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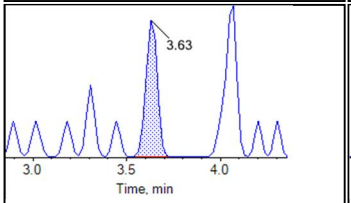
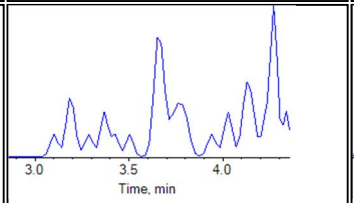


NMeFOSAA_1



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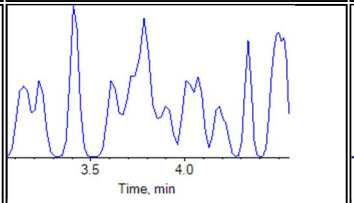
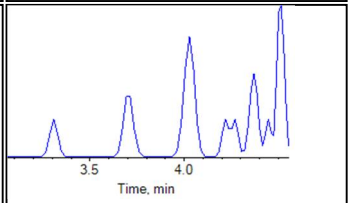
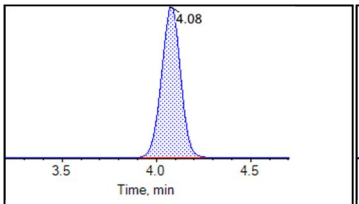


NEtFOSAA_1

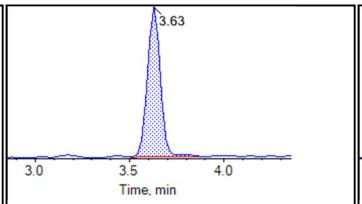


NEtFOSAA_2

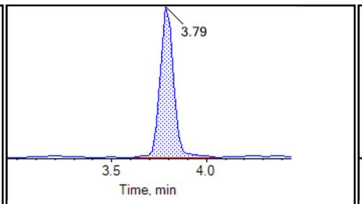
Internal Standards:



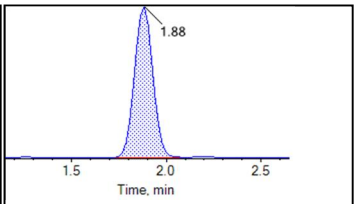
13C2-PFDoA



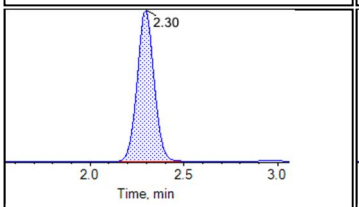
d3-MeFOSAA



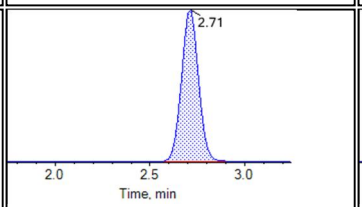
d5-EtFOSAA



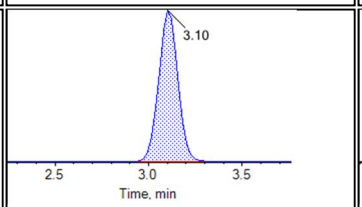
13C5-PFHxA



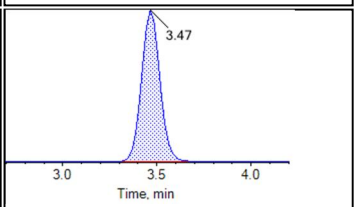
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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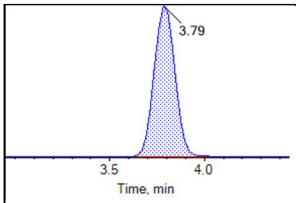
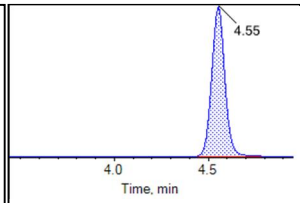
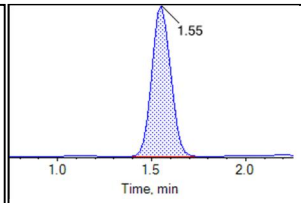


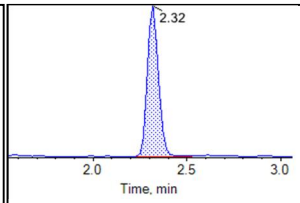
13C7-PFUnA



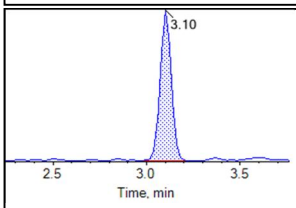
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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Sample Name	KB76	**Injection Vial**	11
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:27:08	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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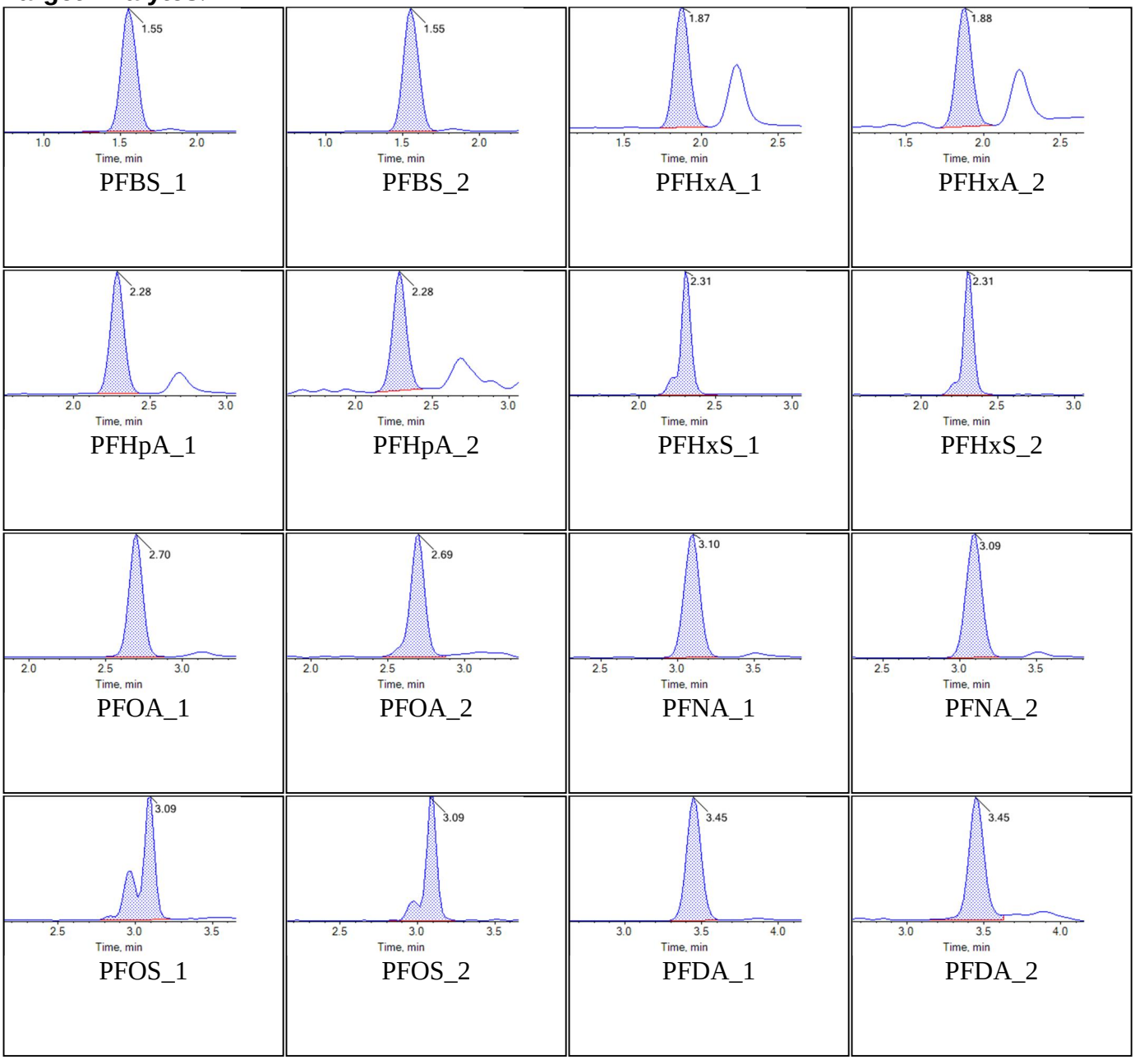

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Chromatogram Report

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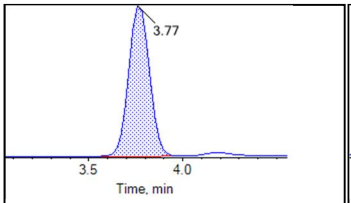
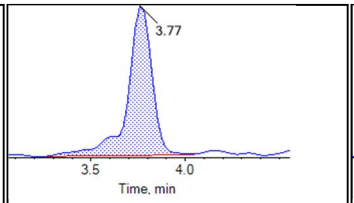
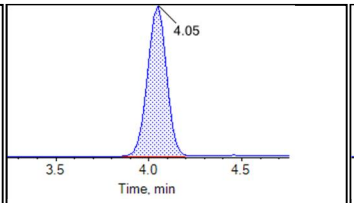


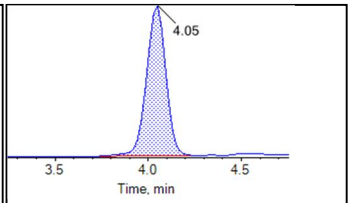
PFUnA_1



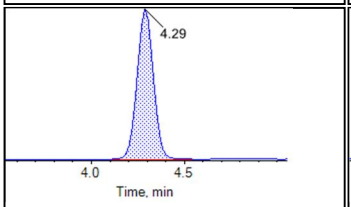
PFUnA_2



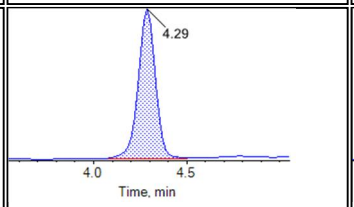
PFDoA_1



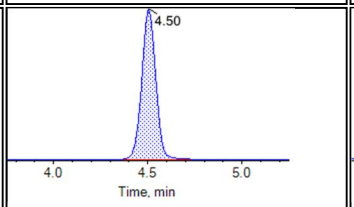
PFDoA_2



PFTrDA_1



PFTrDA_2



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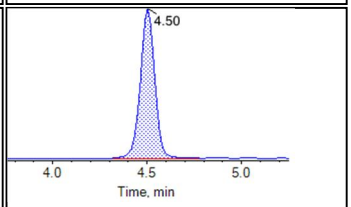
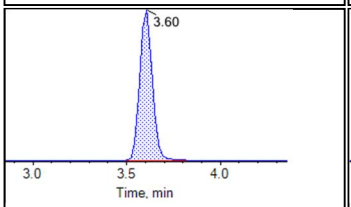
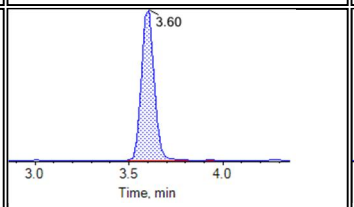


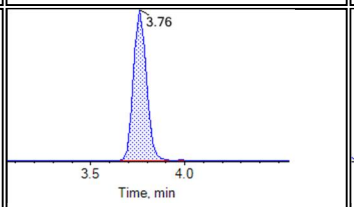
PFTeDA_2



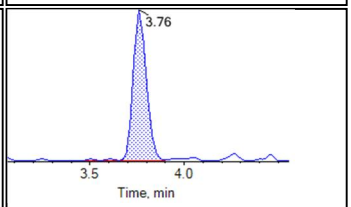
NMeFOSAA_1



NMeFOSAA_2

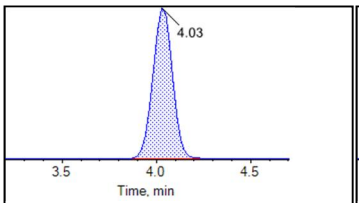


NEtFOSAA_1

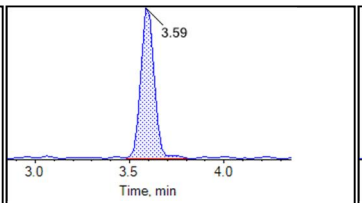


NEtFOSAA_2

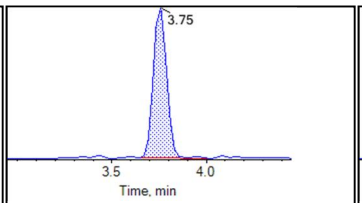
Internal Standards:



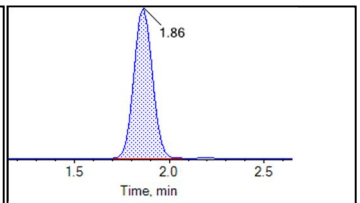
13C2-PFDoA



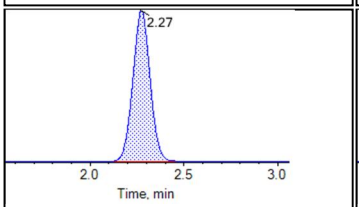
d3-MeFOSAA



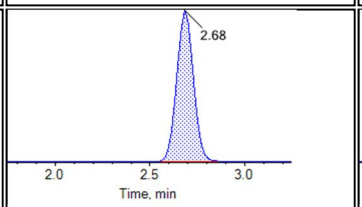
d5-EtFOSAA



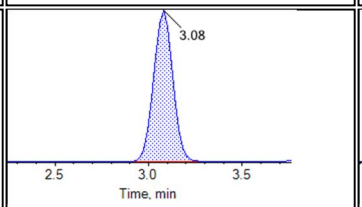
13C5-PFHxA



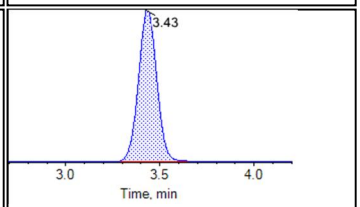
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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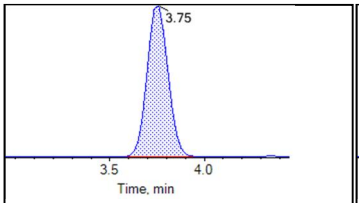
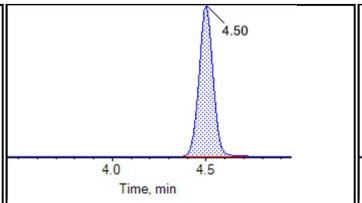
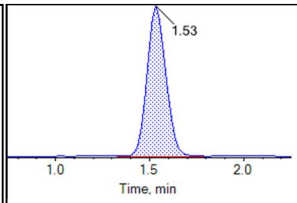


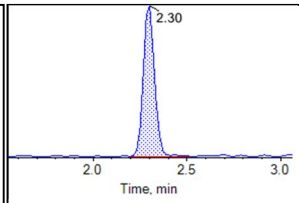
13C7-PFUnA



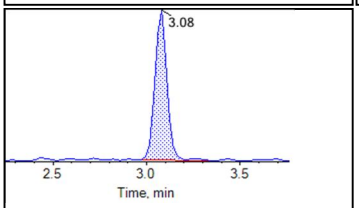
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:43:00 AM

Sample Name	CR986PB-FS(0)	**Injection Vial**	13
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:48:52	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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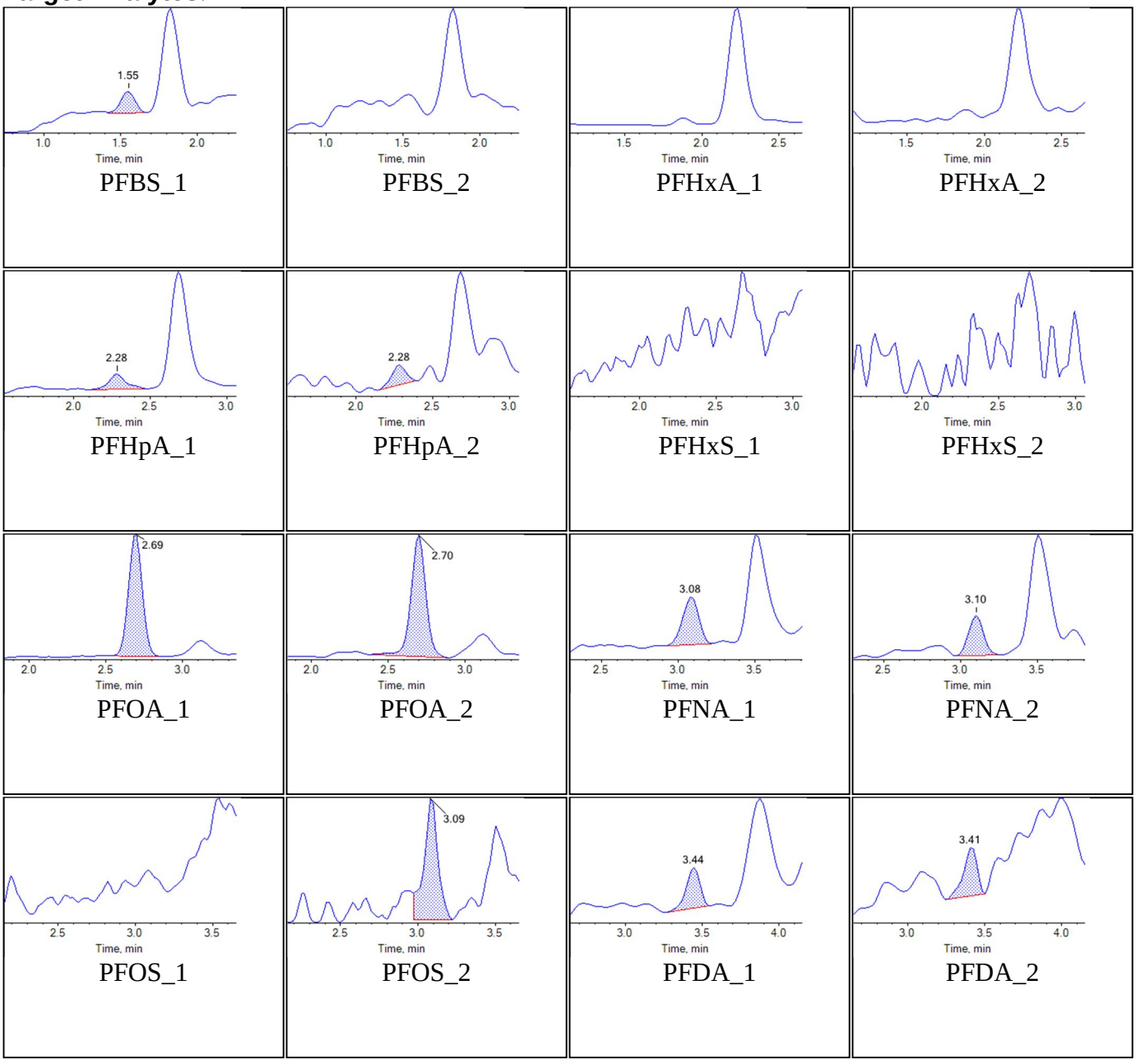

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Chromatogram Report

Created with Analyst Reporter
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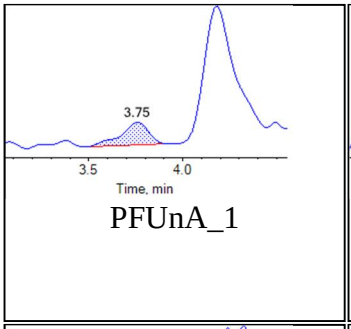
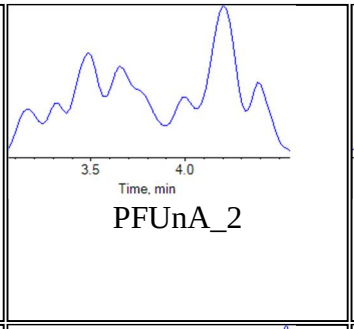
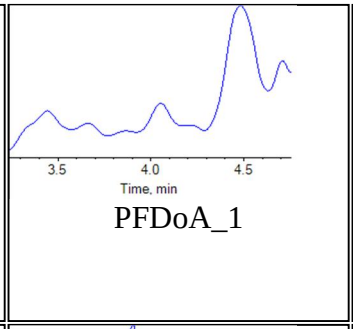


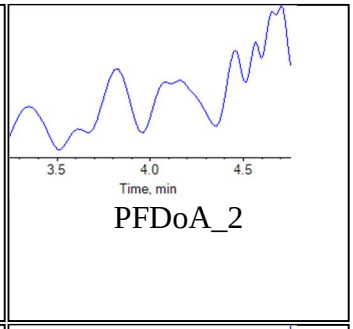
PFUnA_1



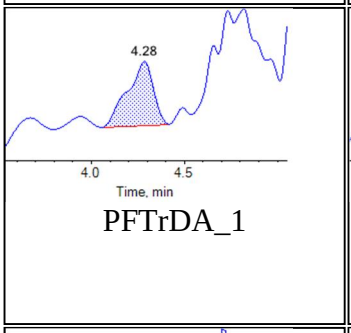
PFUnA_2



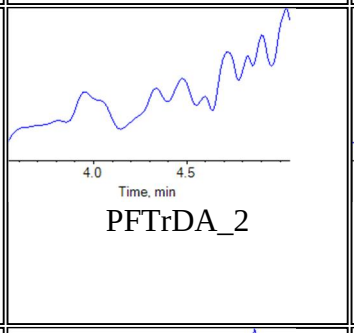
PFDoA_1



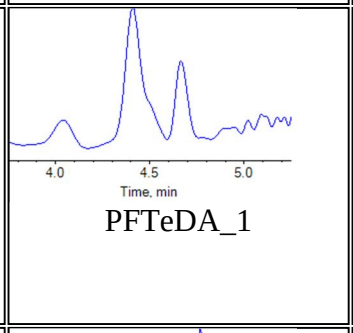
PFDoA_2



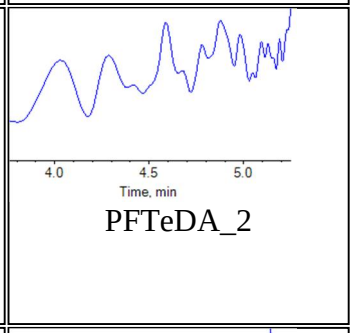
PFTrDA_1



PFTrDA_2



PFTeDA_1



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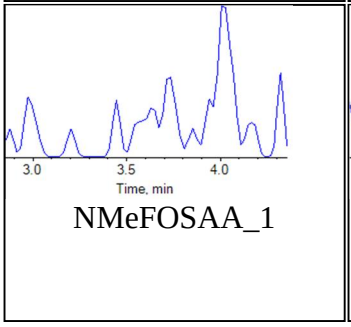
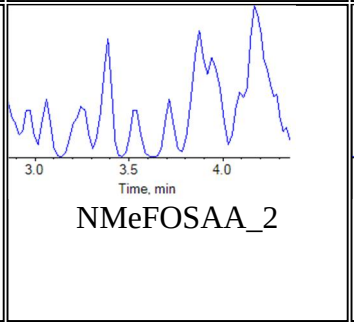
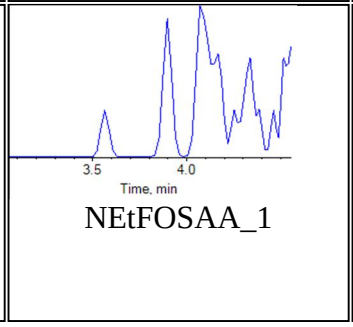


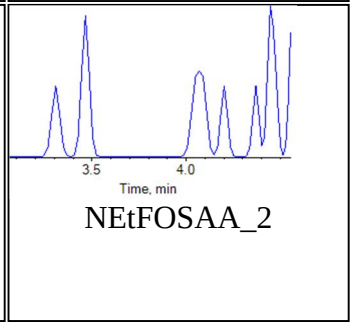
NMeFOSAA_1



NMeFOSAA_2

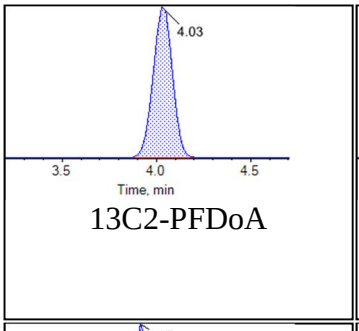


NEtFOSAA_1

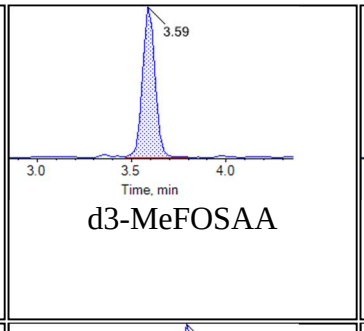


NEtFOSAA_2

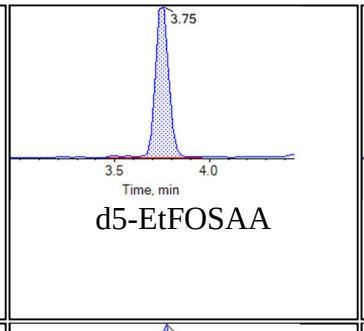
Internal Standards:



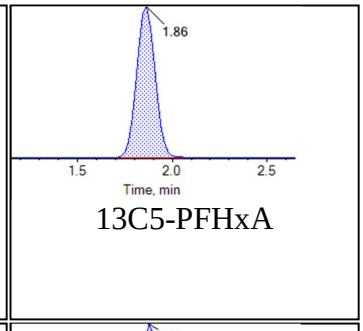
13C2-PFDoA



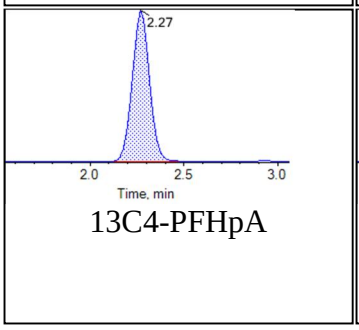
d3-MeFOSAA



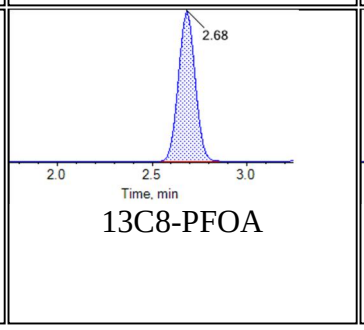
d5-EtFOSAA



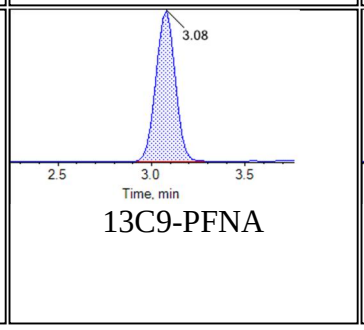
13C5-PFHxA



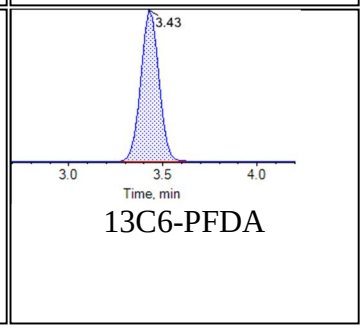
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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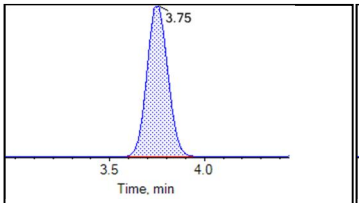
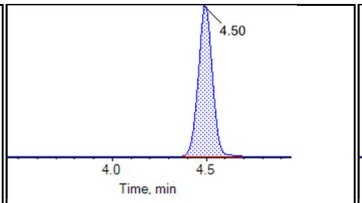


13C7-PFUnA



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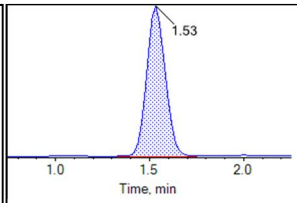

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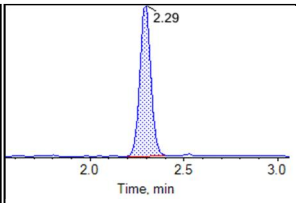

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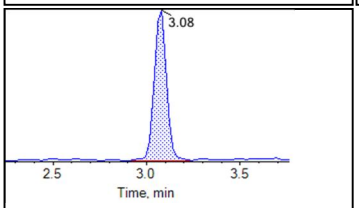

13C8-PFOS

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Chromatogram Report

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Sample Name	J8667-FS(0)	**Injection Vial**	15
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:10:37	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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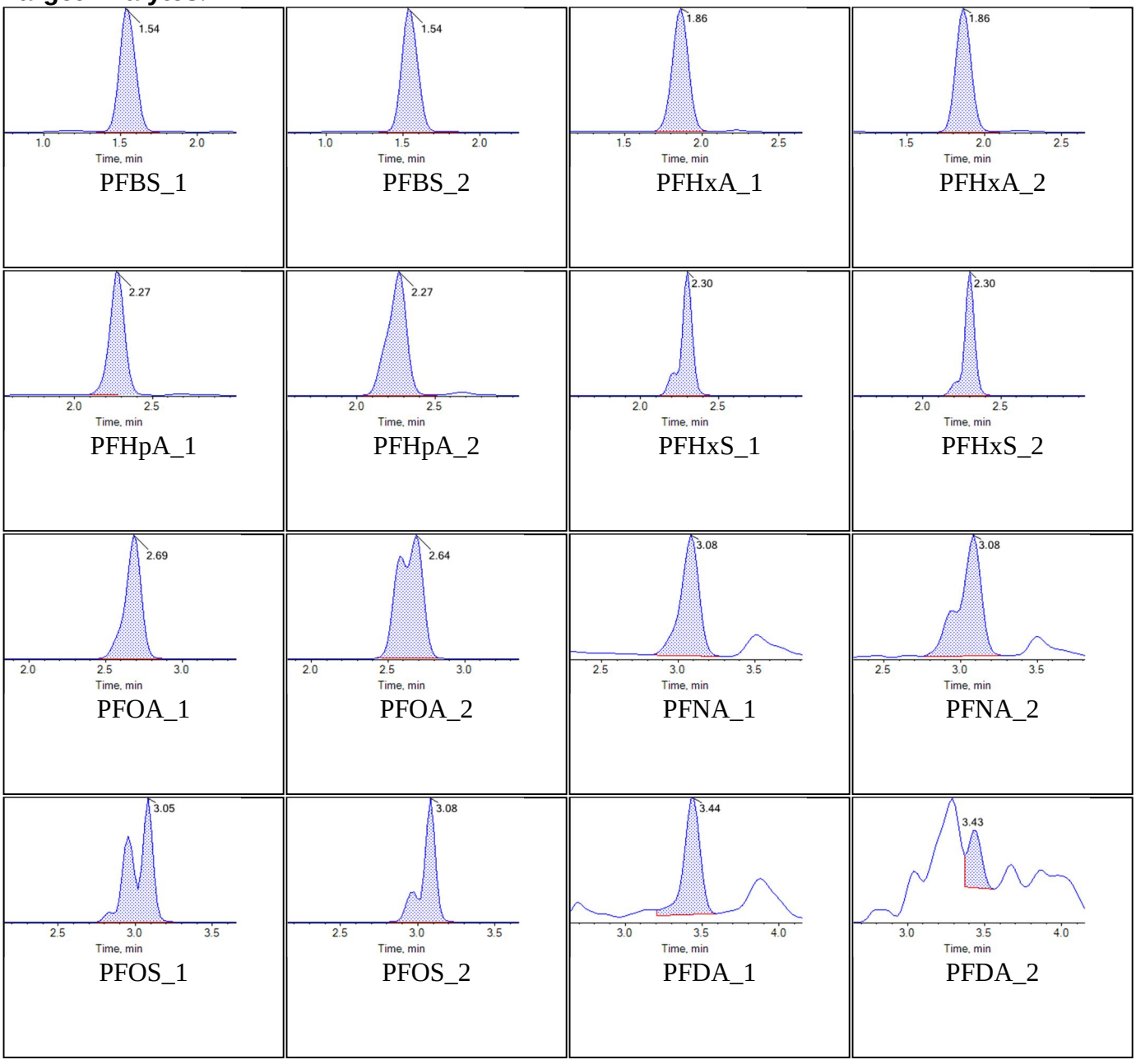

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Chromatogram Report

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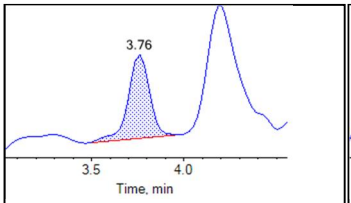

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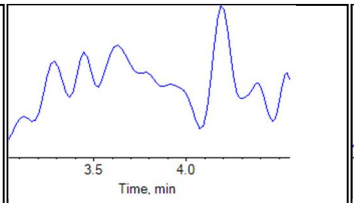

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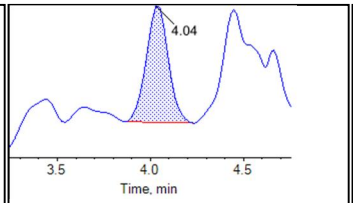

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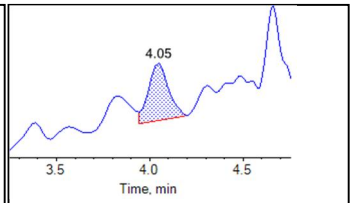
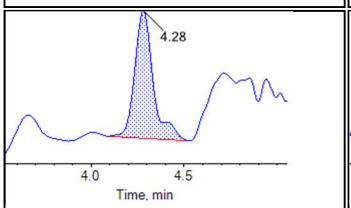


PFDoA_2



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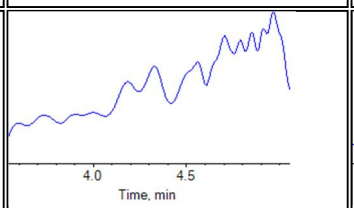

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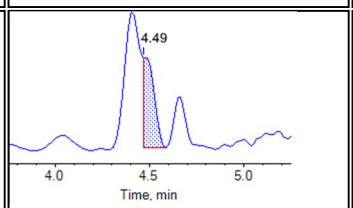

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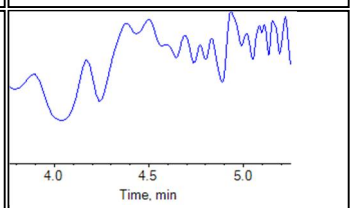

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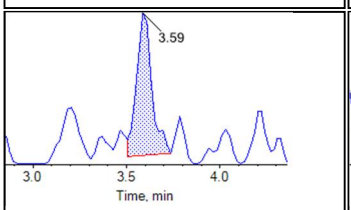

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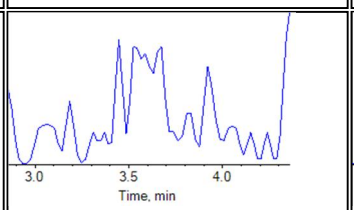

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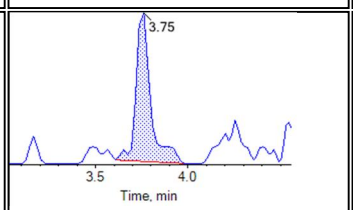

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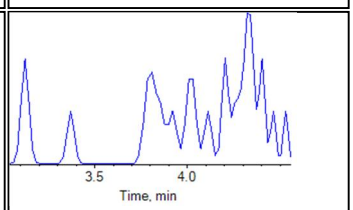

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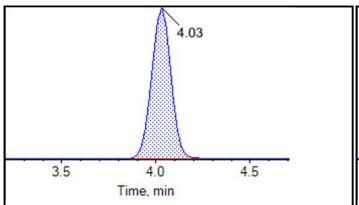
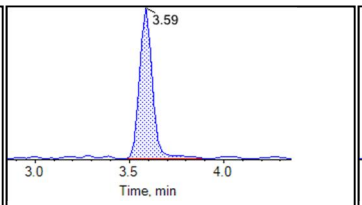
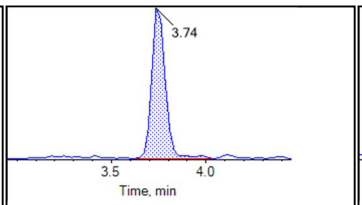


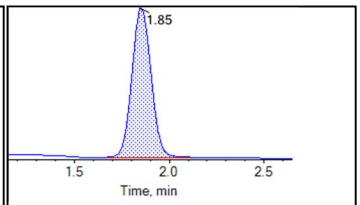
13C2-PFDoA



d3-MeFOSAA



d5-EtFOSAA



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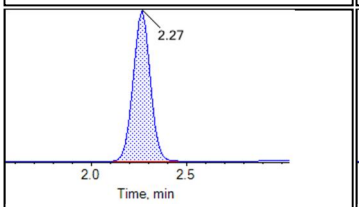

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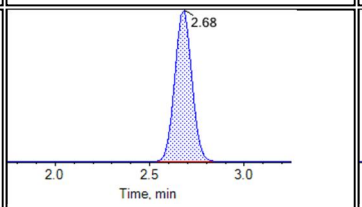

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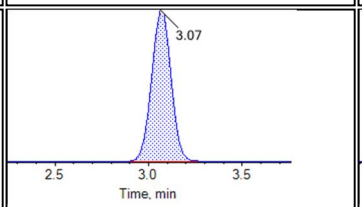

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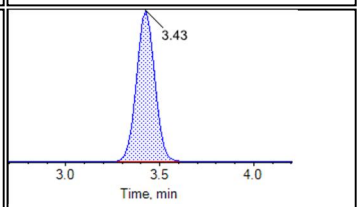

13C6-PFDA

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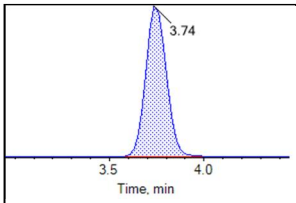
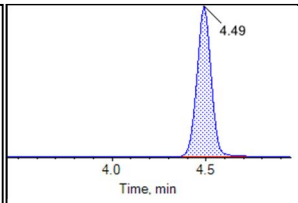


13C7-PFUnA



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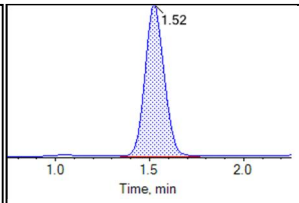

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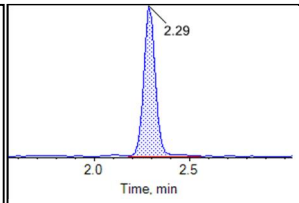

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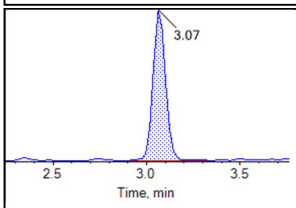

13C8-PFOS

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Chromatogram Report

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Sample Name	J8667-FS-D(5)	**Injection Vial**	17
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:32:22	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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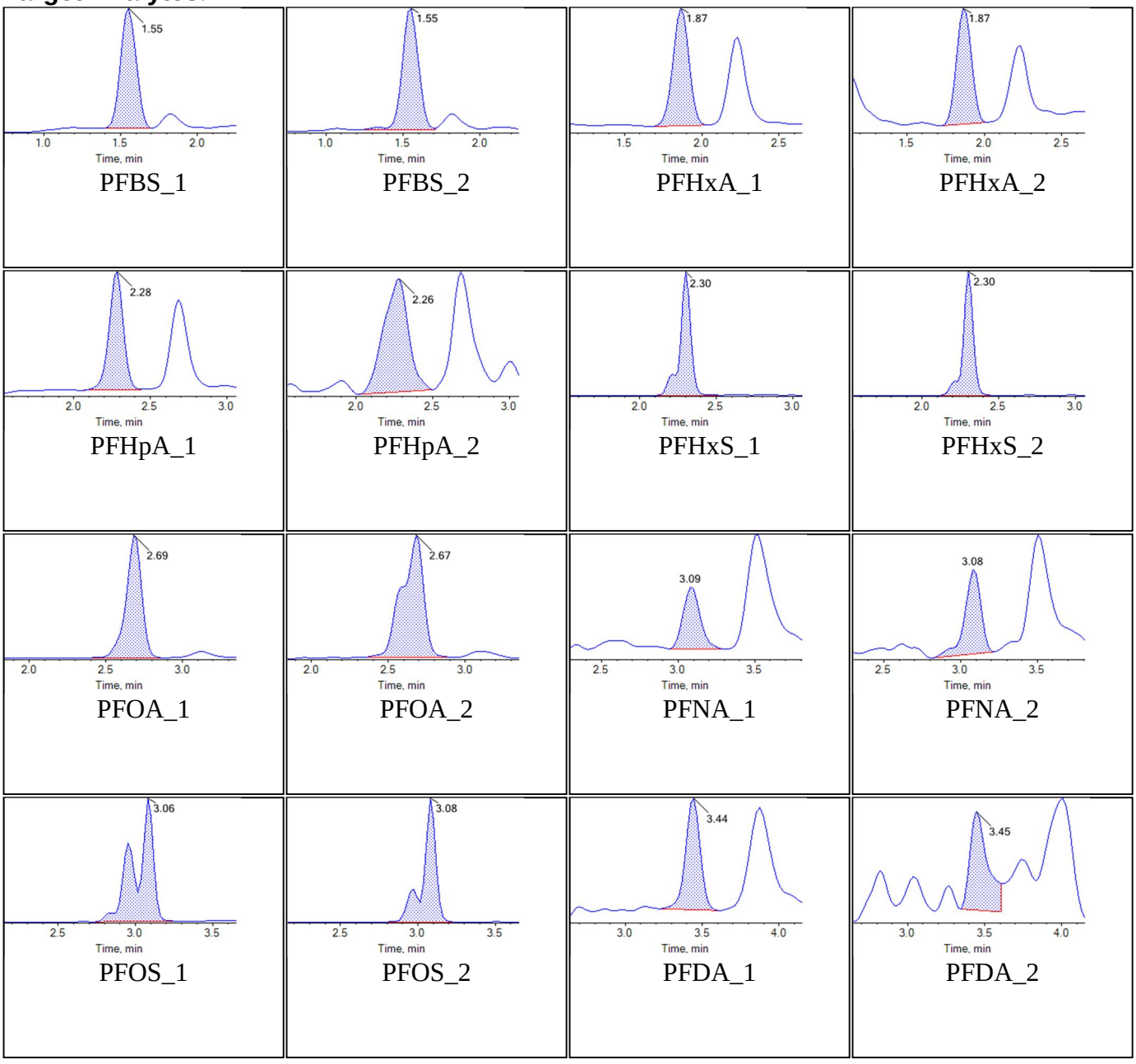

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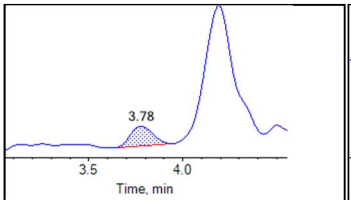

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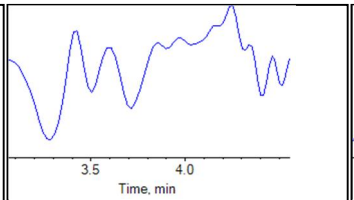

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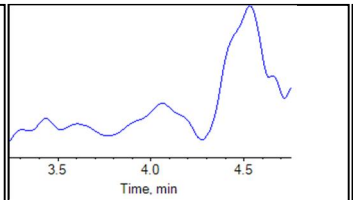

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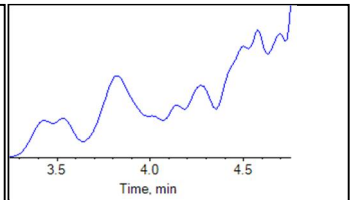

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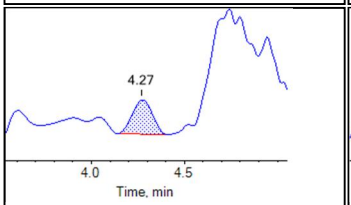

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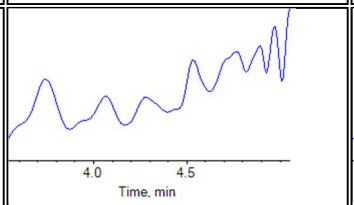

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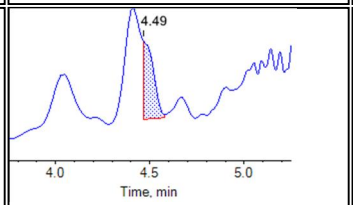

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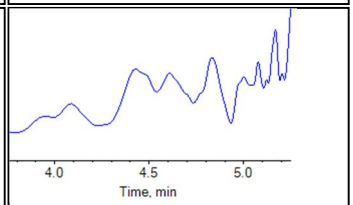

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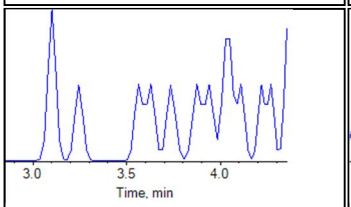

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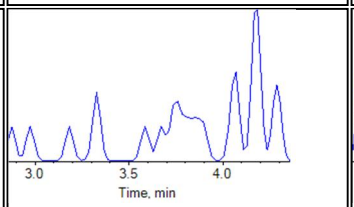

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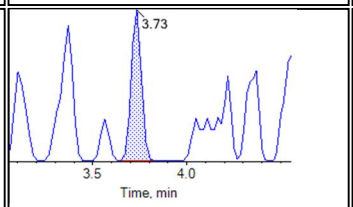

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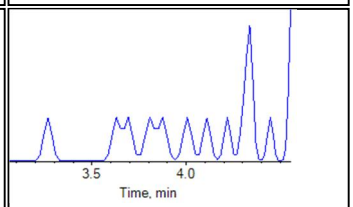

NEtFOSAA_2

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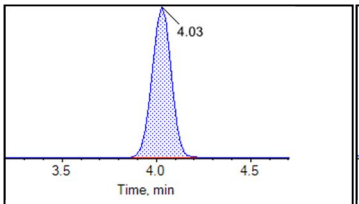

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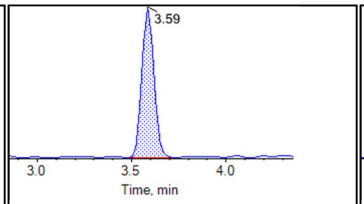
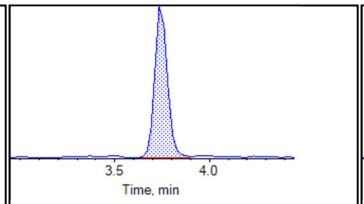
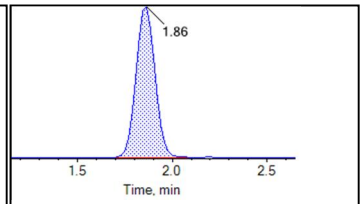


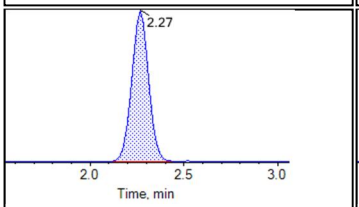
d3-MeFOSAA



d5-EtFOSAA



13C5-PFHxA



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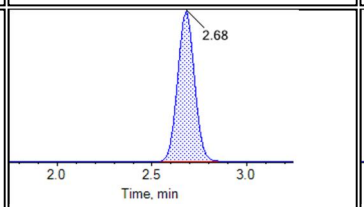
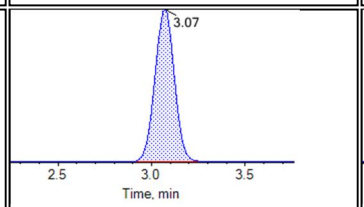
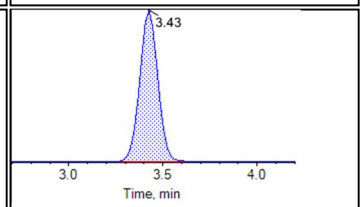


13C8-PFOA



13C9-PFNA



13C6-PFDA

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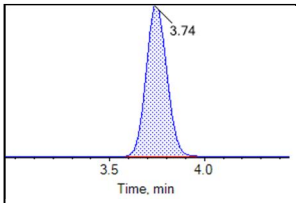
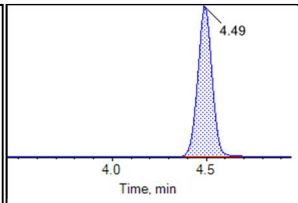
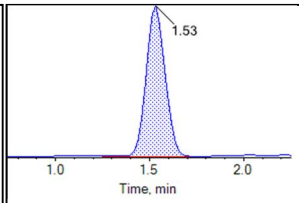


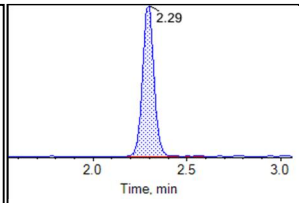
13C7-PFUnA



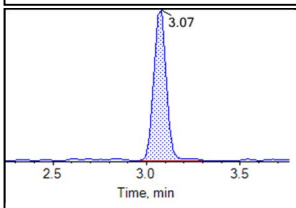
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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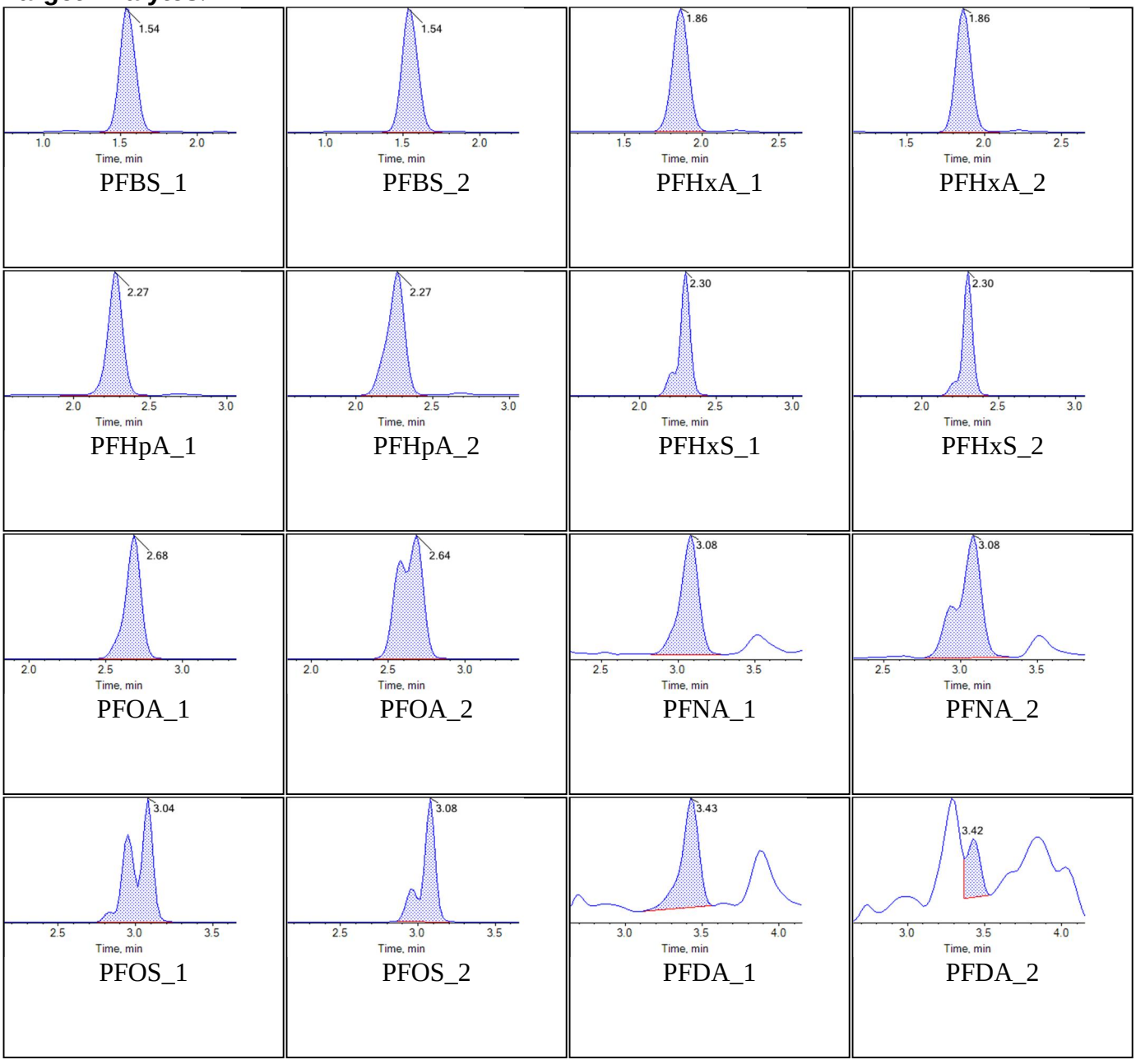
Sample Name	J8668-FS(0)	**Injection Vial**	19
Sample ID	VC-CS12-DW01P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:54:05	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

Target Analytes:



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Chromatogram Report

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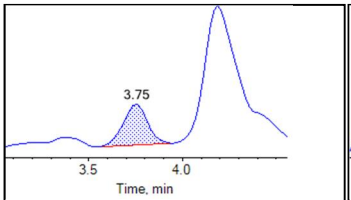

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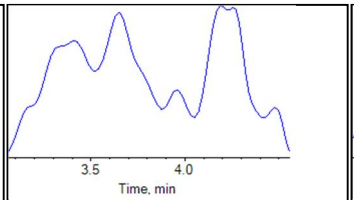

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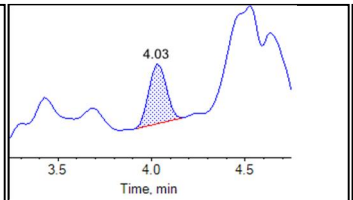

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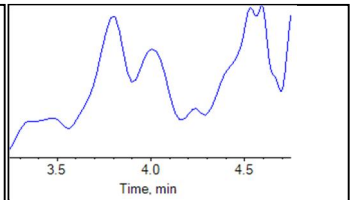

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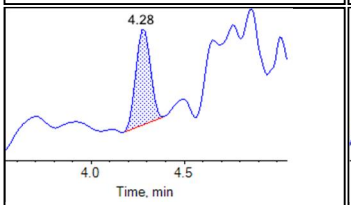

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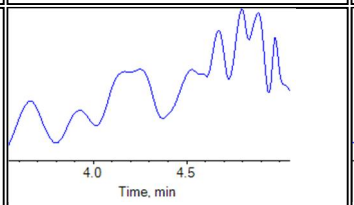

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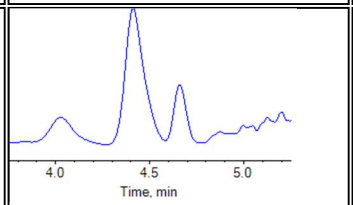

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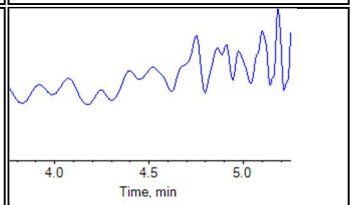

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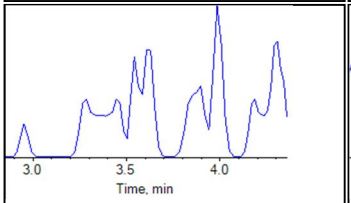

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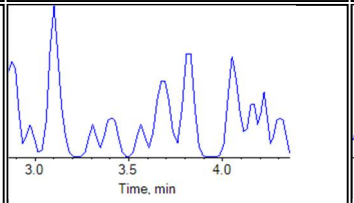

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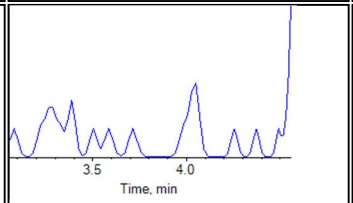

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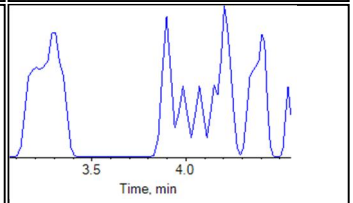

NEtFOSAA_2

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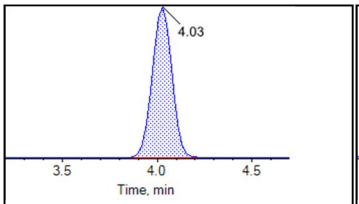
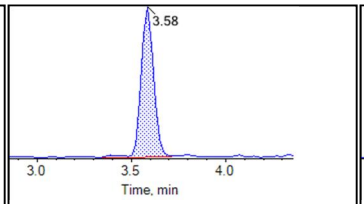


13C2-PFDoA



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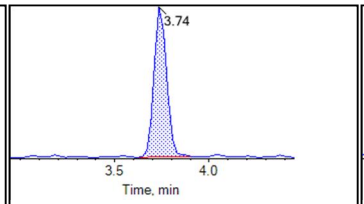

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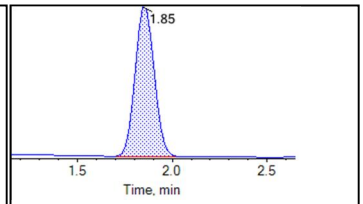
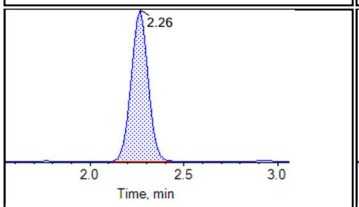
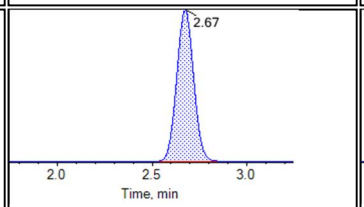


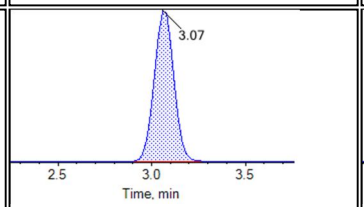
13C5-PFHxA



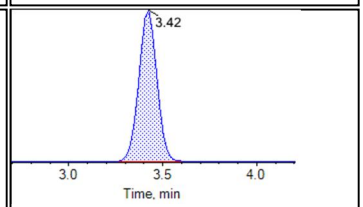
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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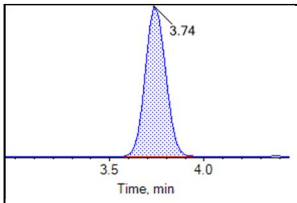
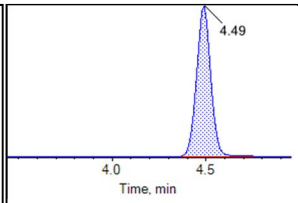


13C7-PFUnA



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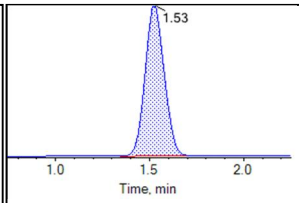
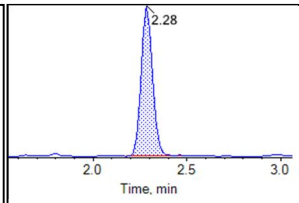


13C3-PFBS



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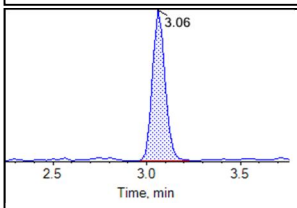

13C8-PFOS

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Chromatogram Report

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Sample Name	J8668-FS-D(3)	**Injection Vial**	20
Sample ID	VC-CS12-DW01P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:04:57	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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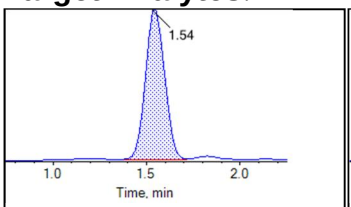

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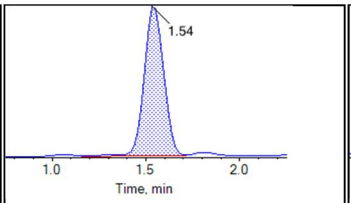
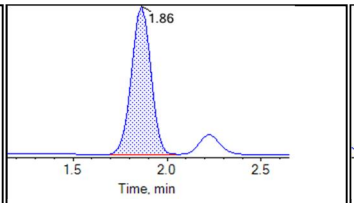


PFBS_2



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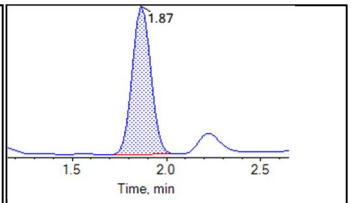

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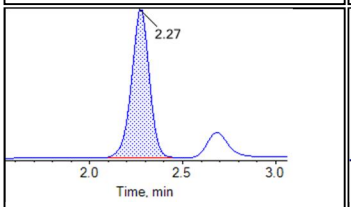

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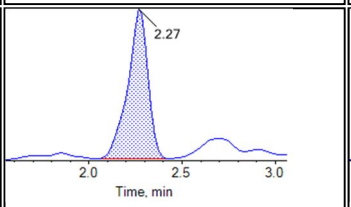

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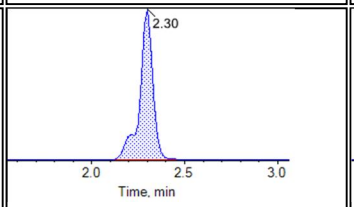

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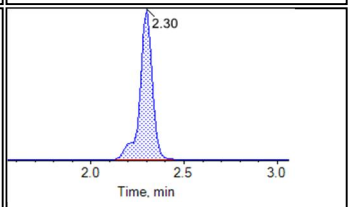
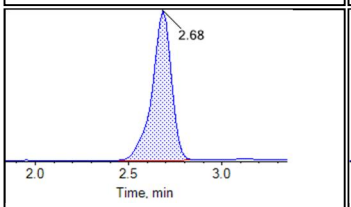


PFHxS_2



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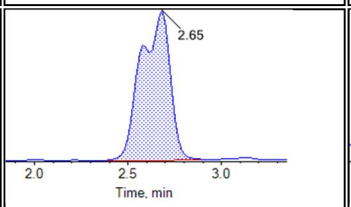

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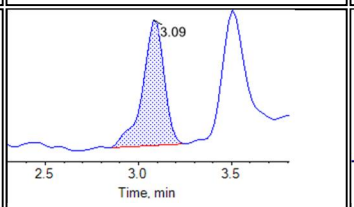

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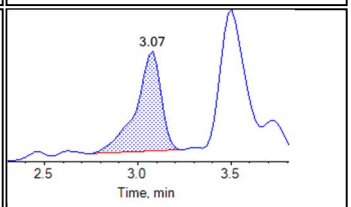

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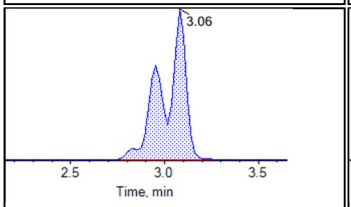

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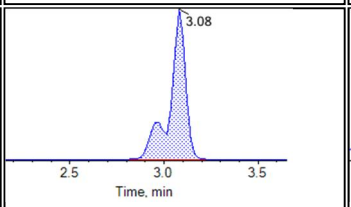
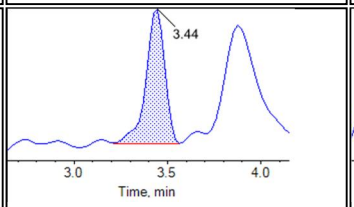


PFOS_2



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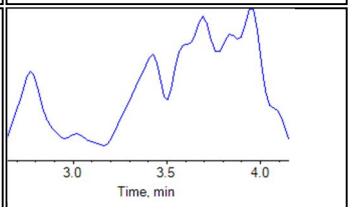

PFDA_2

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Chromatogram Report

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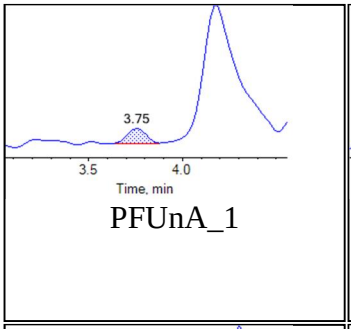
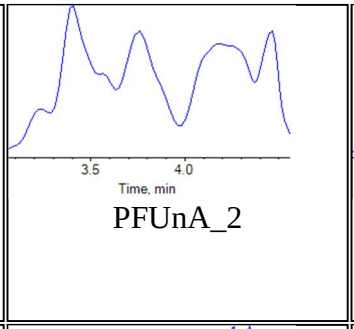
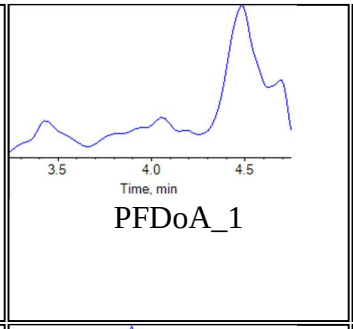


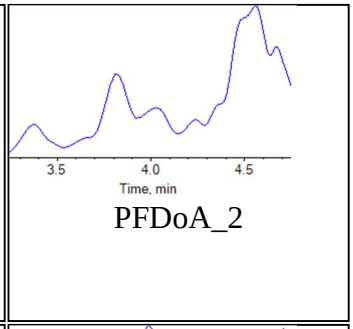
PFUnA_1



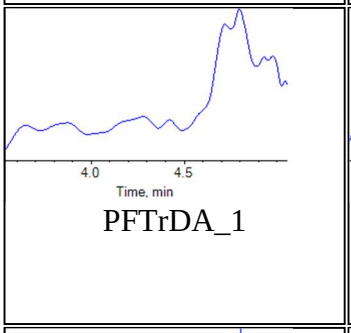
PFUnA_2



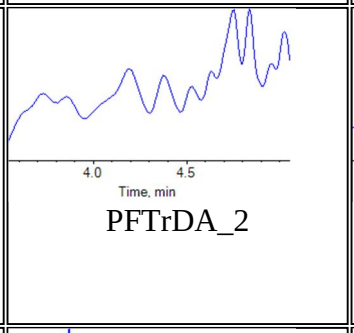
PFDoA_1



PFDoA_2



PFTrDA_1



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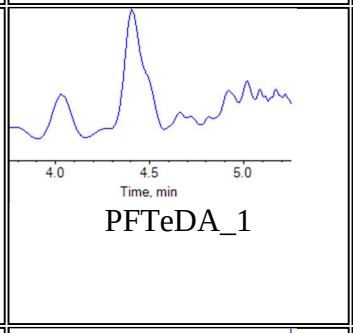

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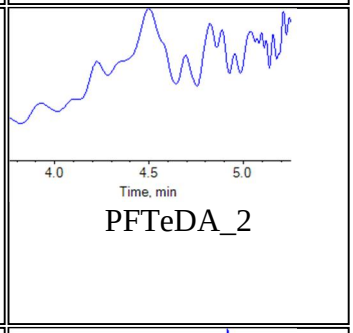

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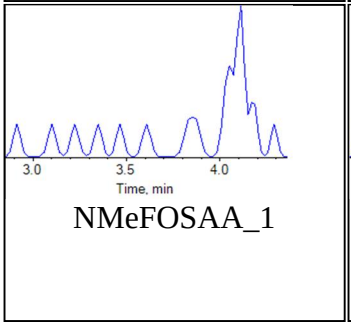

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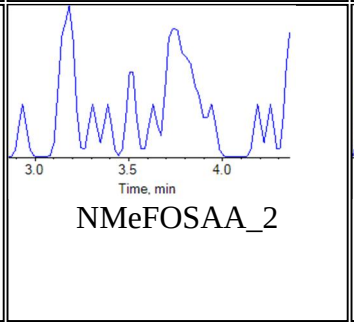

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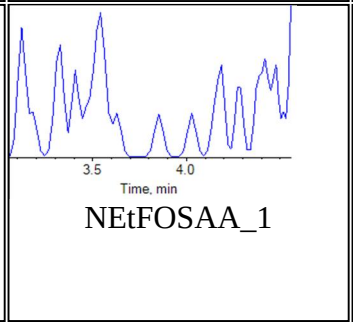

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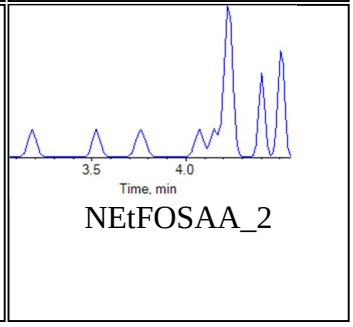

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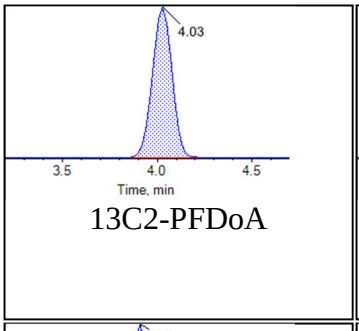

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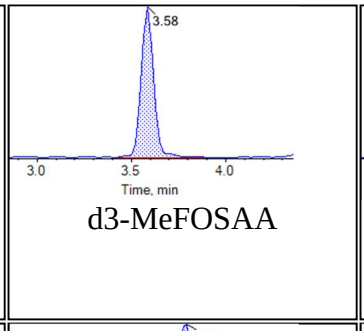

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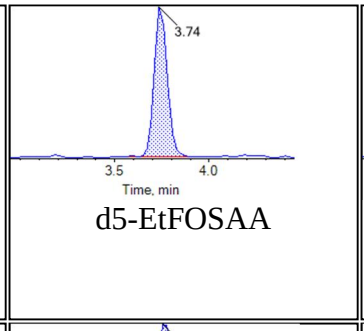

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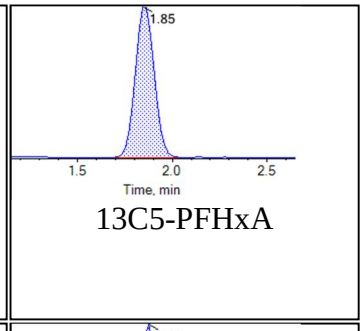

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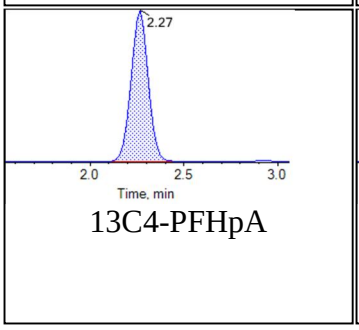

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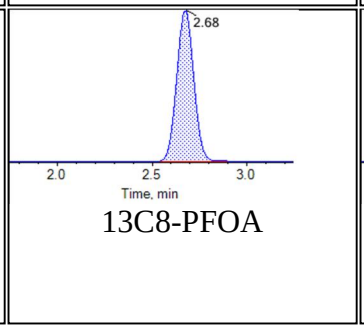

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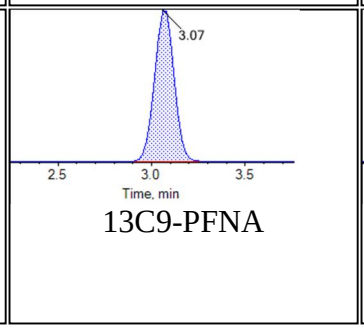
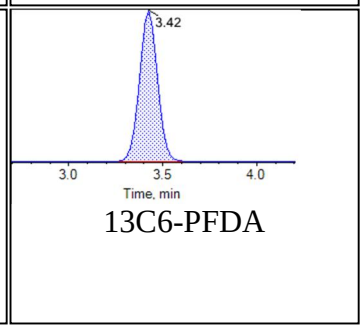


13C9-PFNA



13C6-PFDA

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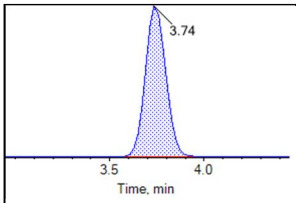
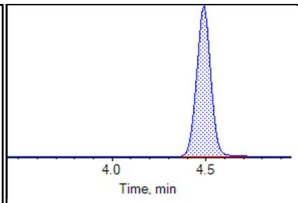


13C7-PFUnA



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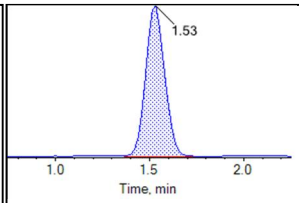

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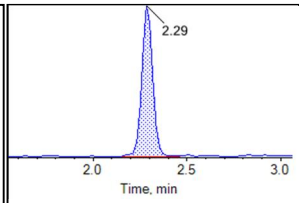

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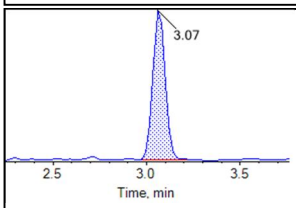

13C8-PFOS

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Chromatogram Report

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Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:37:35	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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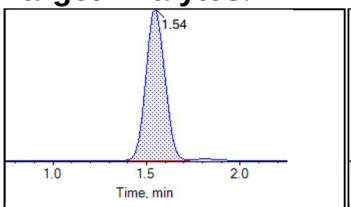

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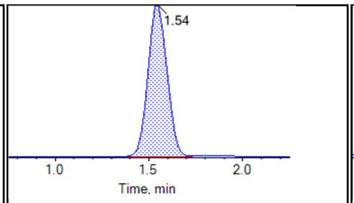

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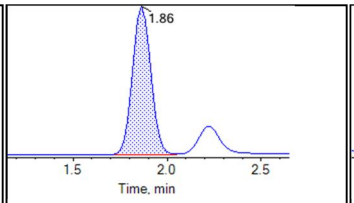

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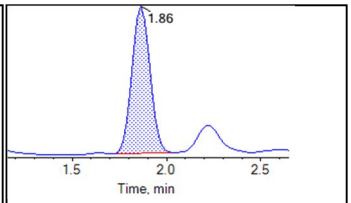

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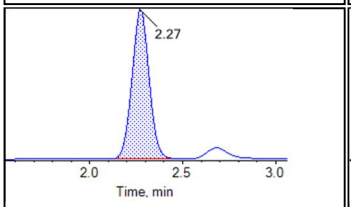

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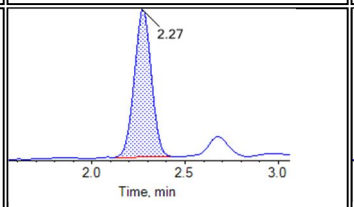

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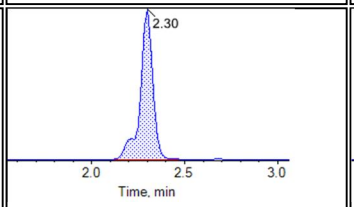

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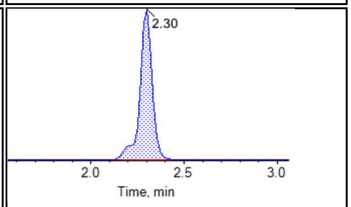

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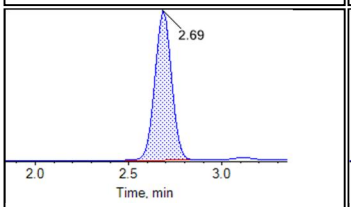

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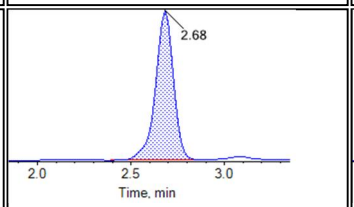

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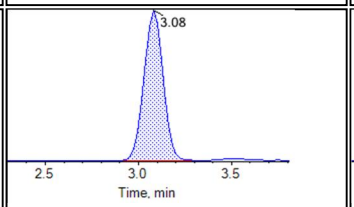

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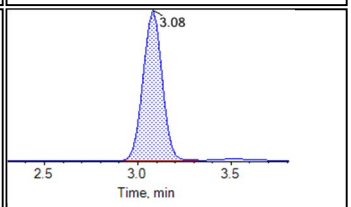

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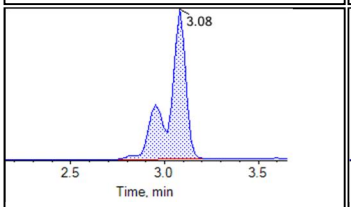

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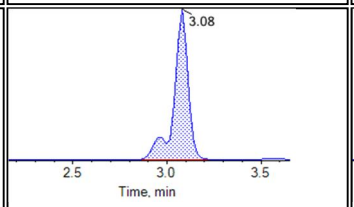

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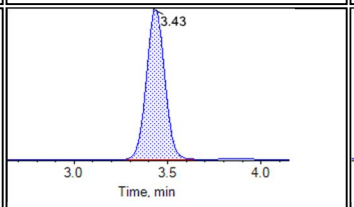

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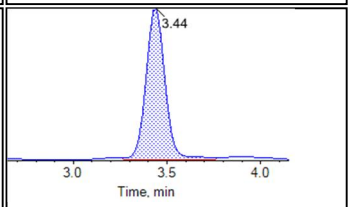

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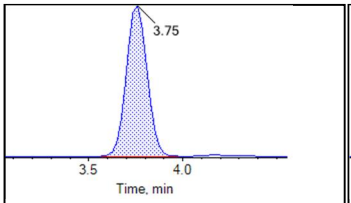

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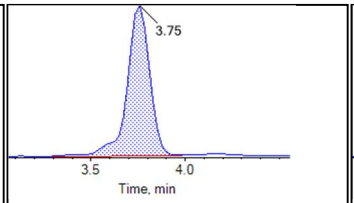

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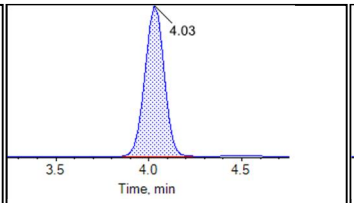

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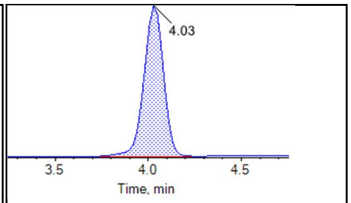

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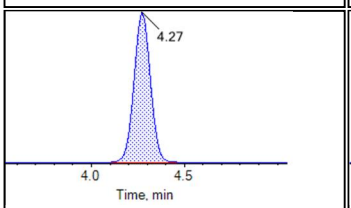

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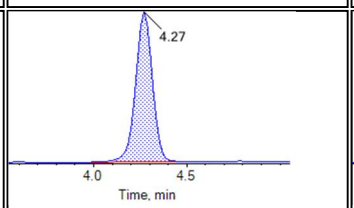

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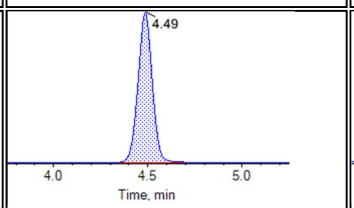

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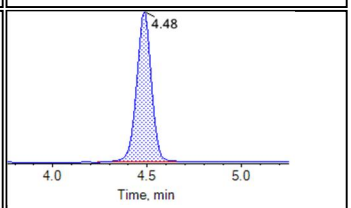

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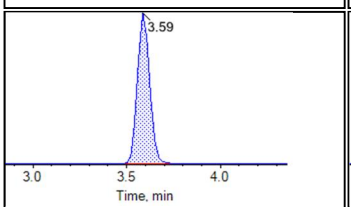

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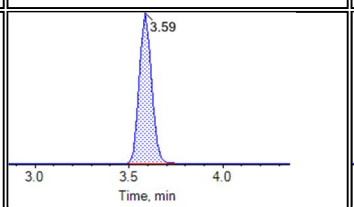

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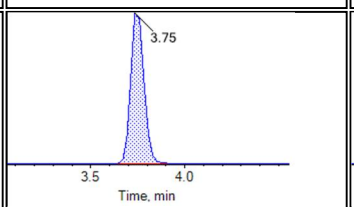

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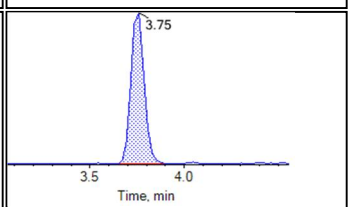

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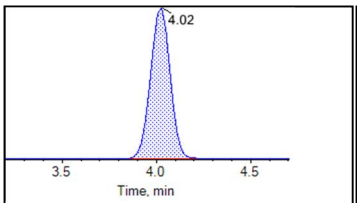

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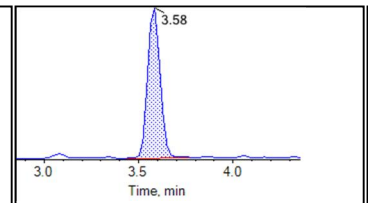
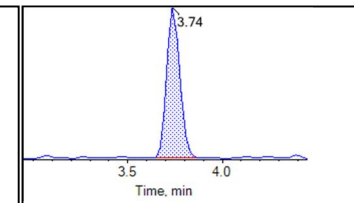


d3-MeFOSAA



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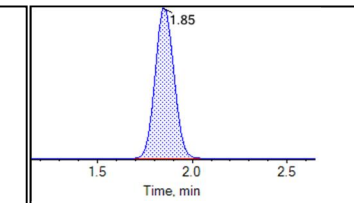

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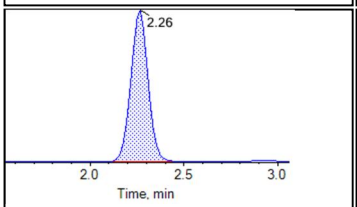
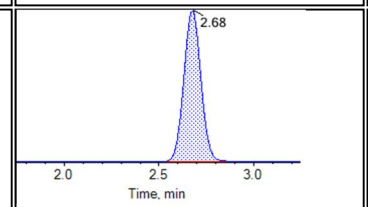
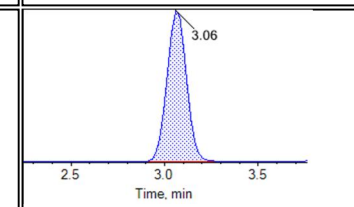


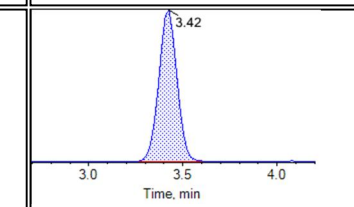
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

BATTELLE

Chromatogram Report

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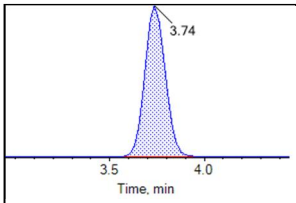
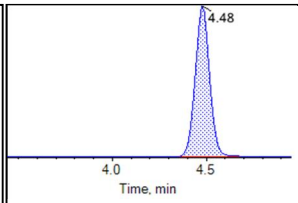
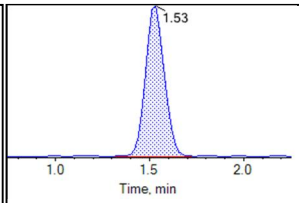


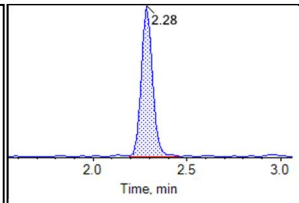
13C7-PFUnA



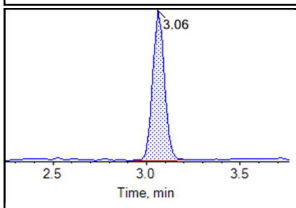
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

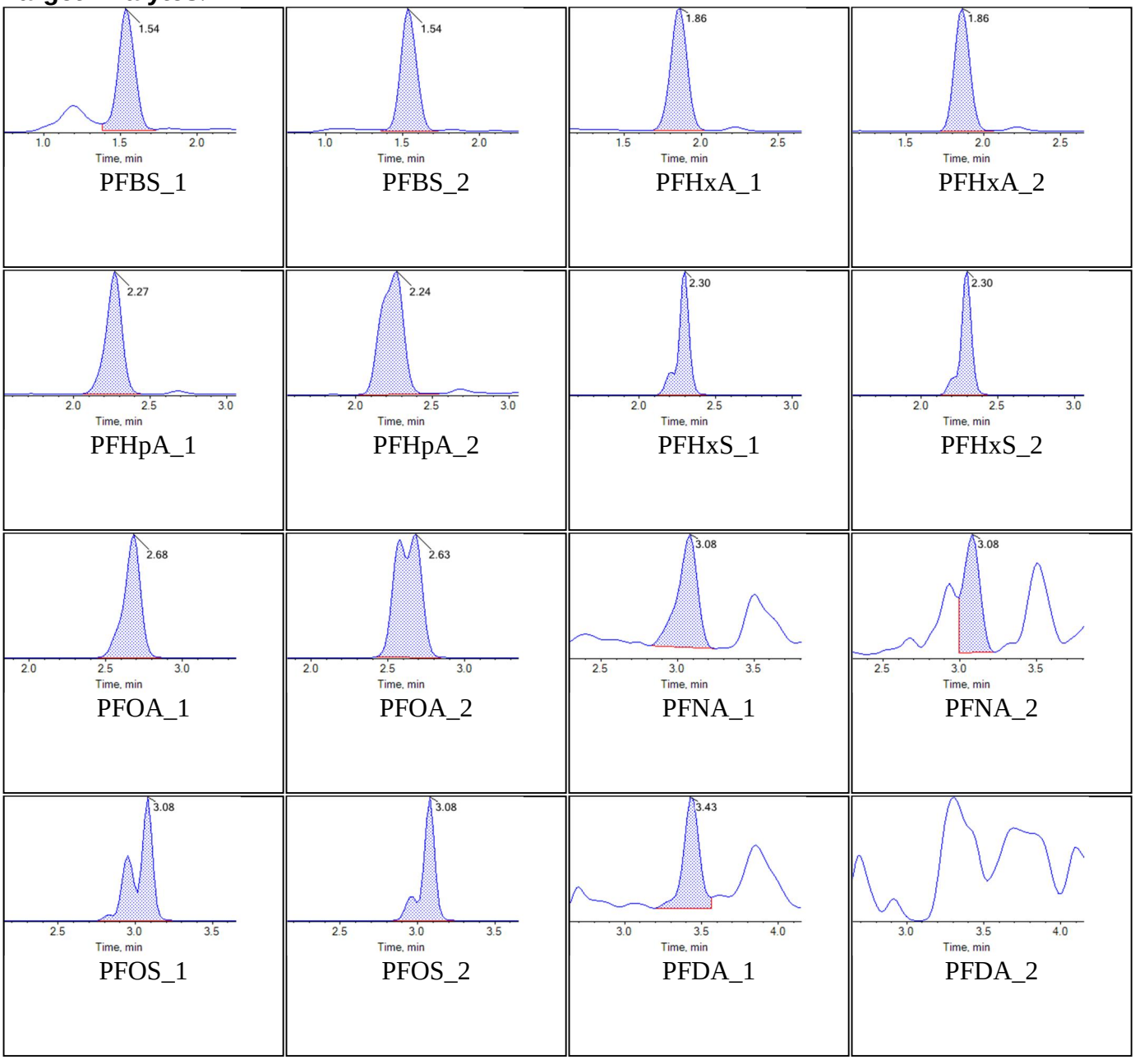
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:43:56 AM

Sample Name	J8669-FS(0)	**Injection Vial**	24
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:48:27	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

Target Analytes:



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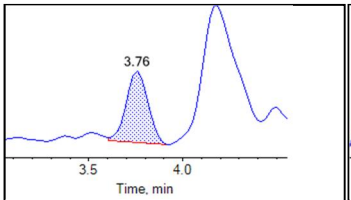

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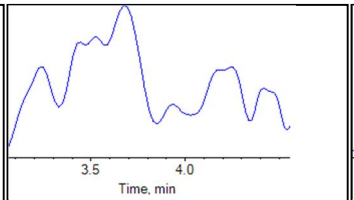
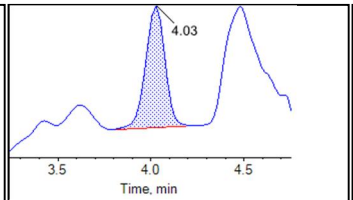


PFUnA_2



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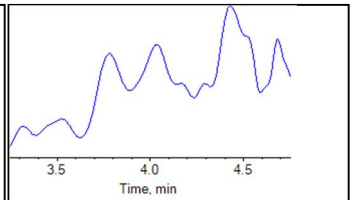
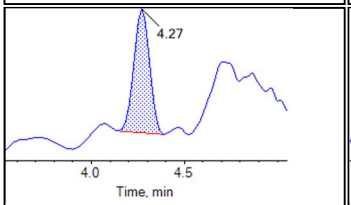
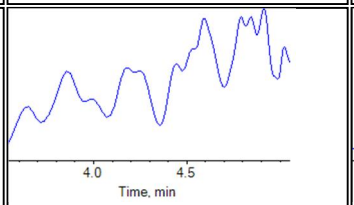


PFDoA_2



PFTrDA_1



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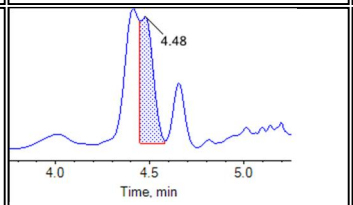

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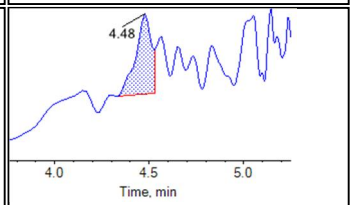

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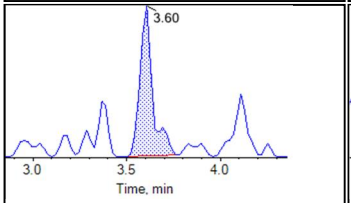
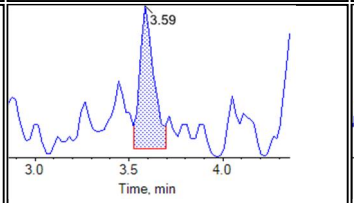


NMeFOSAA_1



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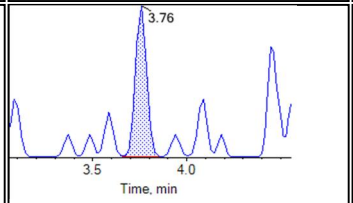
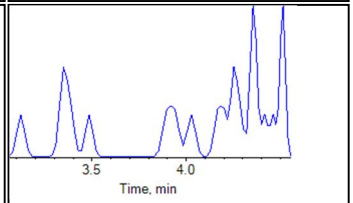
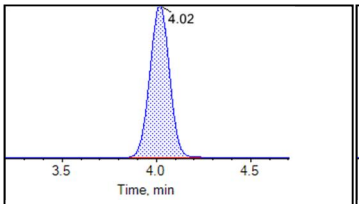


NEtFOSAA_1

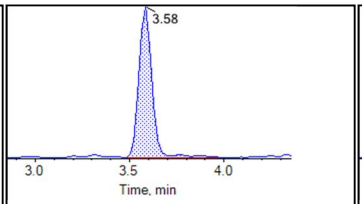


NEtFOSAA_2

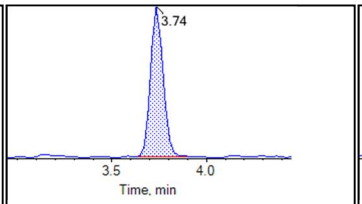
Internal Standards:



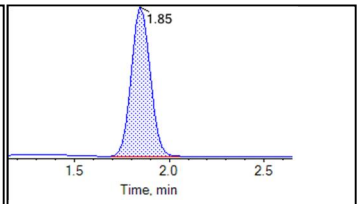
13C2-PFDoA



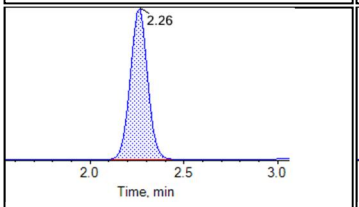
d3-MeFOSAA



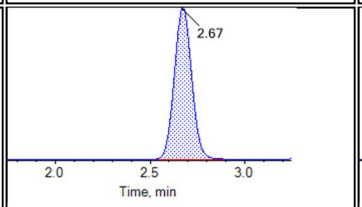
d5-EtFOSAA



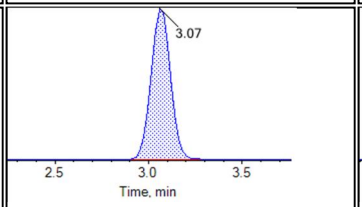
13C5-PFHxA



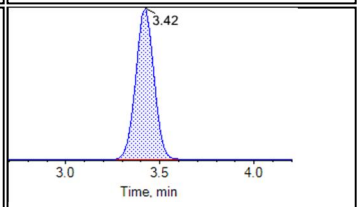
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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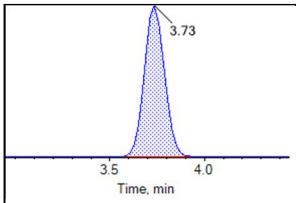
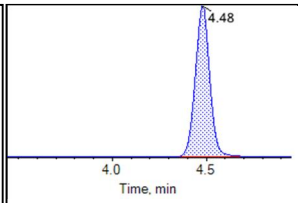
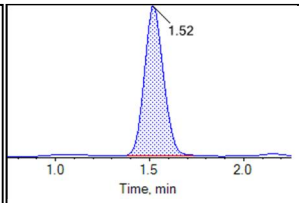


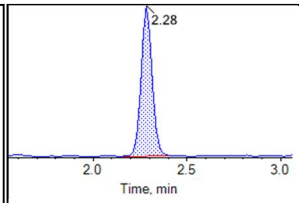
13C7-PFUnA



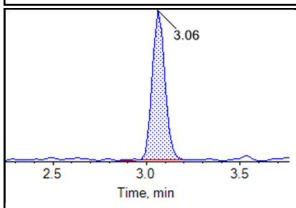
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:44:02 AM

Sample Name	J8669-FS-D(3)	**Injection Vial**	25
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:59:18	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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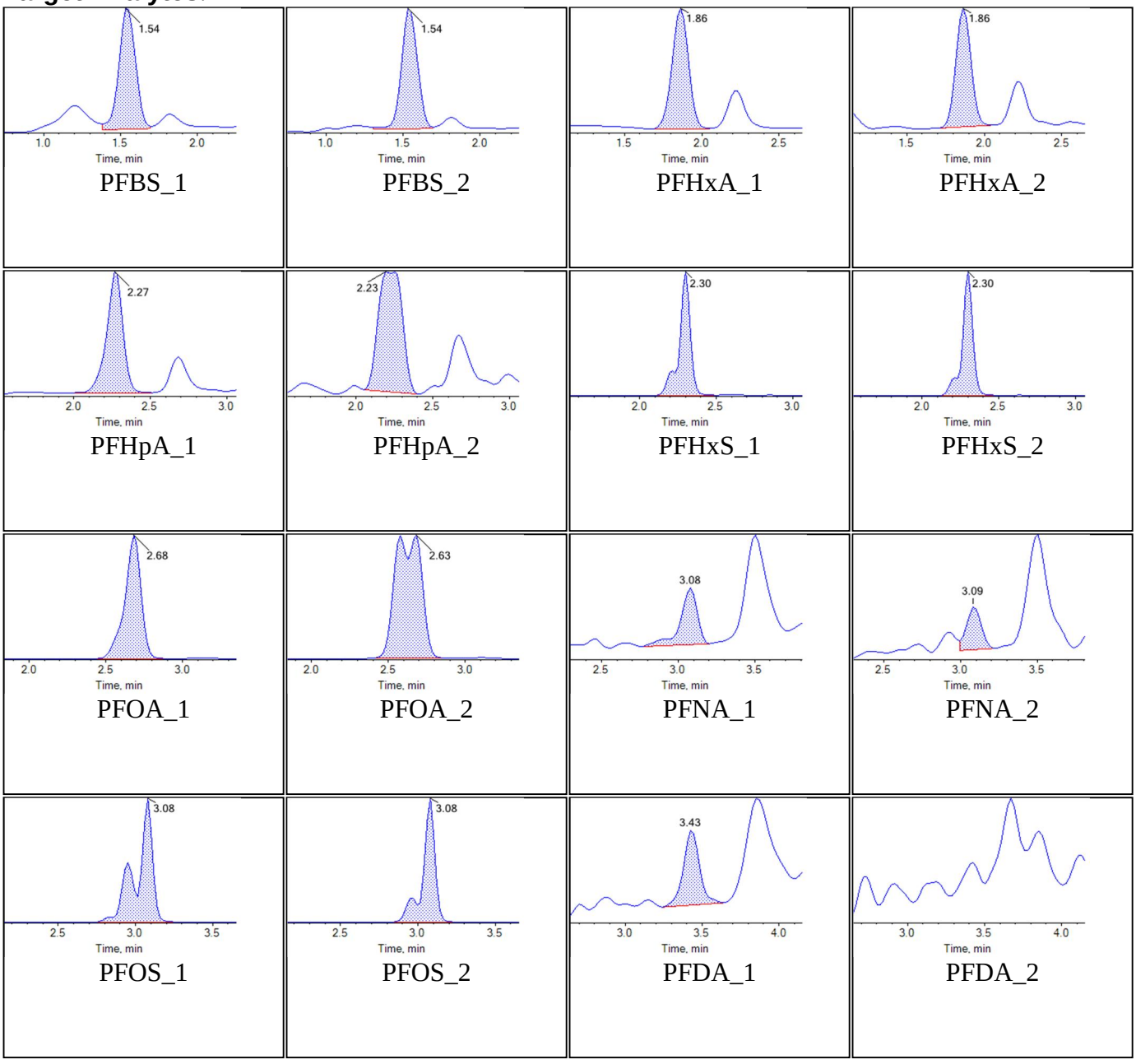

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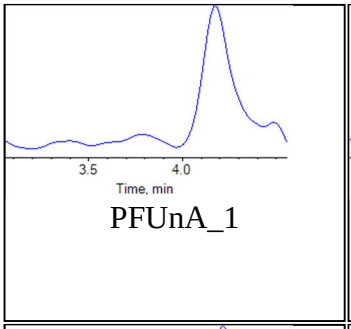

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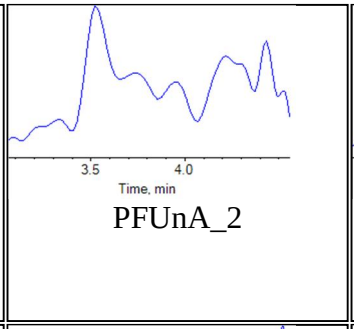
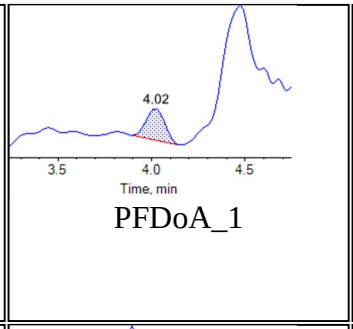


PFUnA_2



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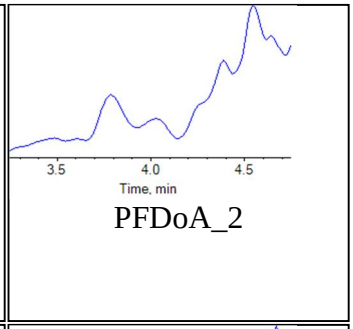
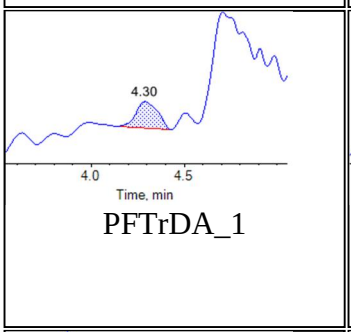
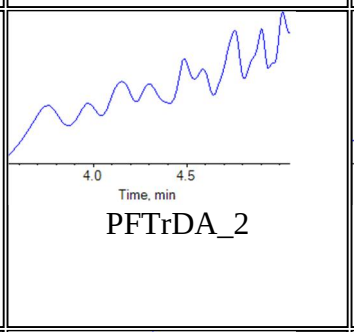


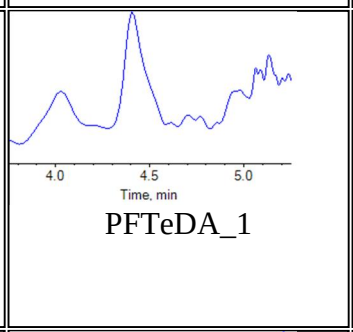
PFDoA_2



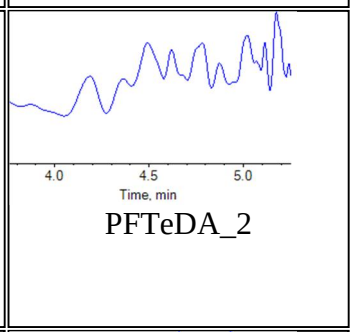
PFTrDA_1



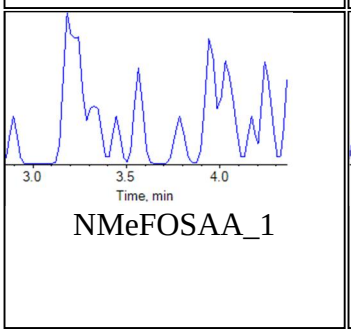
PFTrDA_2



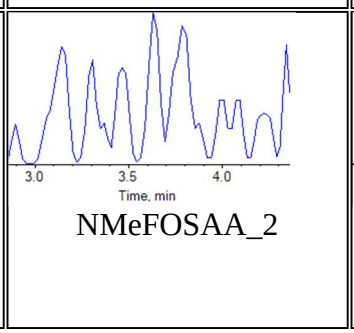
PFTeDA_1



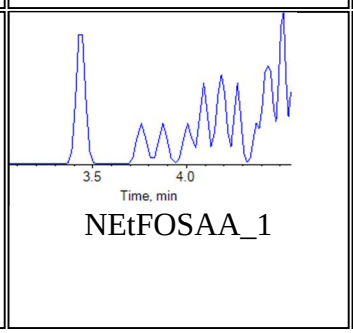
PFTeDA_2



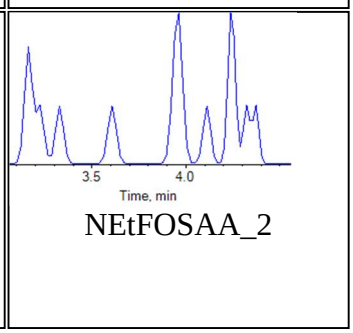
NMeFOSAA_1



NMeFOSAA_2



NEtFOSAA_1



NEtFOSAA_2

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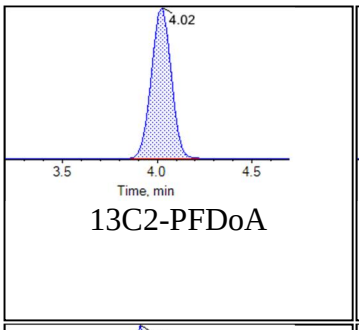
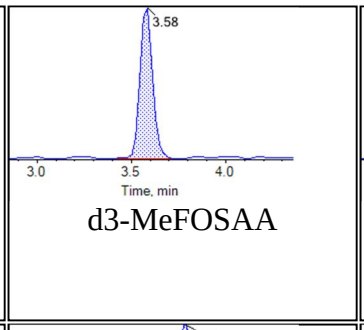
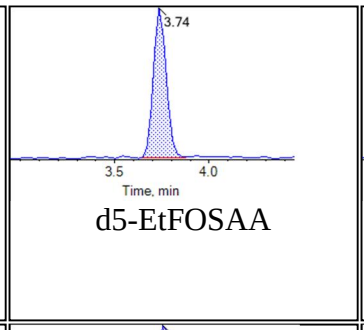


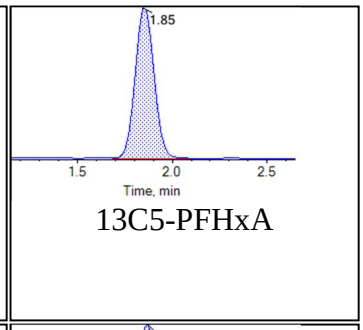
13C2-PFDoA



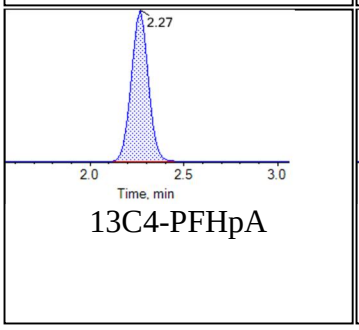
d3-MeFOSAA



d5-EtFOSAA



13C5-PFHxA



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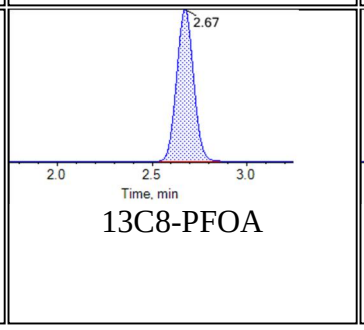

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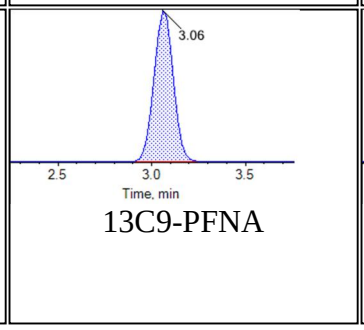
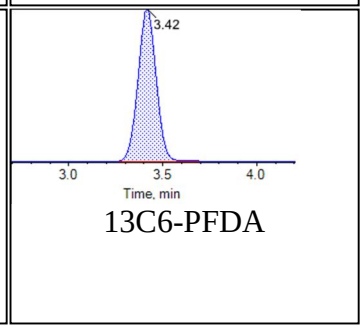


13C9-PFNA



13C6-PFDA

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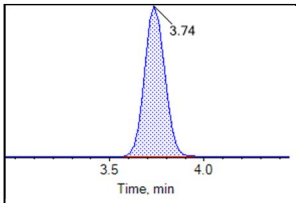

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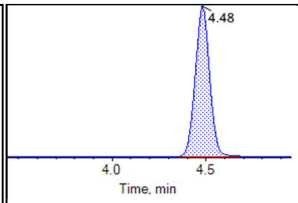

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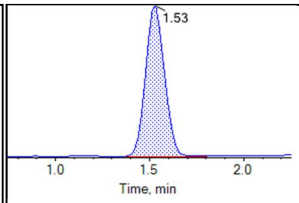

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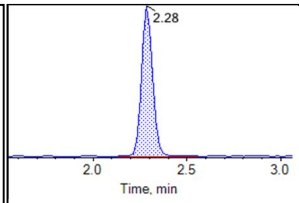

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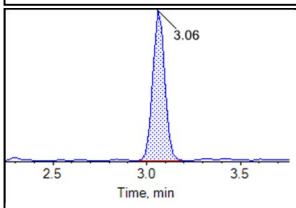

13C8-PFOS

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Sample Name	J8669-FS-D(5)	**Injection Vial**	26
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:10:10	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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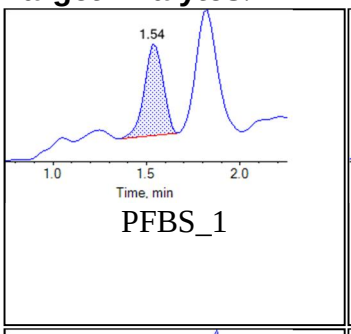

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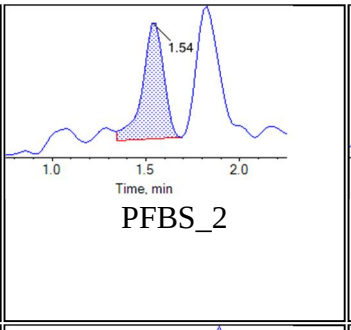

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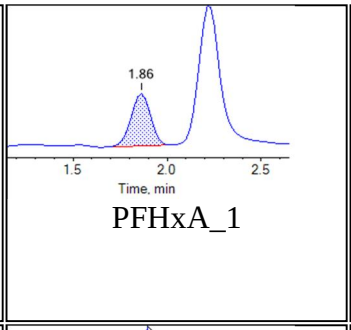

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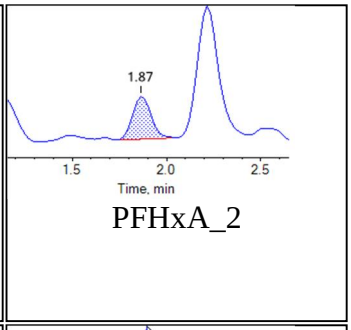

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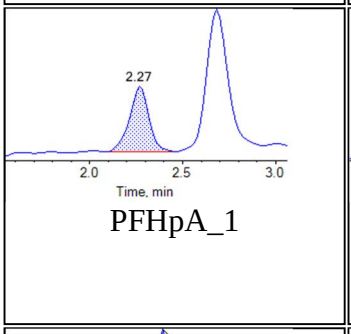

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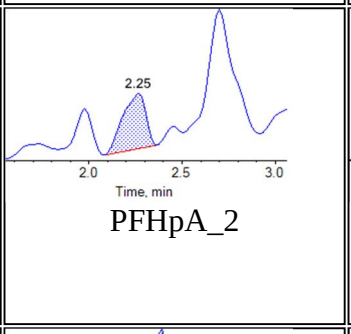

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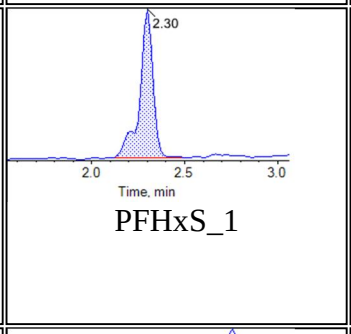

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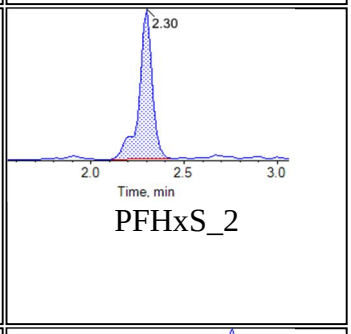

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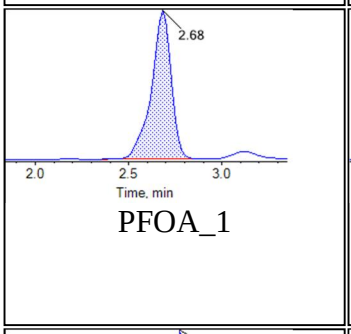

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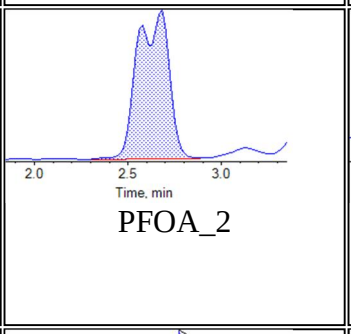

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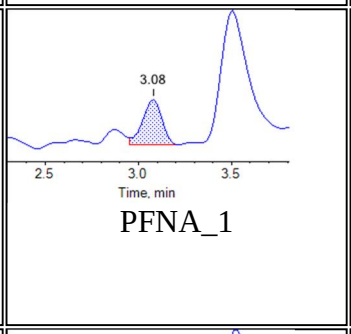

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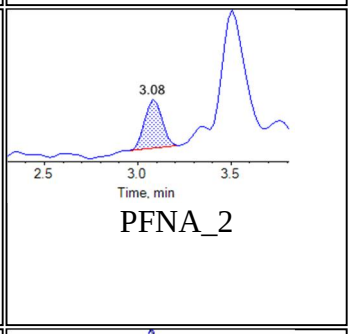

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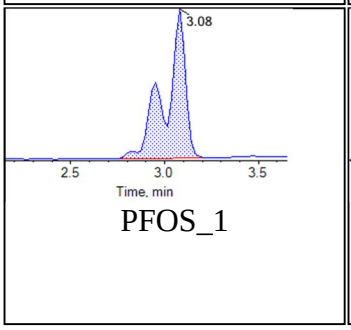

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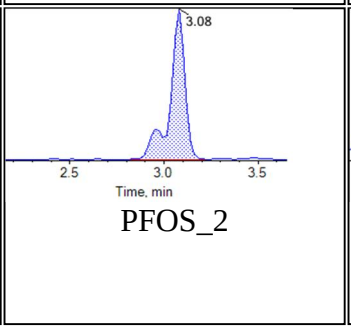

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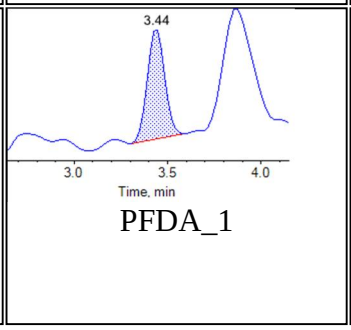

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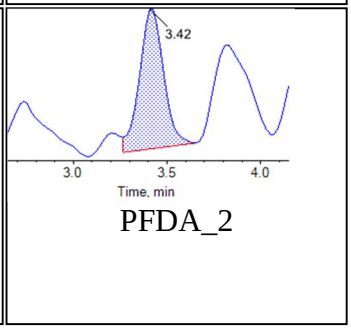

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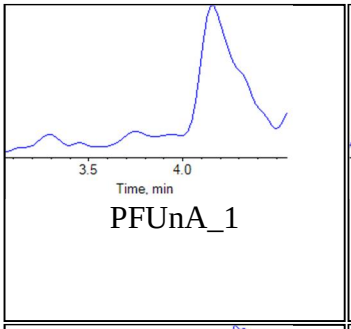

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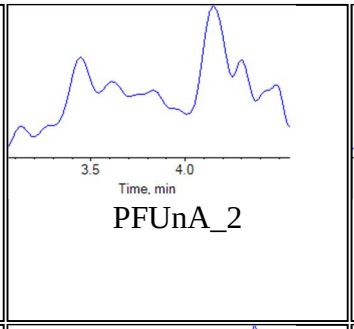

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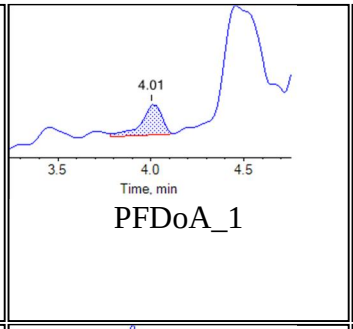

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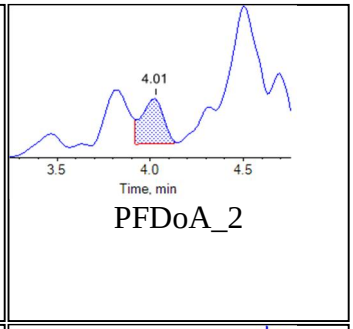

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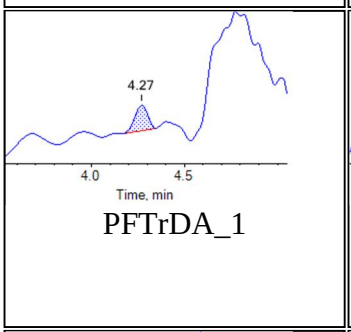

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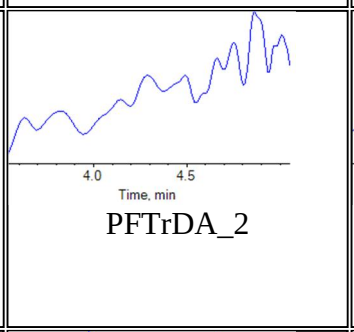

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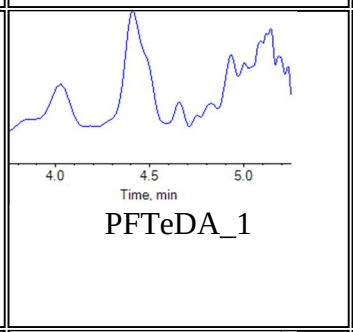

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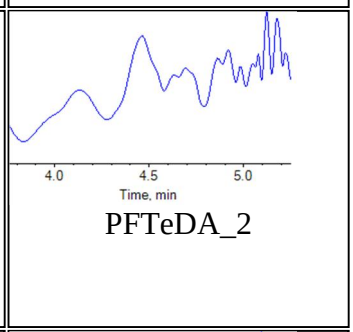

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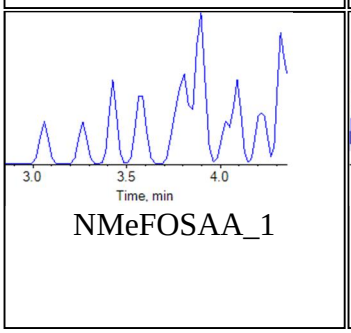

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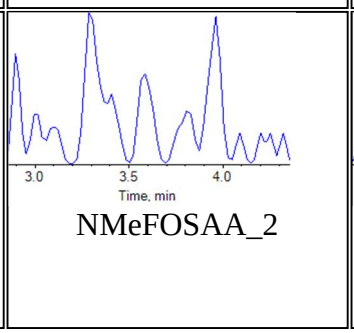

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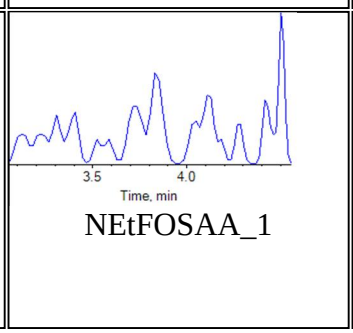

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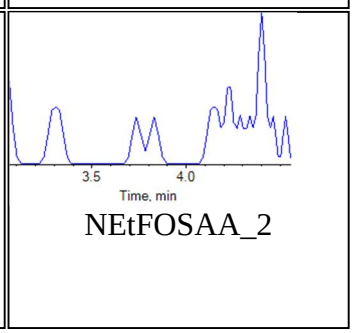

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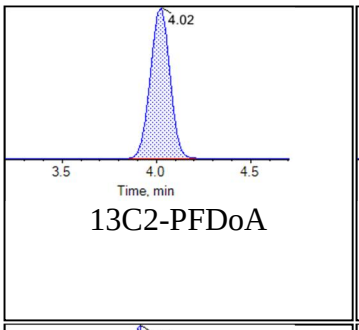

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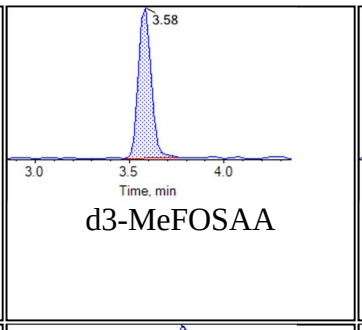

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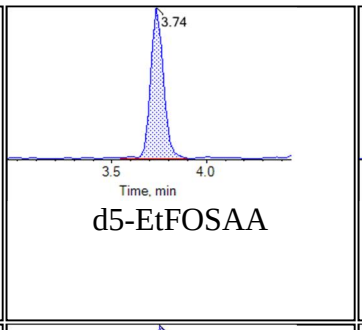

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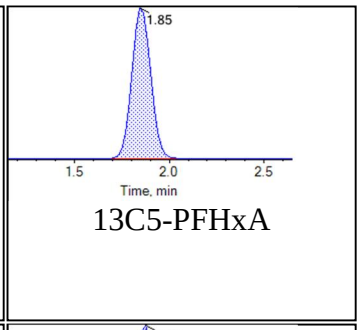
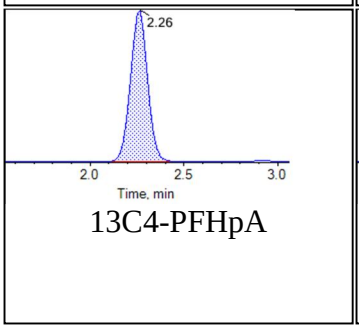
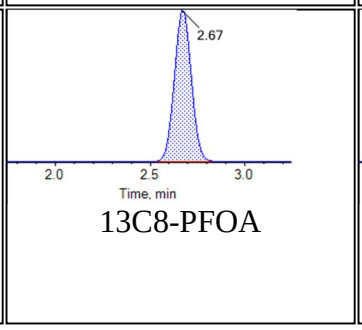


13C5-PFHxA



13C4-PFHpA



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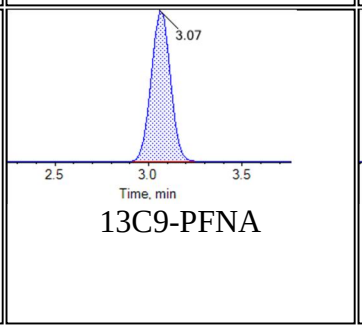

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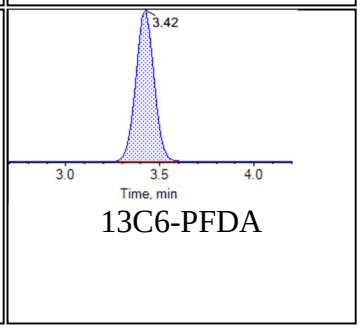

13C6-PFDA

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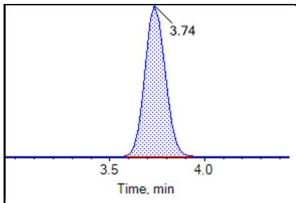
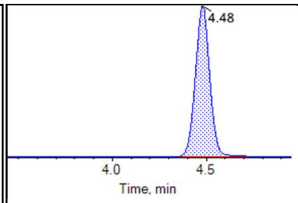
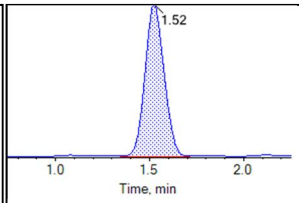


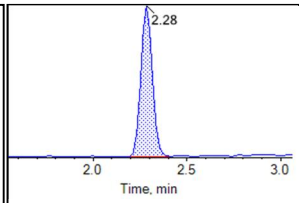
13C7-PFUnA



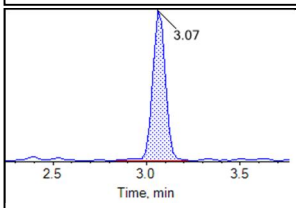
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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Sample Name	J8670-FS(0)	**Injection Vial**	27
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:21:03	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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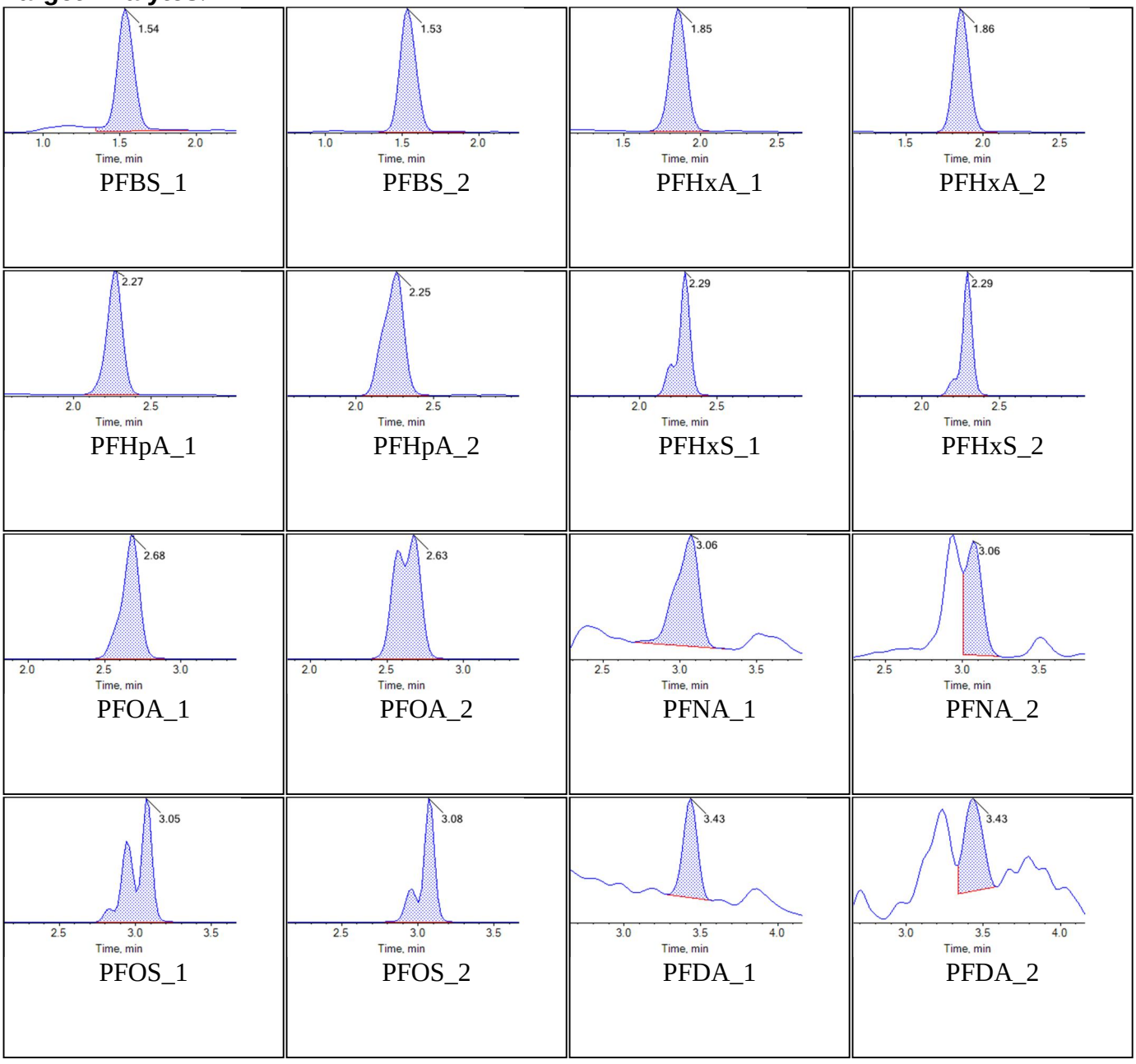

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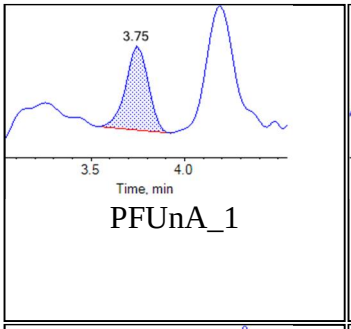

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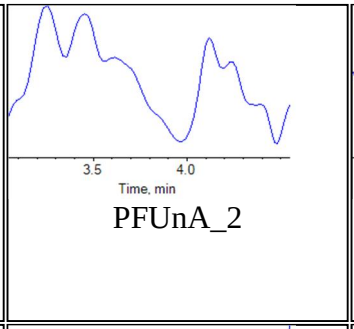

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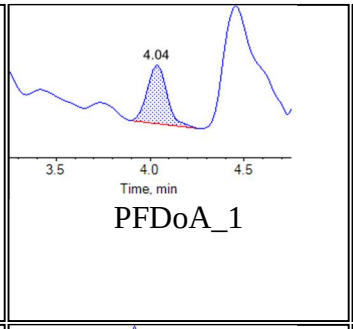

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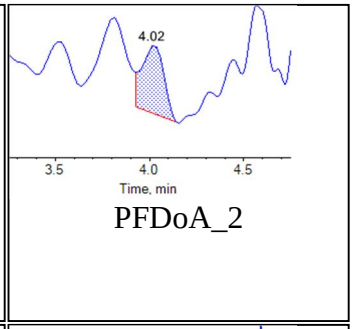

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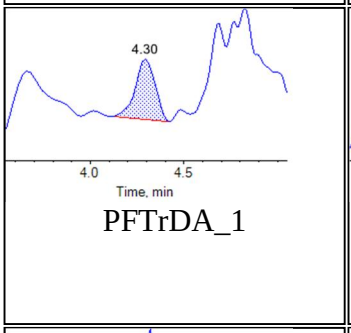

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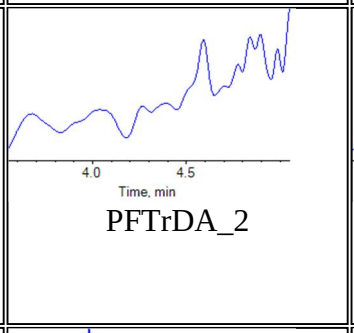

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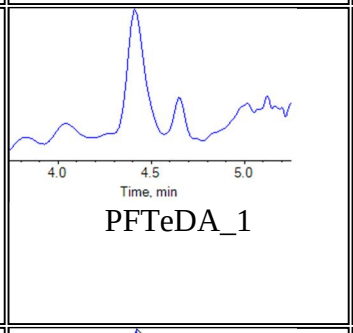

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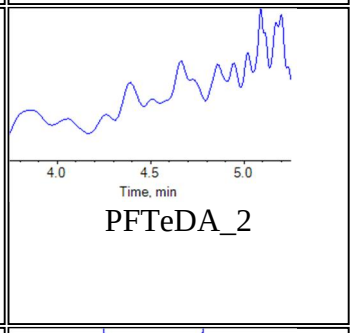

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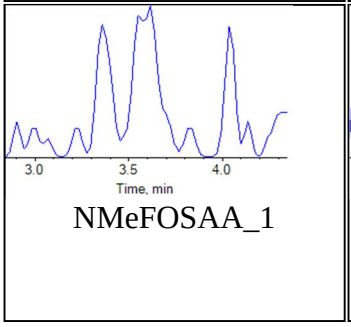

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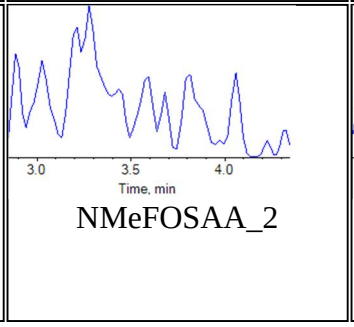

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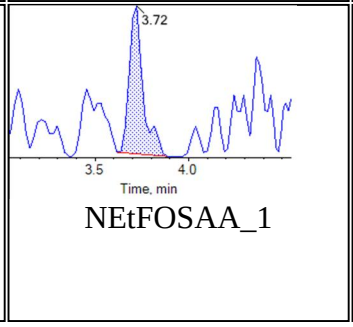

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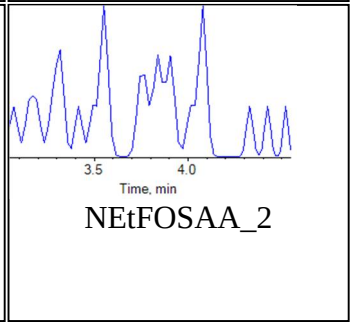

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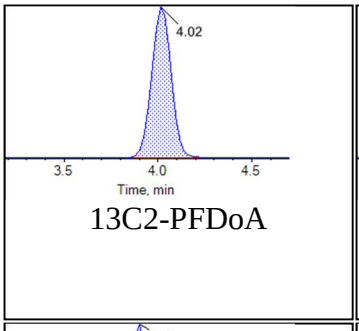

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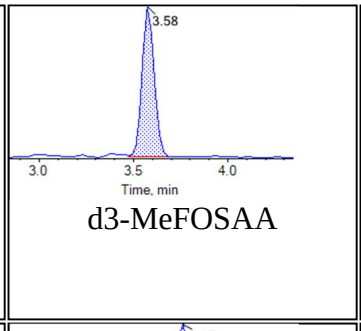
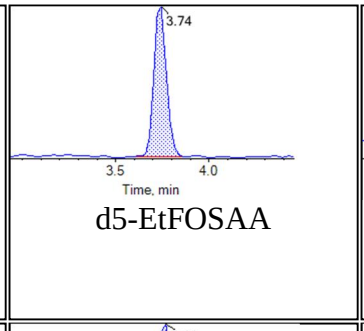


d3-MeFOSAA



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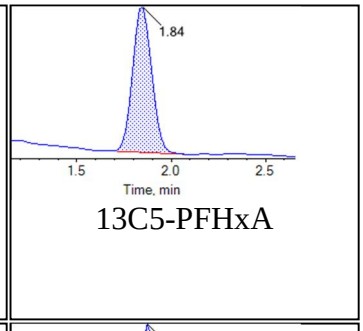

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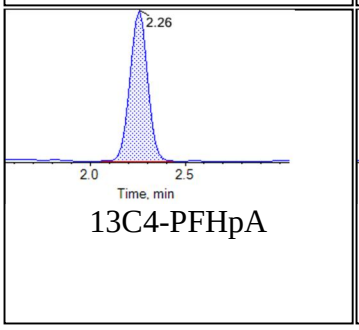

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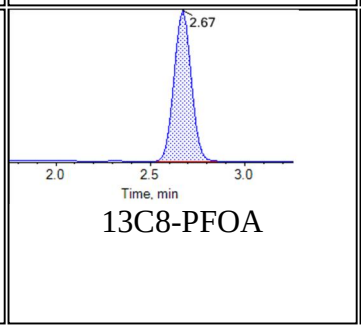

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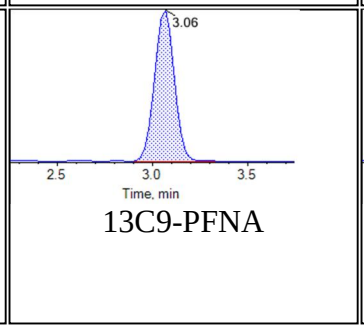
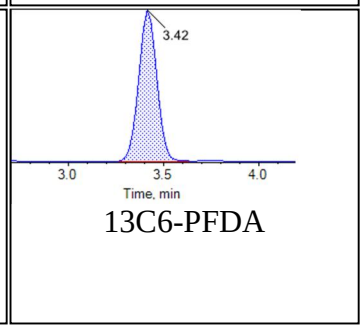


13C9-PFNA



13C6-PFDA

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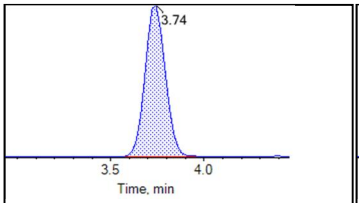
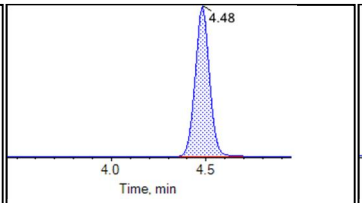


13C7-PFUnA



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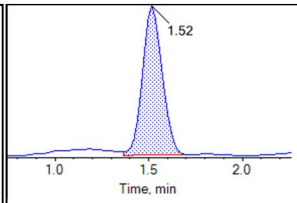

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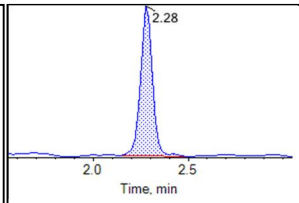

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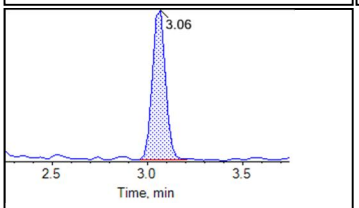

13C8-PFOS

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Sample Name	J8670-FS-D(3)	**Injection Vial**	28
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:31:54	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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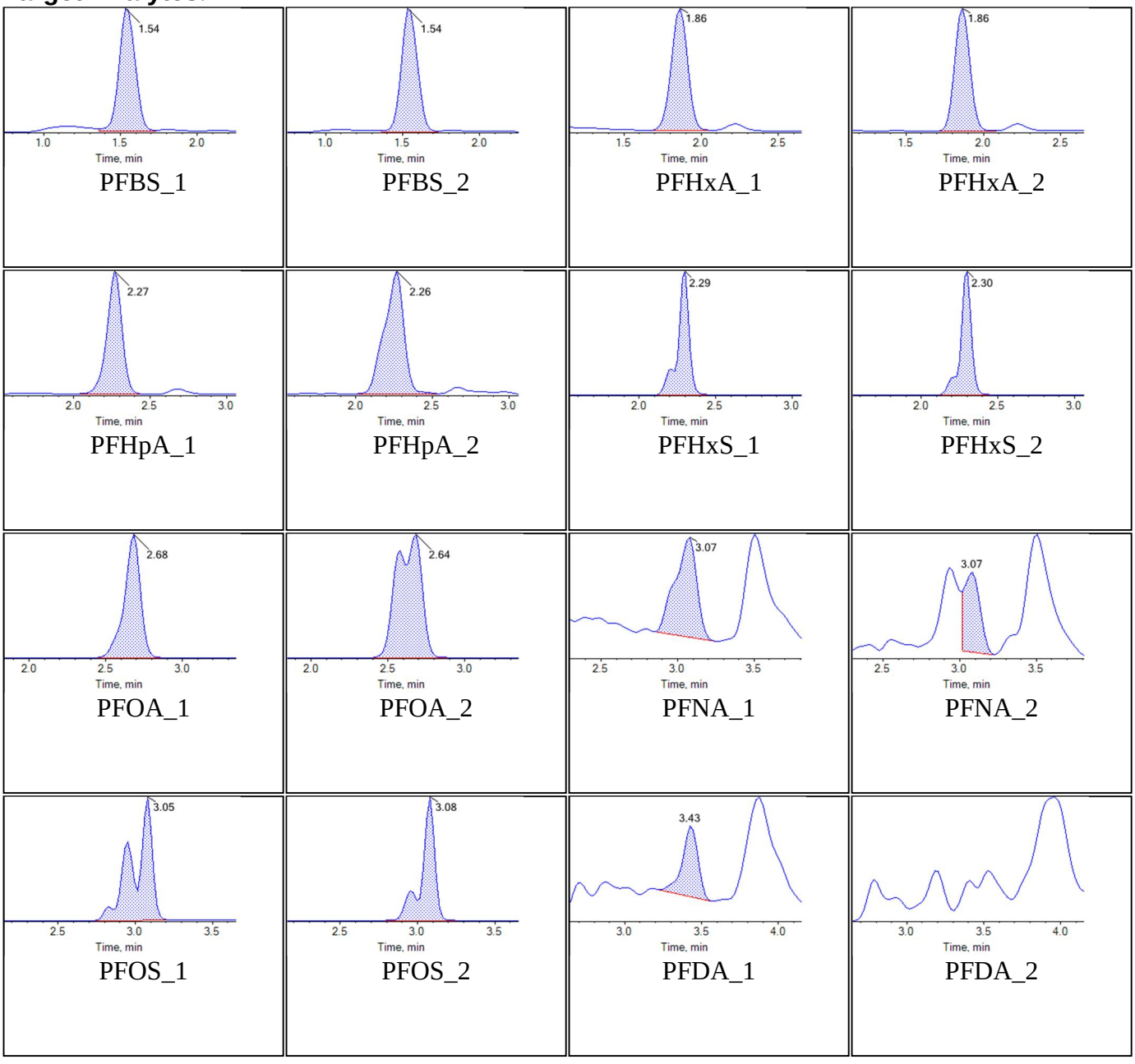

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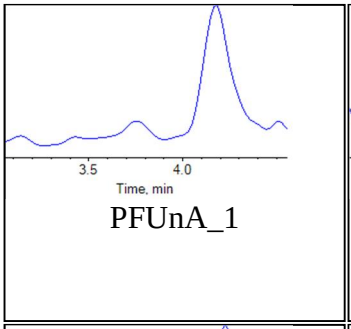

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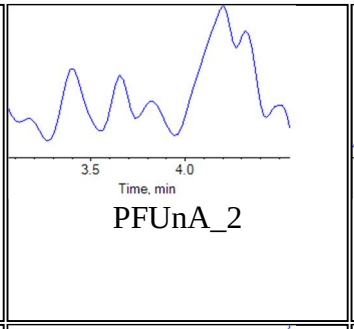

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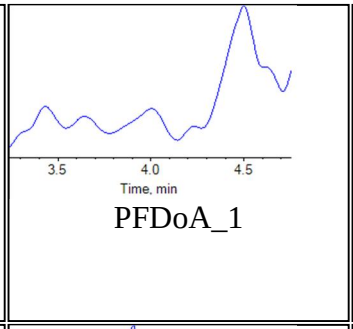

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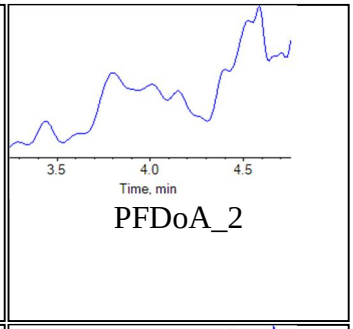

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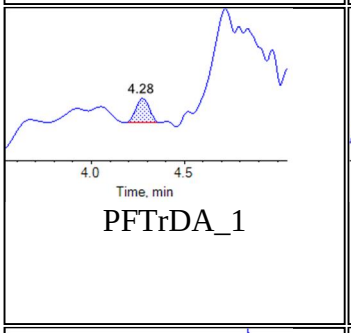

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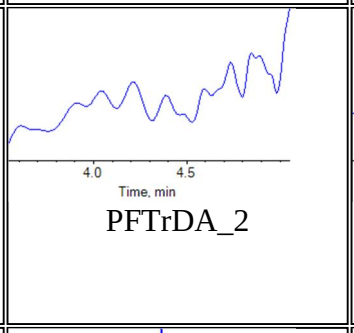

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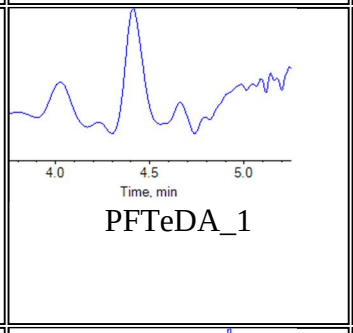

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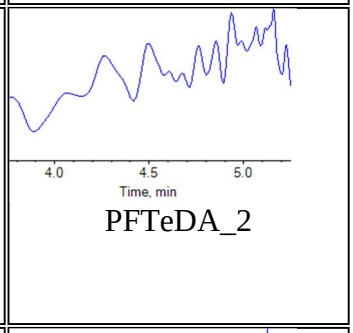

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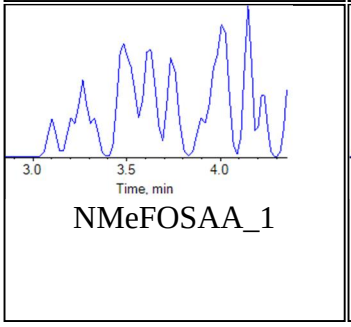

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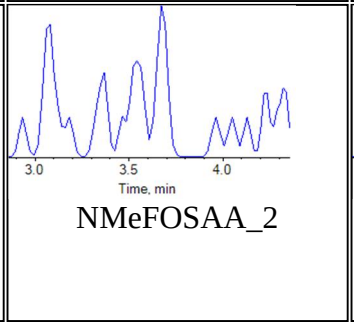

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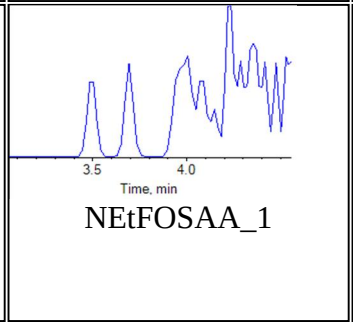

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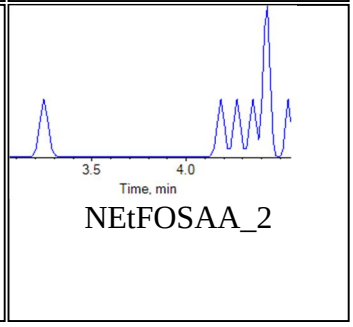

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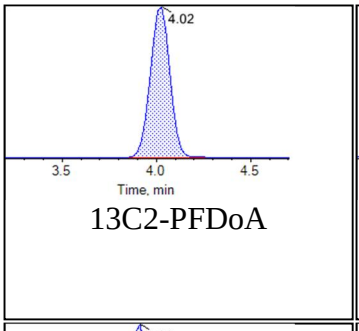

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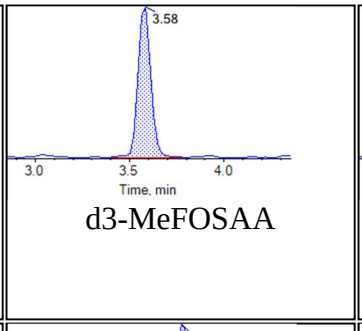
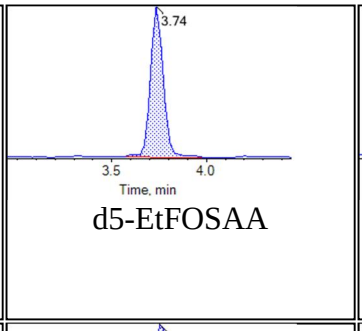


d3-MeFOSAA



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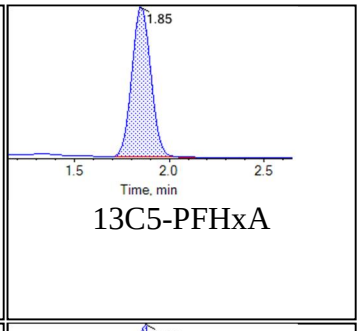

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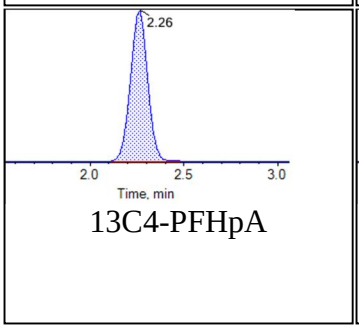

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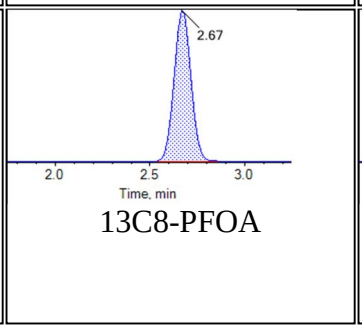

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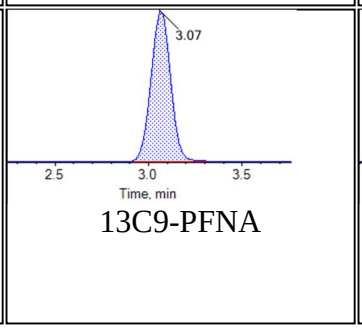

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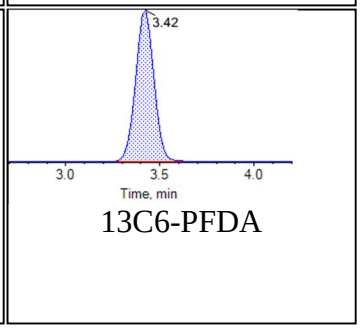

13C6-PFDA

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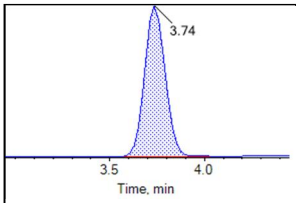
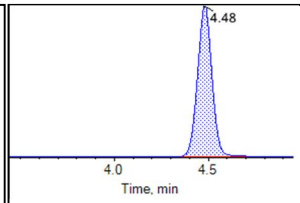


13C7-PFUnA



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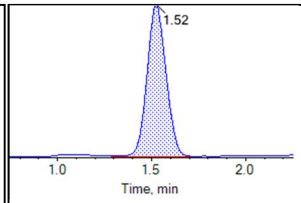
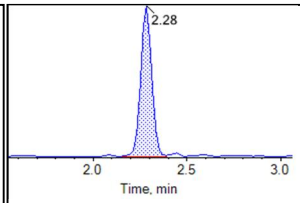


13C3-PFBS



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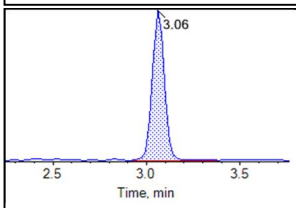

13C8-PFOS

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Chromatogram Report

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Sample Name	J8670-FS-D(5)	**Injection Vial**	29
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:42:46	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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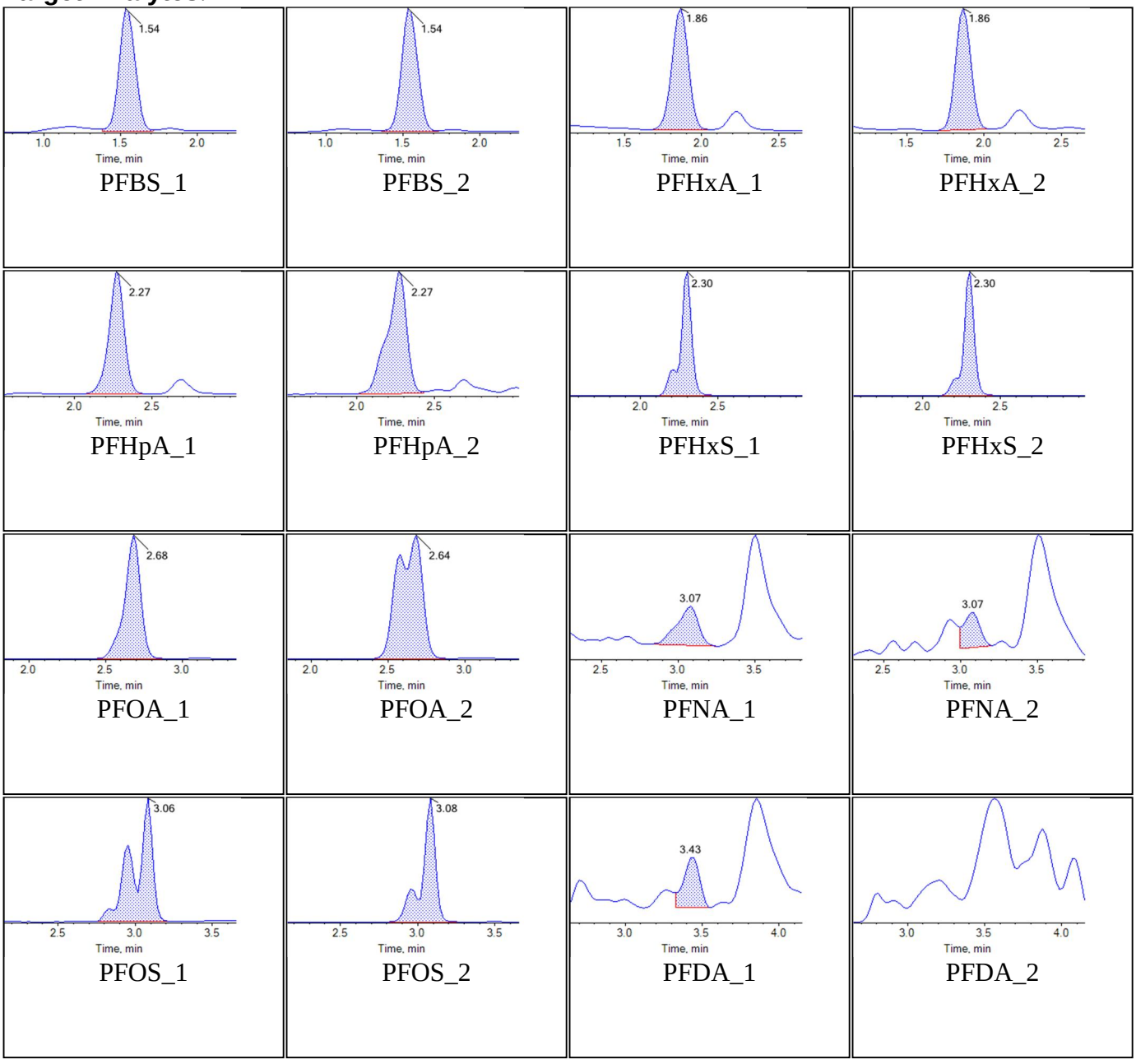

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Chromatogram Report

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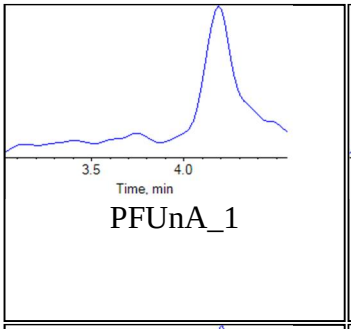

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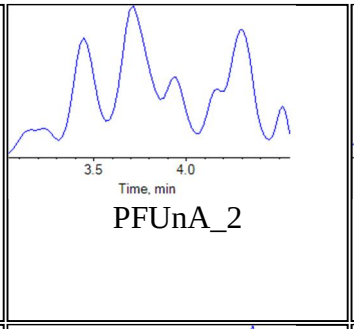

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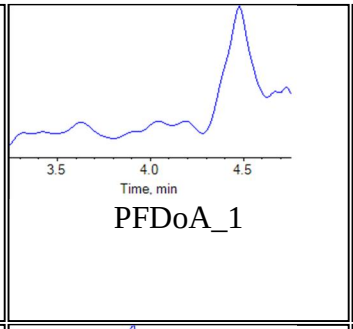

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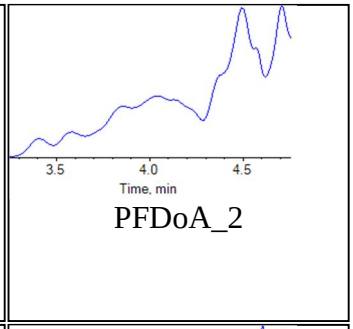

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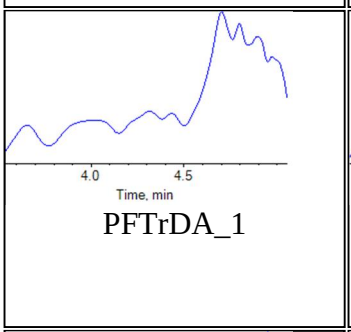

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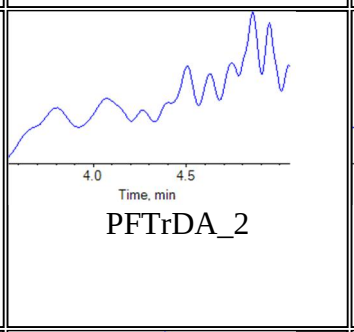

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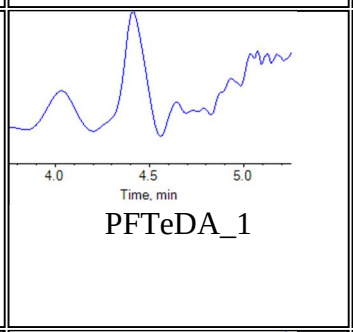

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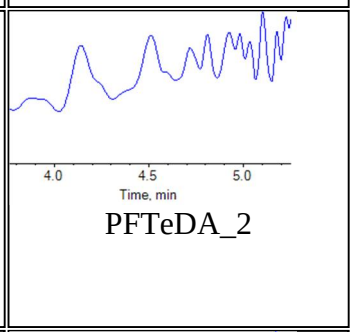

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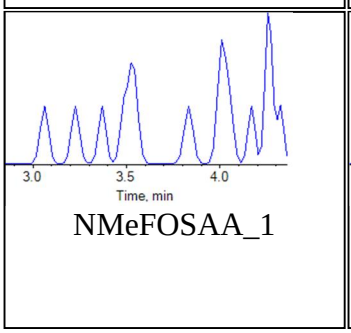

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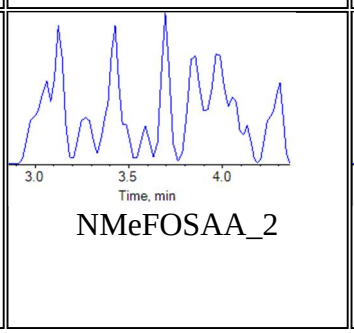

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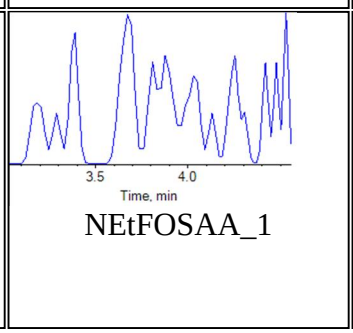

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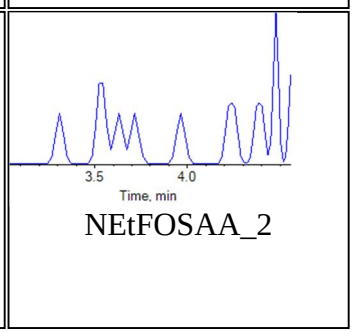

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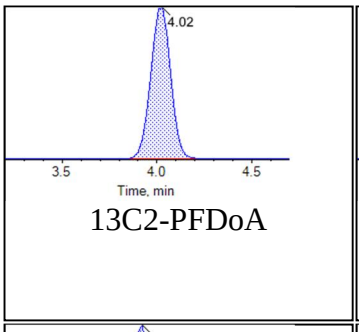
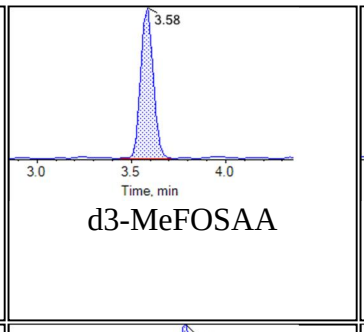
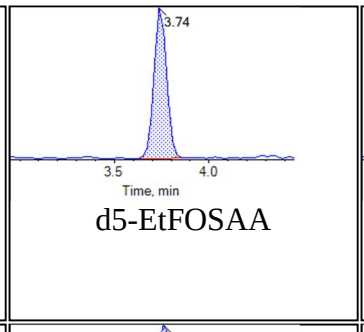


13C2-PFDoA



d3-MeFOSAA



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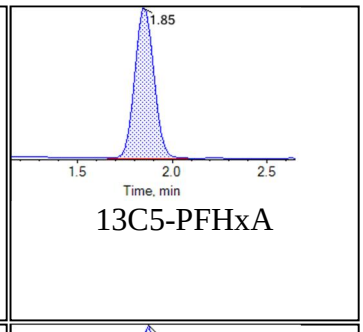

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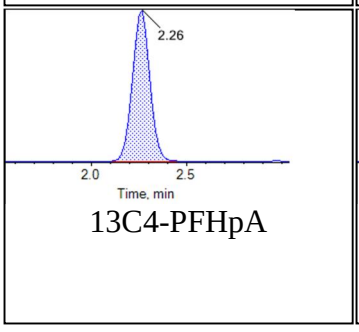

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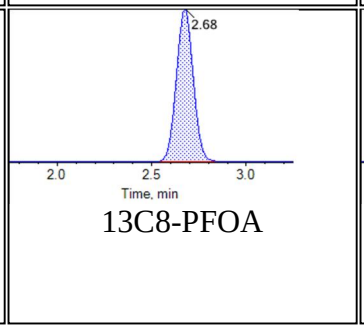
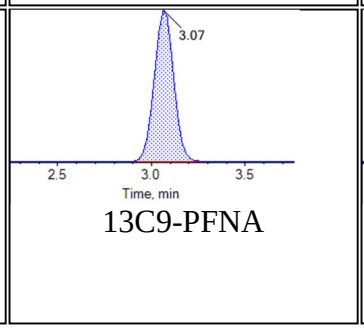
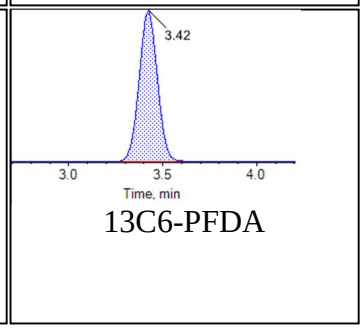


13C8-PFOA



13C9-PFNA



13C6-PFDA

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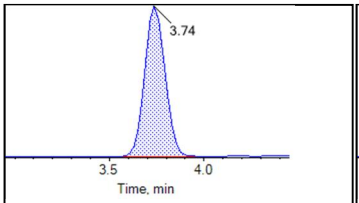
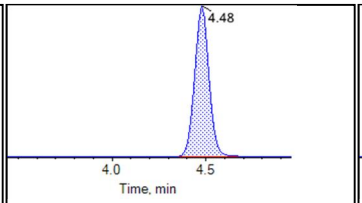


13C7-PFUnA



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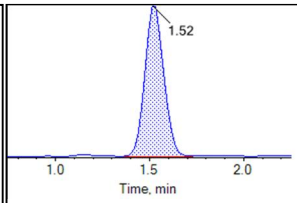
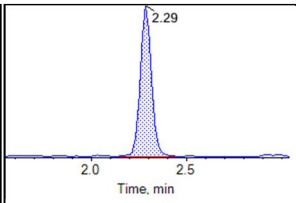


13C3-PFBS



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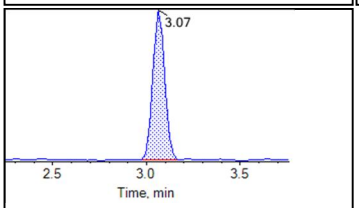

13C8-PFOS

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Sample Name	J8683-FS(0)	**Injection Vial**	30
Sample ID	VC-CS10-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:53:38	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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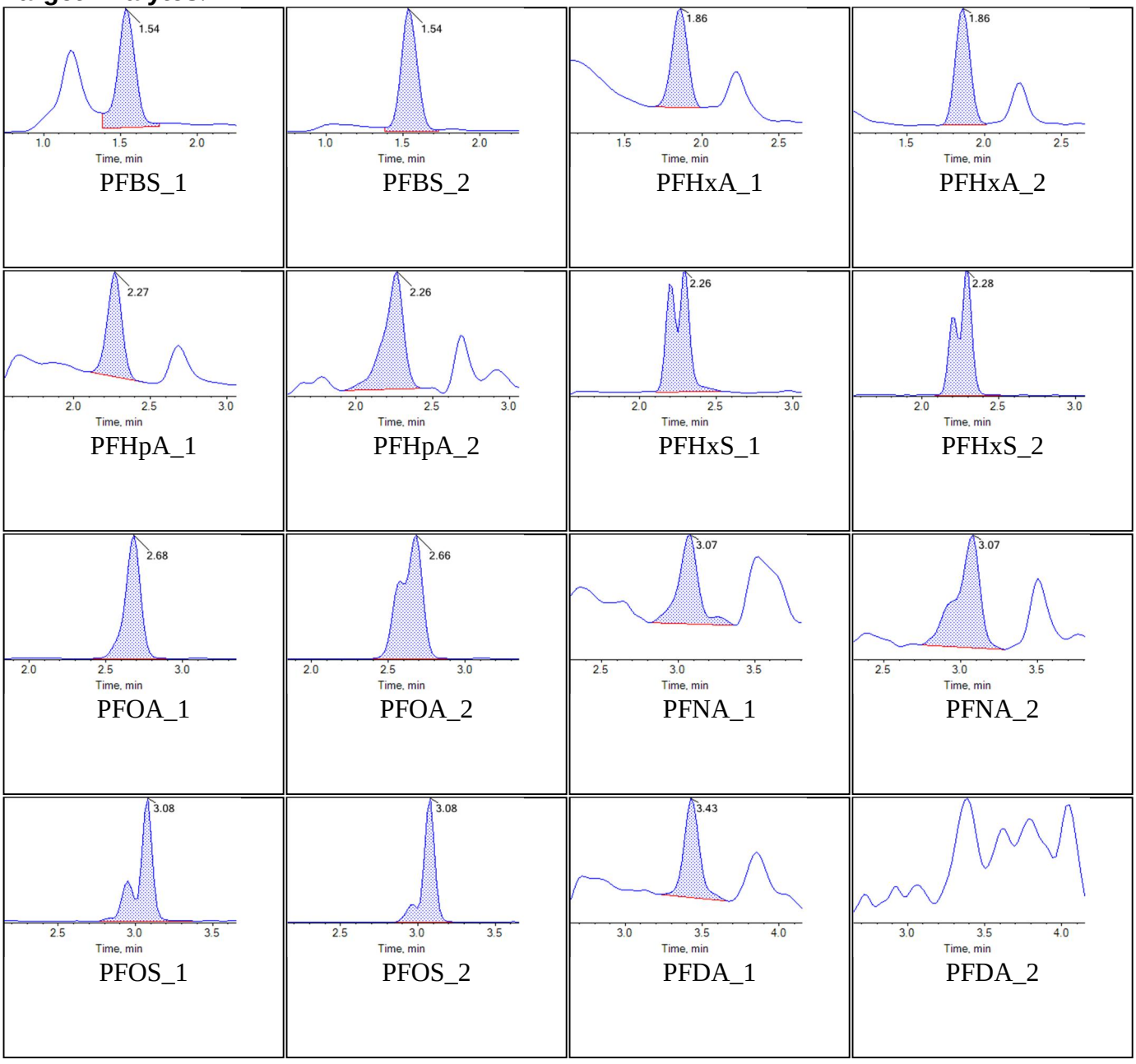

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Chromatogram Report

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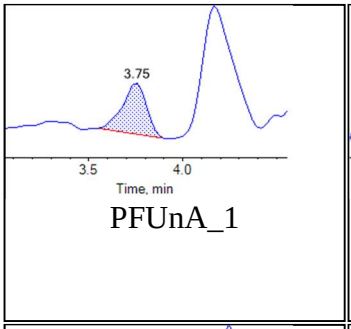

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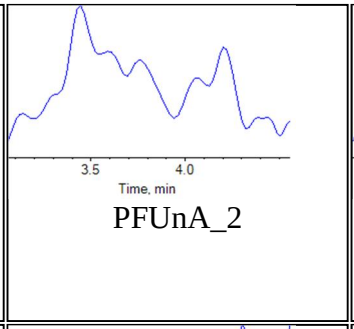

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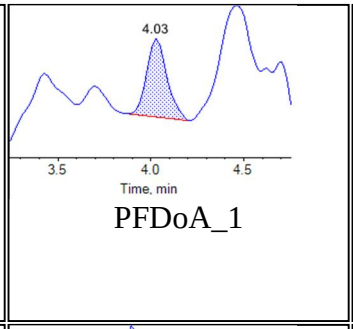

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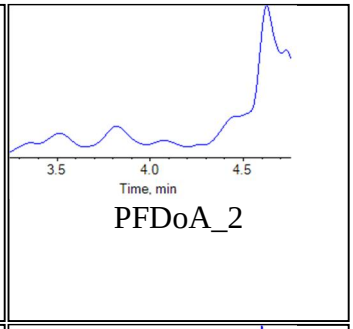
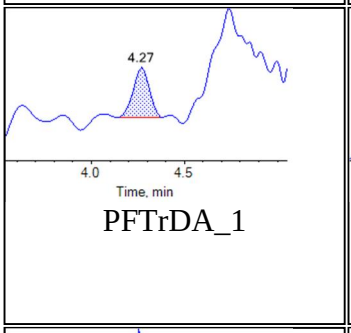


PFDoA_2



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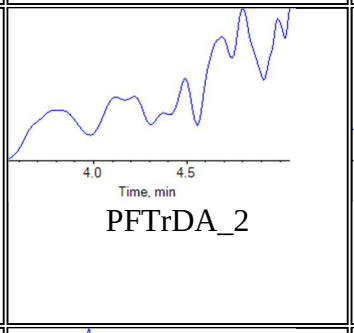

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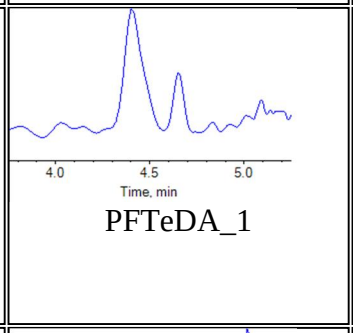

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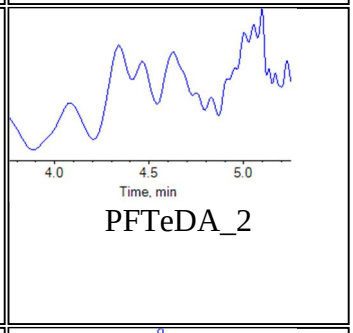

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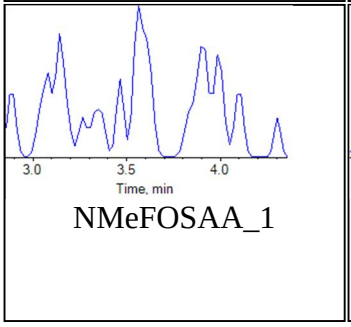

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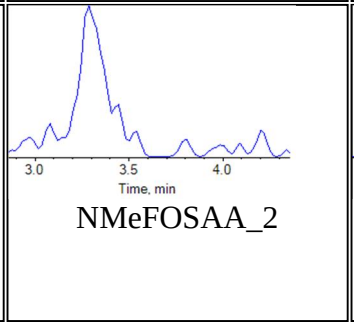

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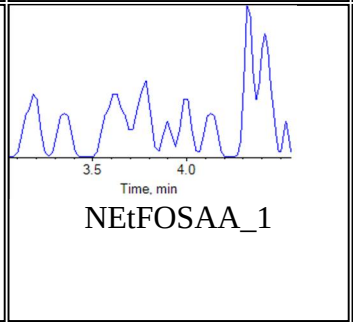

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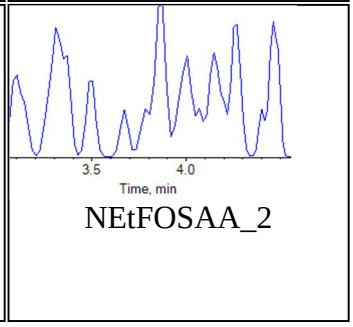

NEtFOSAA_2

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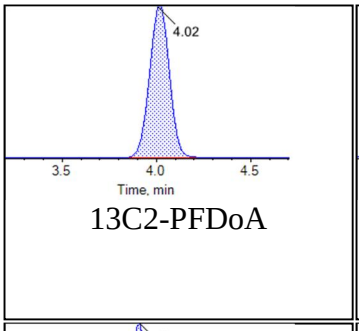

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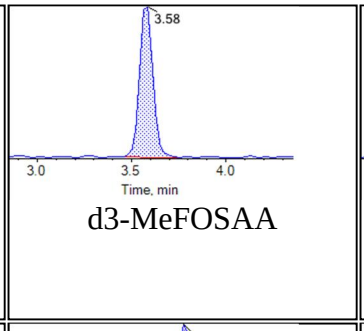
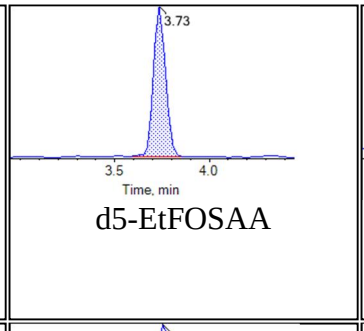
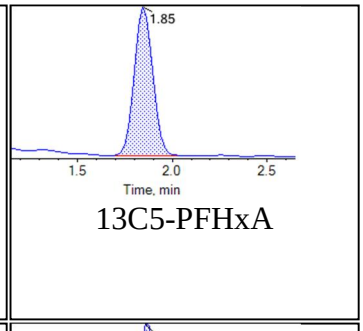


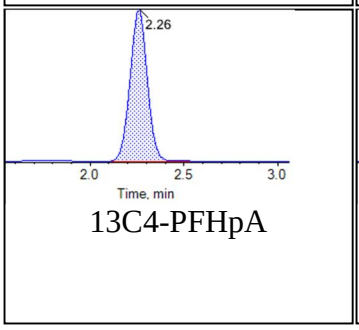
d3-MeFOSAA



d5-EtFOSAA



13C5-PFHxA



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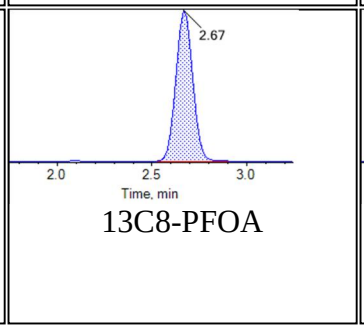

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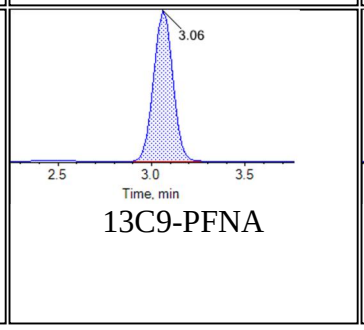
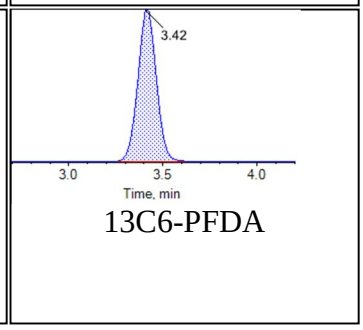


13C9-PFNA



13C6-PFDA

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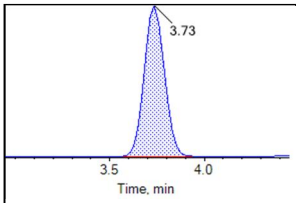
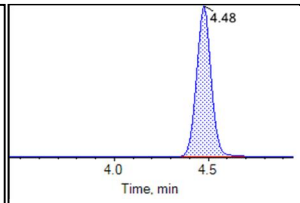
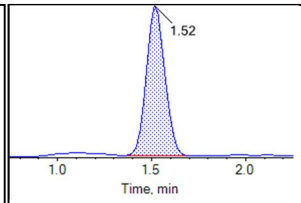


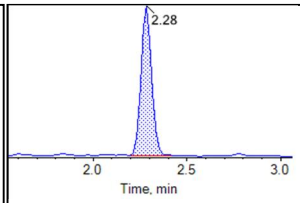
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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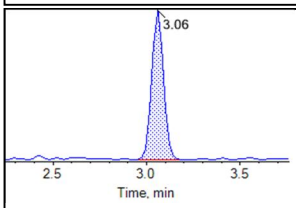

13C8-PFOS

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Chromatogram Report

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Sample Name	J8683-FS-D(3)	**Injection Vial**	31
Sample ID	VC-CS10-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:04:29	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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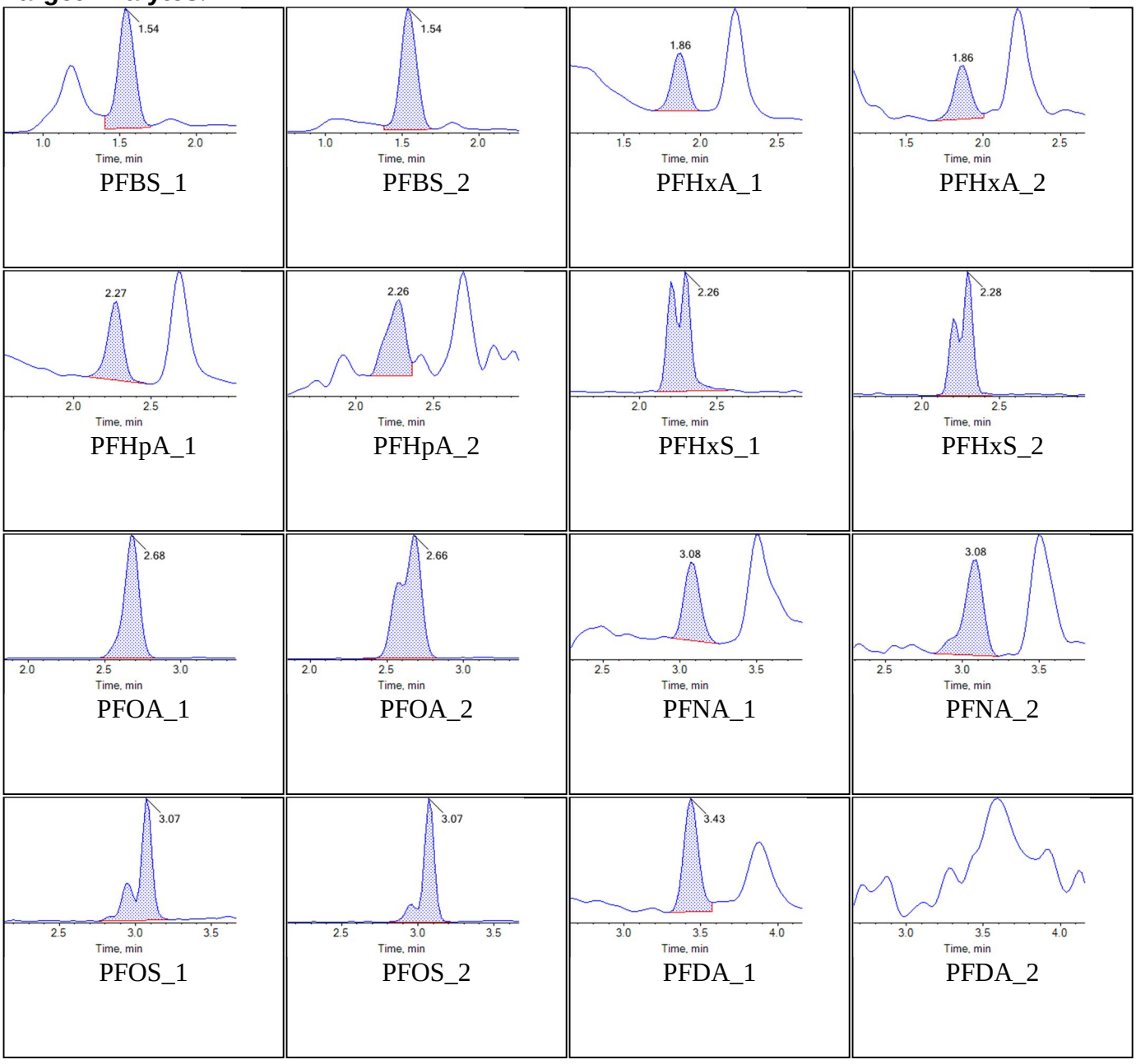

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Chromatogram Report

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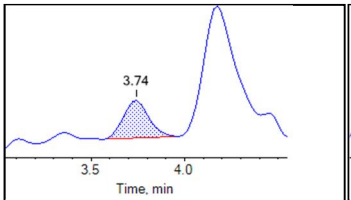

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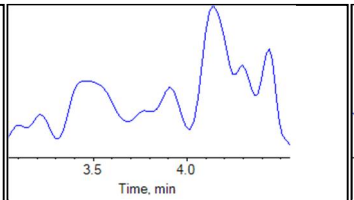

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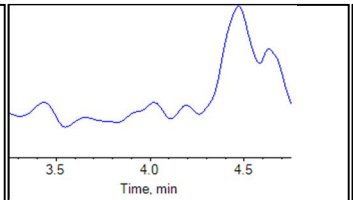

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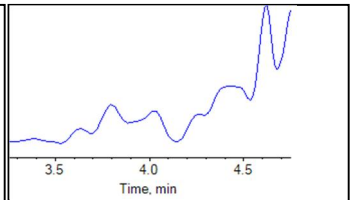

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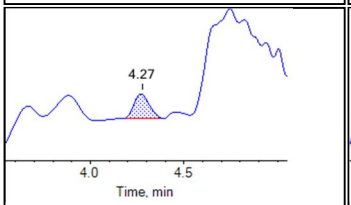

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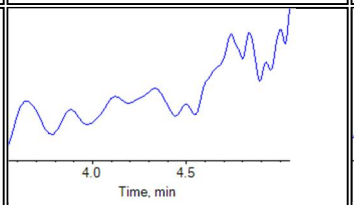

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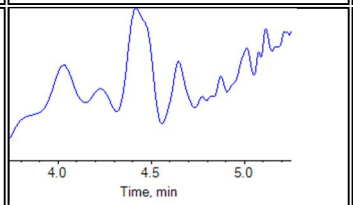

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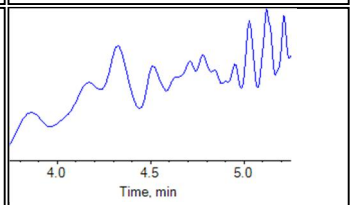

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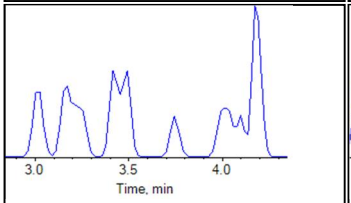

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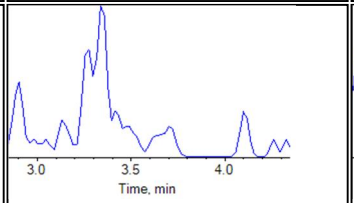

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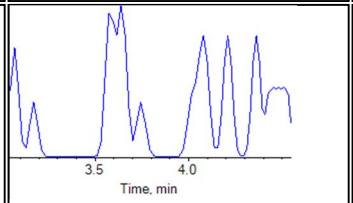

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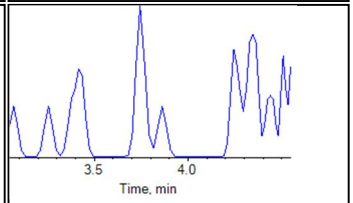

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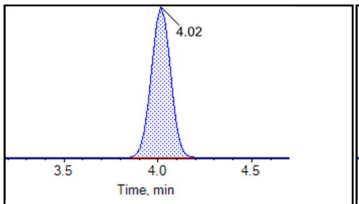

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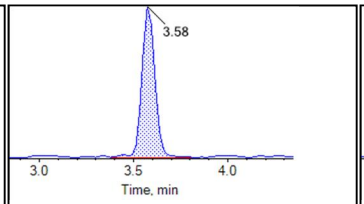

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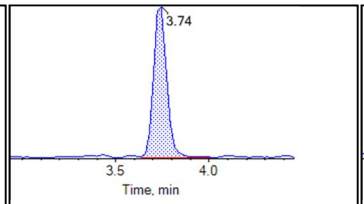

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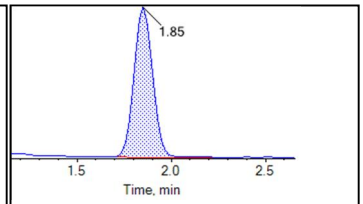

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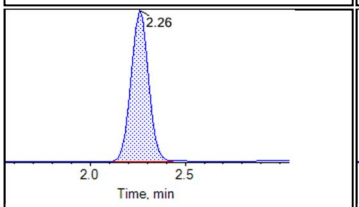

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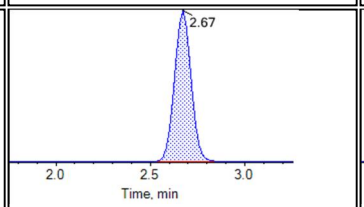

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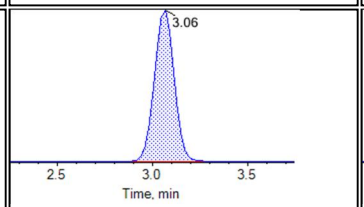

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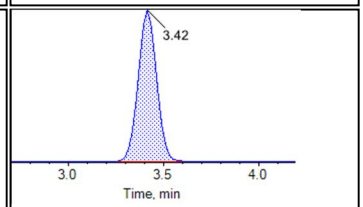

13C6-PFDA

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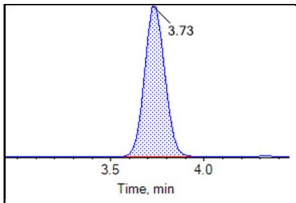

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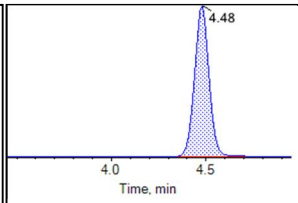

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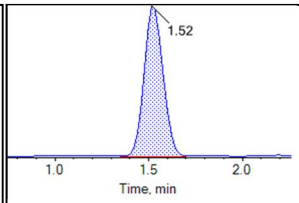

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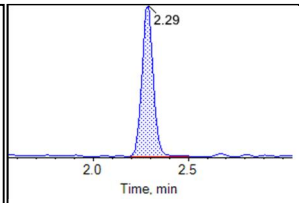

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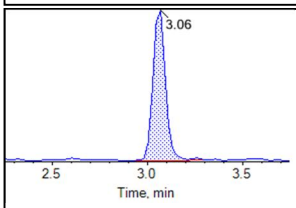

13C8-PFOS

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Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:26:13	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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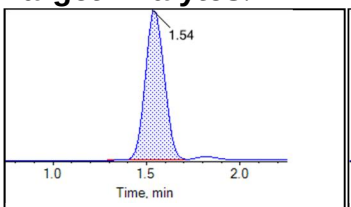

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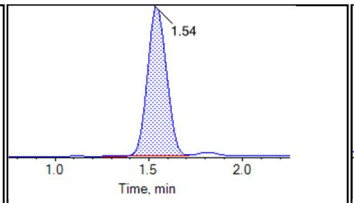

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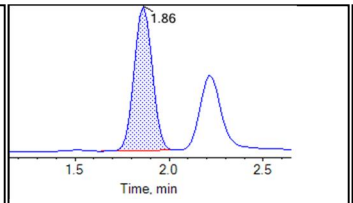

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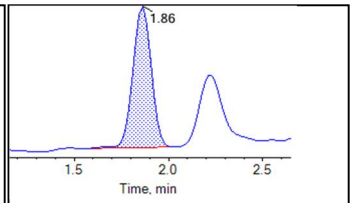

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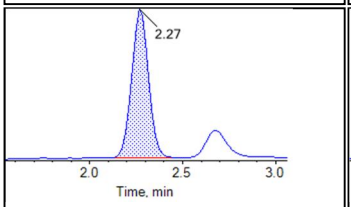

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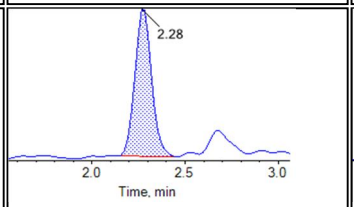

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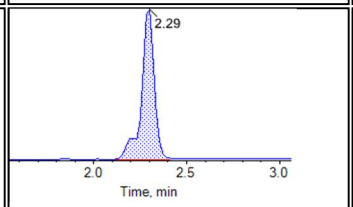

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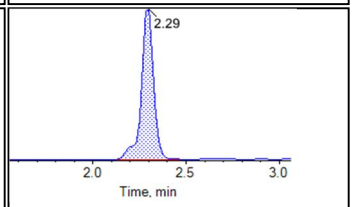

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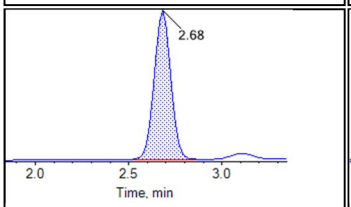

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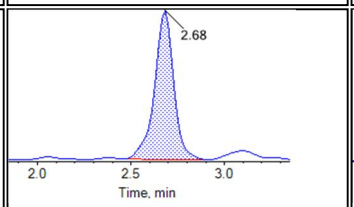

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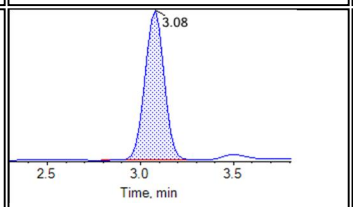

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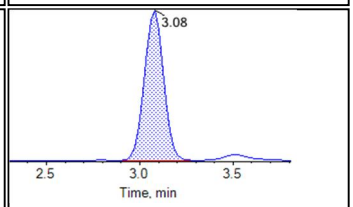

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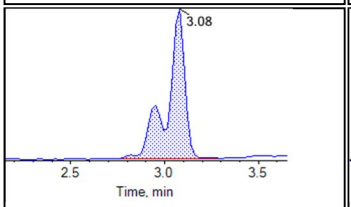

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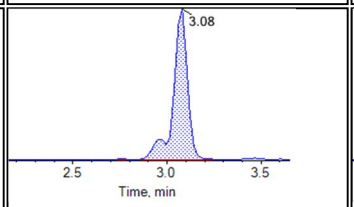

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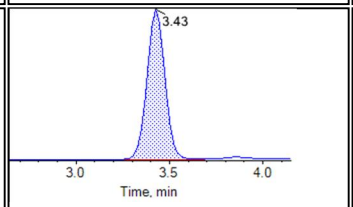

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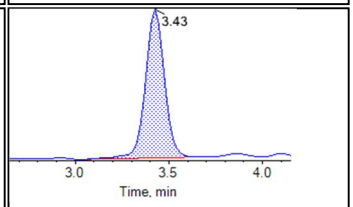

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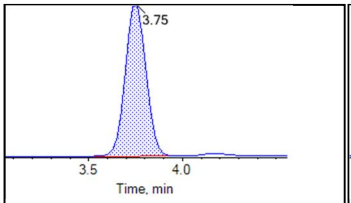

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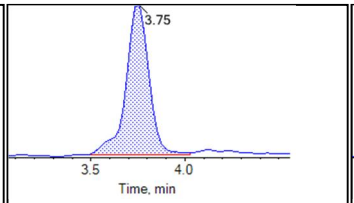

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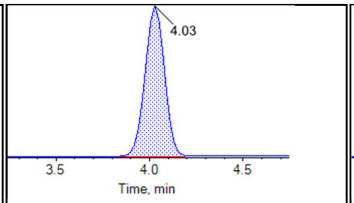

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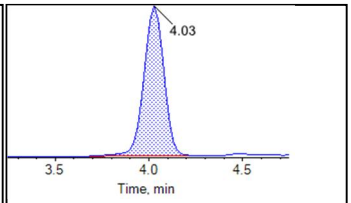

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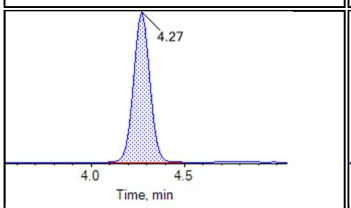

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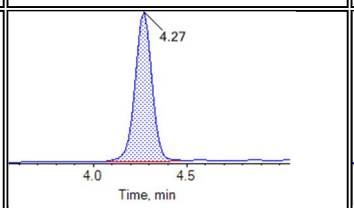

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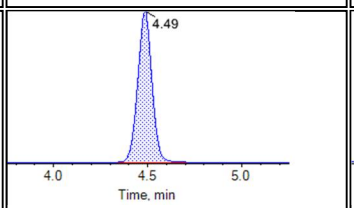

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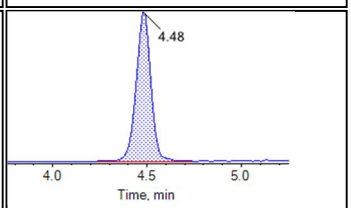

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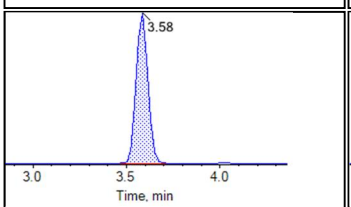

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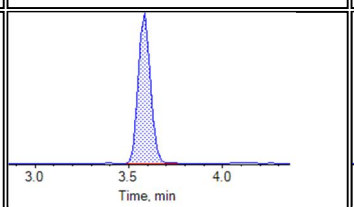

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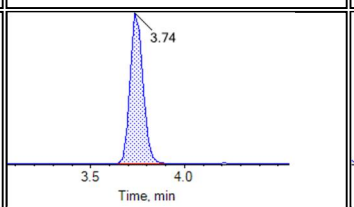

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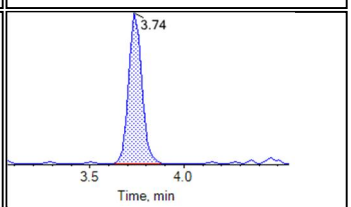

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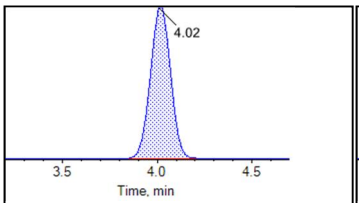
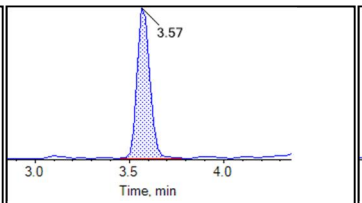
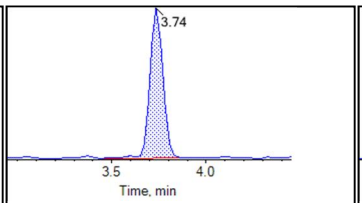


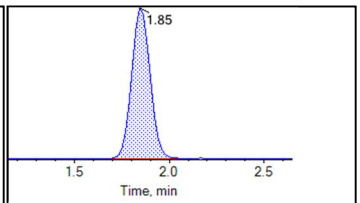
13C2-PFDoA



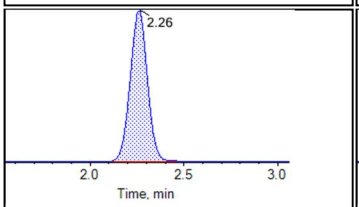
d3-MeFOSAA



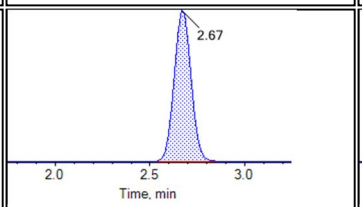
d5-EtFOSAA



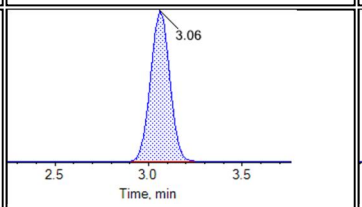
13C5-PFHxA



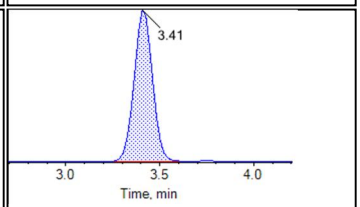
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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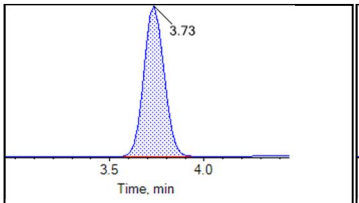
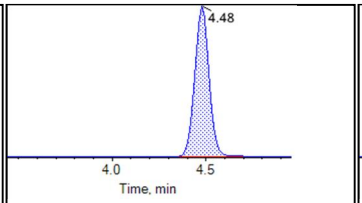
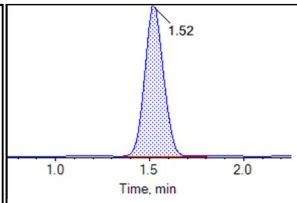


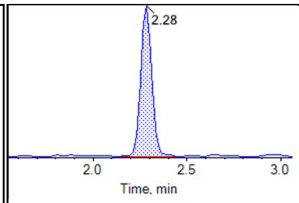
13C7-PFUnA



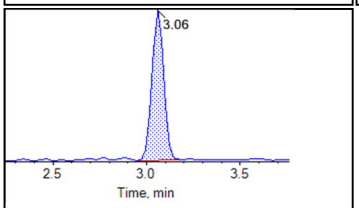
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

Created with Analyst Reporter
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Sample Name	J8684-FS(0)	**Injection Vial**	34
Sample ID	VC-CS10-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:37:05	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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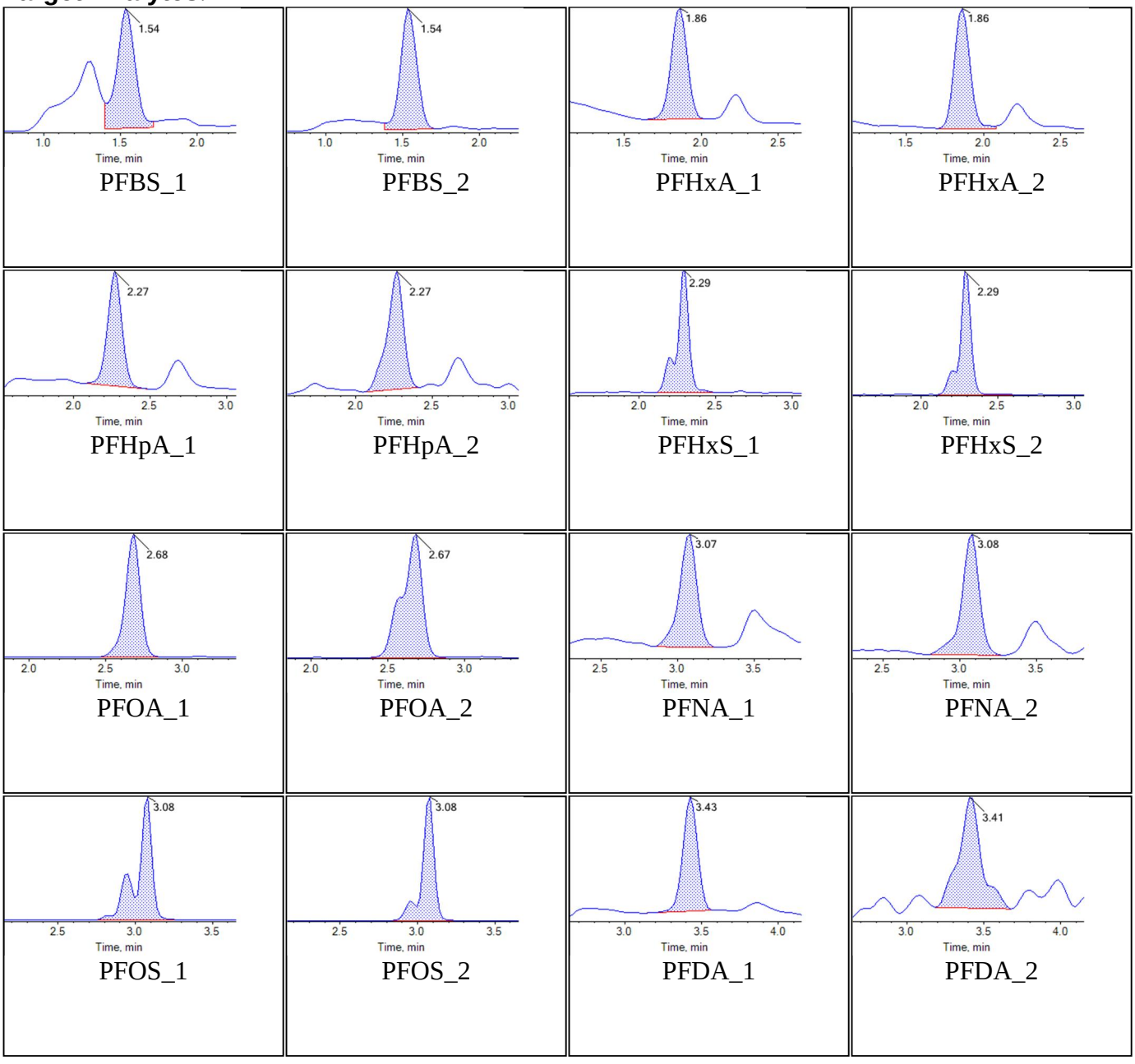

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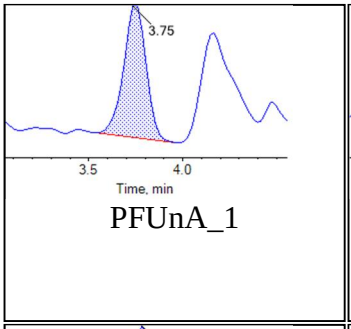

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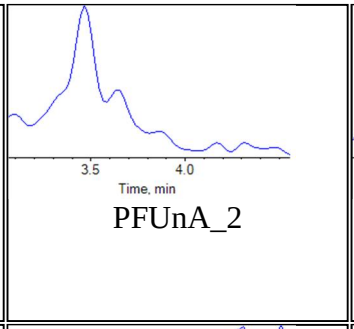
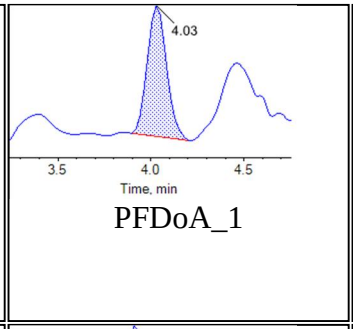


PFUnA_2



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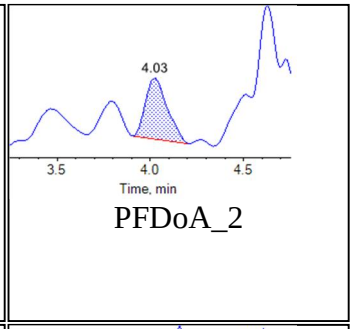
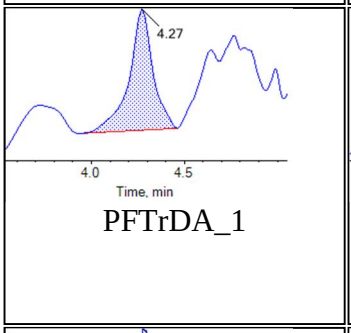
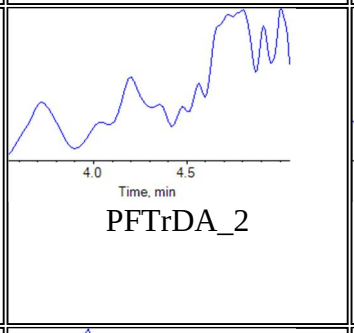


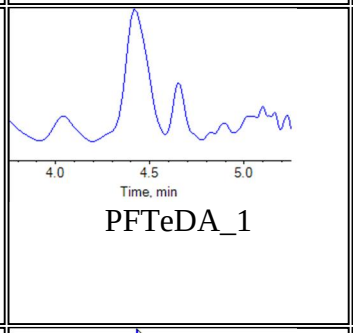
PFDoA_2



PFTrDA_1



PFTrDA_2



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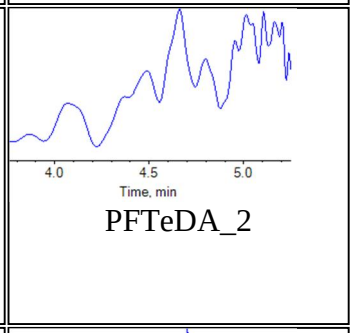

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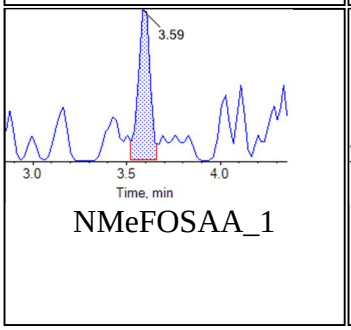

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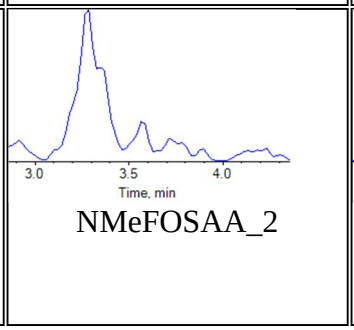

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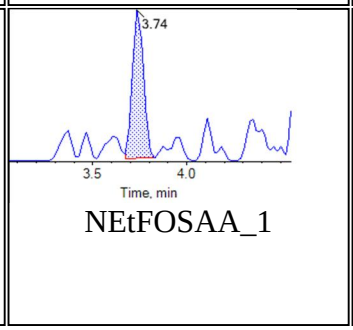

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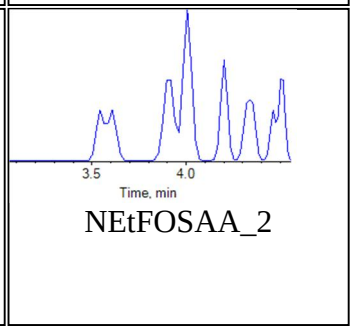
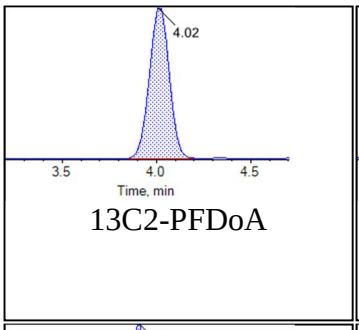
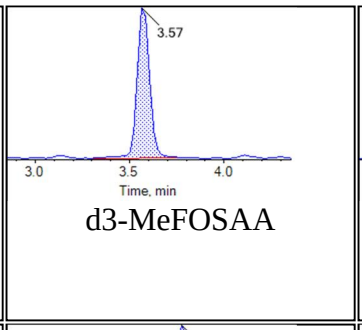


NEtFOSAA_2

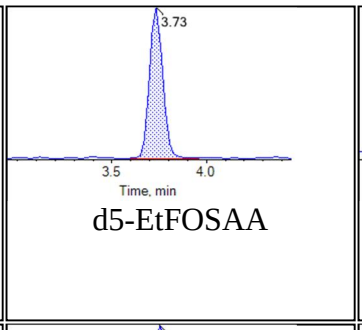
Internal Standards:



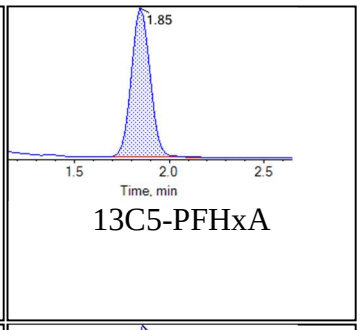
13C2-PFDoA



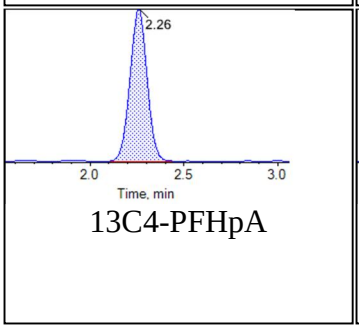
d3-MeFOSAA



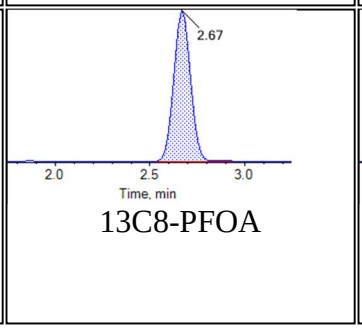
d5-EtFOSAA



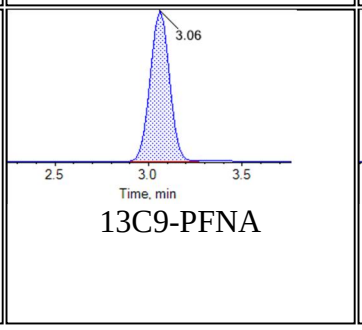
13C5-PFHxA



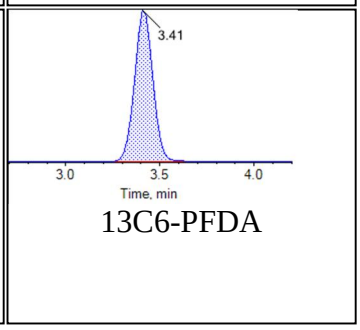
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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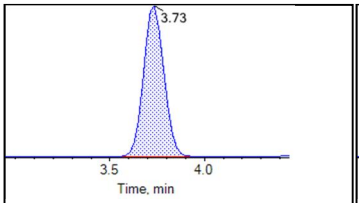
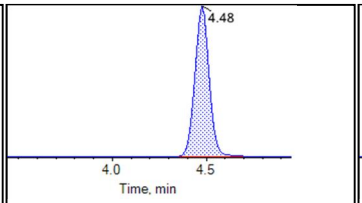
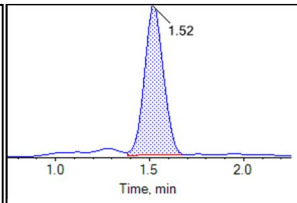


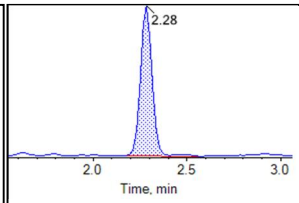
13C7-PFUnA



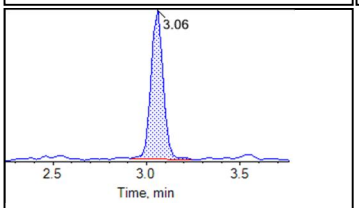
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:44:56 AM

Sample Name	J8684-FS-D(3)	**Injection Vial**	35
Sample ID	VC-CS10-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:47:57	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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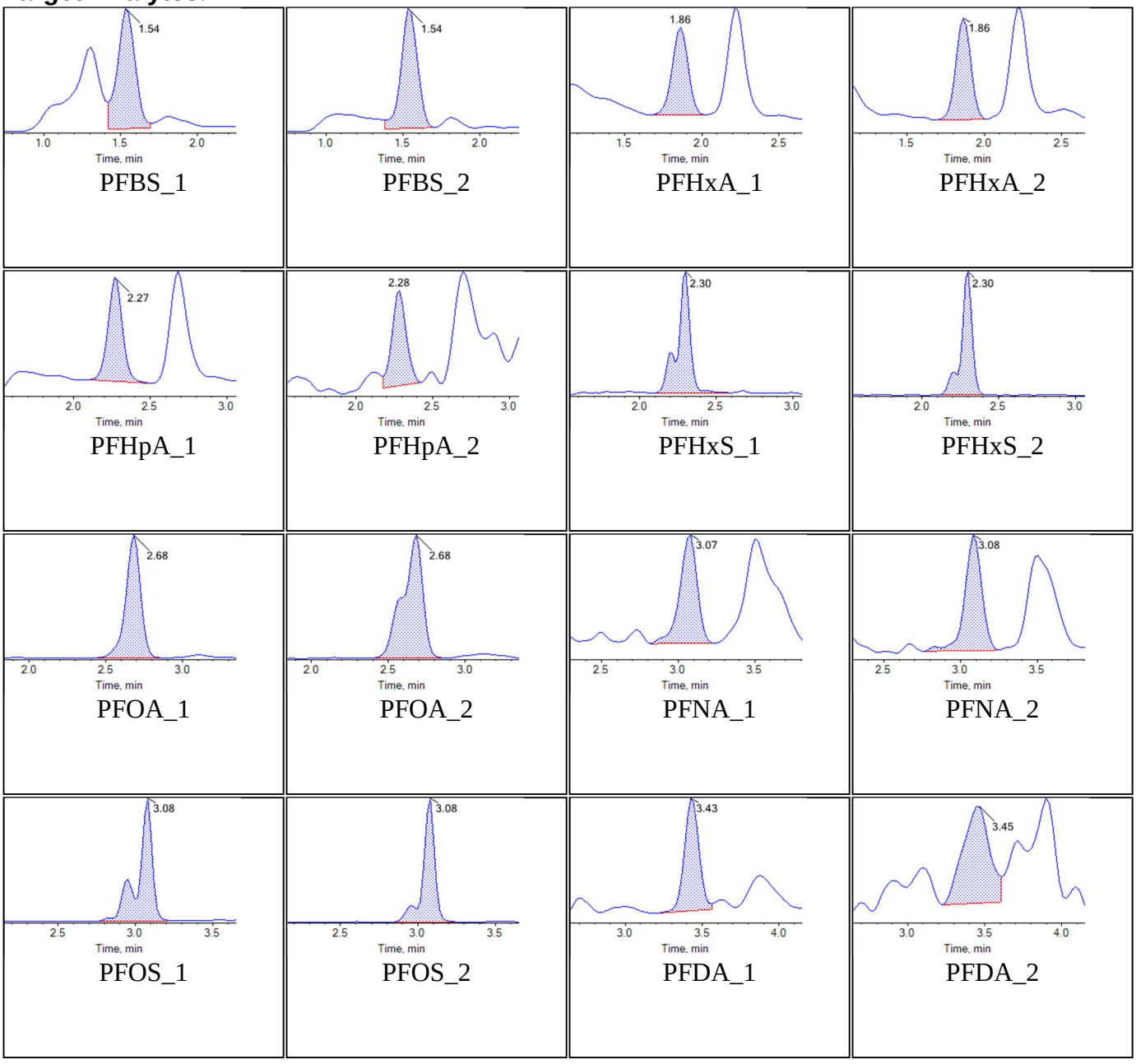

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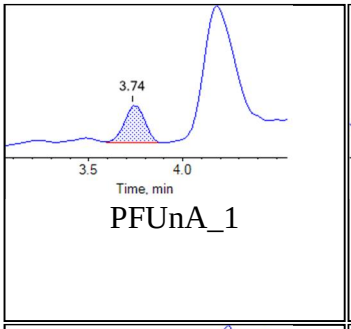

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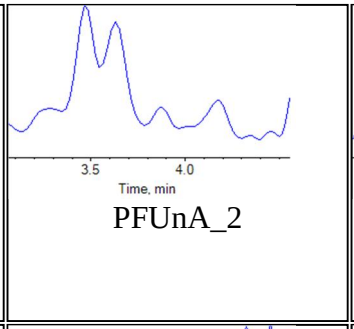
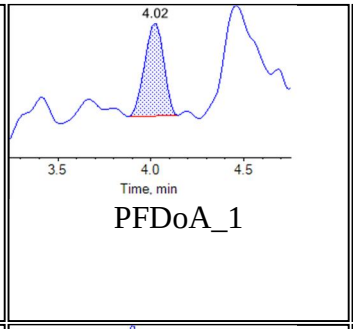


PFUnA_2



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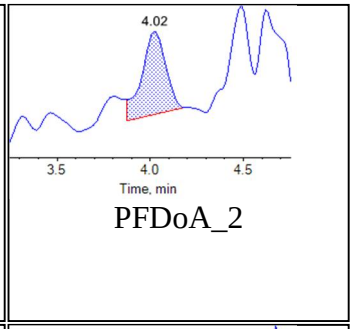
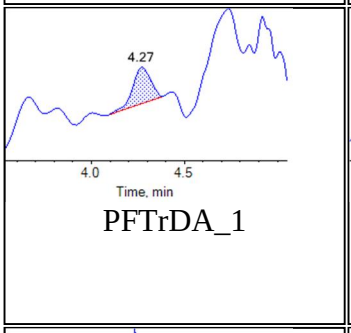
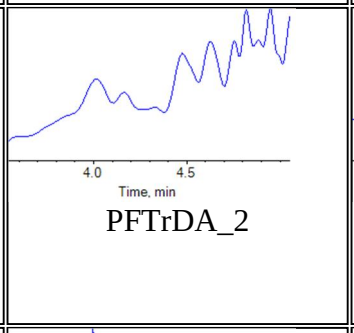


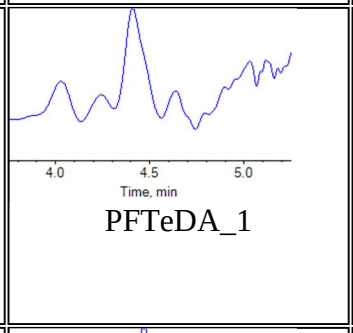
PFDoA_2



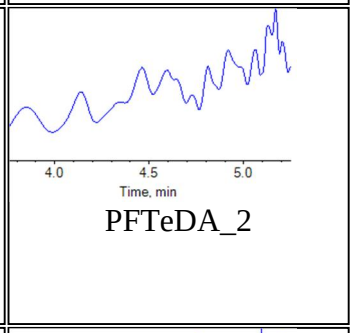
PFTrDA_1



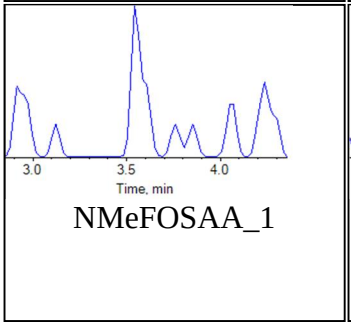
PFTrDA_2



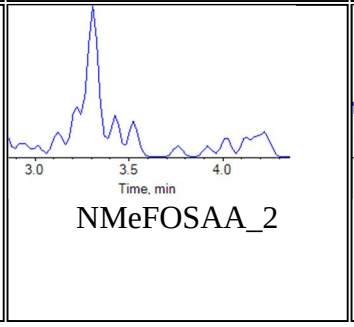
PFTeDA_1



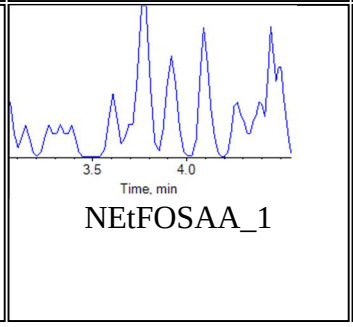
PFTeDA_2



NMeFOSAA_1



NMeFOSAA_2



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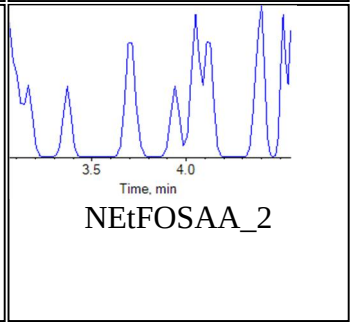
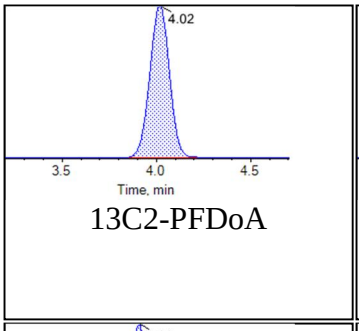
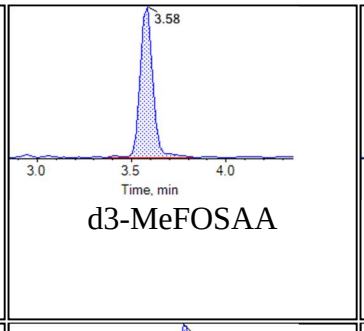


NEtFOSAA_2

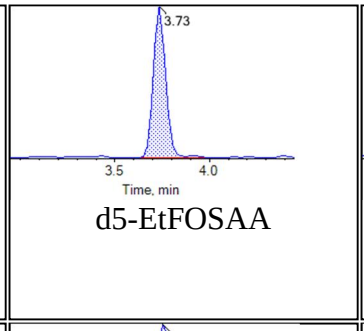
Internal Standards:



13C2-PFDoA



d3-MeFOSAA



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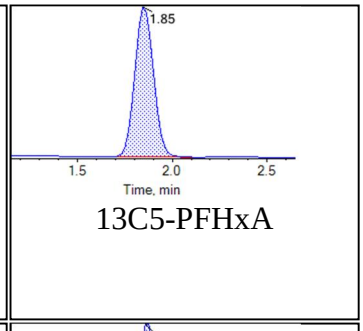

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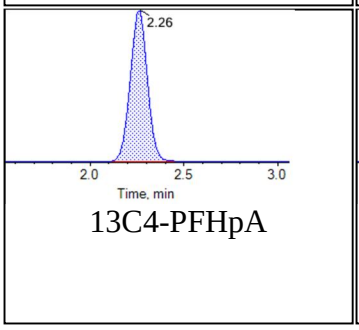

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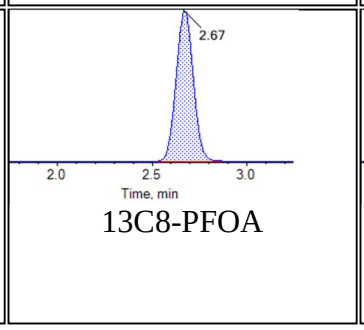
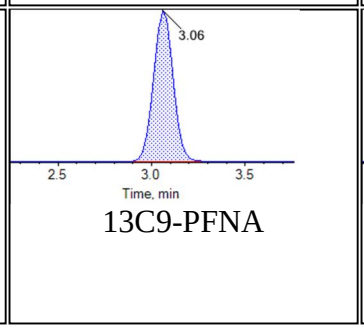


13C8-PFOA



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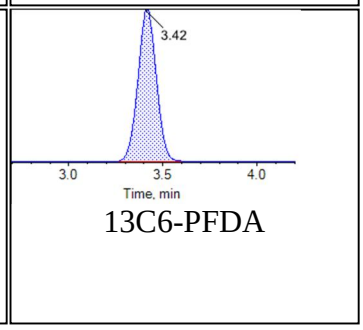

13C6-PFDA

BATTELLE

Chromatogram Report

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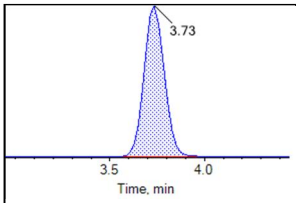
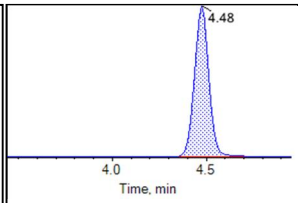


13C7-PFUnA



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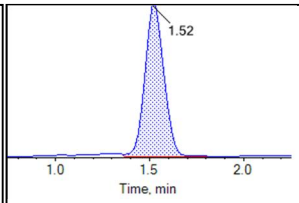
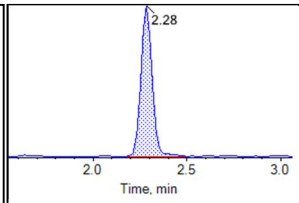


13C3-PFBS



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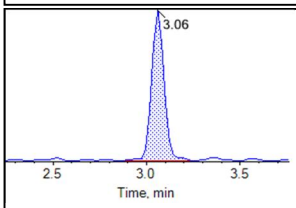

13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
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Sample Name	J8685-FS(0)	**Injection Vial**	36
Sample ID	VC-CS10-DW02P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:58:48	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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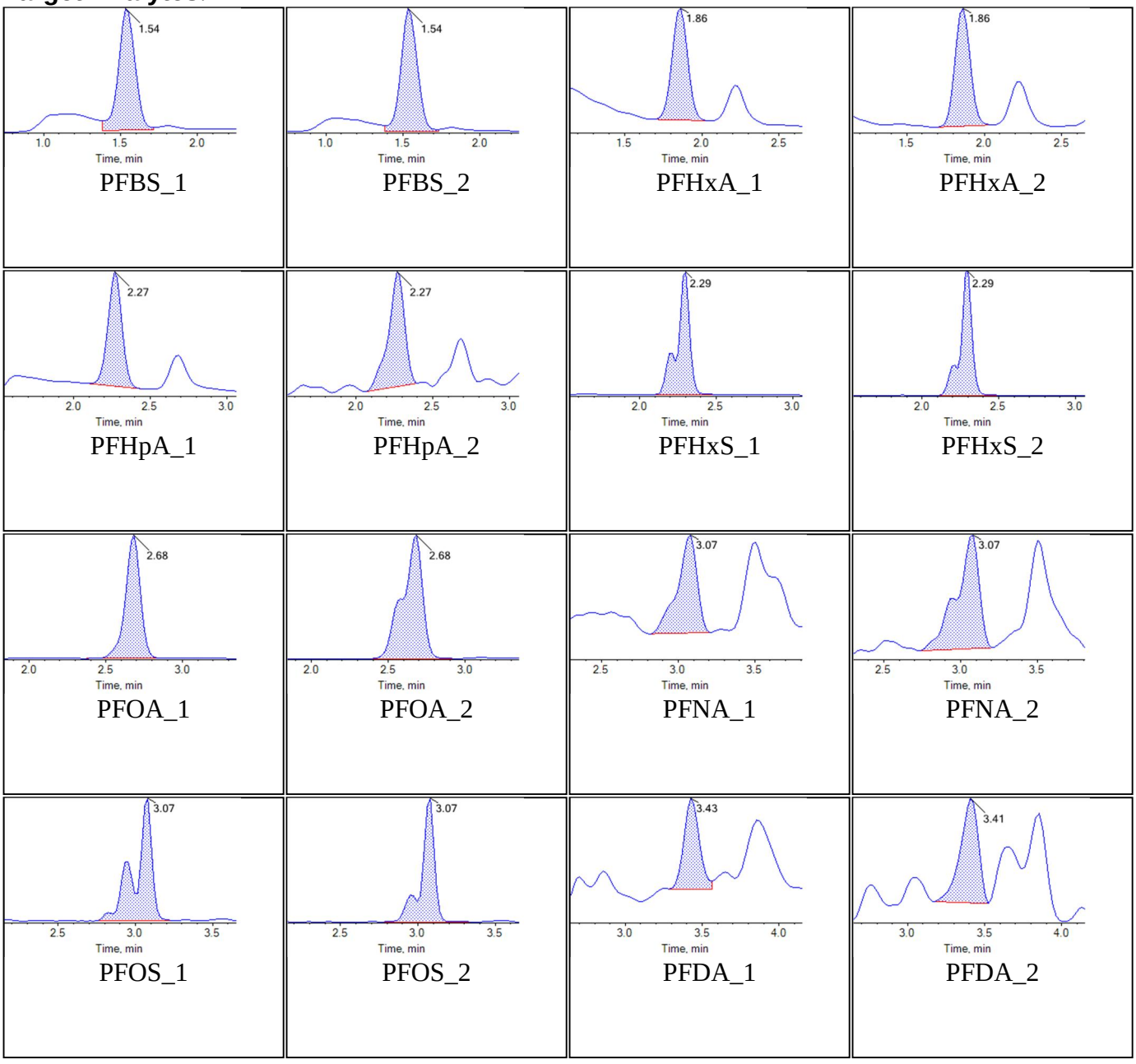

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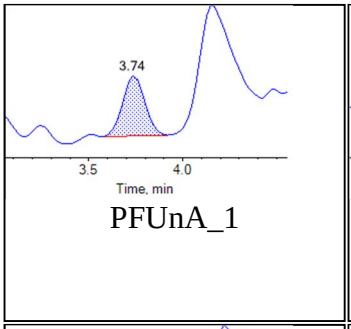
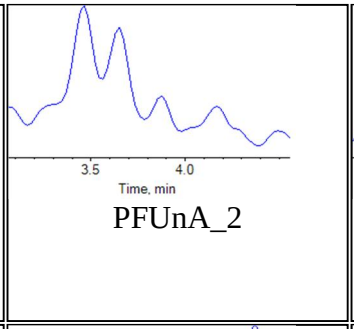
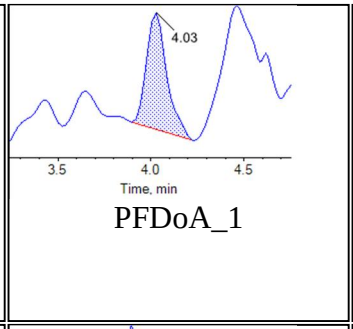


PFUnA_1



PFUnA_2



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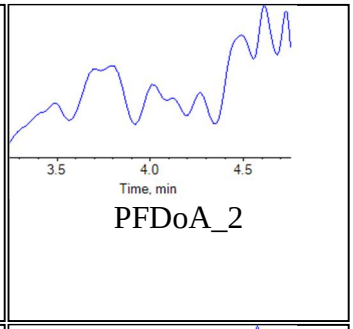
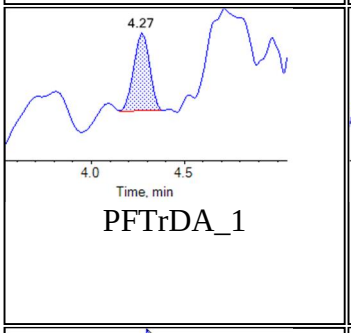


PFDoA_2



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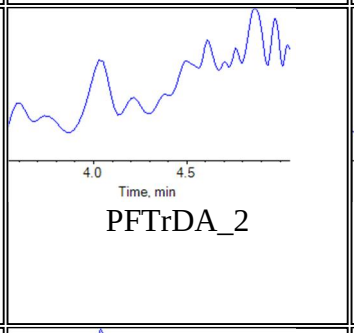

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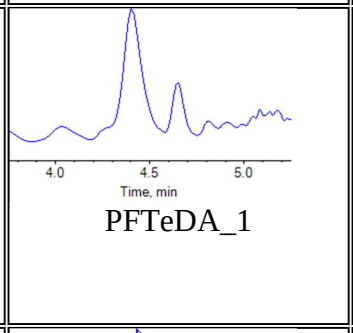

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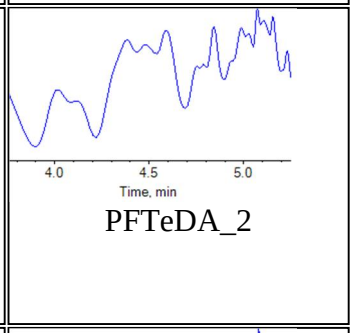

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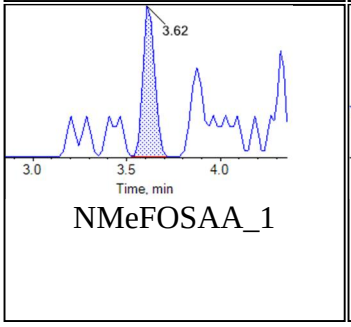

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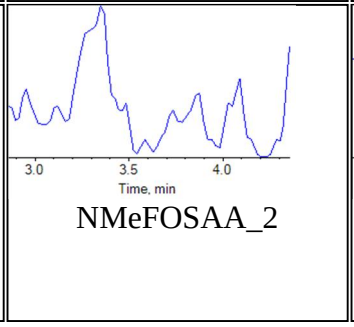

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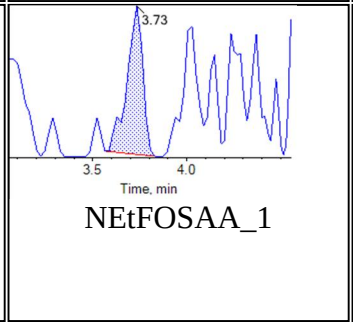

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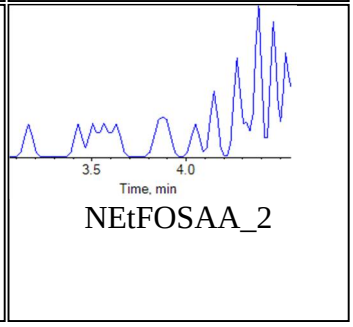

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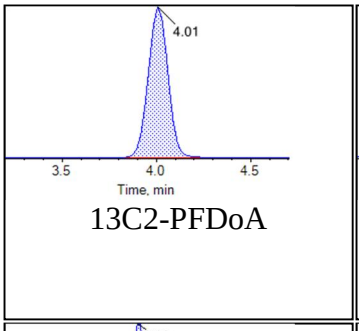

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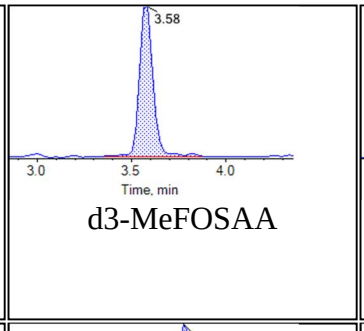
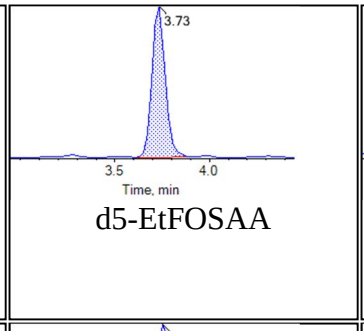


d3-MeFOSAA



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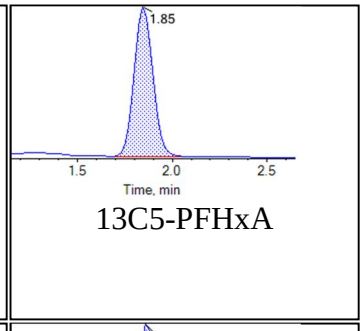
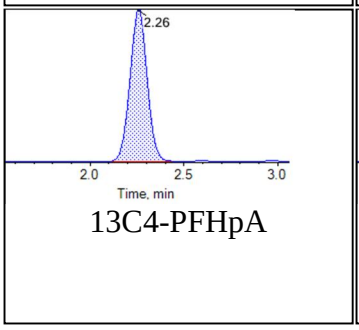
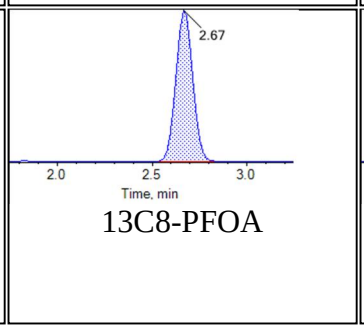


13C5-PFHxA



13C4-PFHpA



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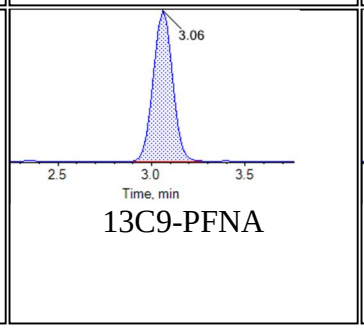
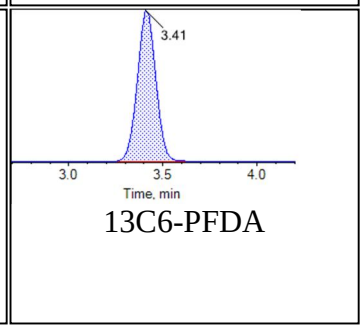


13C9-PFNA



13C6-PFDA

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Chromatogram Report

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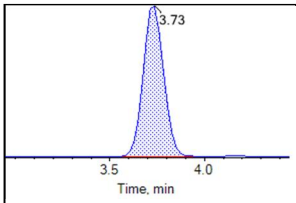
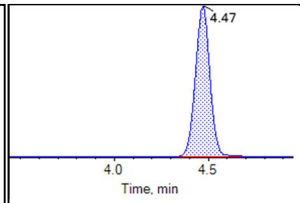
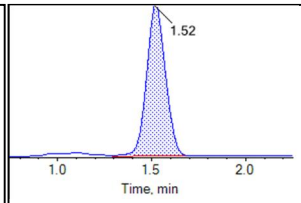


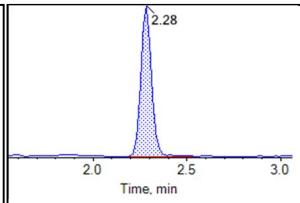
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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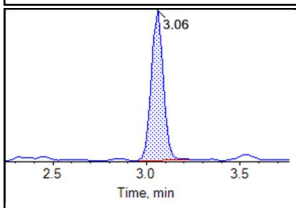

13C8-PFOS

BATTELLE

Chromatogram Report

Created with Analyst Reporter
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Sample Name	J8686-FS(0)	**Injection Vial**	37
Sample ID	VC-CS10-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:09:39	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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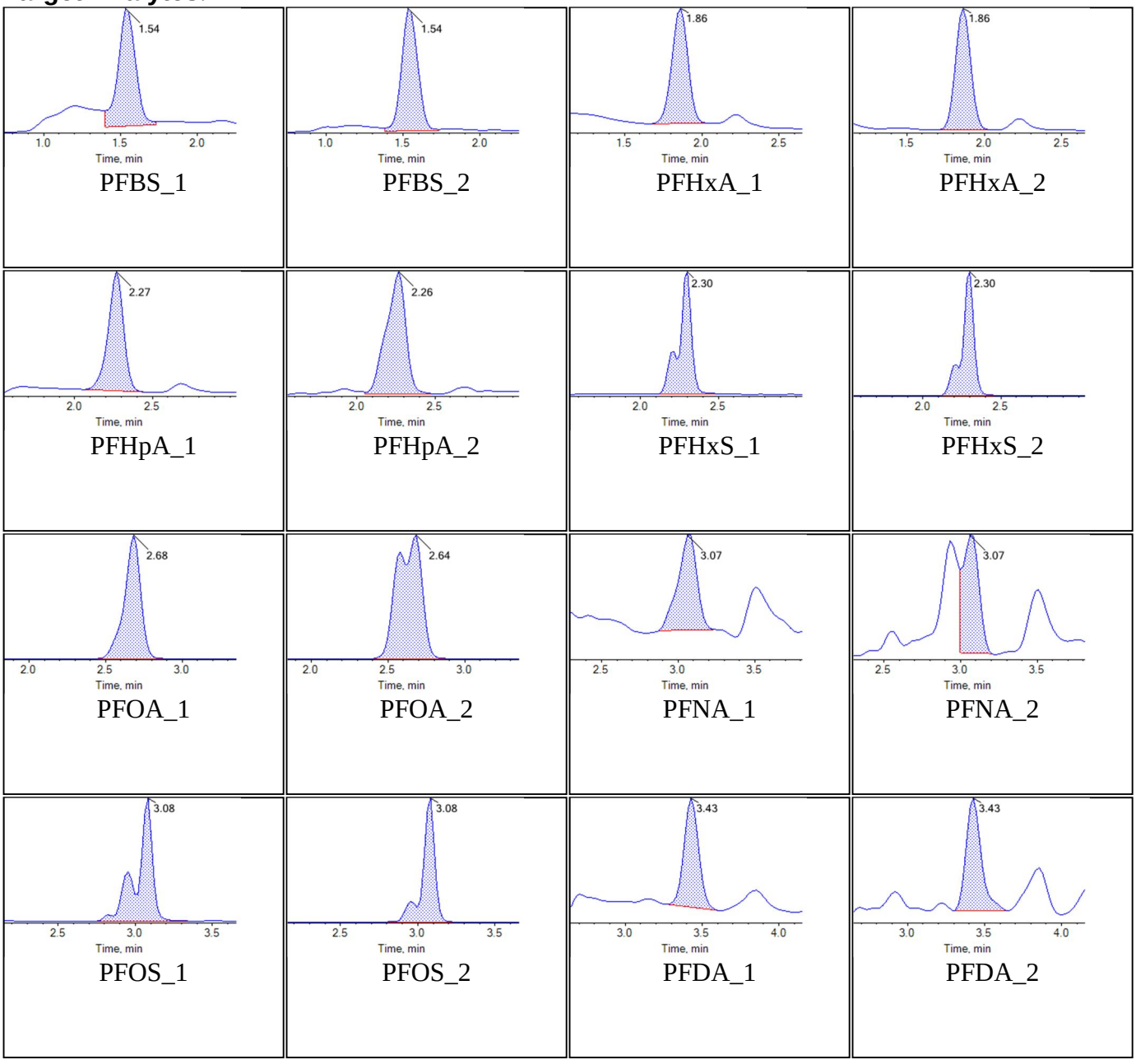

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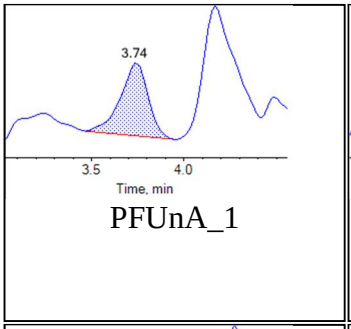

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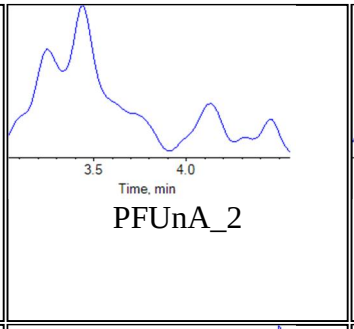

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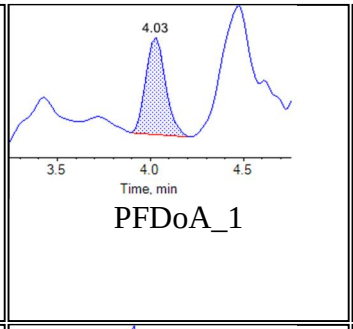

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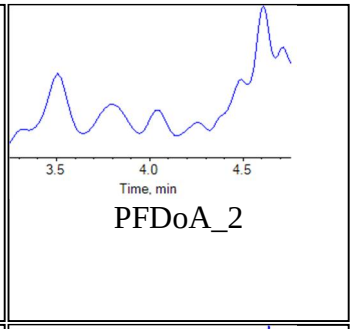

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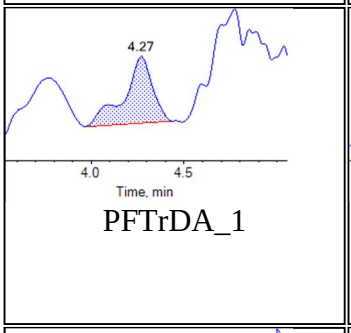

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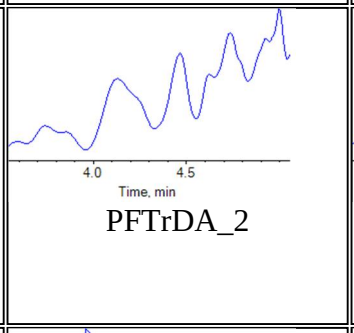

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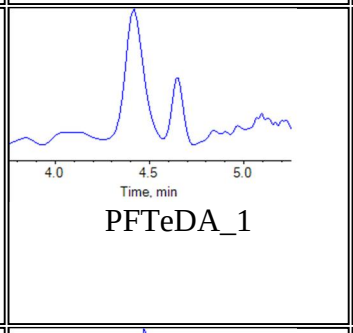

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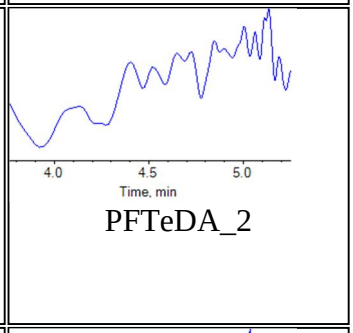

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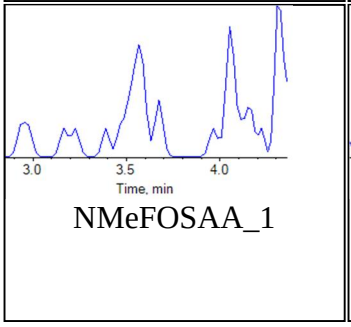

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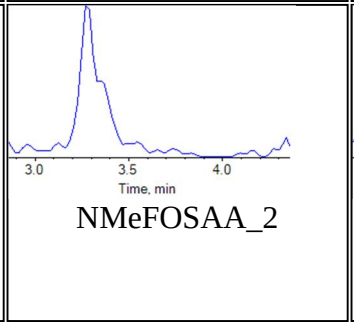

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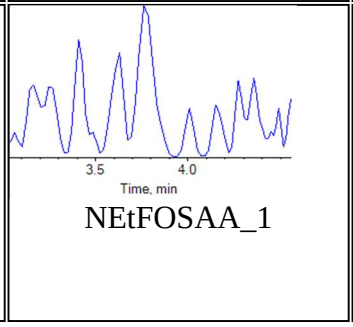

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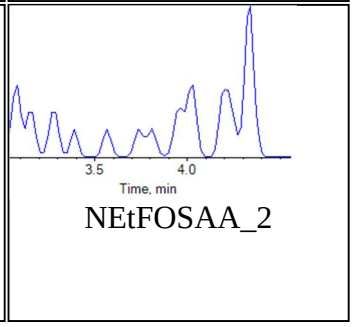
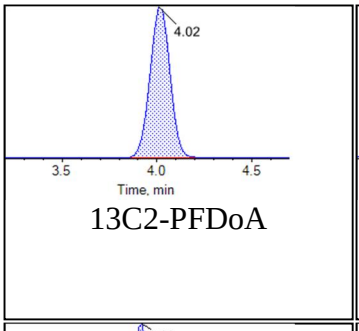
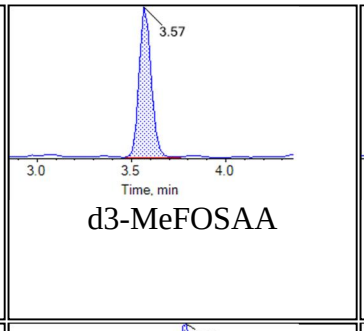


NEtFOSAA_2

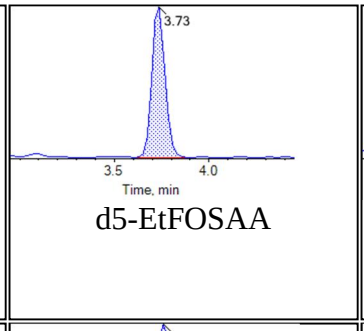
Internal Standards:



13C2-PFDoA



d3-MeFOSAA



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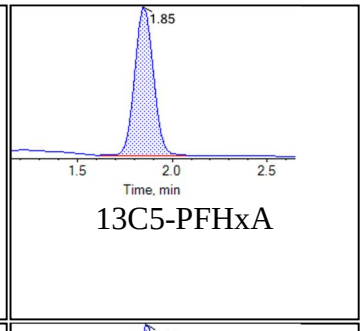

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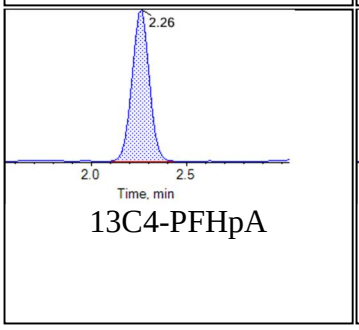
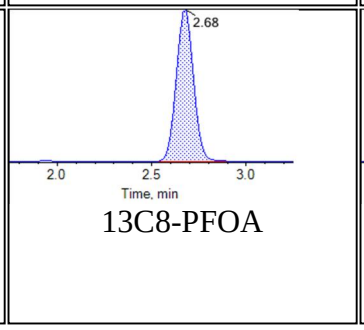
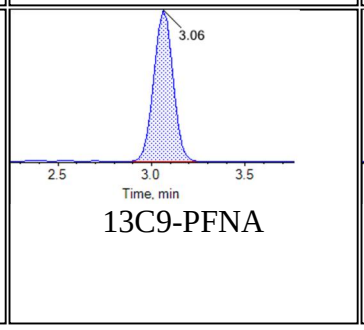


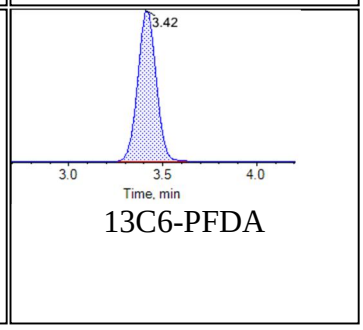
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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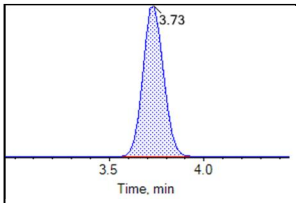
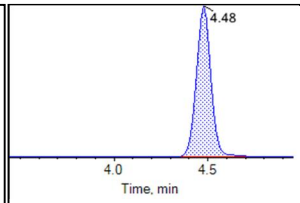
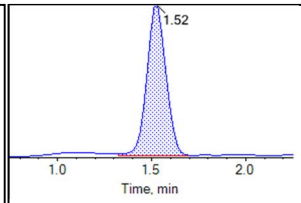


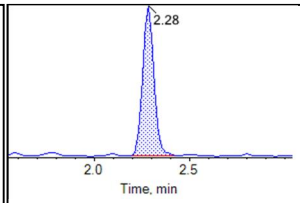
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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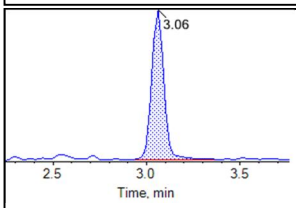

13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
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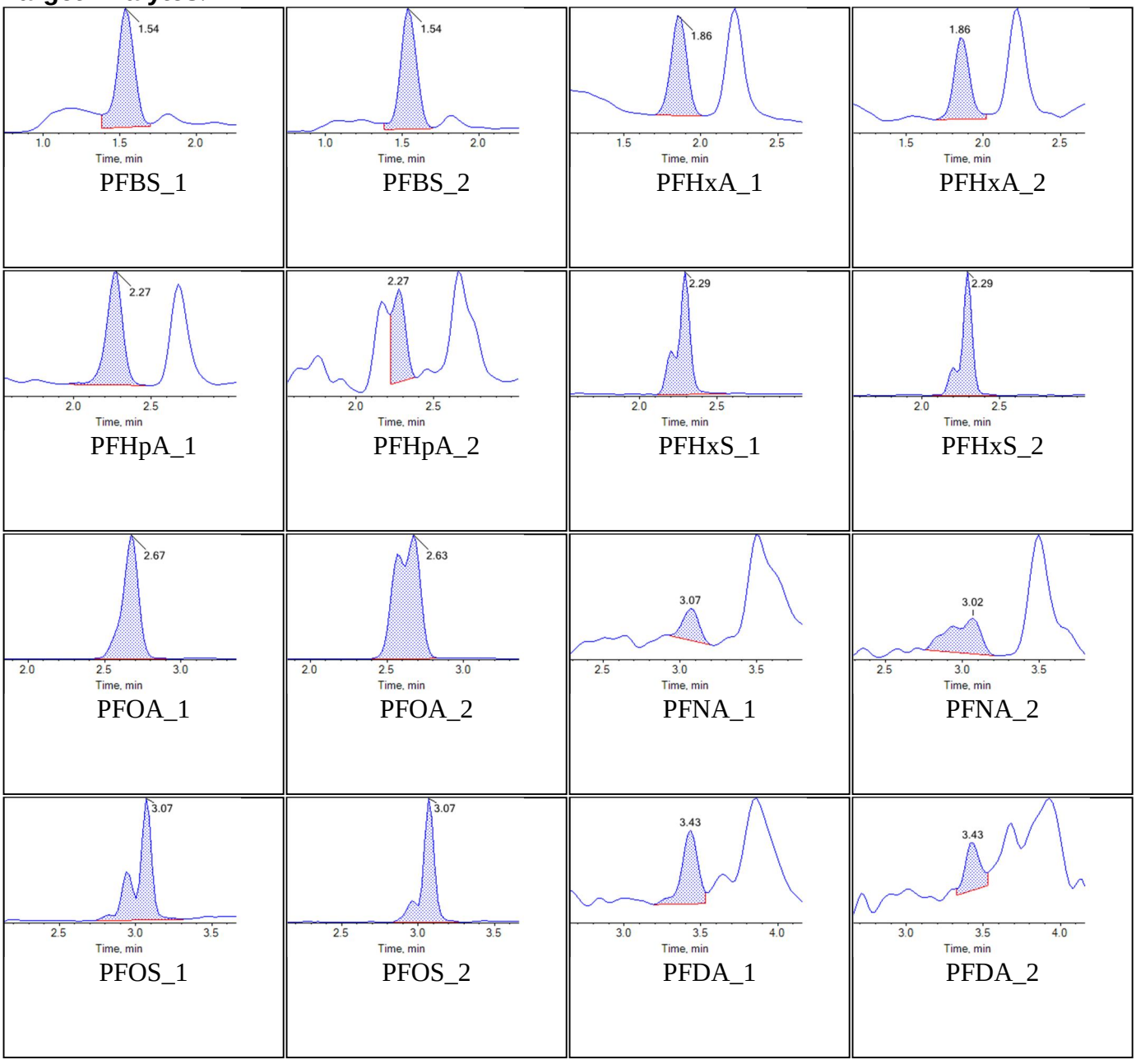
Sample Name	J8686-FS-D(3)	**Injection Vial**	38
Sample ID	VC-CS10-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:20:32	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

Target Analytes:



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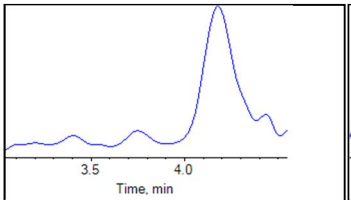
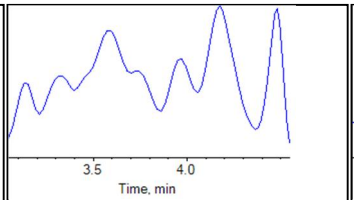


PFUnA_1



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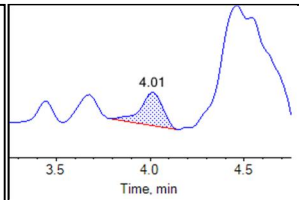

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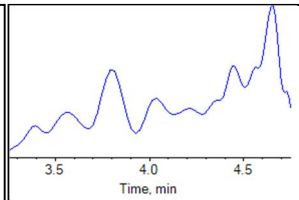
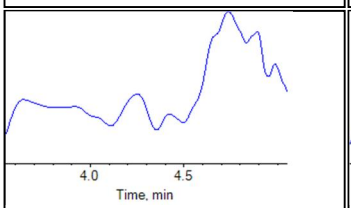
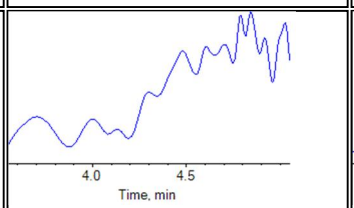


PFDoA_2



PFTrDA_1



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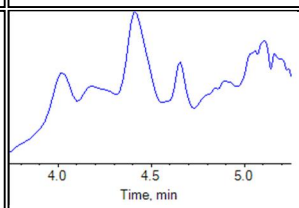

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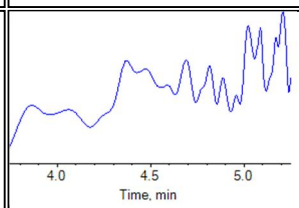

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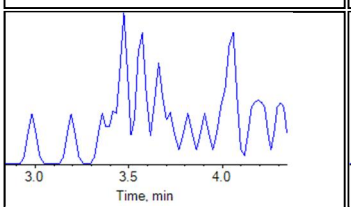
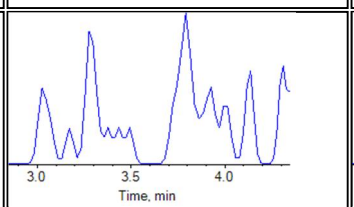


NMeFOSAA_1



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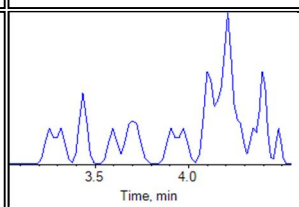

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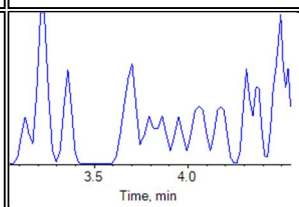

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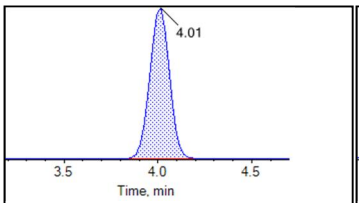
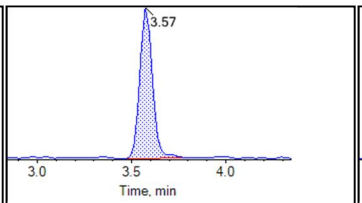
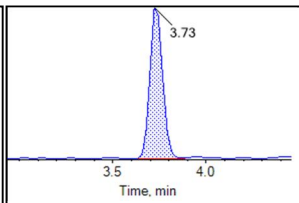
Internal Standards:



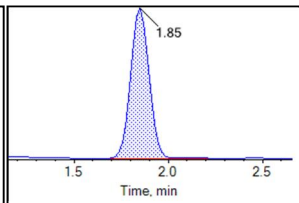
13C2-PFDoA



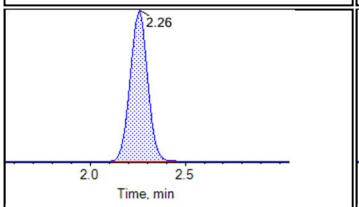
d3-MeFOSAA



d5-EtFOSAA



13C5-PFHxA



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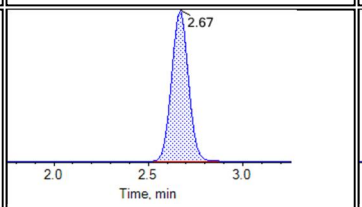

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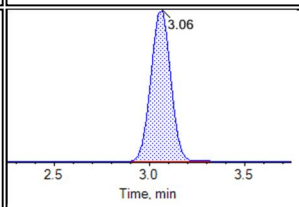
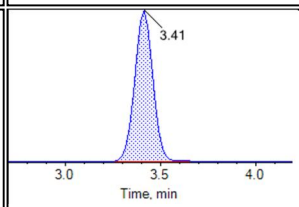


13C9-PFNA



13C6-PFDA

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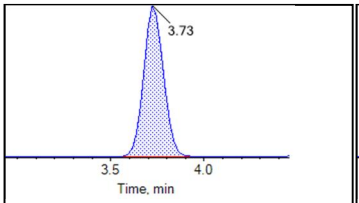
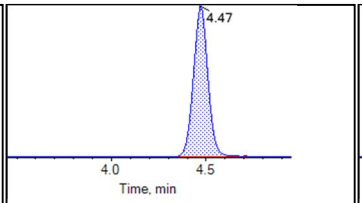
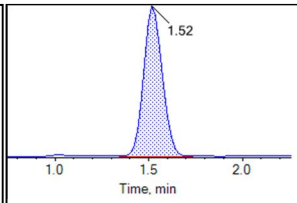


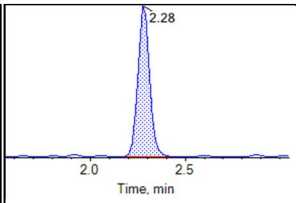
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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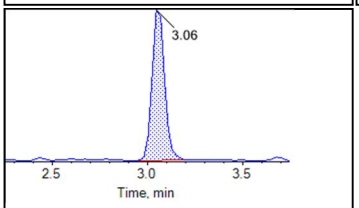

13C8-PFOS

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Chromatogram Report

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Sample Name	J8687-FS(0)	**Injection Vial**	39
Sample ID	VC-CS10-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:31:23	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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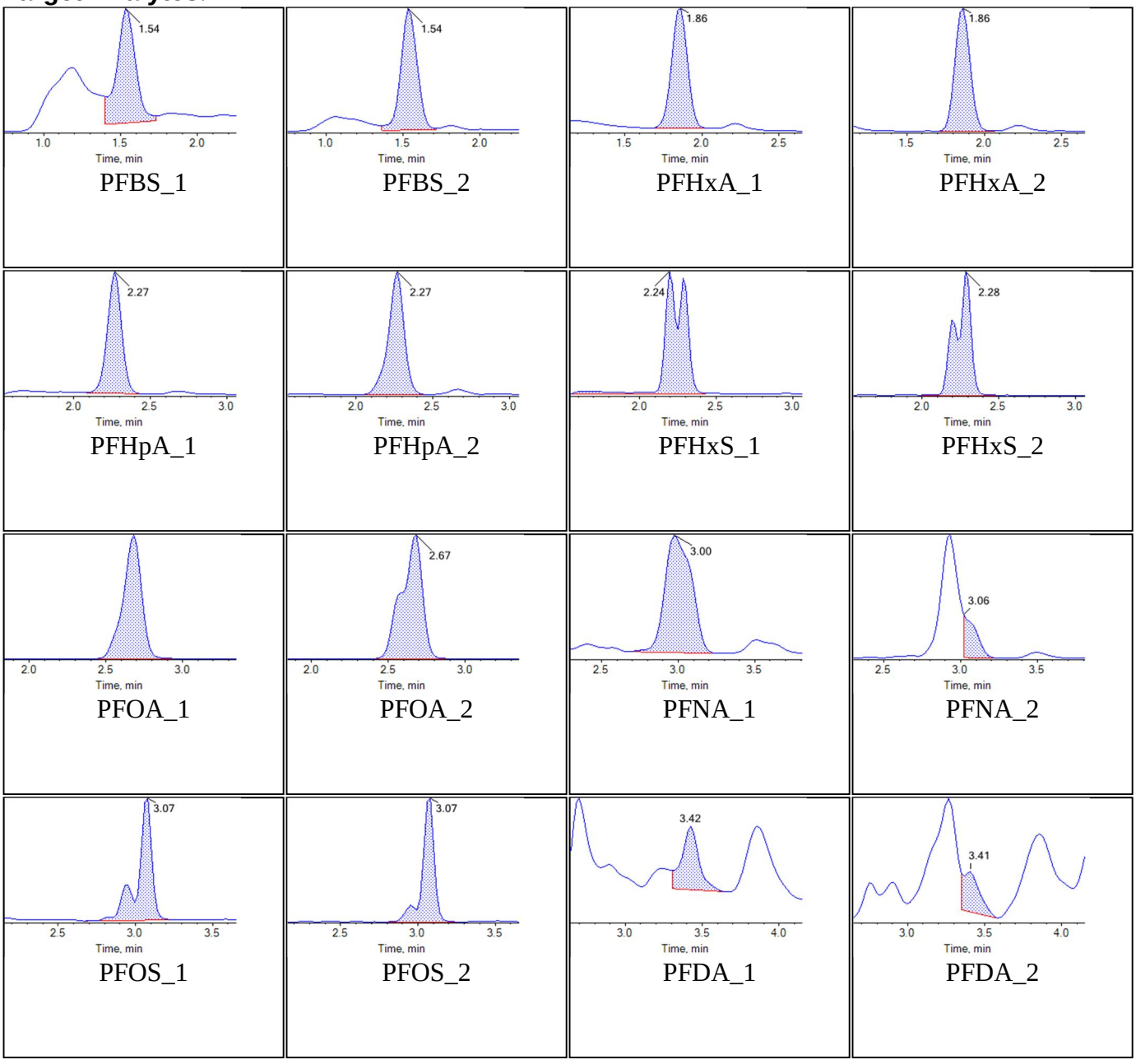

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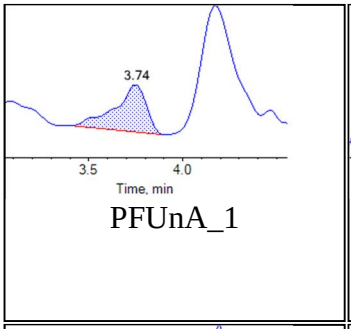
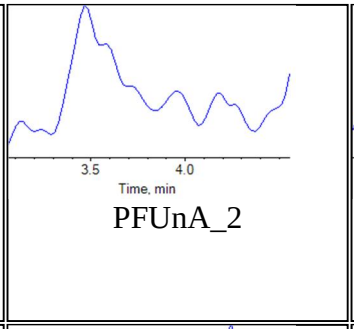
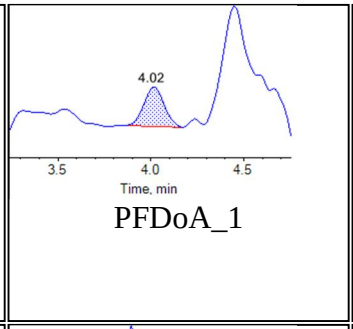


PFUnA_1



PFUnA_2



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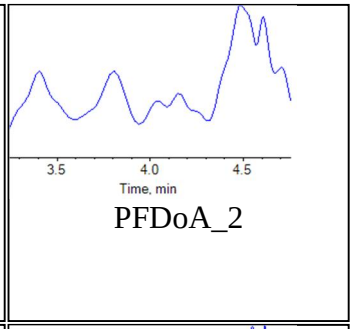

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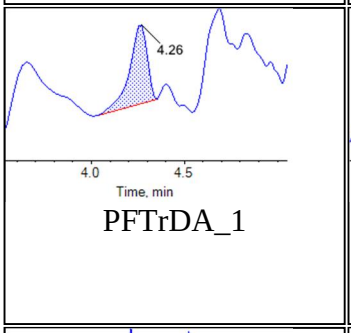
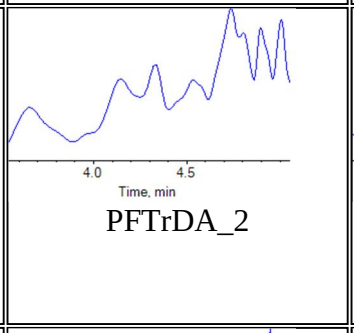


PFTrDA_1



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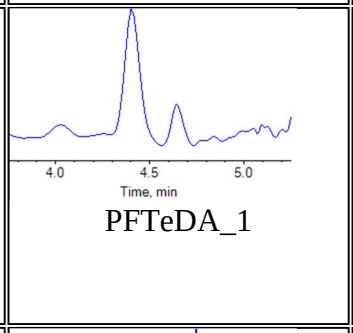

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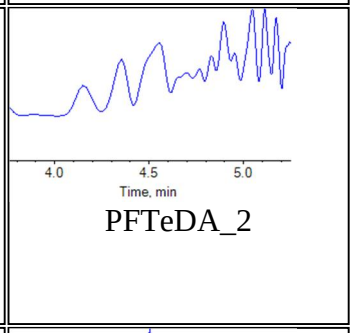

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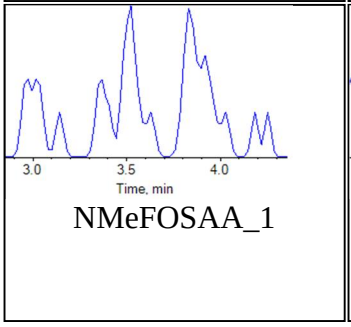

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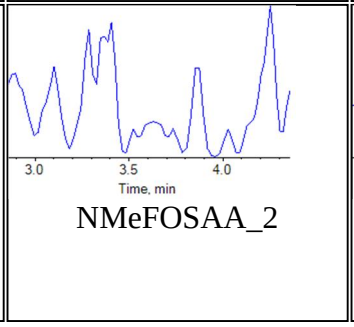

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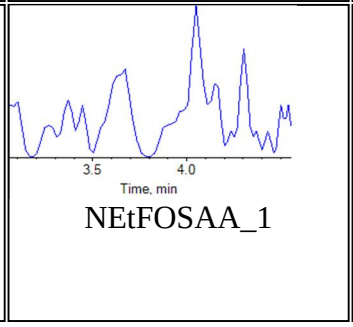

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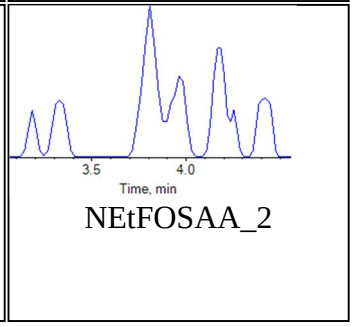
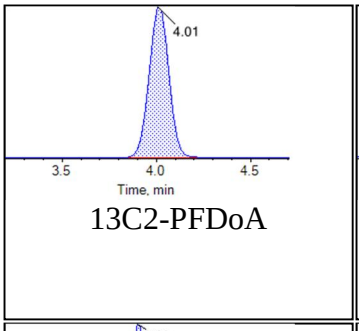


NEtFOSAA_2

Internal Standards:



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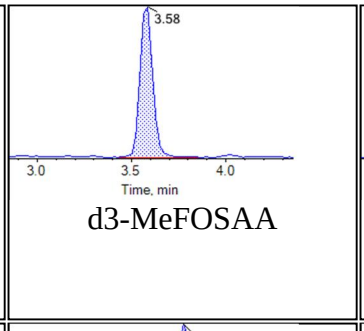

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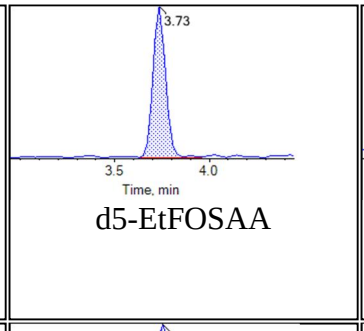

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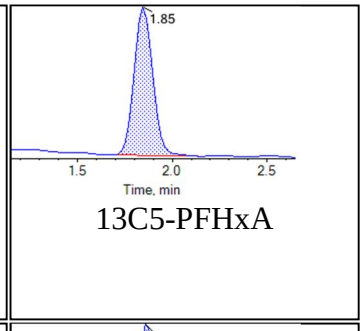

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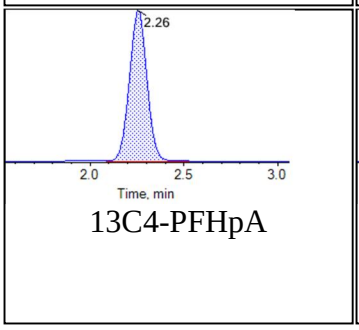

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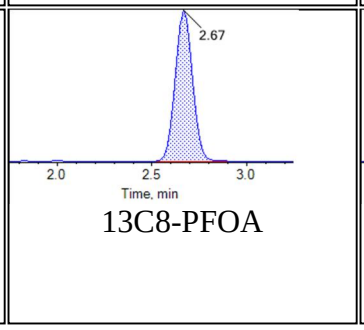

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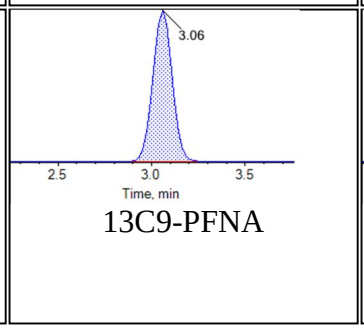

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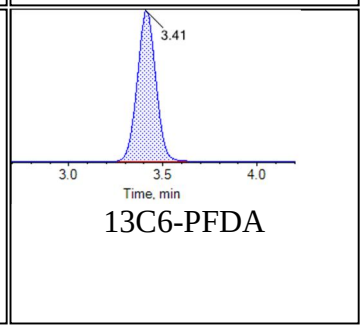

13C6-PFDA

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Chromatogram Report

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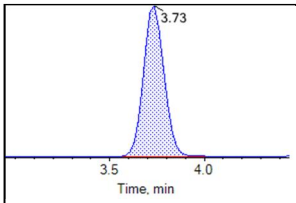

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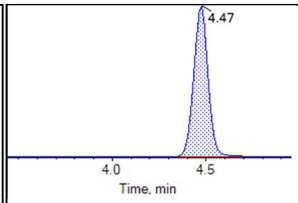

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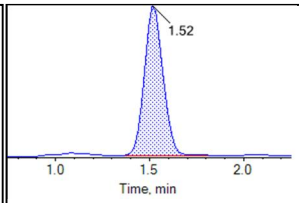

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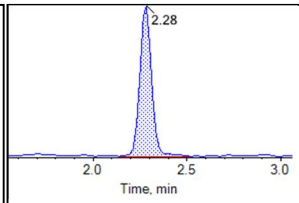

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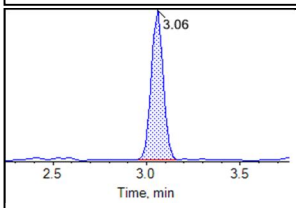

13C8-PFOS

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Chromatogram Report

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Sample Name	KB77	**Injection Vial**	43
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:14:50	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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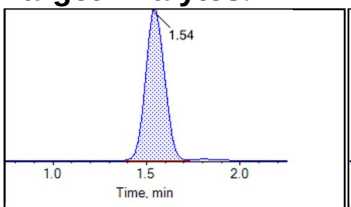

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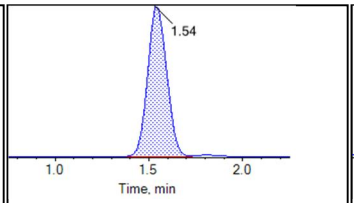

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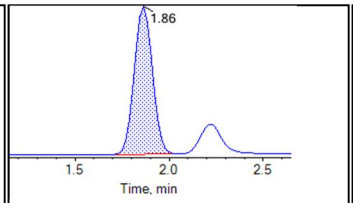

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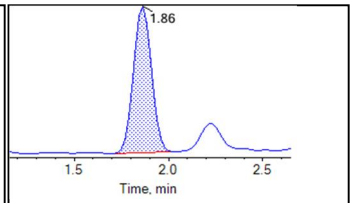

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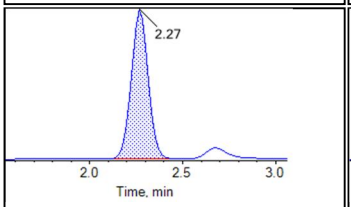

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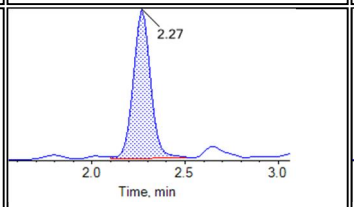

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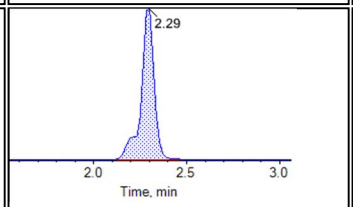

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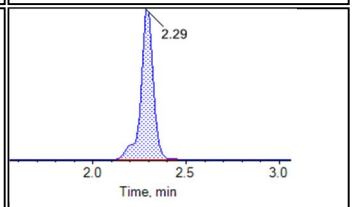

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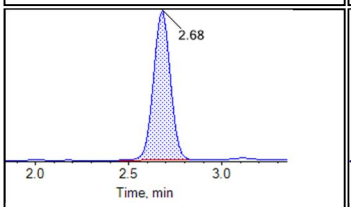

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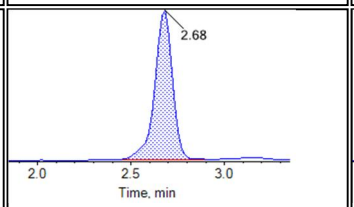

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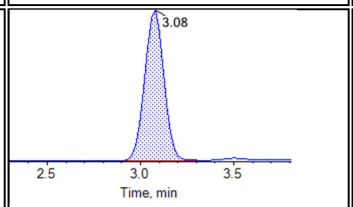

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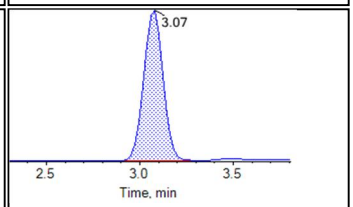

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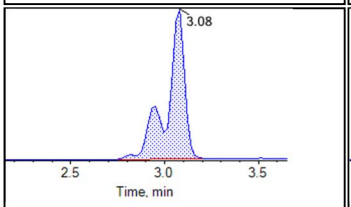

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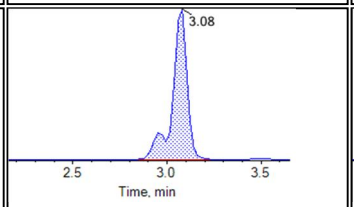

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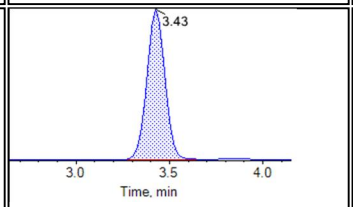

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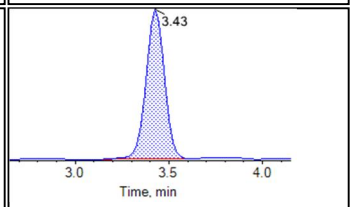

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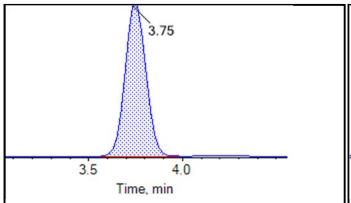

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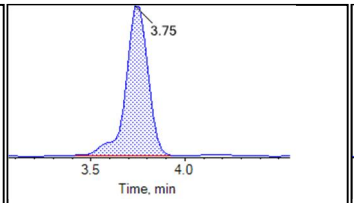

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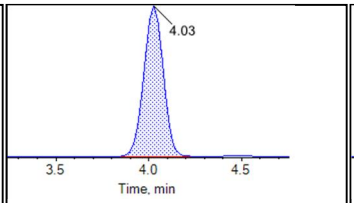

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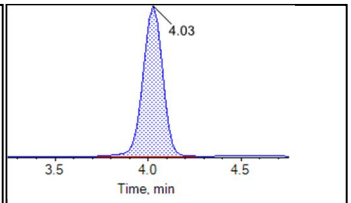

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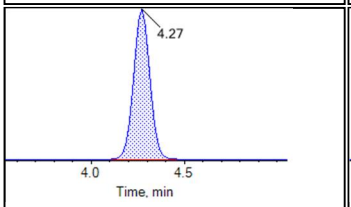

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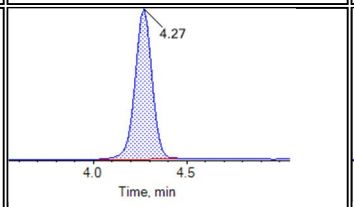

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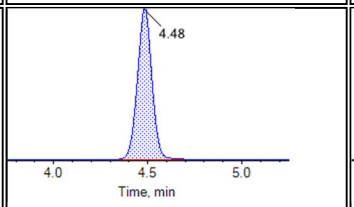

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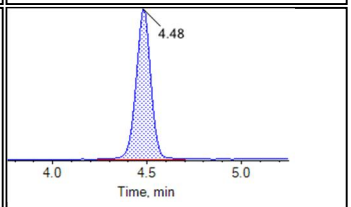

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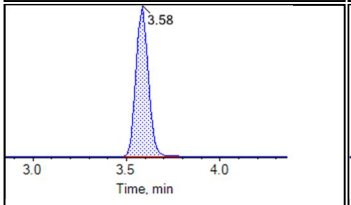

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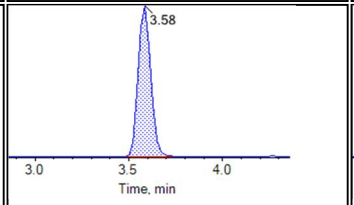

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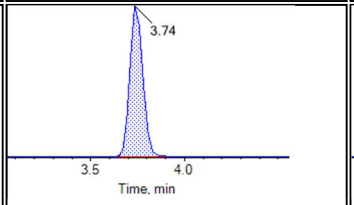

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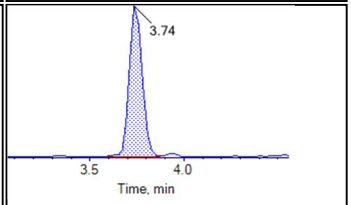

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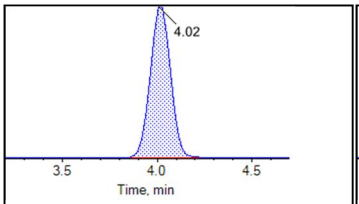

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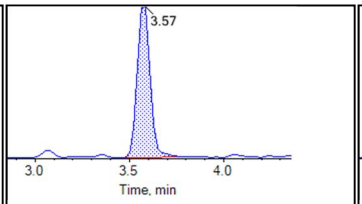

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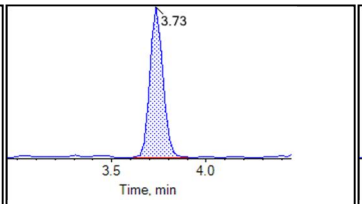

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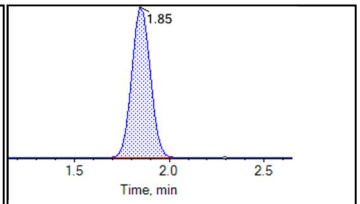

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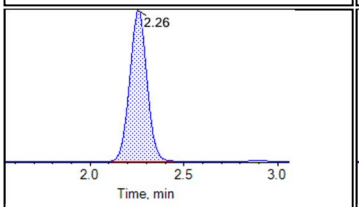

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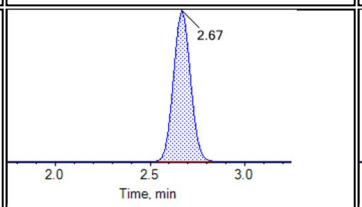

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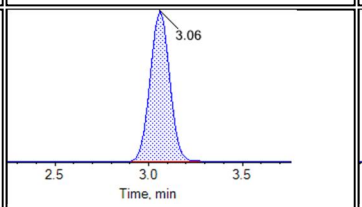

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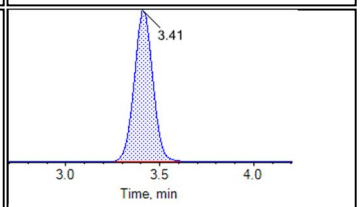

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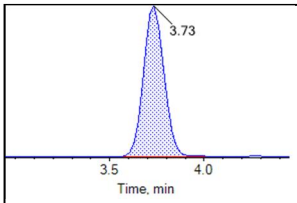

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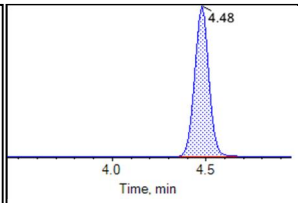

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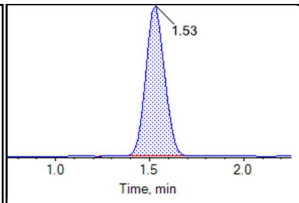

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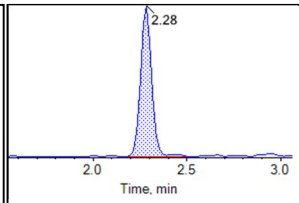

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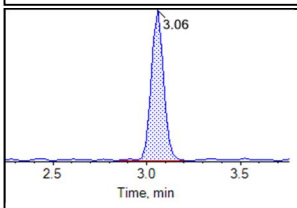

13C8-PFOS

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Chromatogram Report

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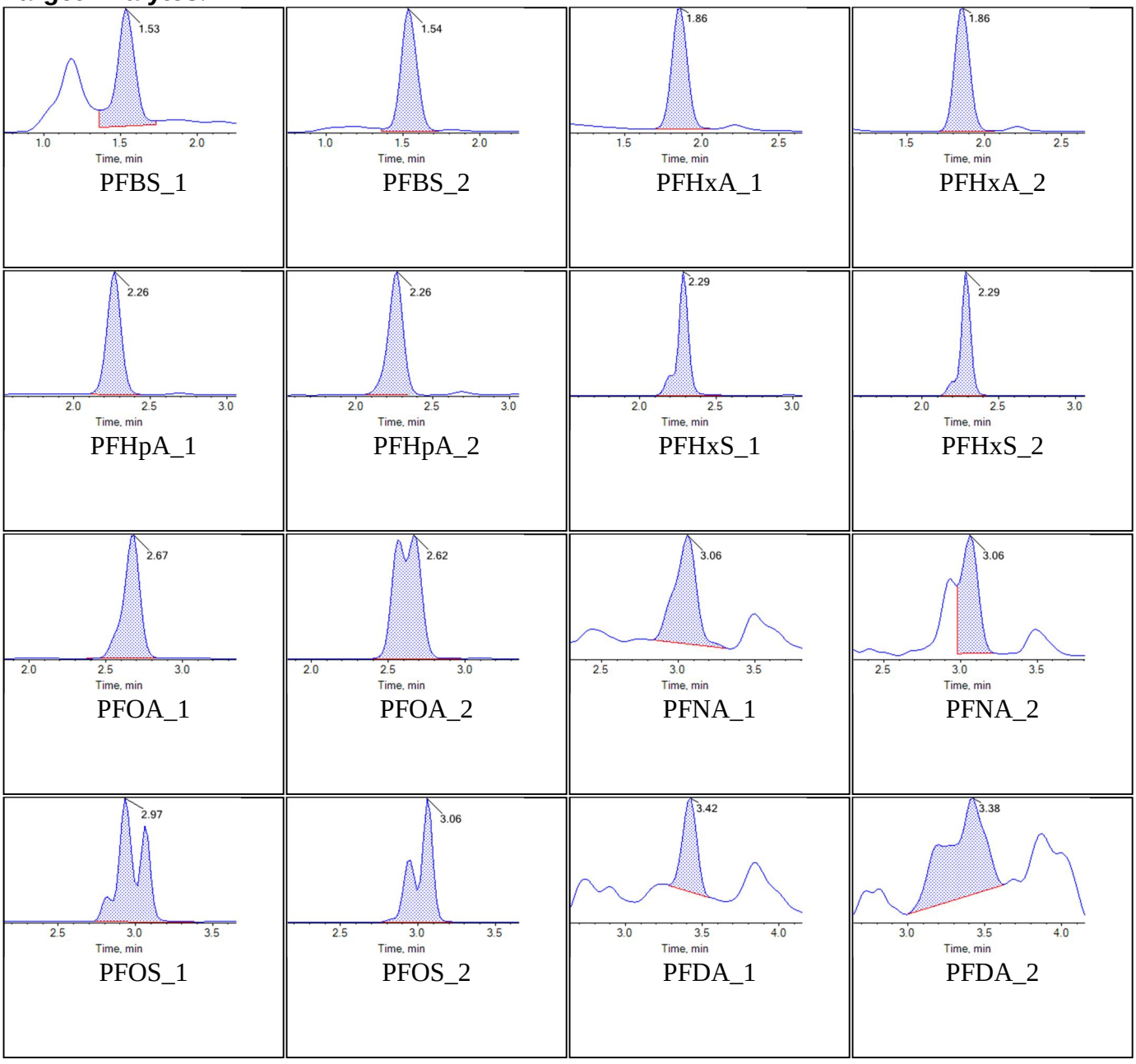
Sample Name	J8688-FS(0)	**Injection Vial**	44
Sample ID	VC-CS18-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:25:42	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

Target Analytes:



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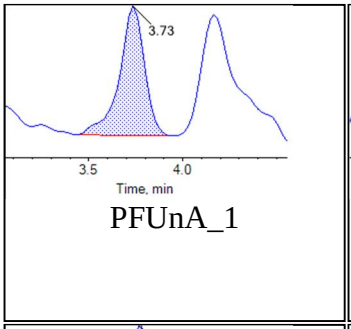

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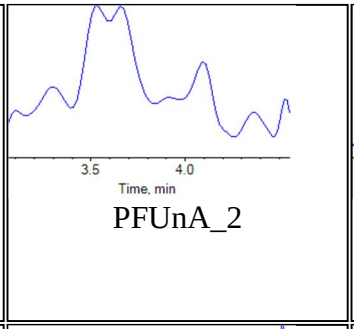

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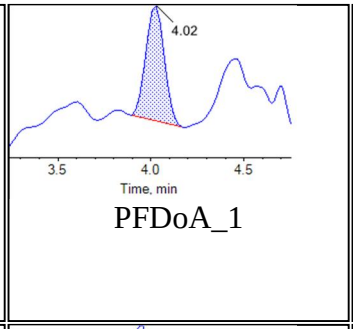

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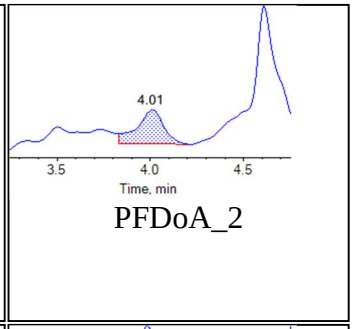

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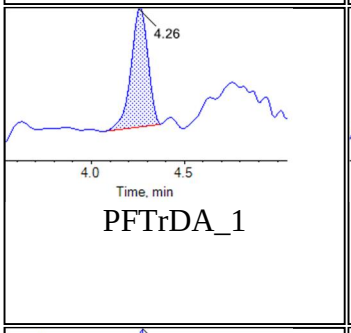

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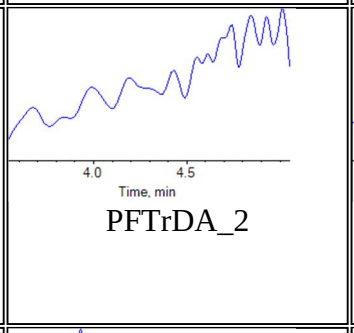

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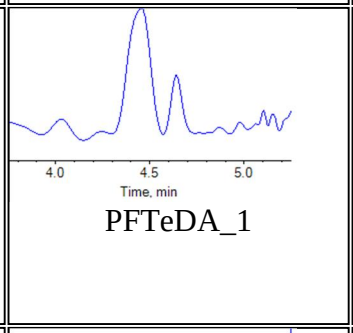

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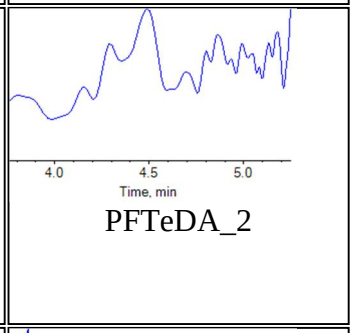

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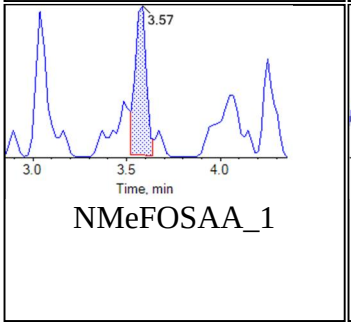

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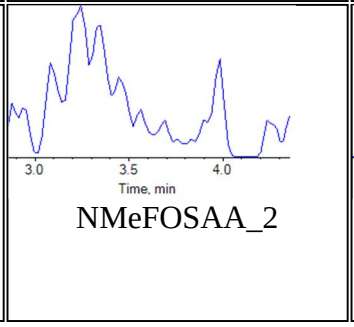

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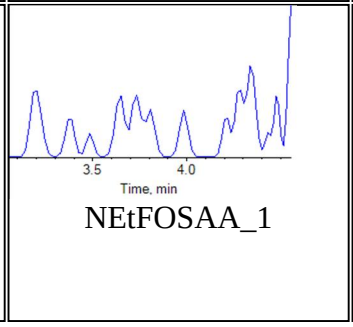

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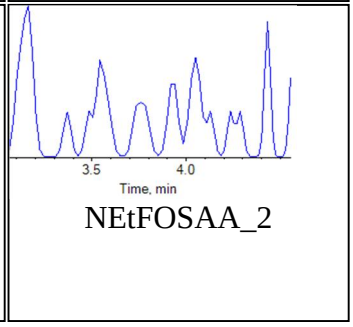

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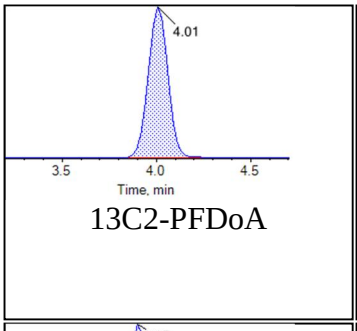
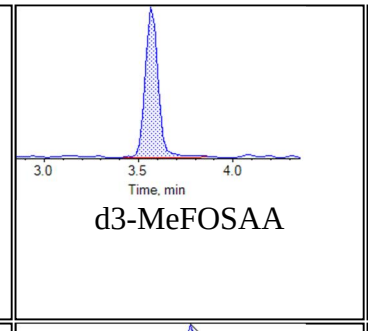
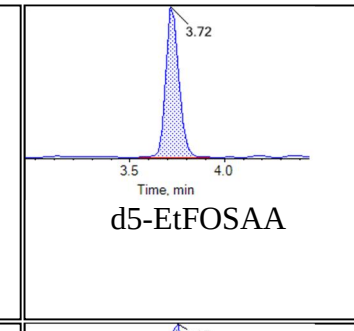


13C2-PFDoA



d3-MeFOSAA



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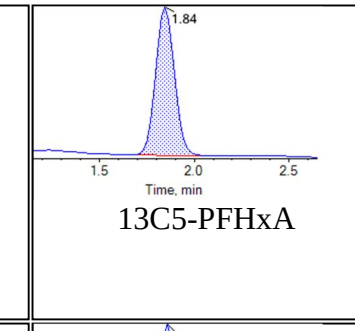

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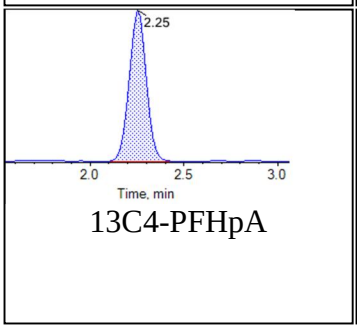

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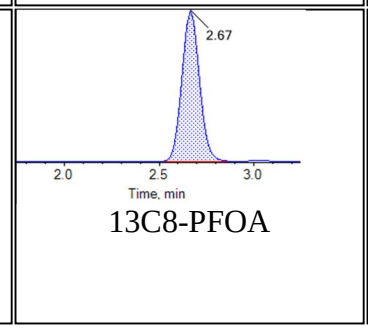

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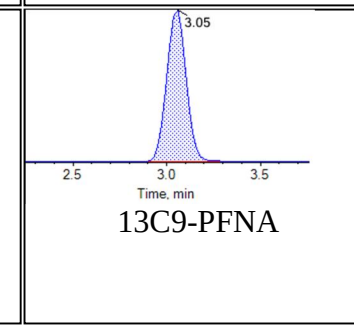

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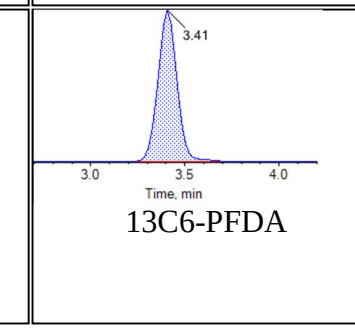

13C6-PFDA

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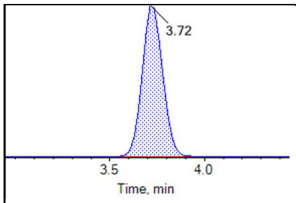

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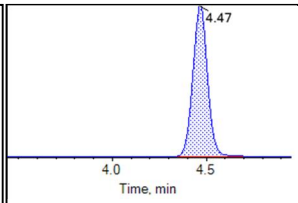

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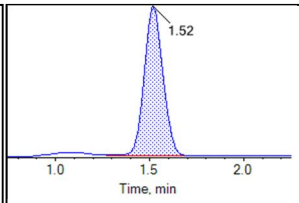

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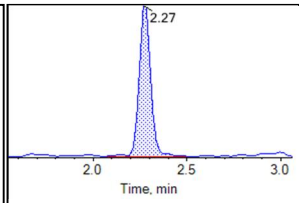

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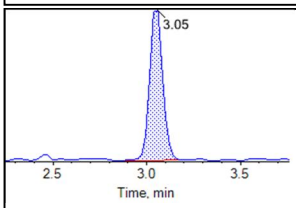

13C8-PFOS

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Chromatogram Report

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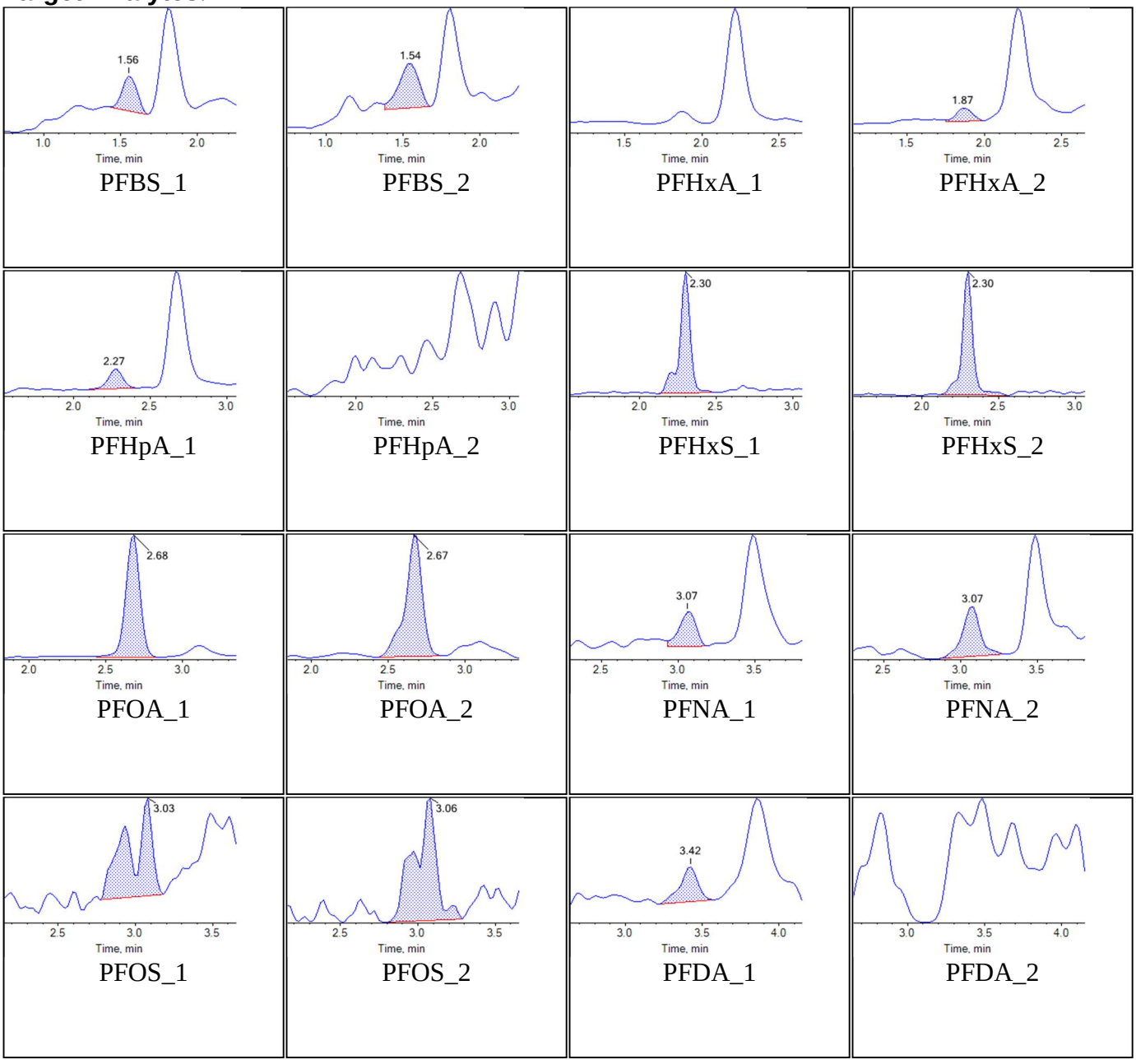
Sample Name	J8714-FS(0)	**Injection Vial**	45
Sample ID	VC-SO-FB11-10062018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:36:33	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

Target Analytes:



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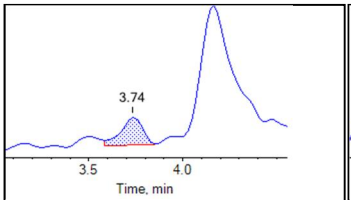

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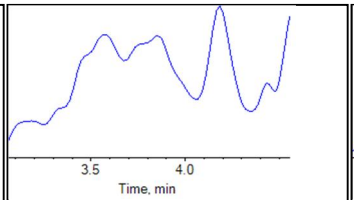

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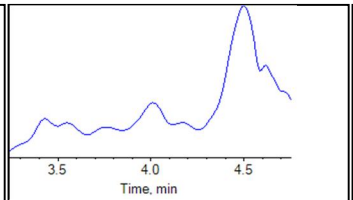

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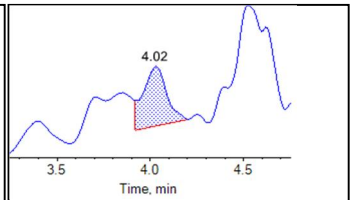

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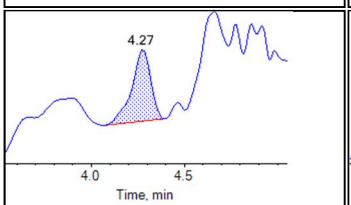

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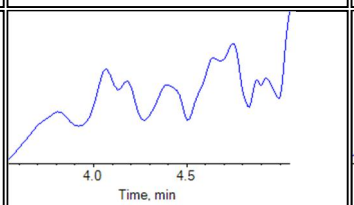

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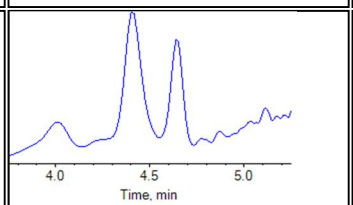

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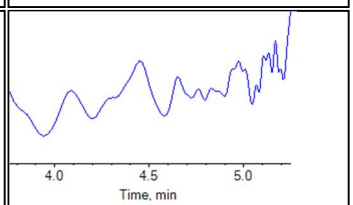

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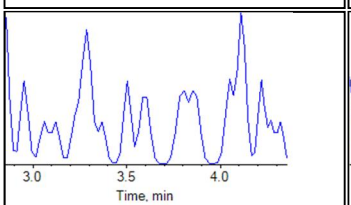

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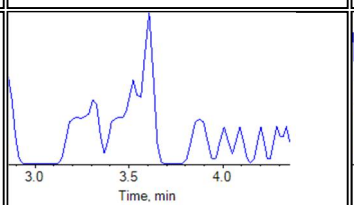

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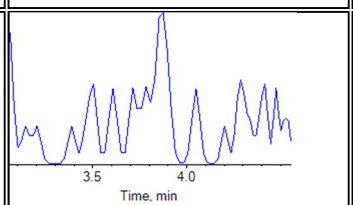

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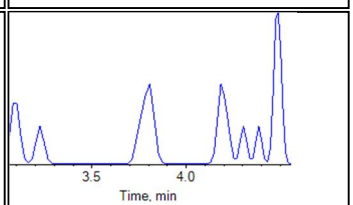

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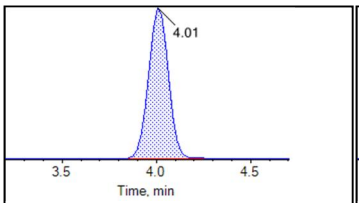

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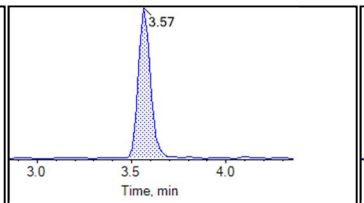

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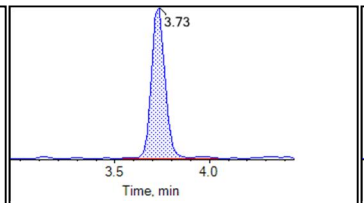
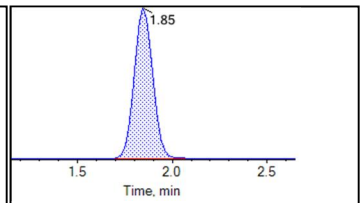


d5-EtFOSAA



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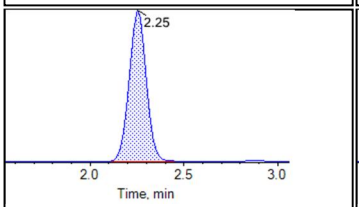

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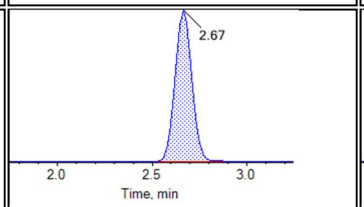

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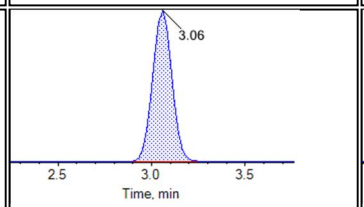

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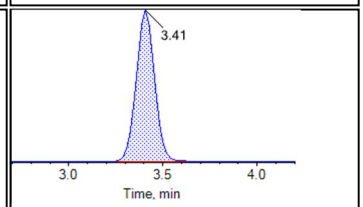

13C6-PFDA

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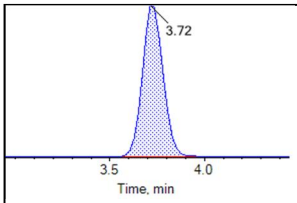
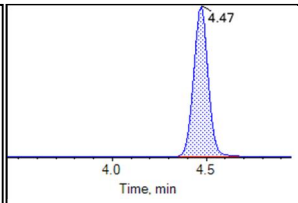
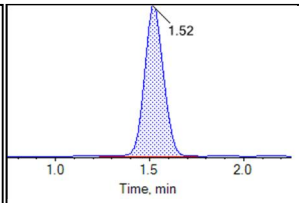


13C7-PFUnA



13C2-PFTeDA



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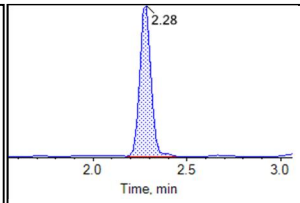

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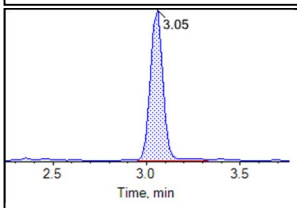

13C8-PFOS

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:45:54 AM

Sample Name	J8715-FS(0)	**Injection Vial**	46
Sample ID	VC-SO-EB11-10062018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:47:24	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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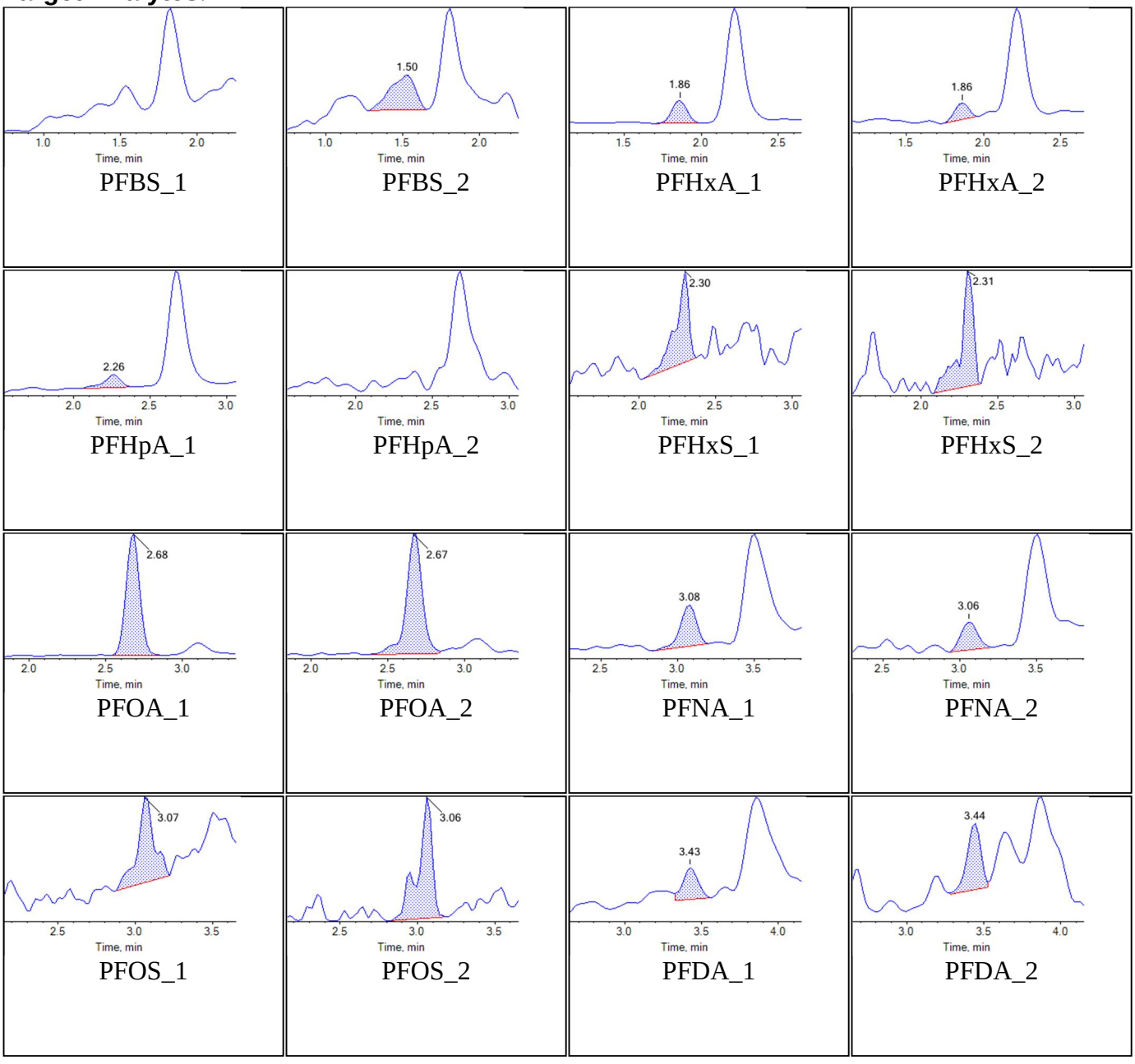

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Chromatogram Report

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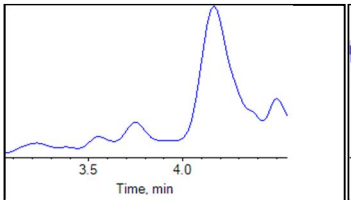

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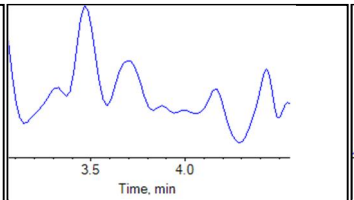

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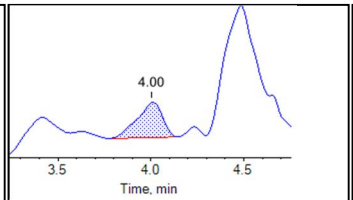

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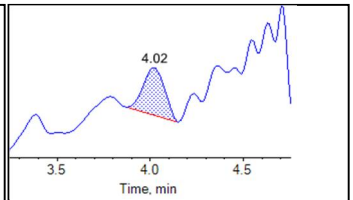

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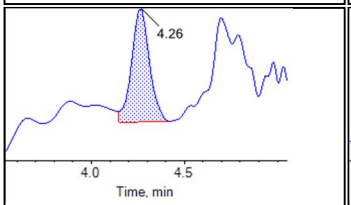

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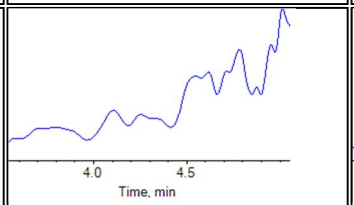

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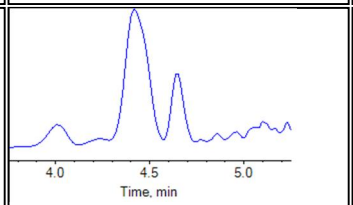

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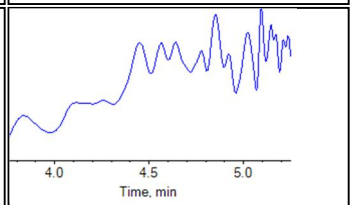

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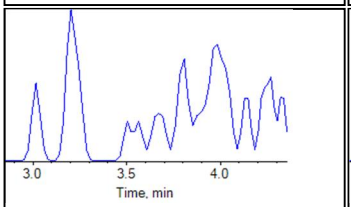

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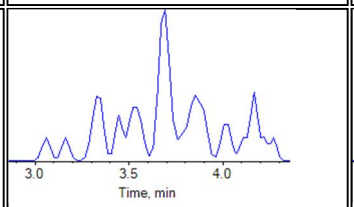

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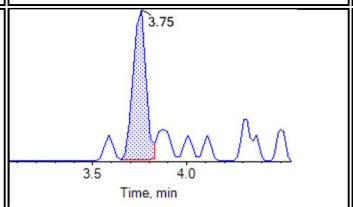

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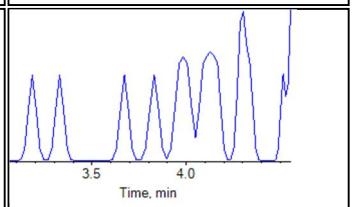

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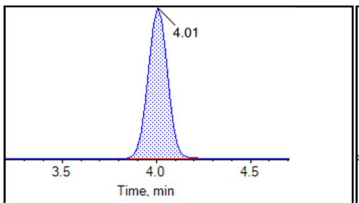

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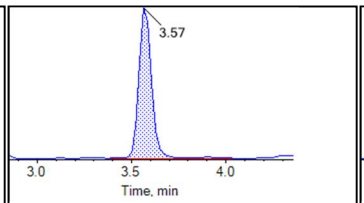
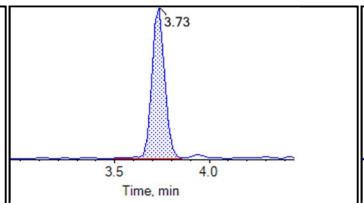


d3-MeFOSAA



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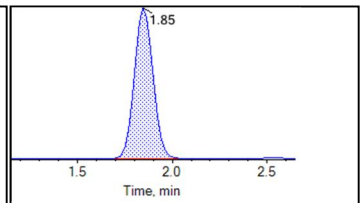

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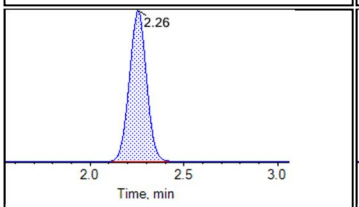

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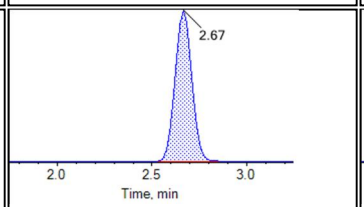

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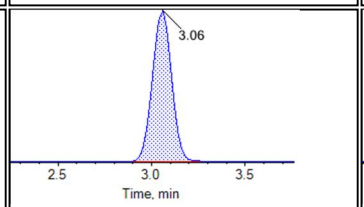

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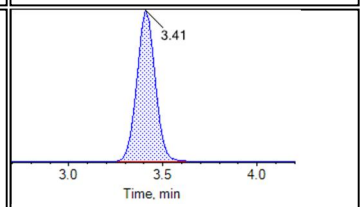

13C6-PFDA

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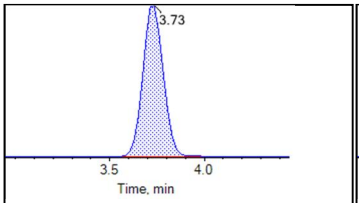

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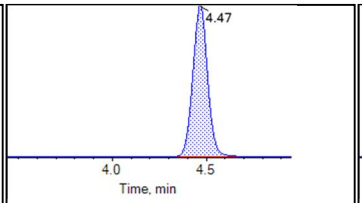

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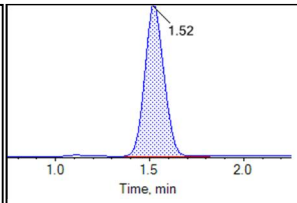

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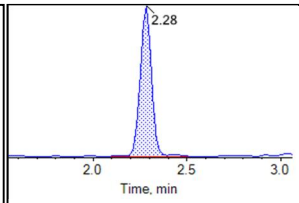

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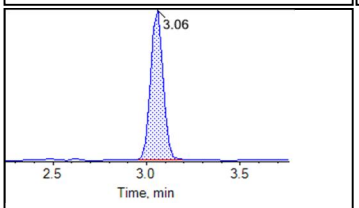

13C8-PFOS

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Chromatogram Report

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Sample Name	J8716-FS(0)	**Injection Vial**	47
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:58:16	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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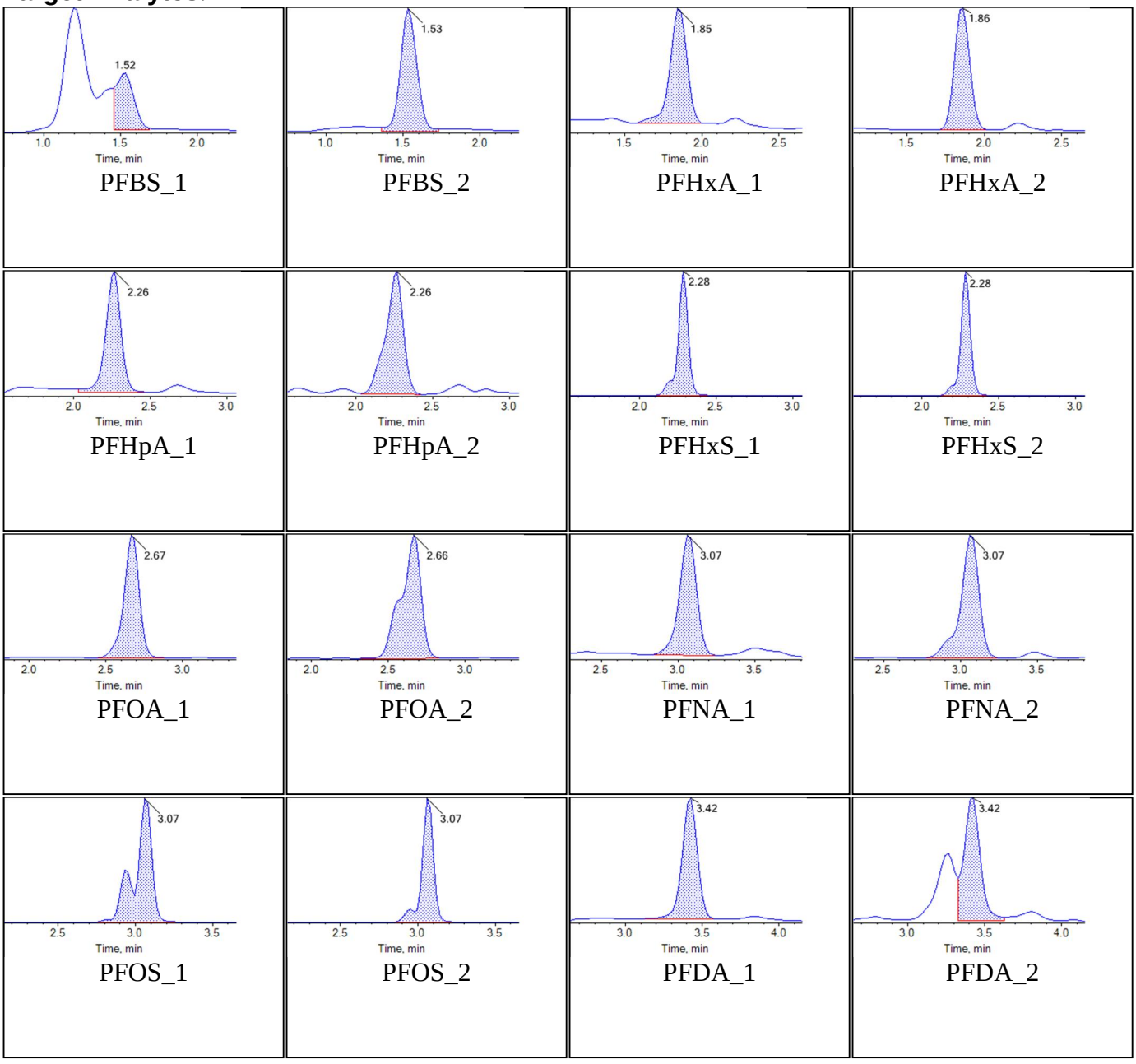

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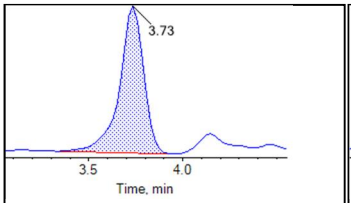

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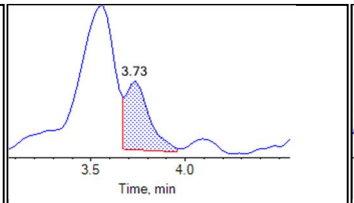

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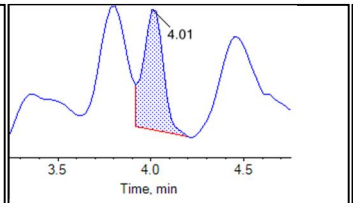

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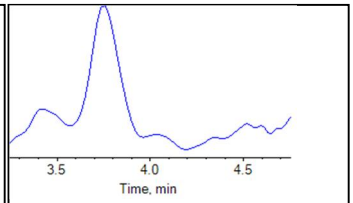

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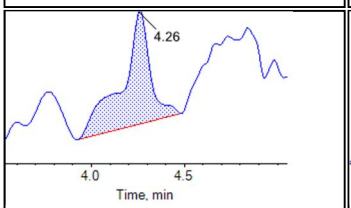

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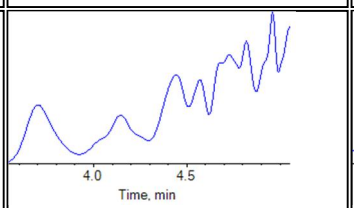

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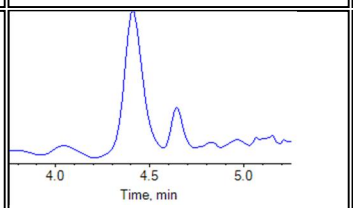

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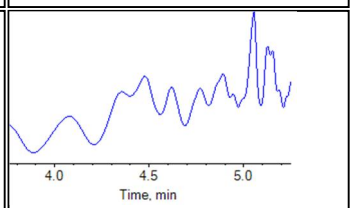

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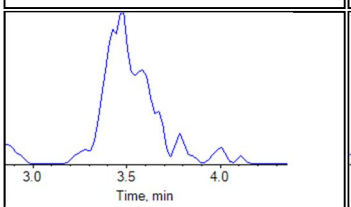

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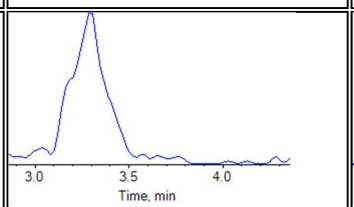

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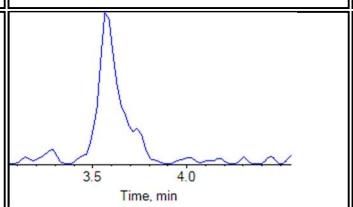

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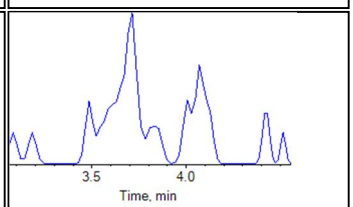

NEtFOSAA_2

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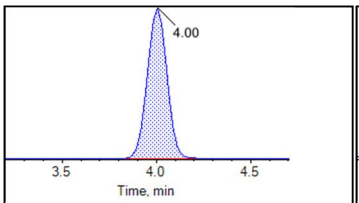

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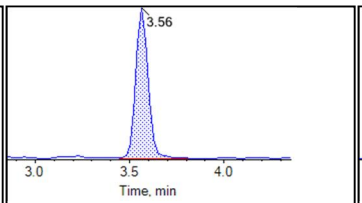
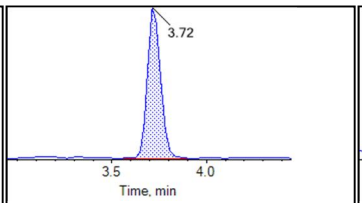
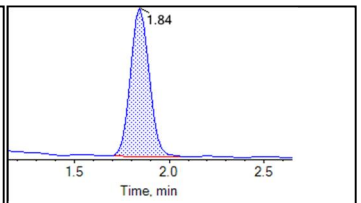


d3-MeFOSAA



d5-EtFOSAA



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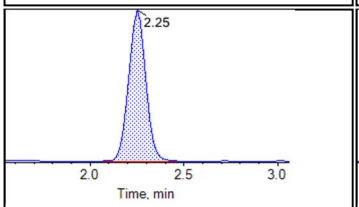

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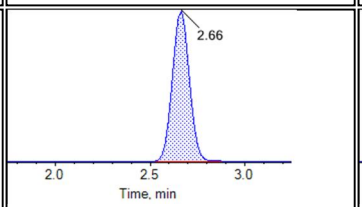

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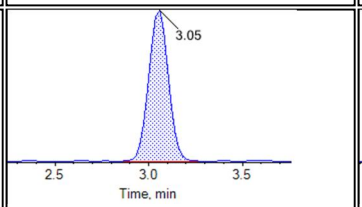
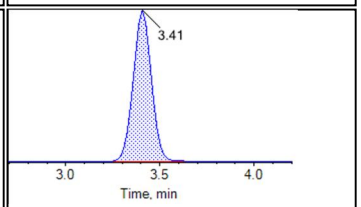


13C9-PFNA



13C6-PFDA

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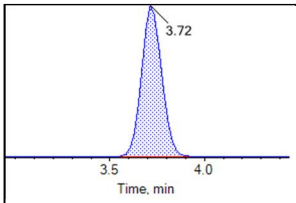
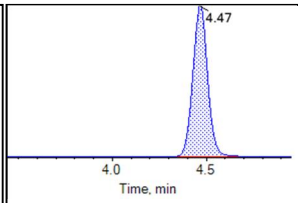


13C7-PFUnA



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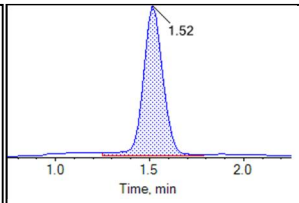
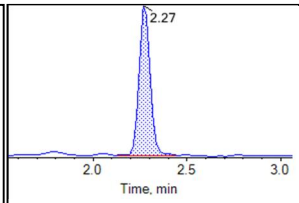


13C3-PFBS



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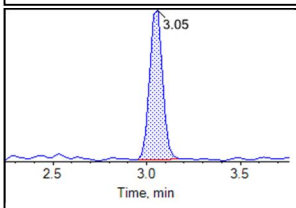

13C8-PFOS

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Chromatogram Report

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Sample Name	J8716-FS-D(3)	**Injection Vial**	48
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:09:09	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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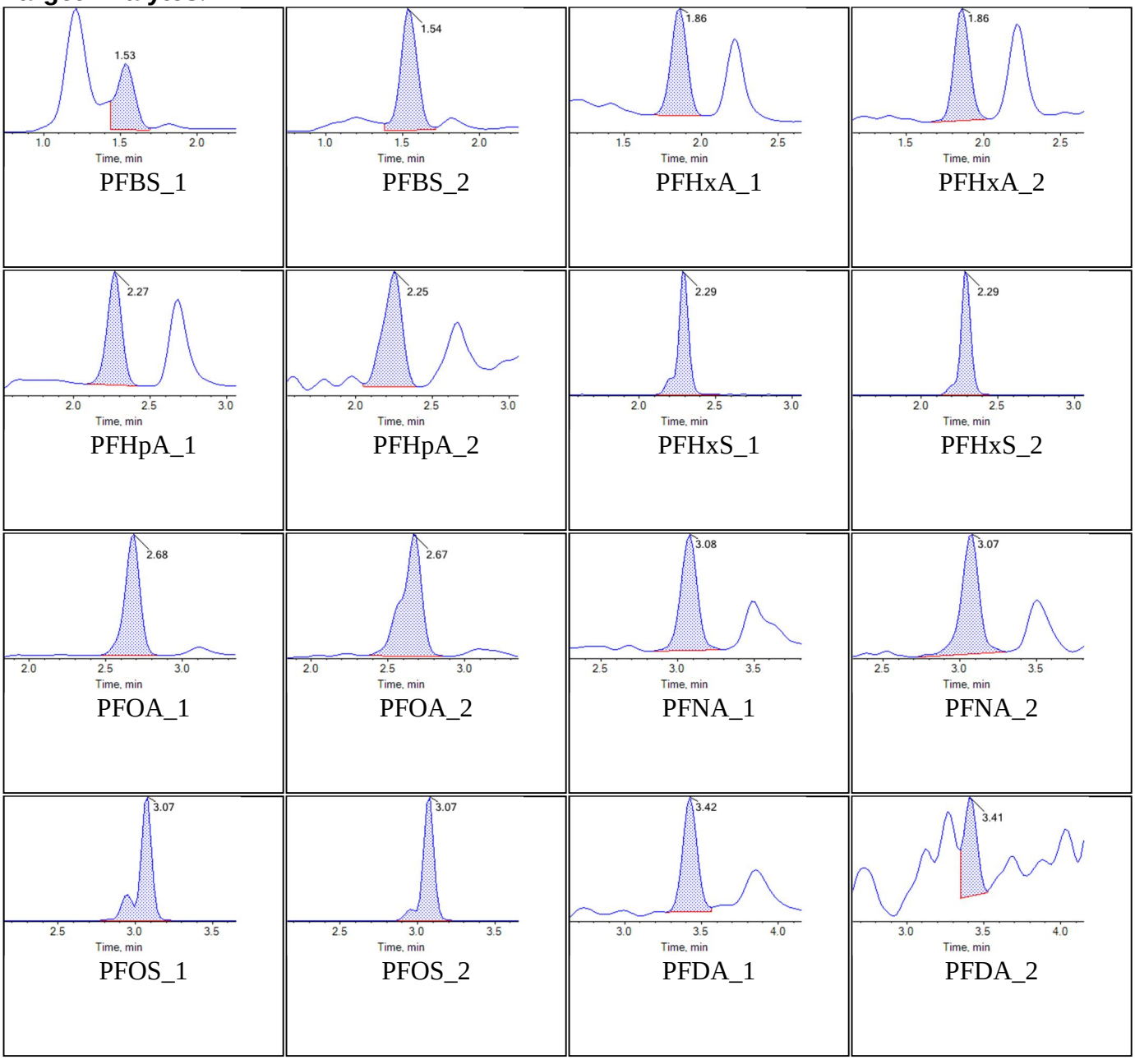

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Chromatogram Report

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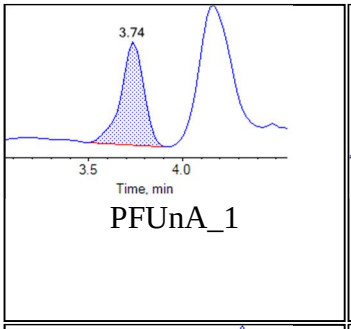

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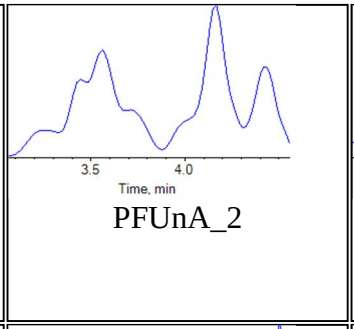

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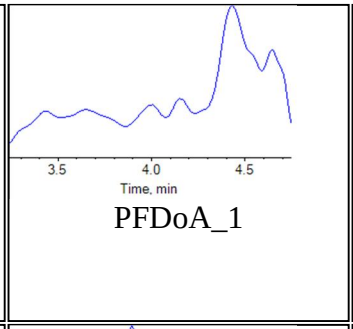

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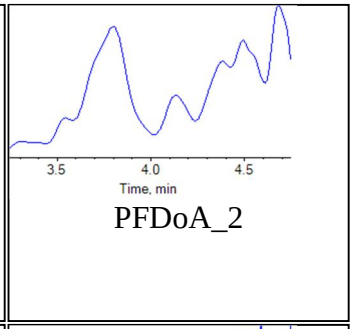

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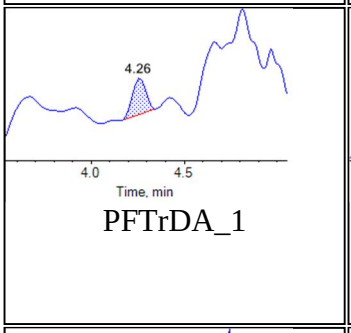

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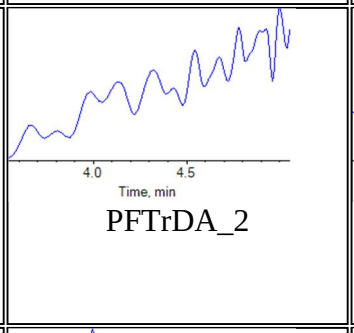

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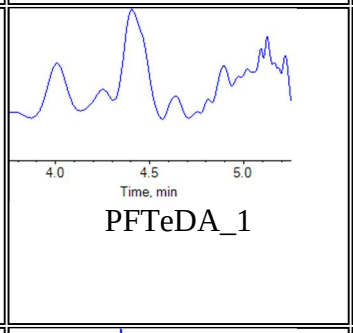

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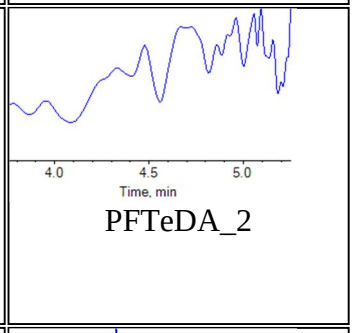

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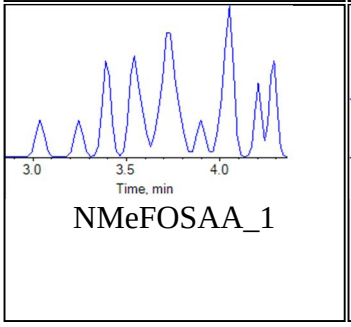

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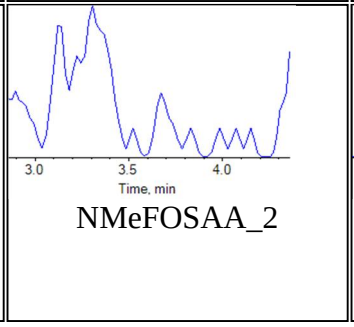

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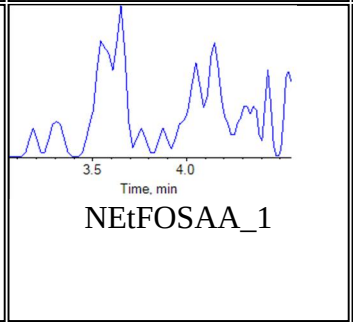

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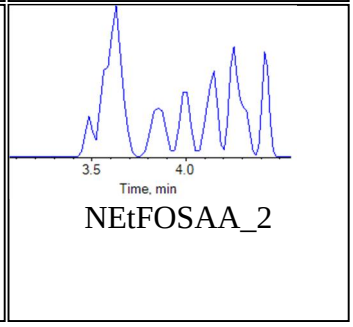

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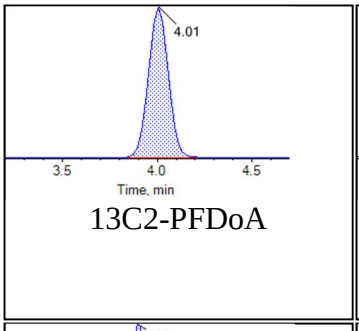

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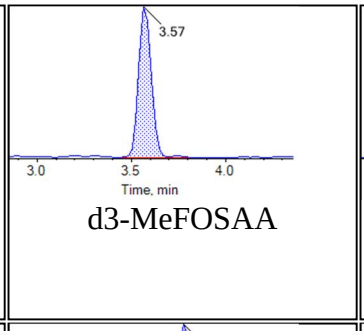

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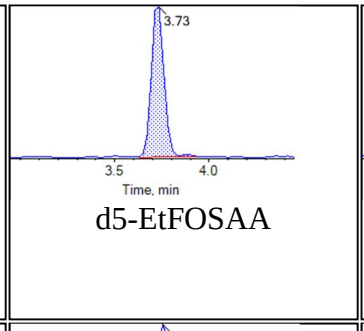

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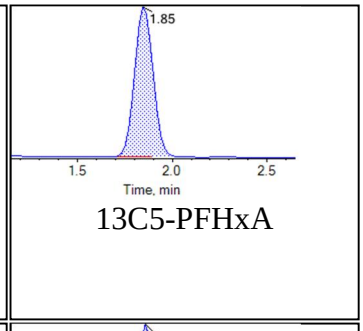
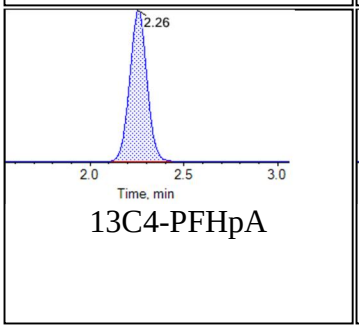


13C5-PFHxA



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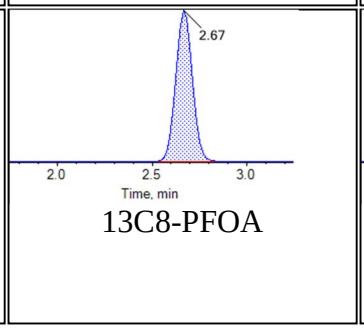
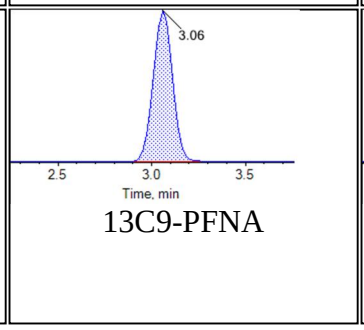
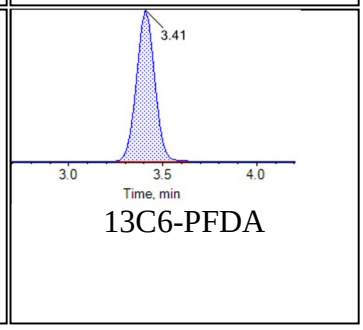


13C8-PFOA



13C9-PFNA



13C6-PFDA

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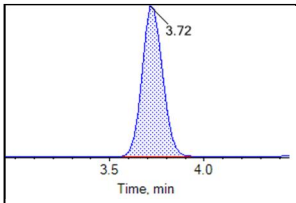
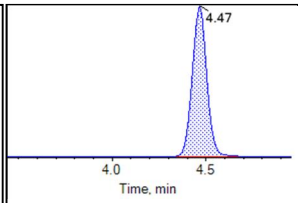


13C7-PFUnA



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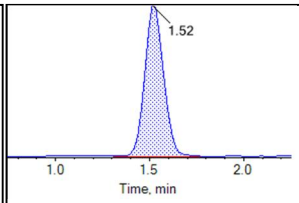

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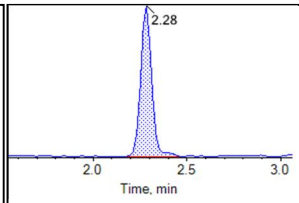

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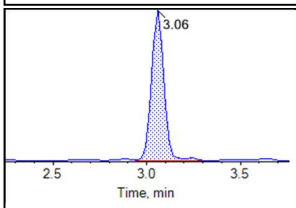

13C8-PFOS

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Chromatogram Report

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Sample Name	J8717-FS(0)	**Injection Vial**	49
Sample ID	VC-CS00-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:20:02	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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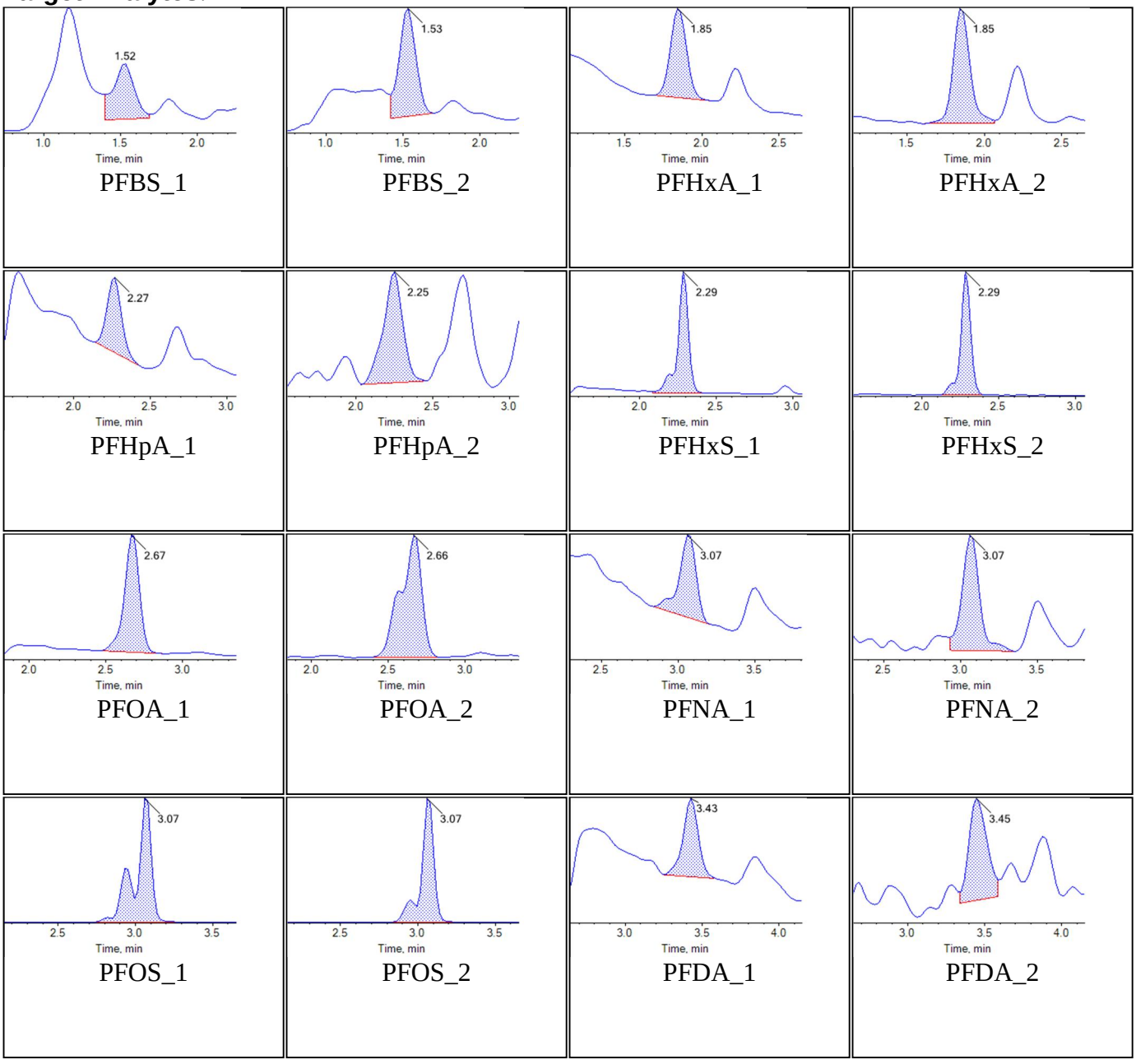

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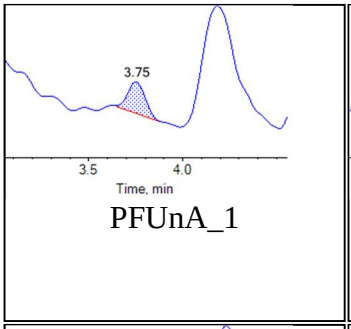

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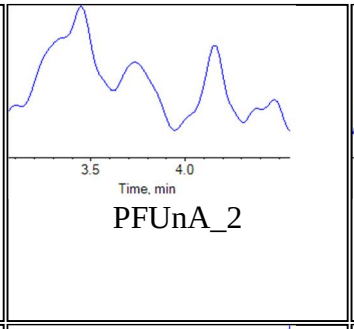

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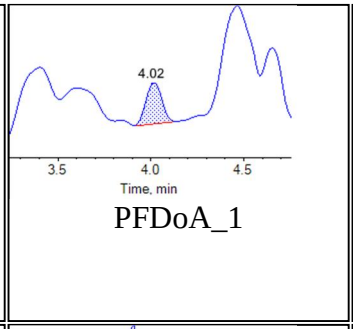

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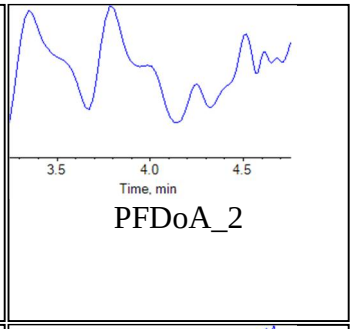

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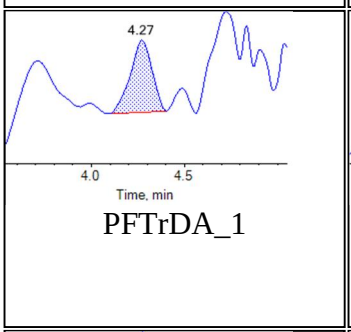

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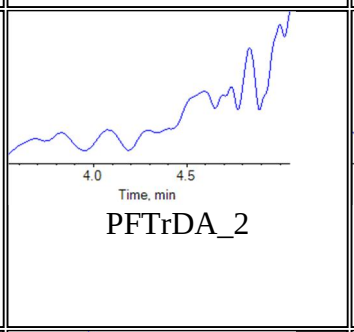

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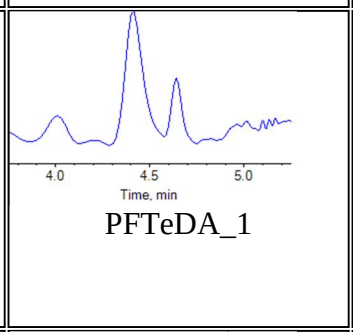

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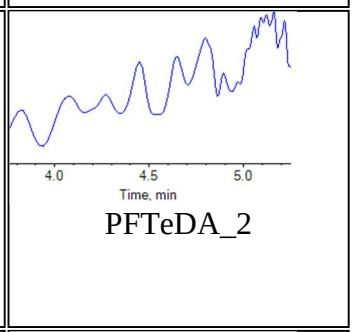

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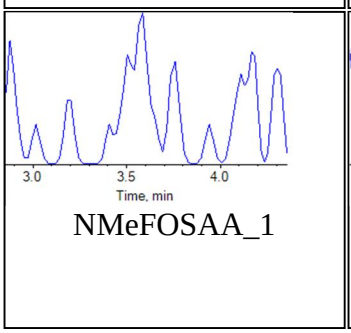

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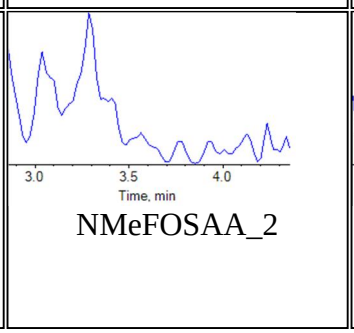

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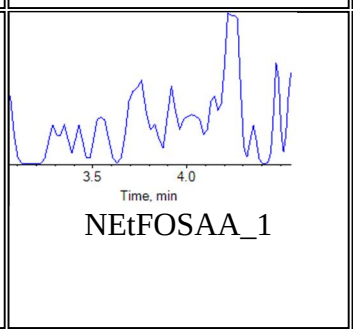

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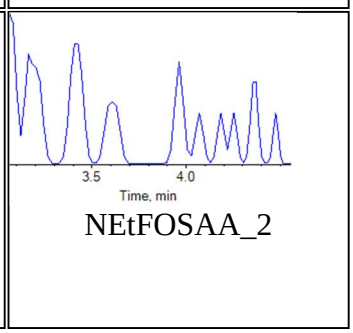

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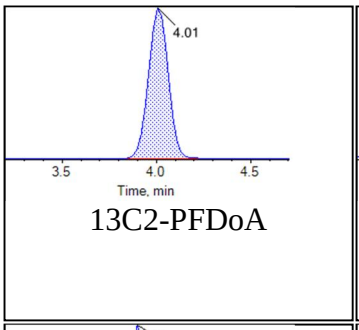

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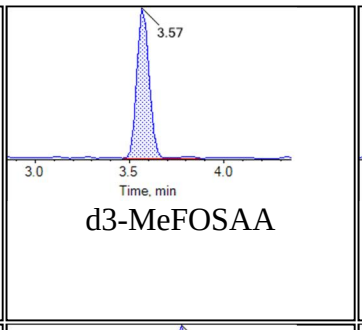
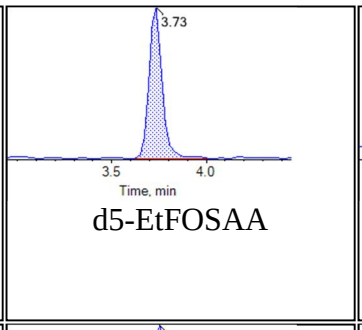
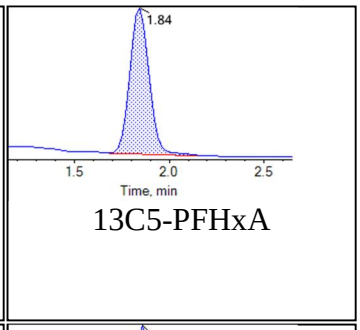


d3-MeFOSAA



d5-EtFOSAA



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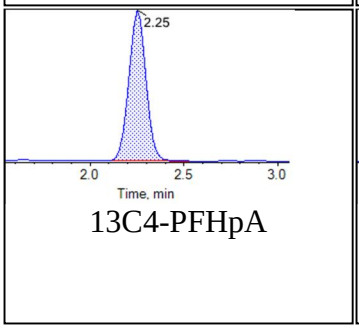

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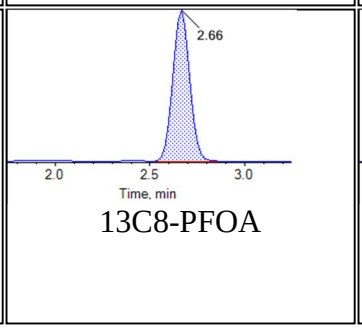
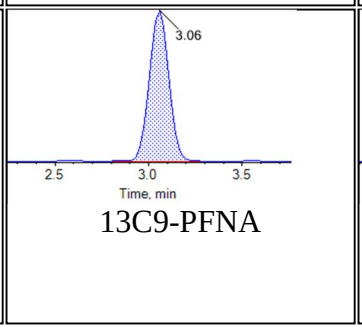
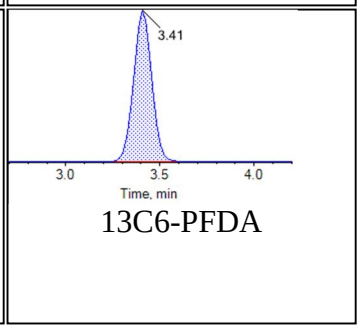


13C8-PFOA



13C9-PFNA



13C6-PFDA

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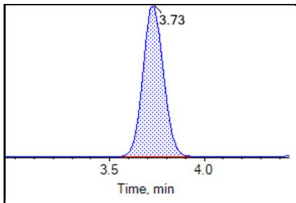
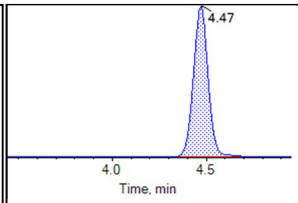


13C7-PFUnA



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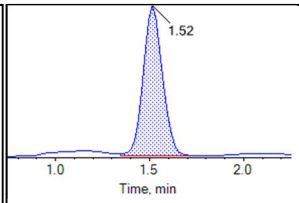
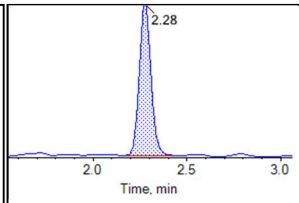


13C3-PFBS



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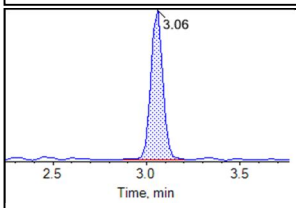

13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:46:18 AM

Sample Name	J8718-FS(0)	**Injection Vial**	50
Sample ID	VC-CS00-DW02P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:30:53	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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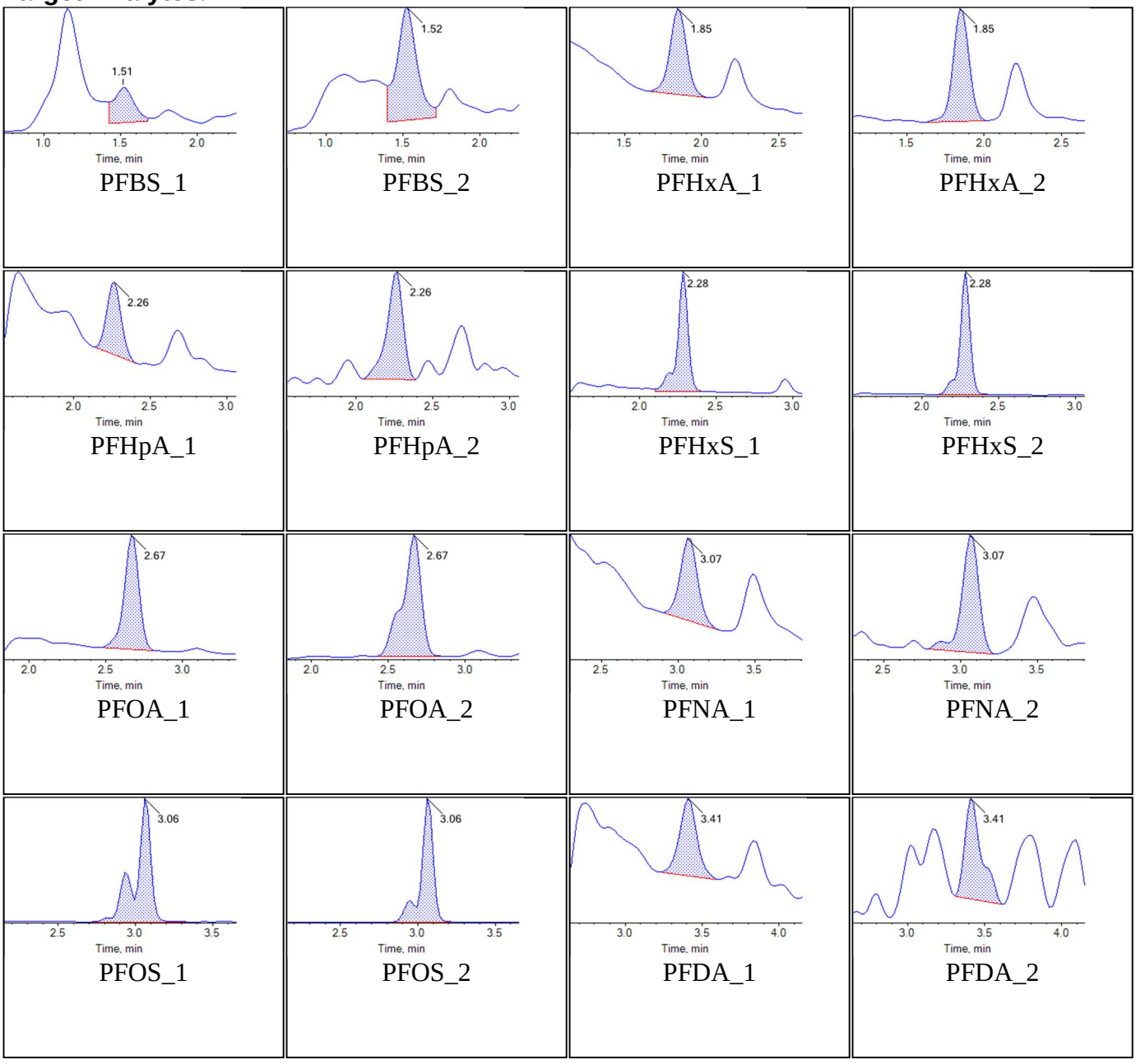

BATTELLE

Chromatogram Report

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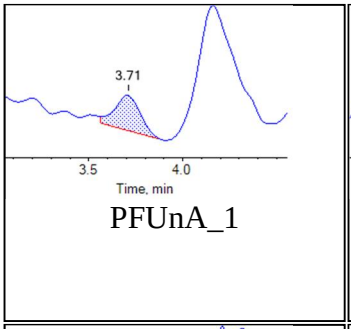

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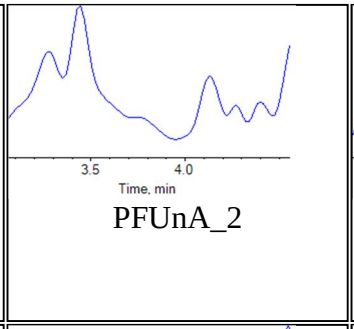

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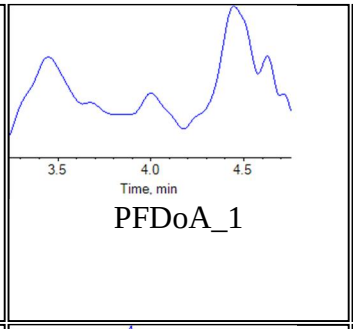

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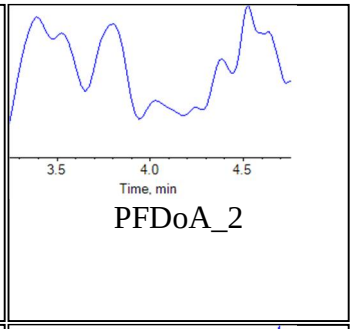

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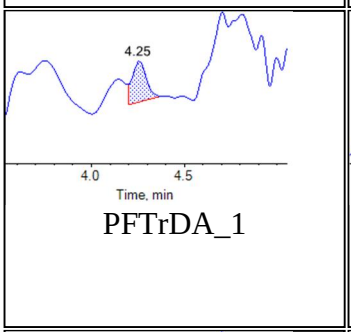

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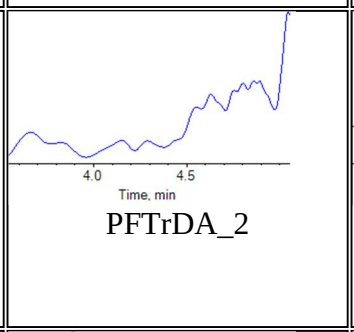

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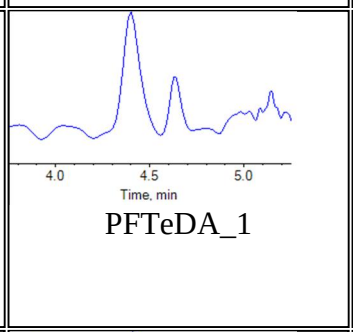

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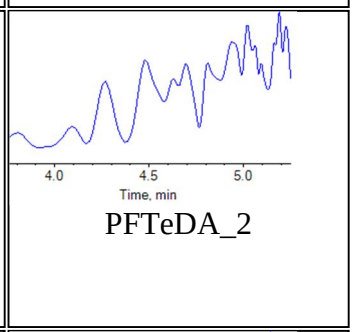

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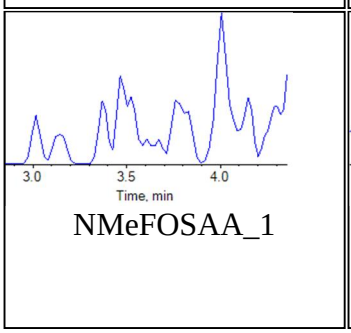

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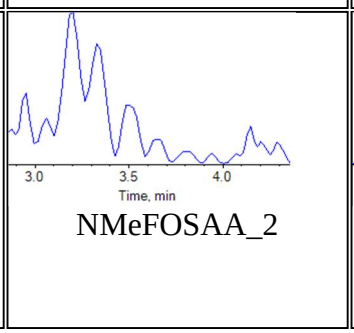

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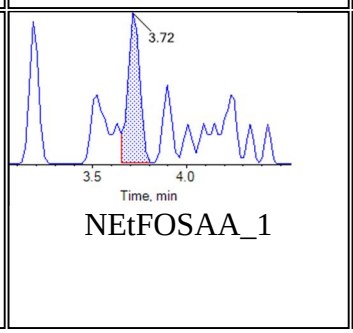

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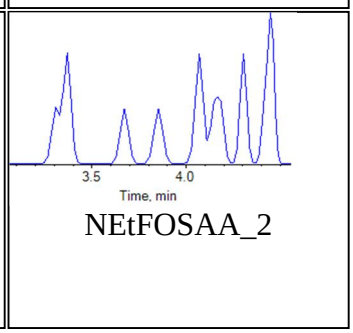

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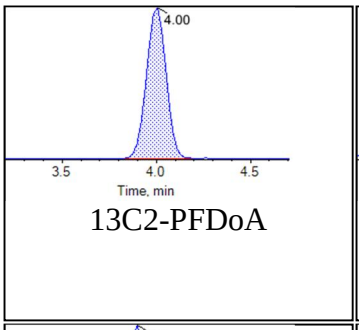
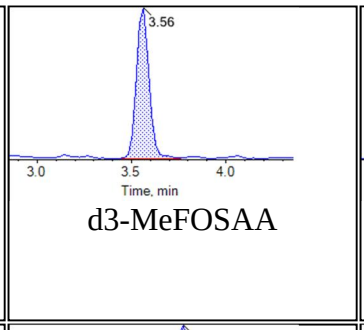
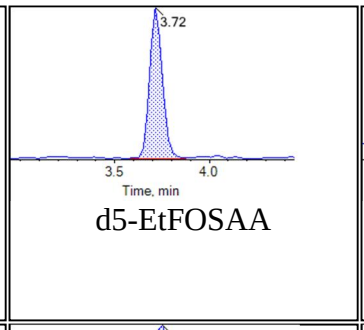


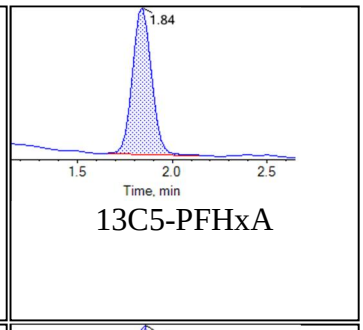
13C2-PFDoA



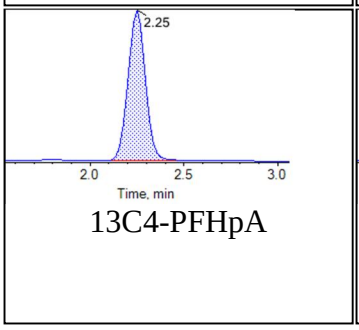
d3-MeFOSAA



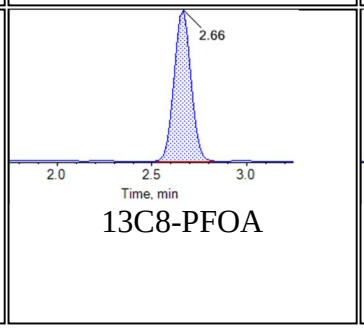
d5-EtFOSAA



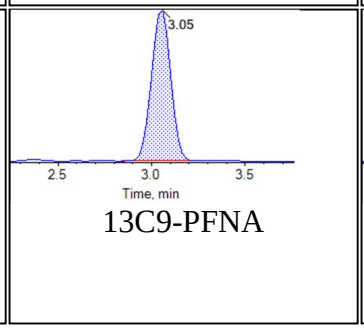
13C5-PFHxA



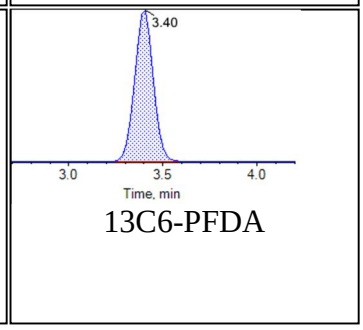
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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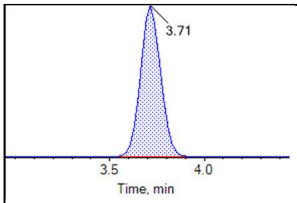
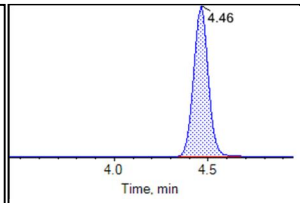
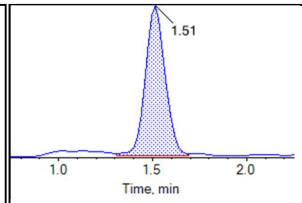


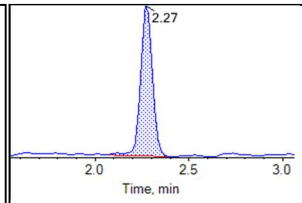
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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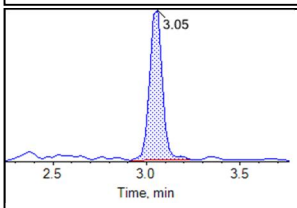

13C8-PFOS

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Chromatogram Report

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Sample Name	J8719-FS(0)	**Injection Vial**	51
Sample ID	VC-CS00-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:41:45	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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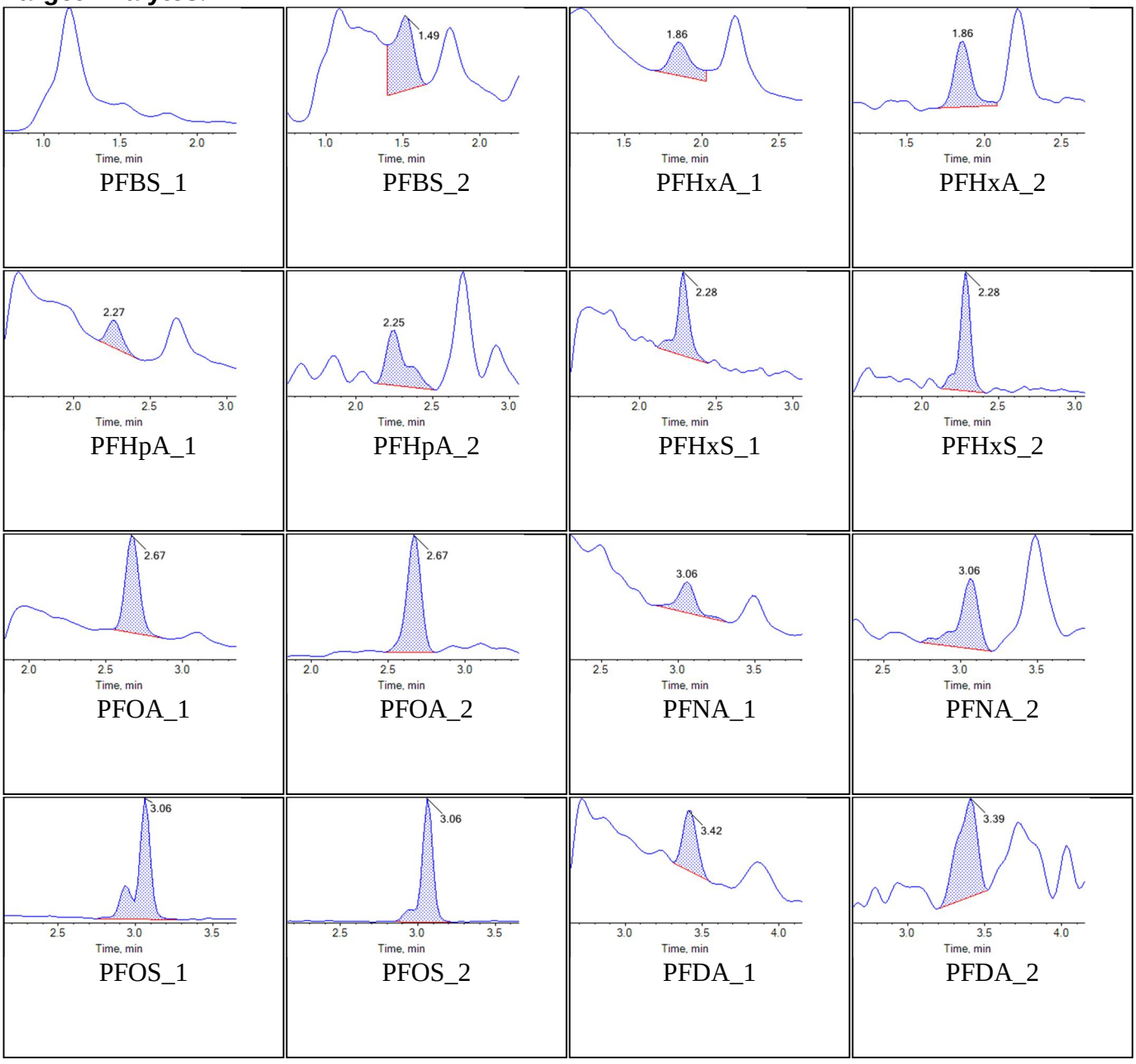

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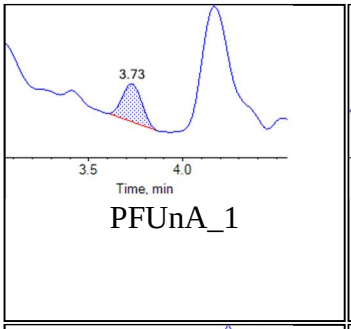

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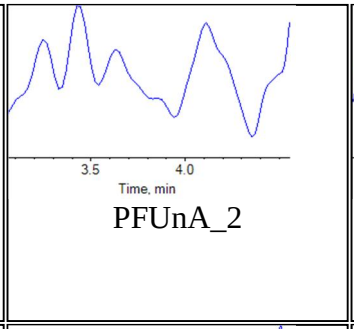

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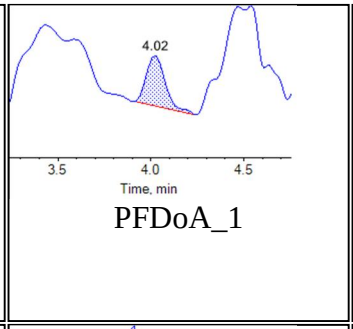

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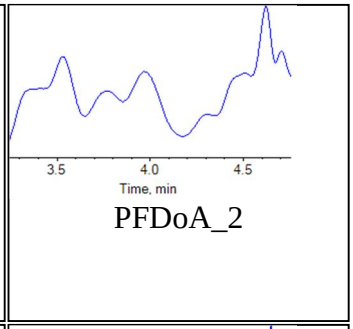

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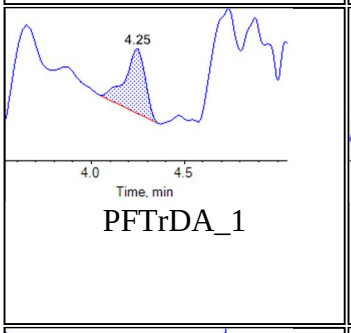

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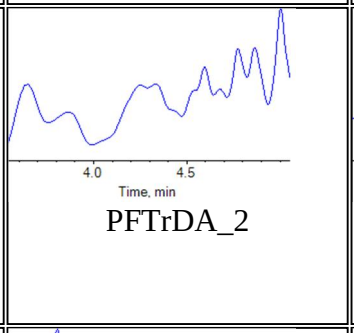

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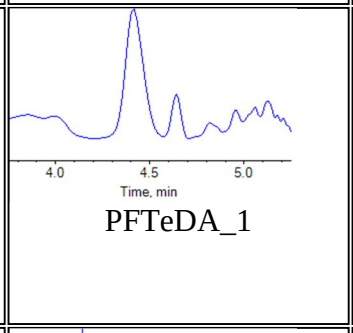

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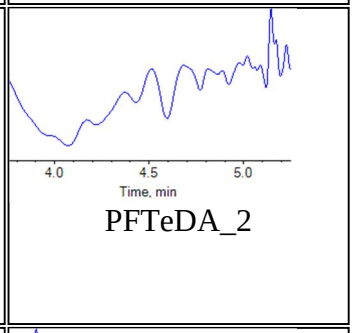

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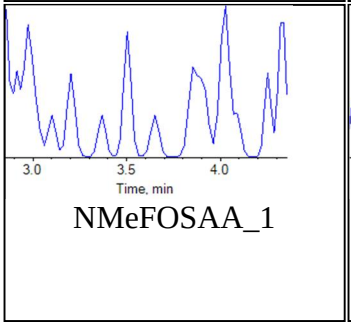

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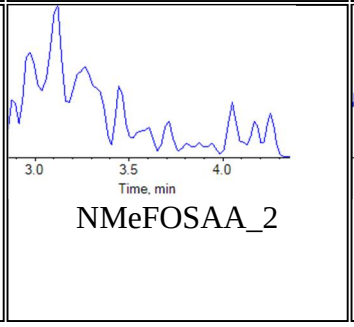

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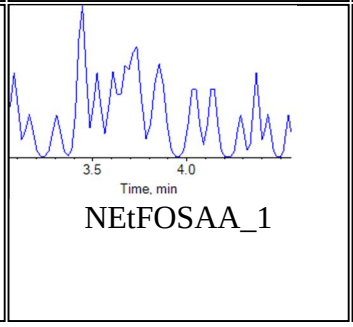

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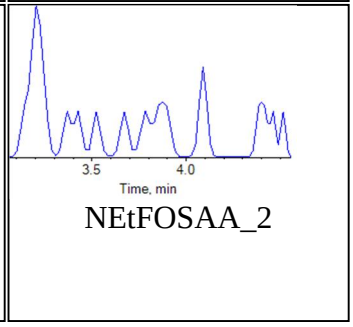

NEtFOSAA_2

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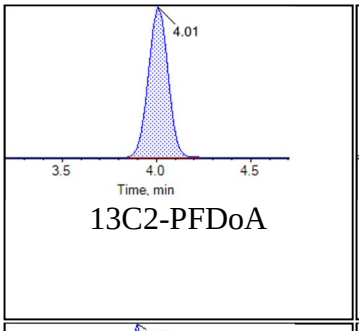
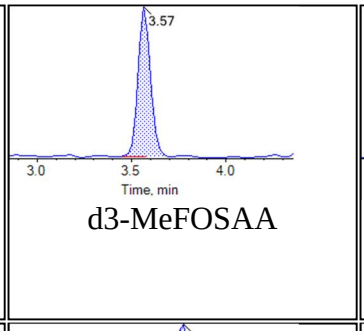
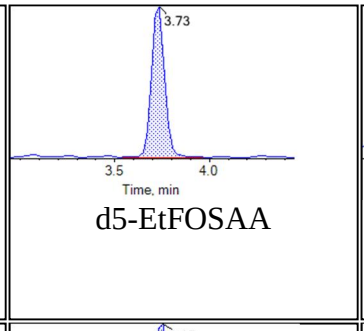


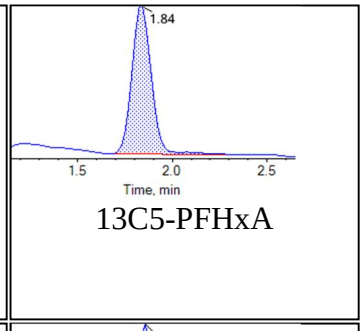
13C2-PFDoA



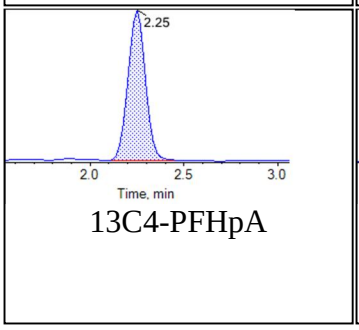
d3-MeFOSAA



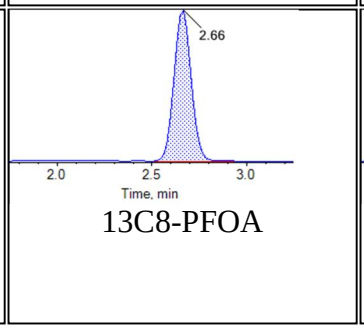
d5-EtFOSAA



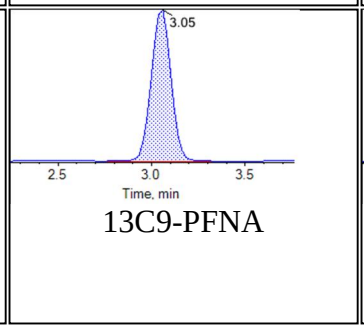
13C5-PFHxA



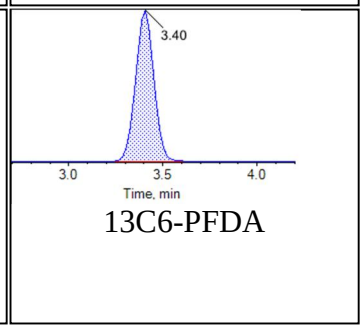
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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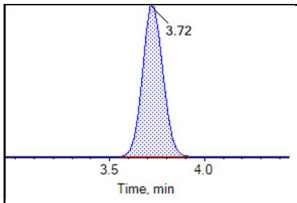
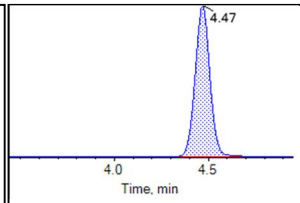
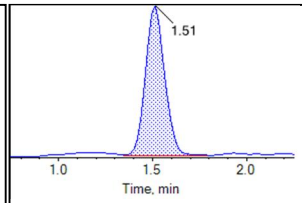
Printed: 01/11/2018 8:46:24 AM



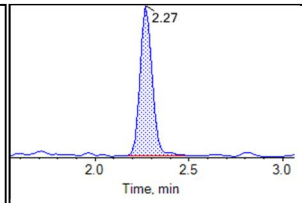
13C7-PFUnA



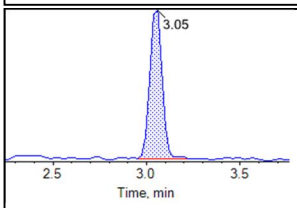
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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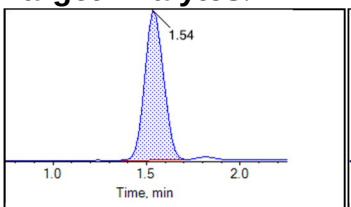
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:46:31 AM

Sample Name	KB76	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:03:28	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

Target Analytes:



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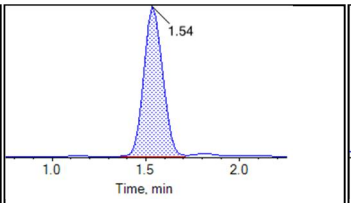

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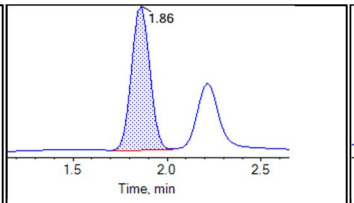

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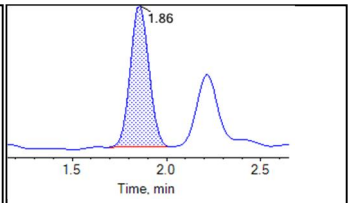

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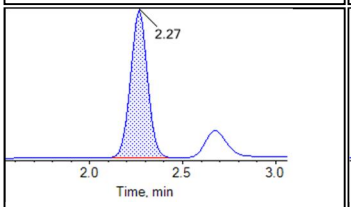

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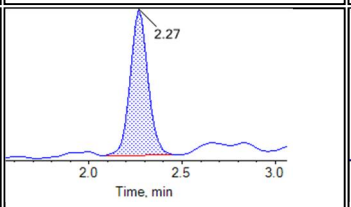

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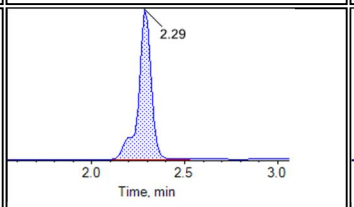

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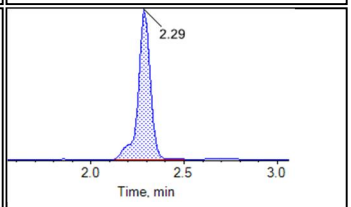

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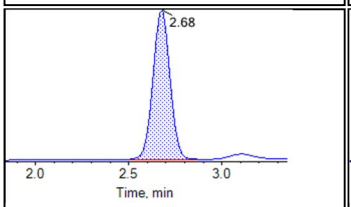

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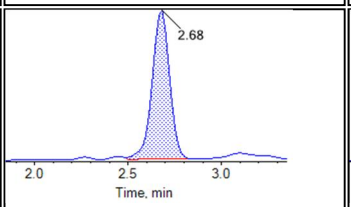

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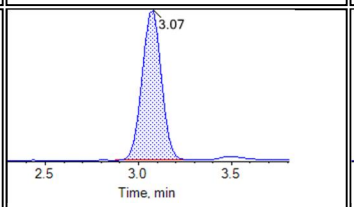

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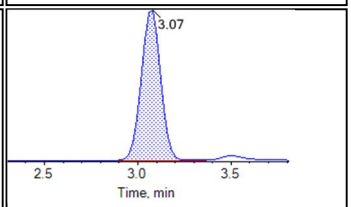

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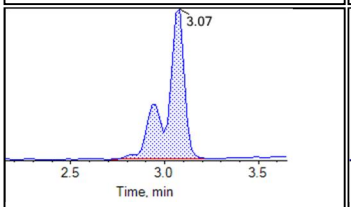

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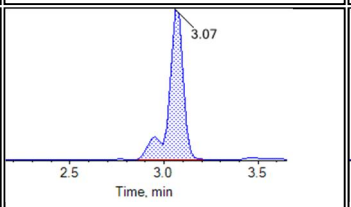

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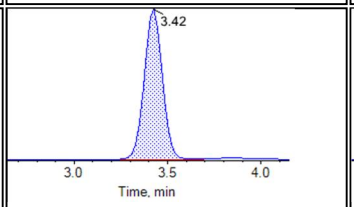

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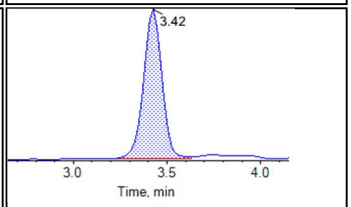

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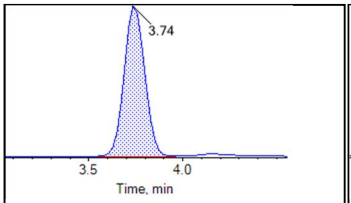

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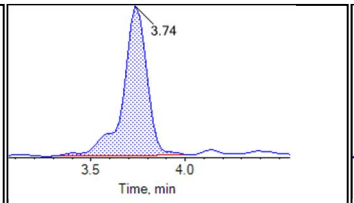

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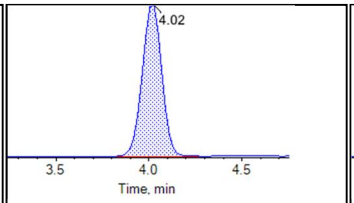

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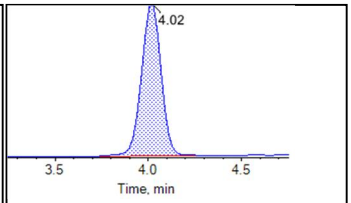

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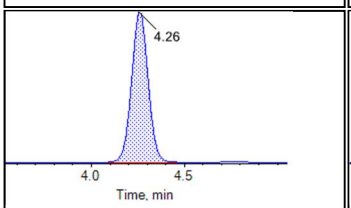

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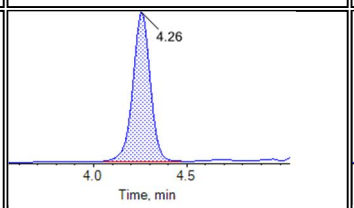

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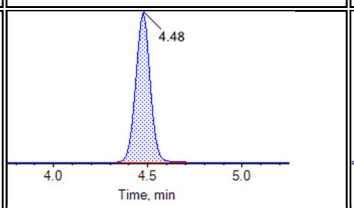

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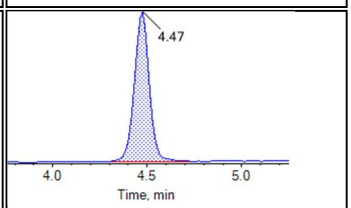

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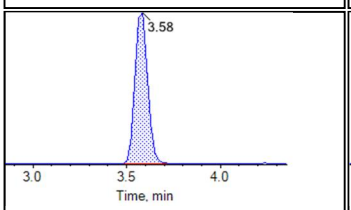

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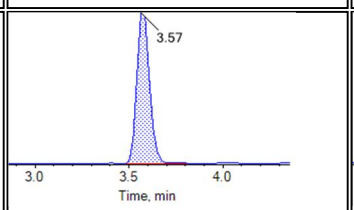

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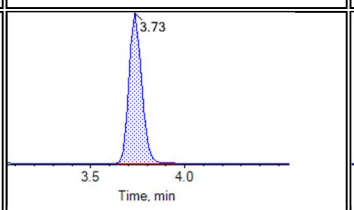

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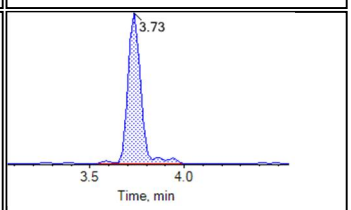

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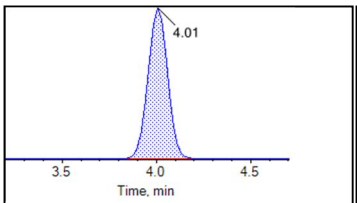

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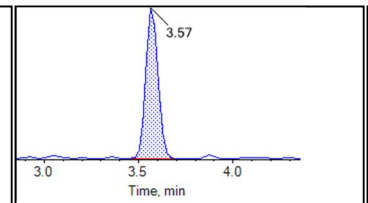

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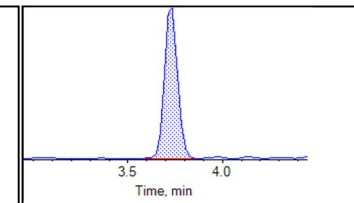

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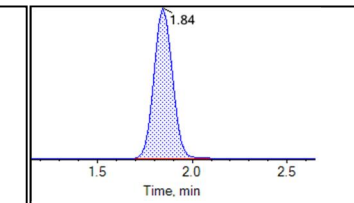

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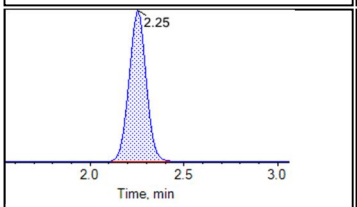

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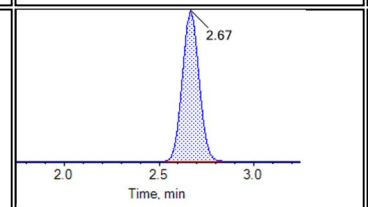
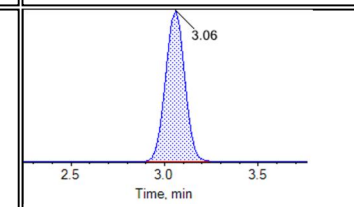


13C8-PFOA



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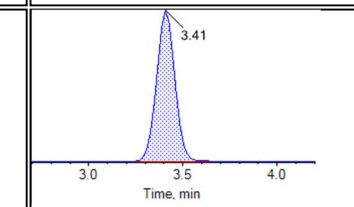

13C6-PFDA

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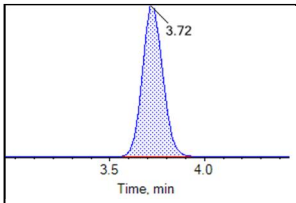

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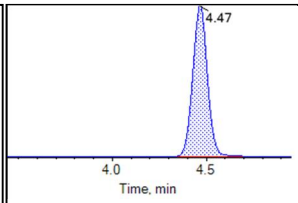
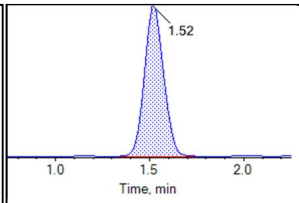


13C2-PFTeDA



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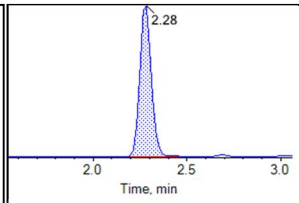

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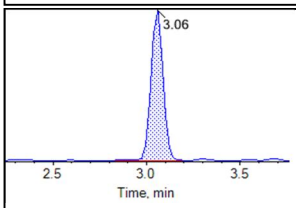

13C8-PFOS

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Chromatogram Report

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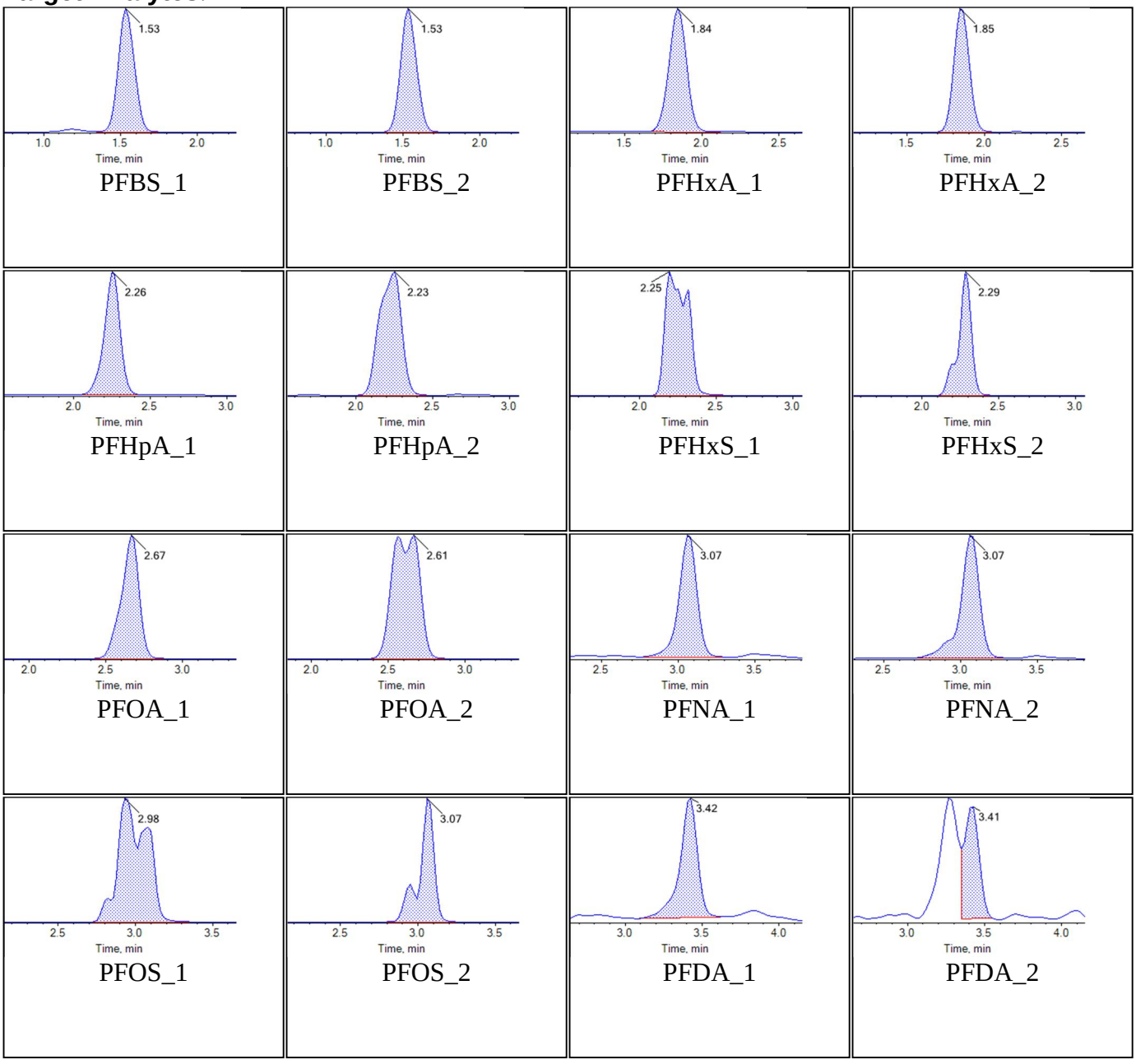
Sample Name	J8720-FS(0)	**Injection Vial**	53
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:14:19	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

Target Analytes:



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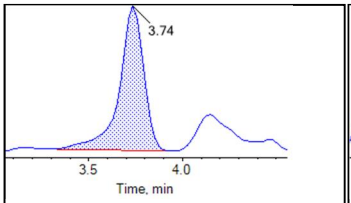

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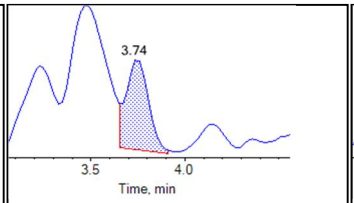

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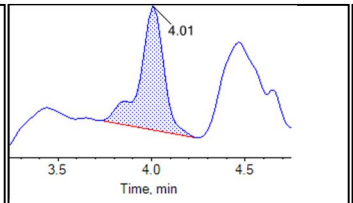

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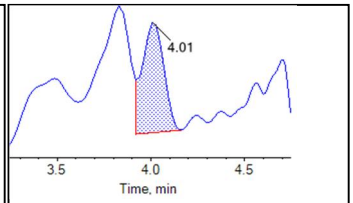

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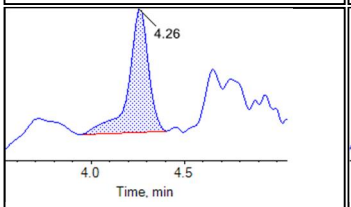

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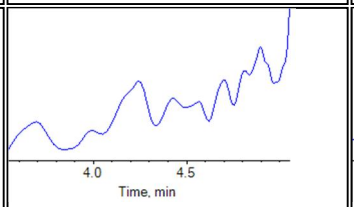

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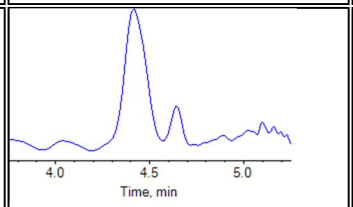

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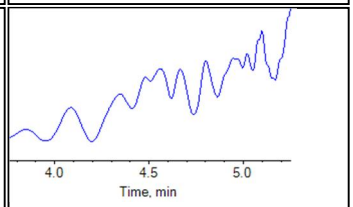

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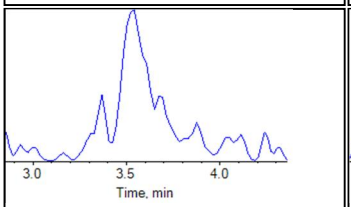

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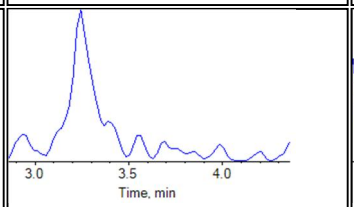

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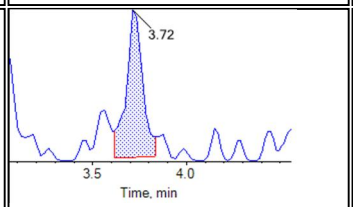

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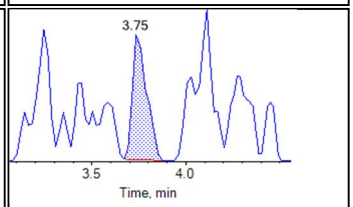
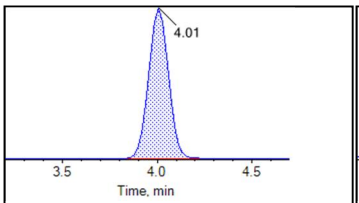
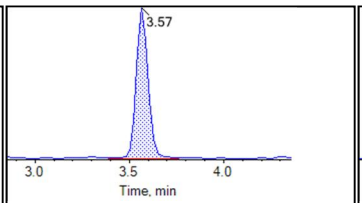


NEtFOSAA_2

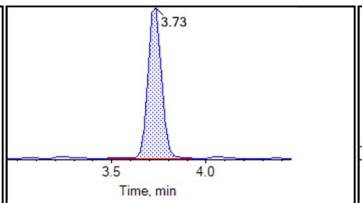
Internal Standards:



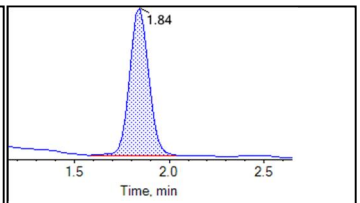
13C2-PFDoA



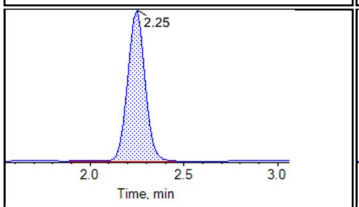
d3-MeFOSAA



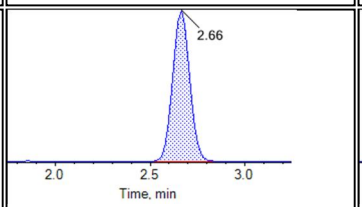
d5-EtFOSAA



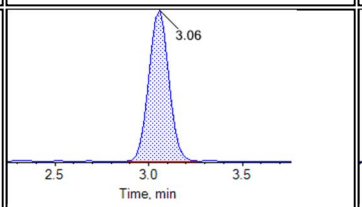
13C5-PFHxA



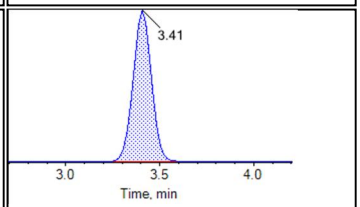
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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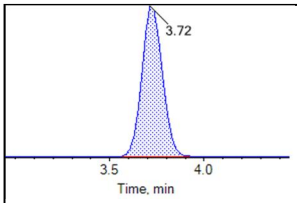
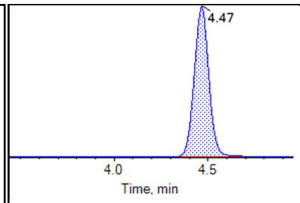
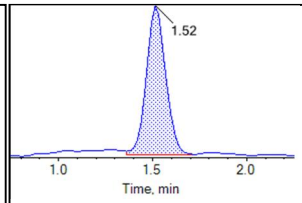


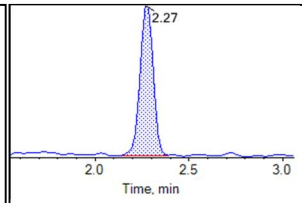
13C7-PFUnA



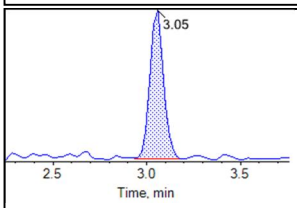
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
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Sample Name	J8720-FS-D(3)	**Injection Vial**	54
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:25:10	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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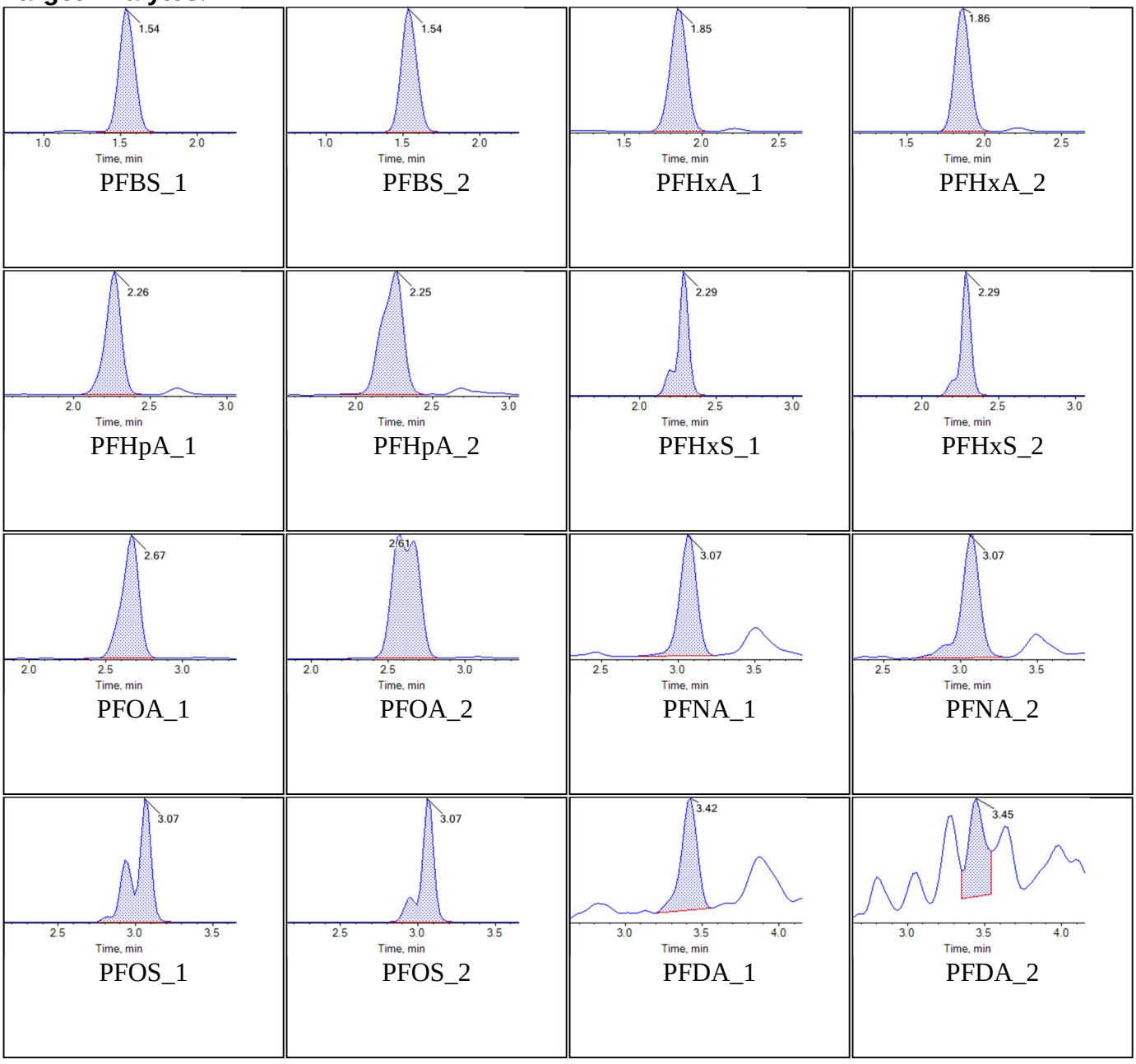

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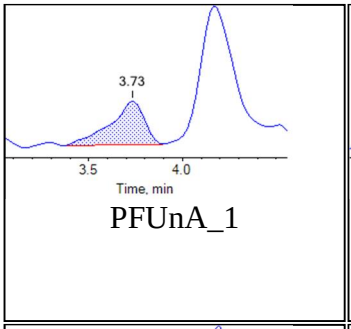
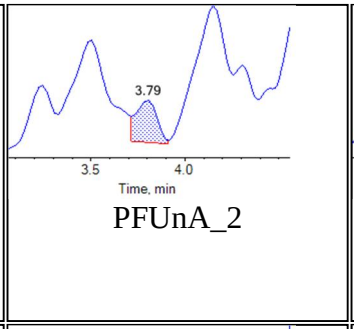
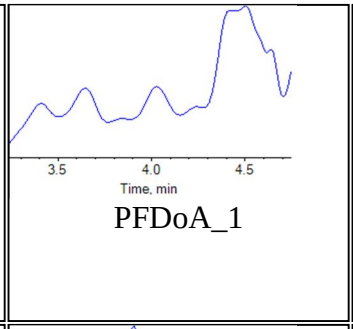


PFUnA_1



PFUnA_2



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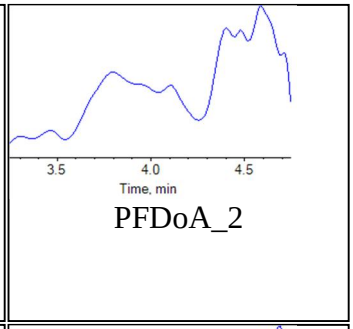
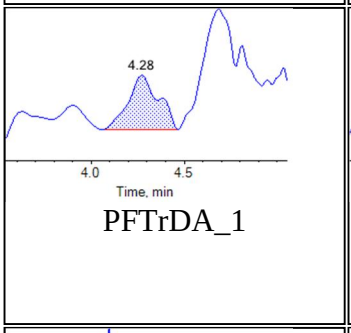


PFDoA_2



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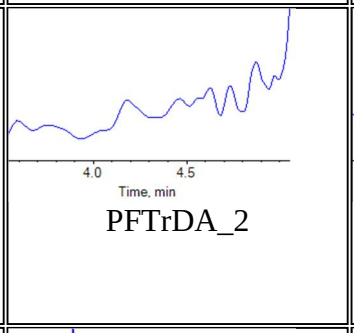

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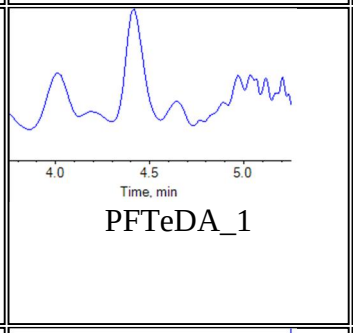

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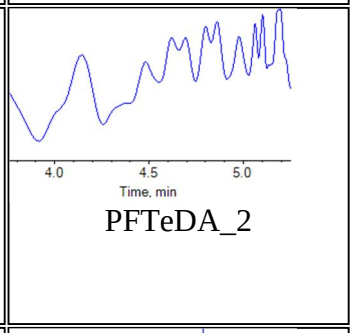

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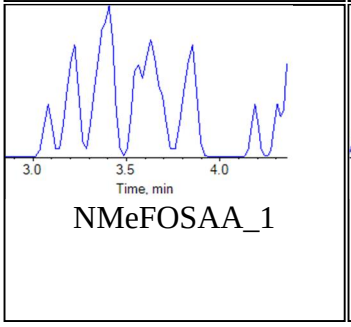

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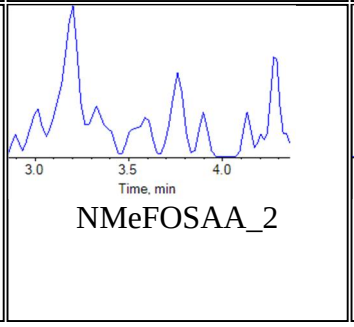

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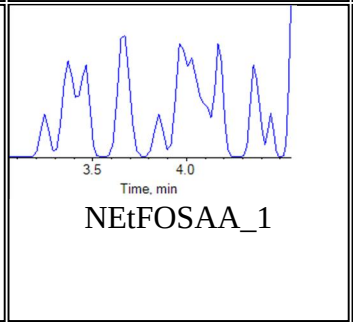

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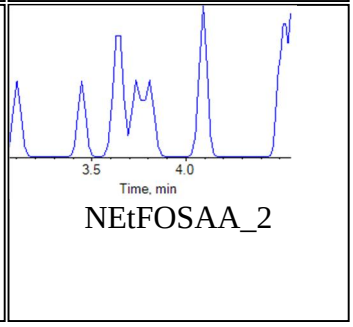

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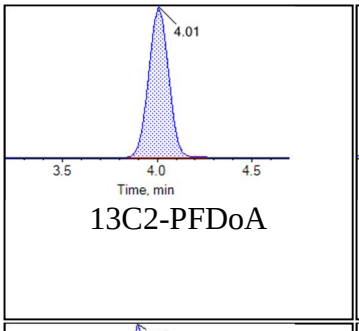
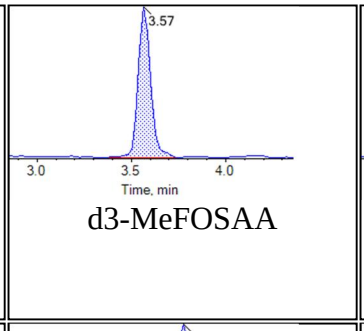
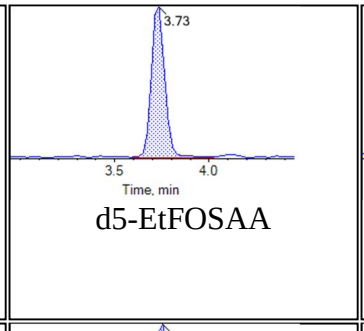


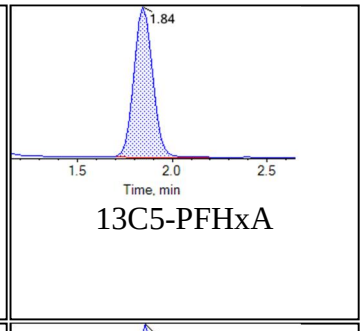
13C2-PFDoA



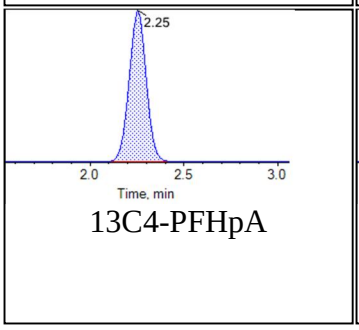
d3-MeFOSAA



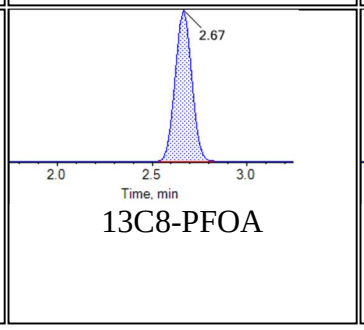
d5-EtFOSAA



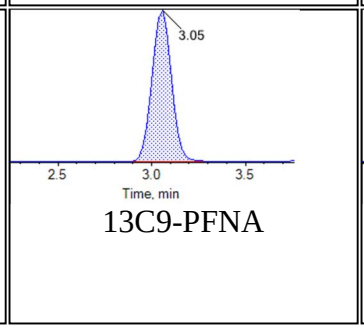
13C5-PFHxA



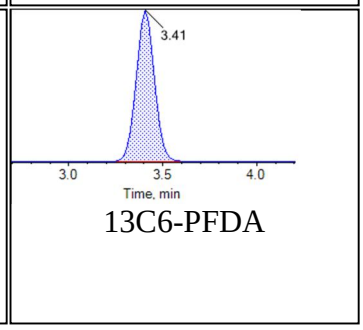
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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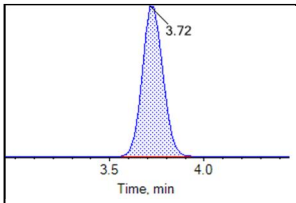
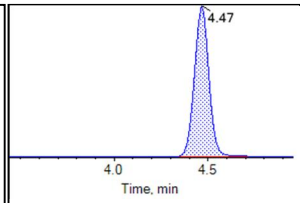
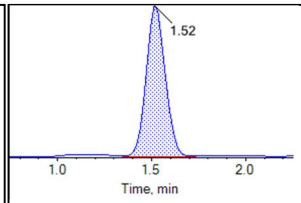


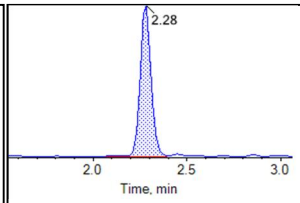
13C7-PFUnA



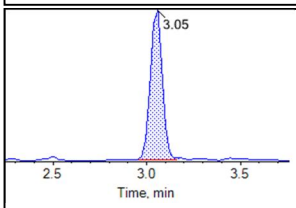
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:46:49 AM

Sample Name	J8720-FS-D(5)	**Injection Vial**	1
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:36:01	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

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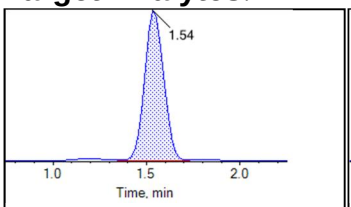

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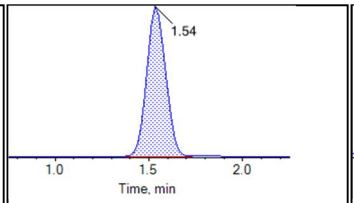
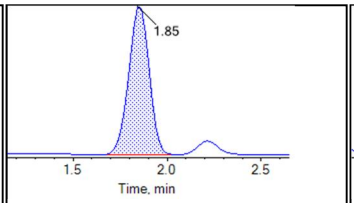


PFBS_2



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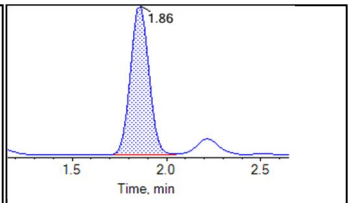
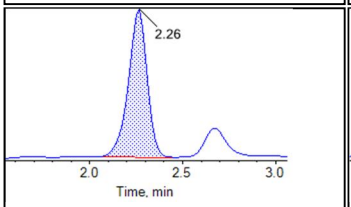


PFHxA_2



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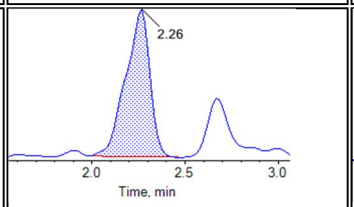
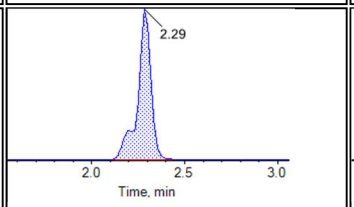


PFHpA_2



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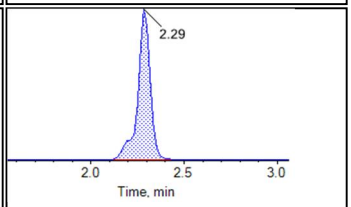
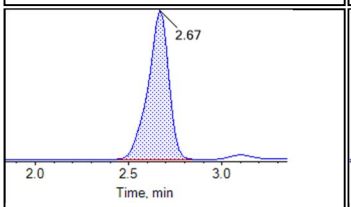
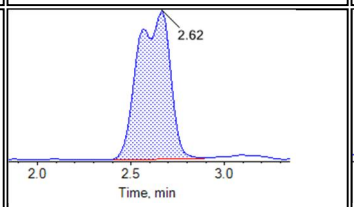


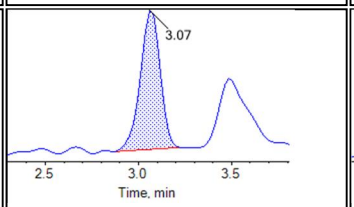
PFHxS_2



PFOA_1



PFOA_2



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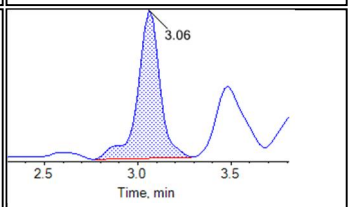
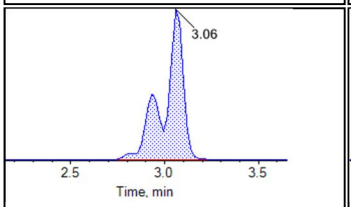
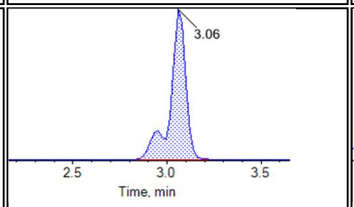


PFNA_2



PFOS_1



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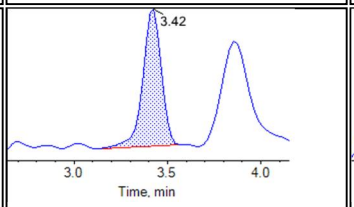

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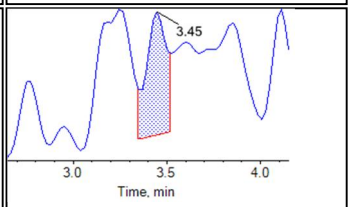

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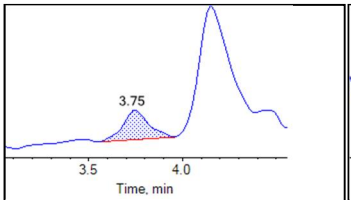

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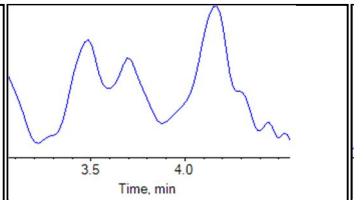

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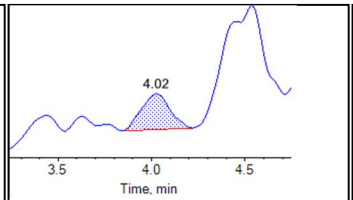

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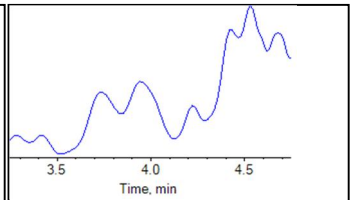

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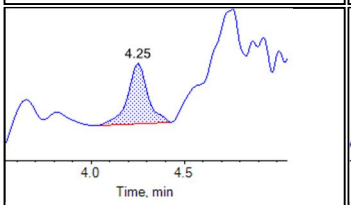

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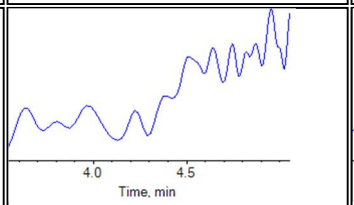

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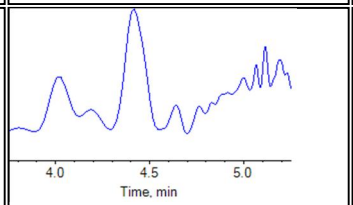

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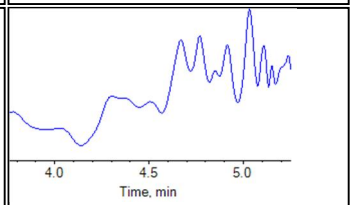

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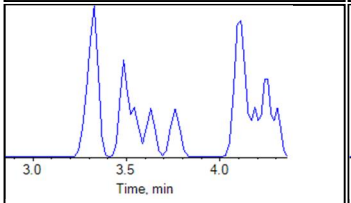

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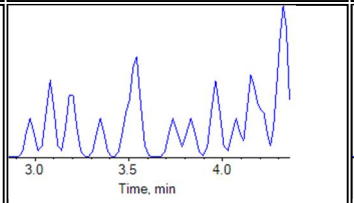

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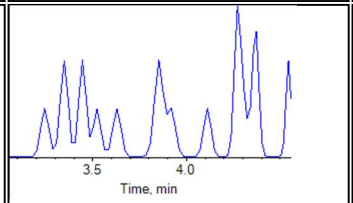

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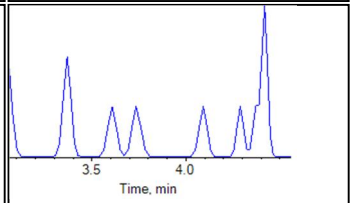

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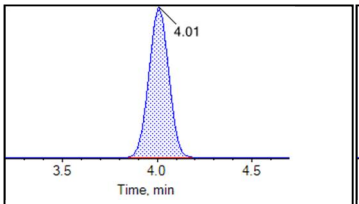

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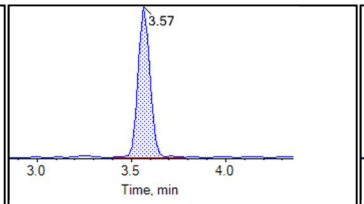

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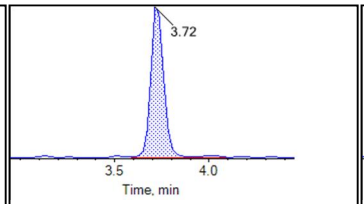

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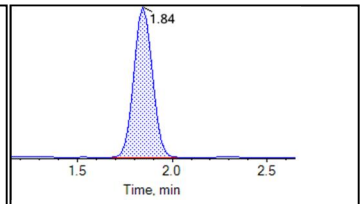

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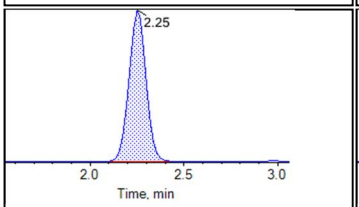

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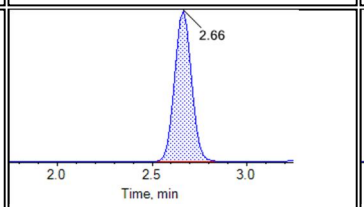

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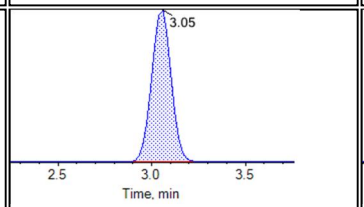

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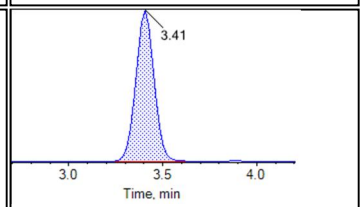

13C6-PFDA

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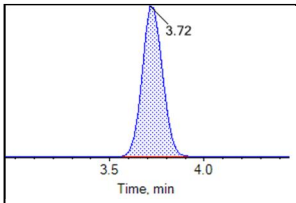
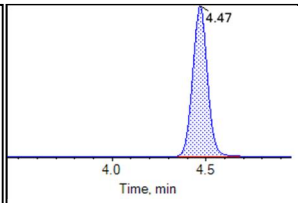


13C7-PFUnA



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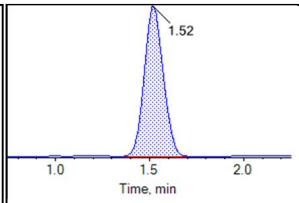

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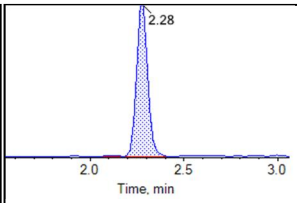

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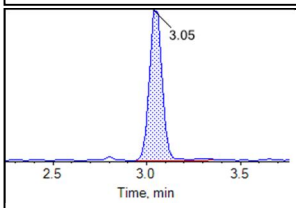

13C8-PFOS

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Sample Name	J8721-FS(0)	**Injection Vial**	2
Sample ID	VC-CS00-DW05-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:46:54	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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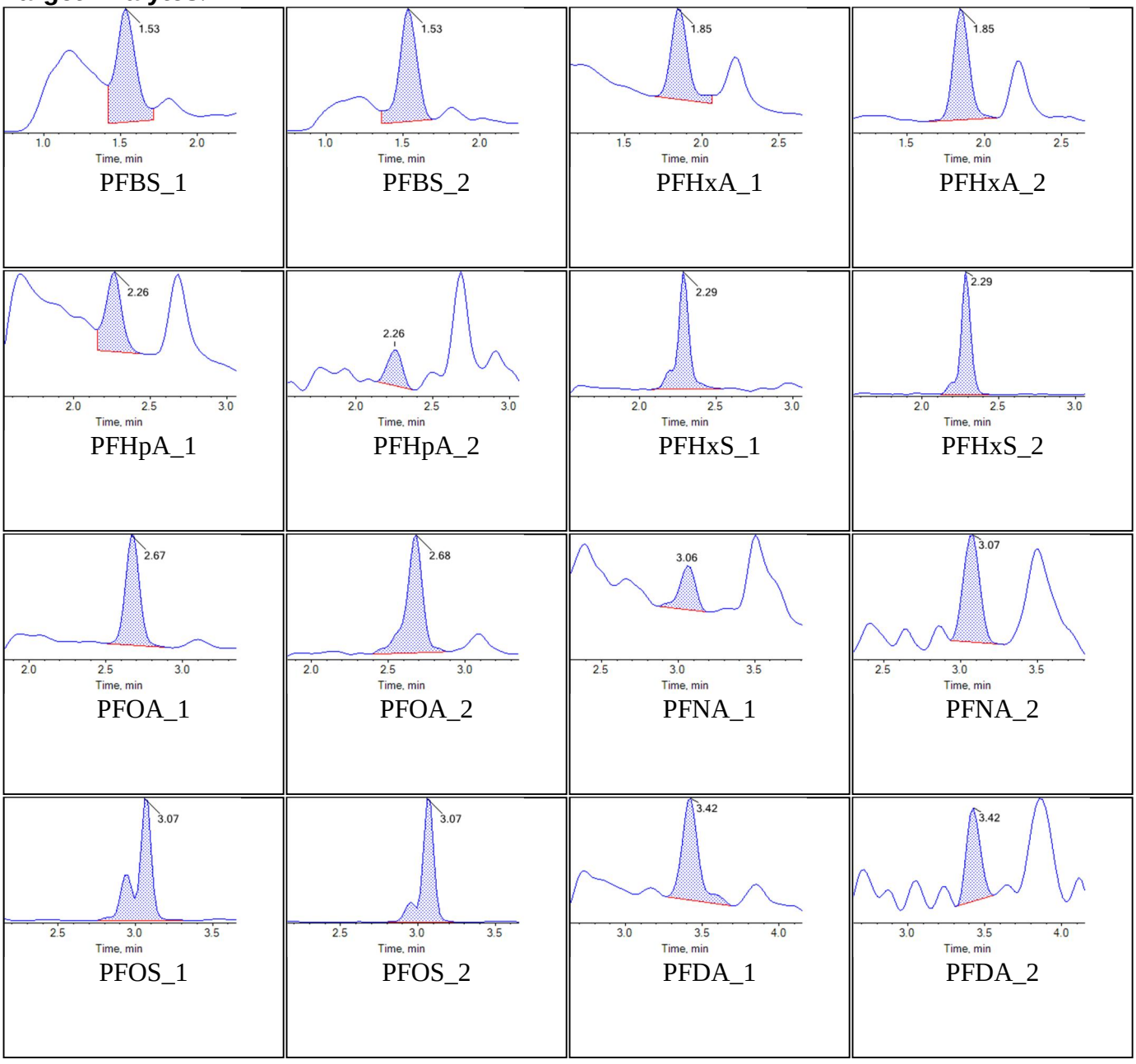

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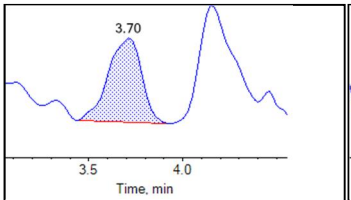

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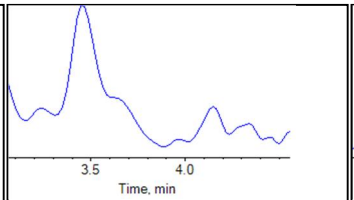

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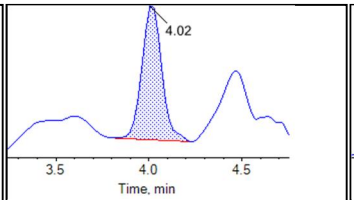

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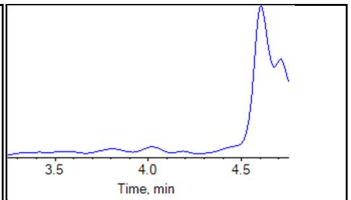

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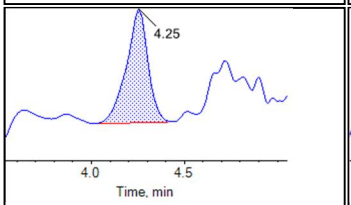

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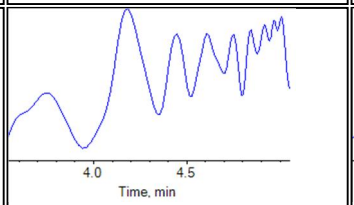

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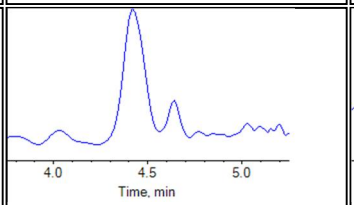

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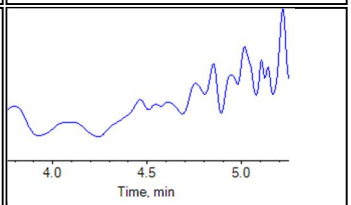

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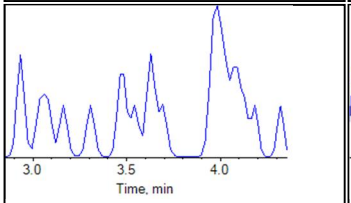

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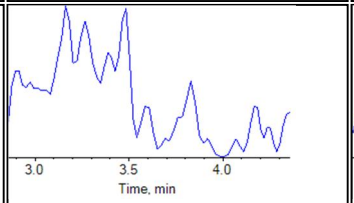

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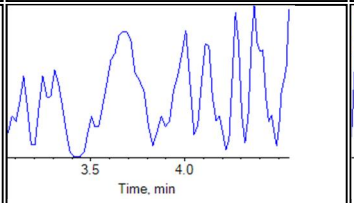

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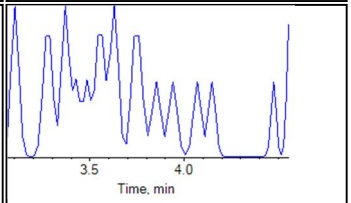

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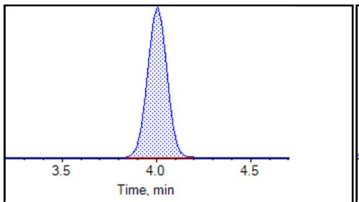

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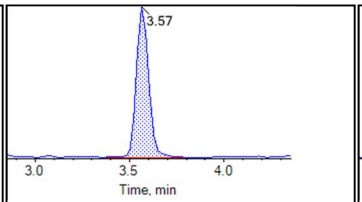

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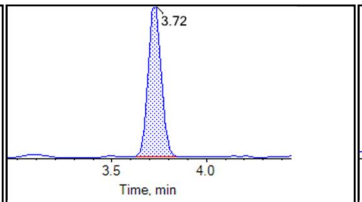

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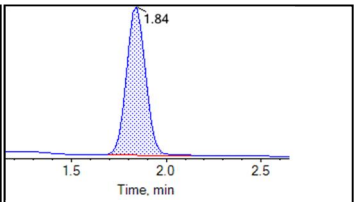

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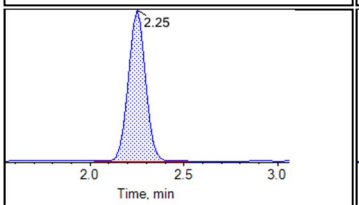

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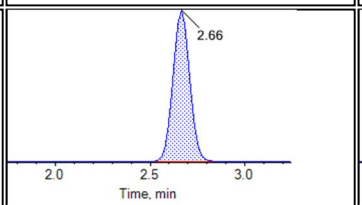

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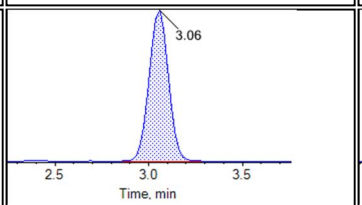

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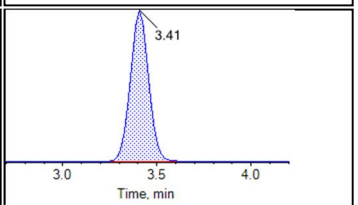

13C6-PFDA

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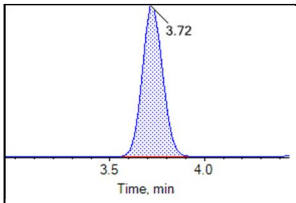

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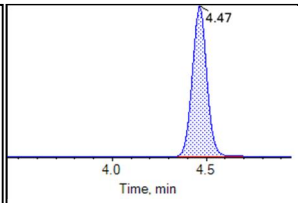

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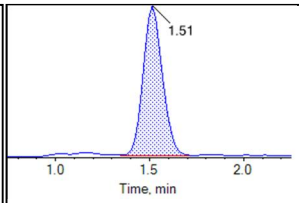
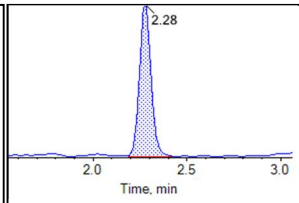
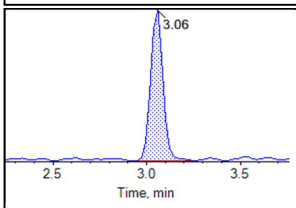


13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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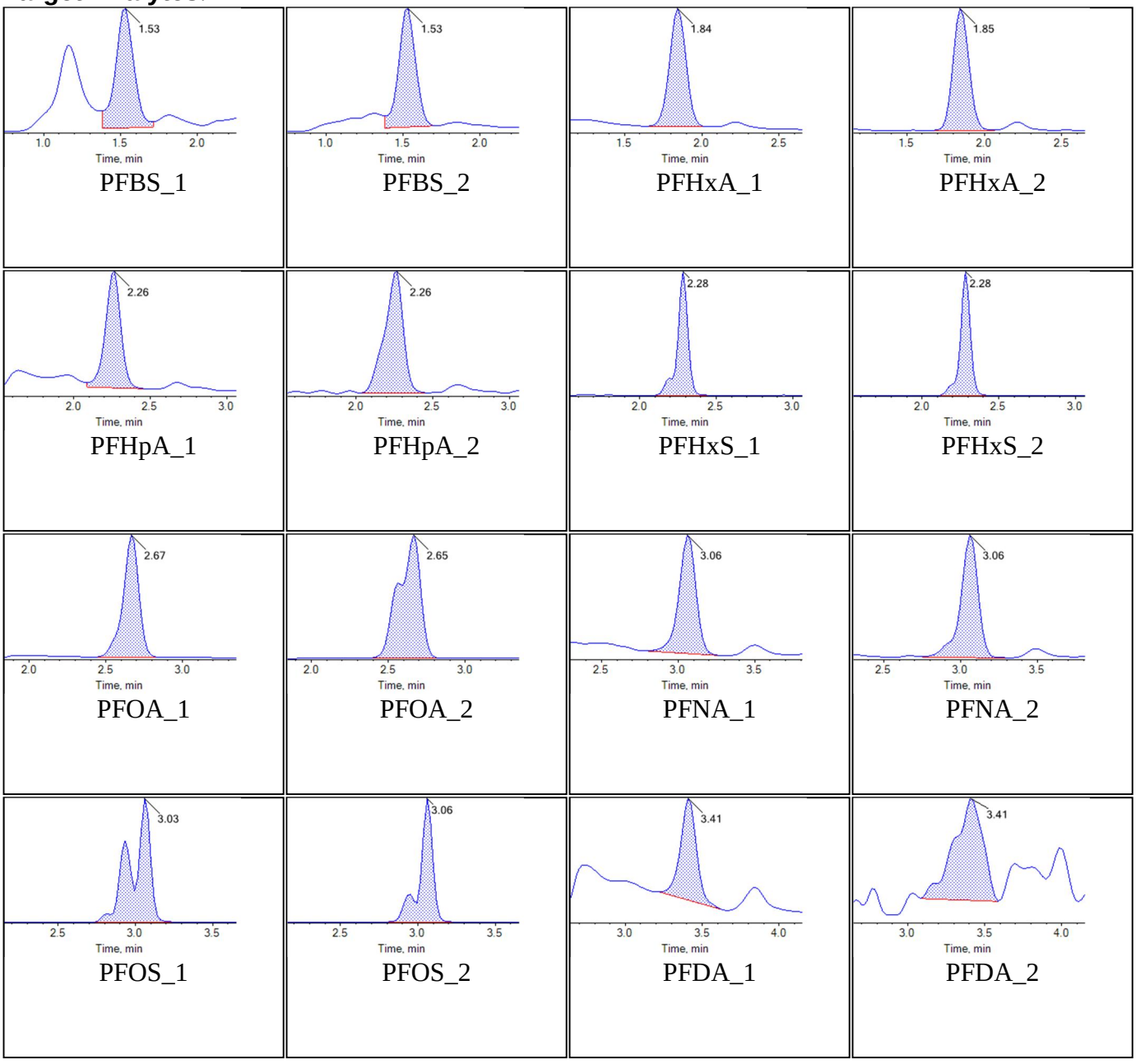
Sample Name	J8722-FS(0)	**Injection Vial**	3
Sample ID	VC-CS00-DW06-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:57:47	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

Target Analytes:



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Chromatogram Report

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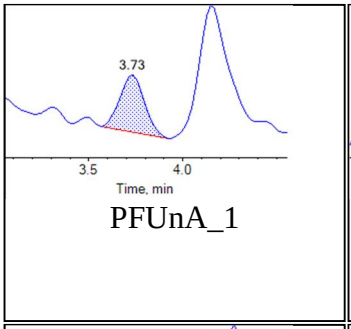

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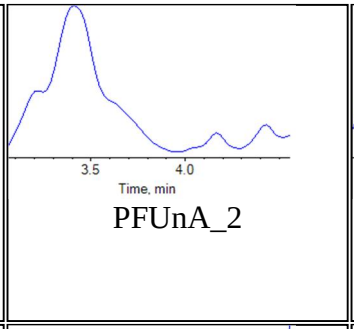

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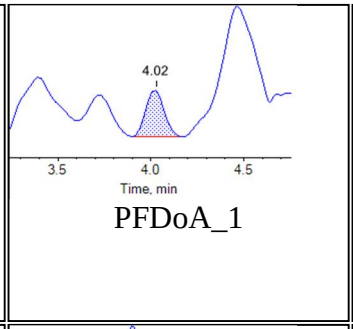

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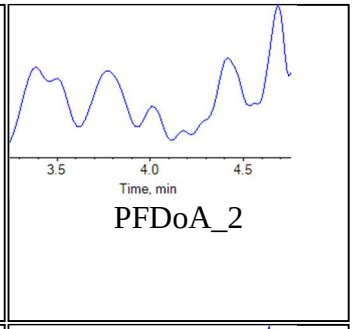

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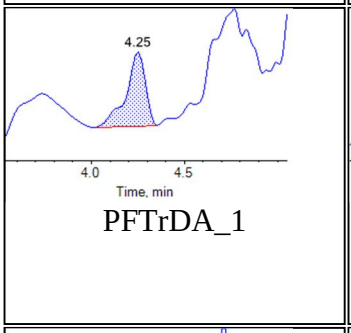
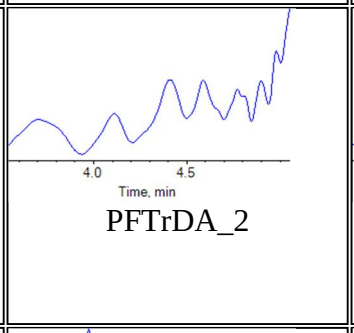


PFTrDA_1



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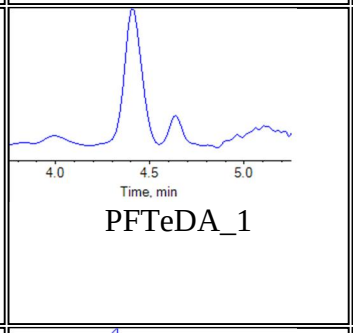

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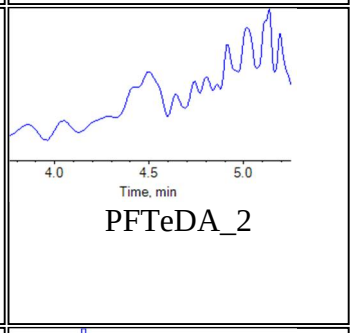

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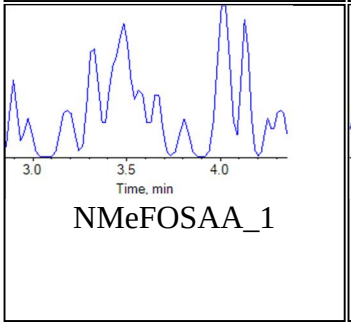

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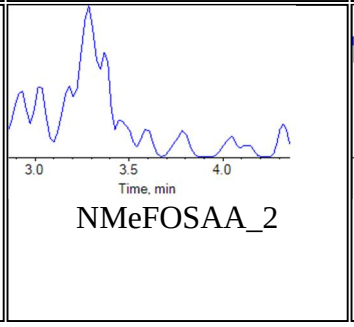

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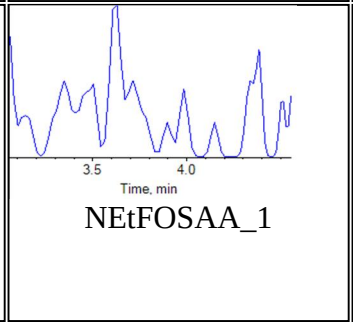

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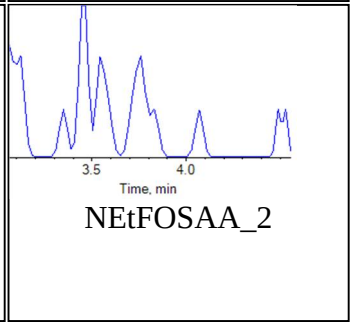
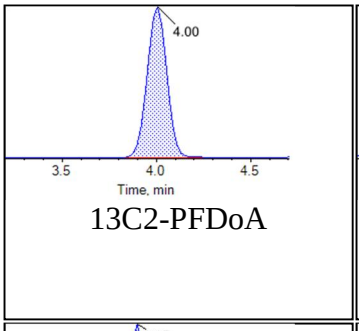
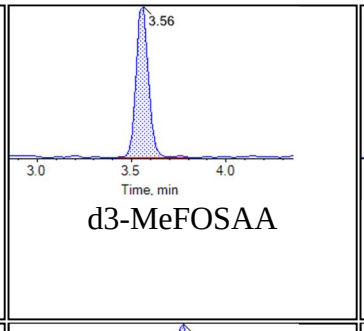


NEtFOSAA_2

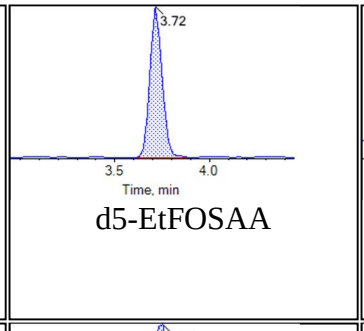
Internal Standards:



13C2-PFDoA



d3-MeFOSAA



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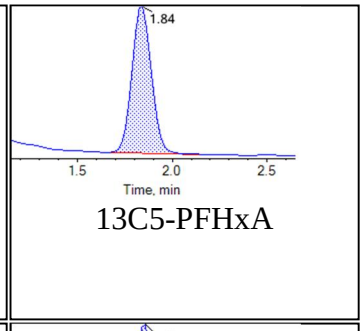
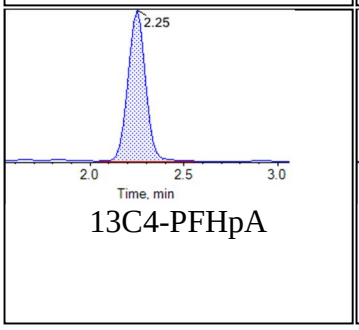
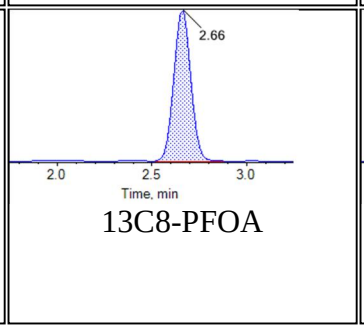


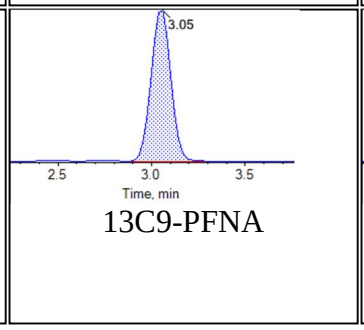
13C5-PFHxA



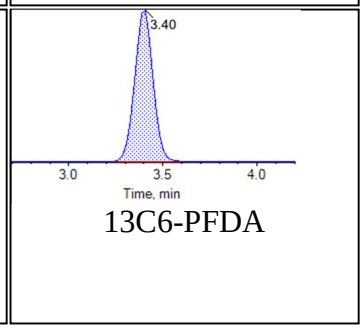
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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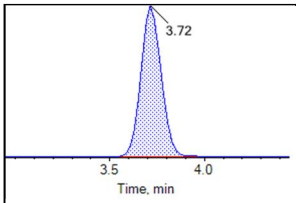
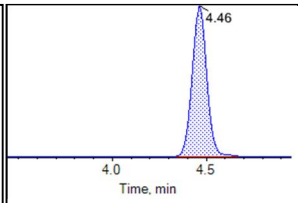
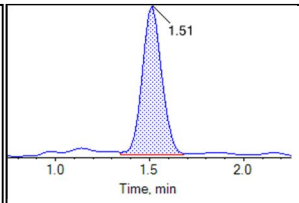


13C7-PFUnA



13C2-PFTeDA



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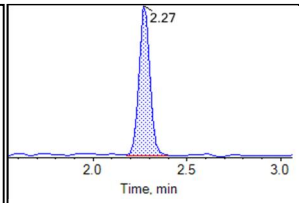

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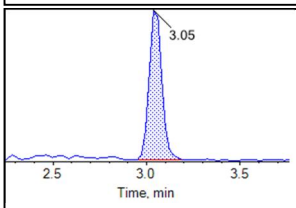

13C8-PFOS

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Chromatogram Report

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Sample Name	KB77	**Injection Vial**	5
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T03:19:32	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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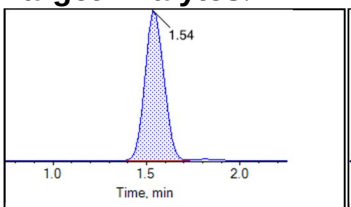

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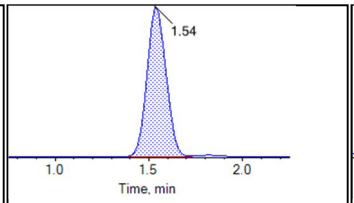
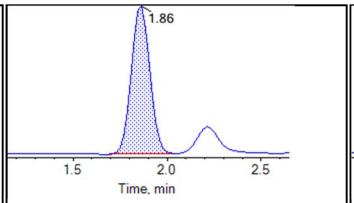


PFBS_2



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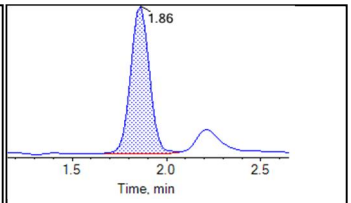
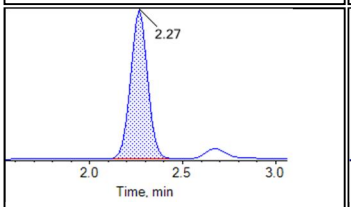
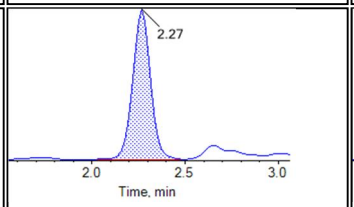


PFHxA_2



PFHpA_1



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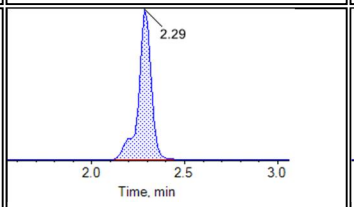

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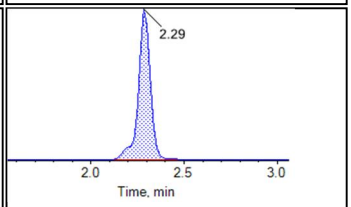
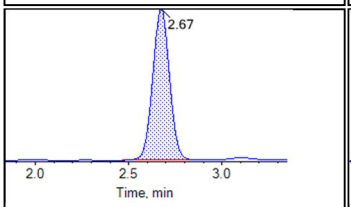


PFHxS_2



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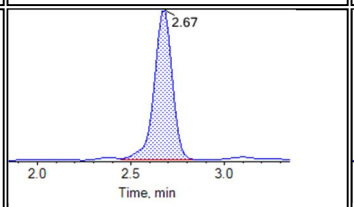

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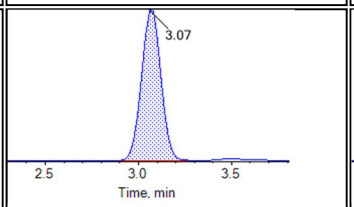

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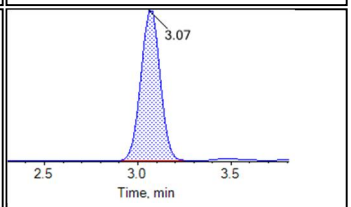

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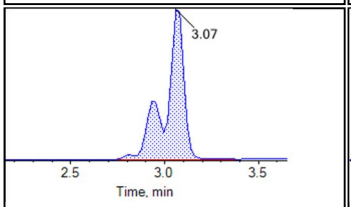

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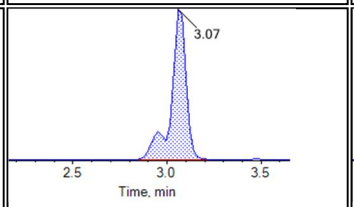
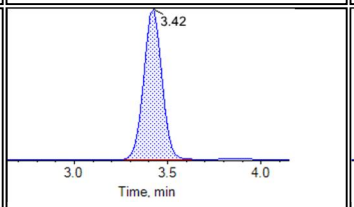
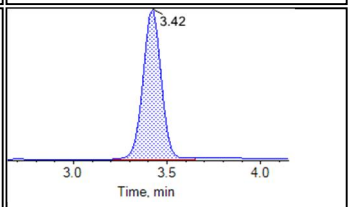


PFOS_2



PFDA_1



PFDA_2

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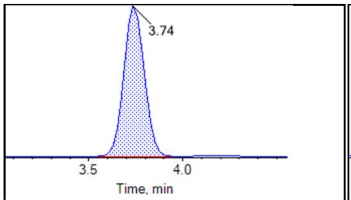
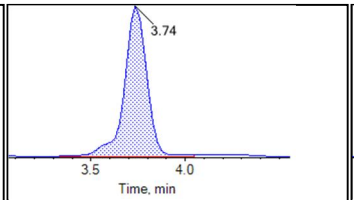
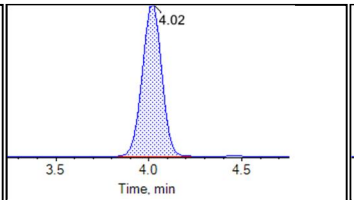


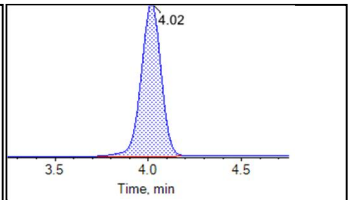
PFUnA_1



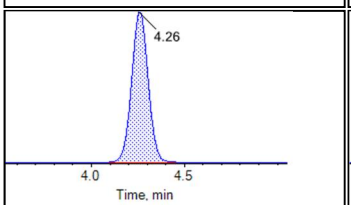
PFUnA_2



PFDoA_1



PFDoA_2



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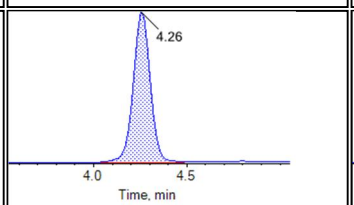
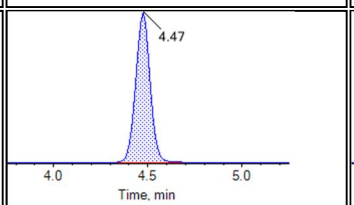
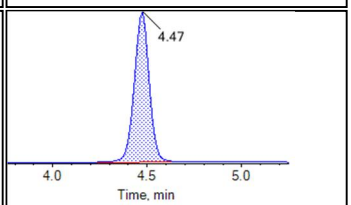


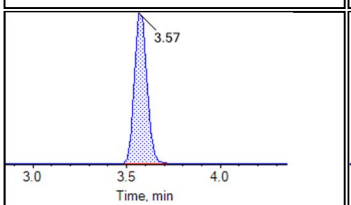
PFTrDA_2



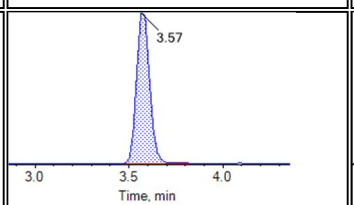
PFTeDA_1



PFTeDA_2



NMeFOSAA_1



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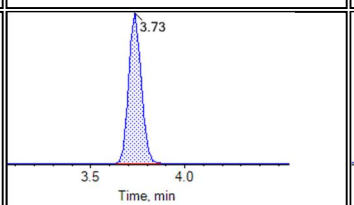

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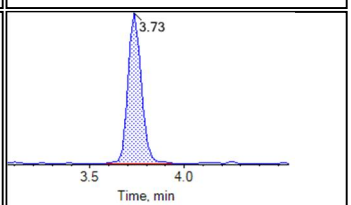

NEtFOSAA_2

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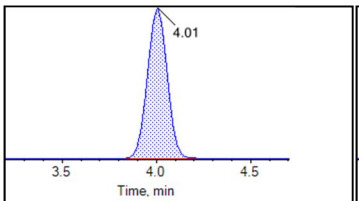
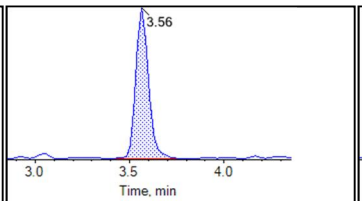
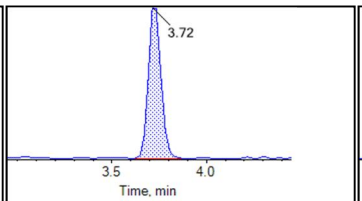


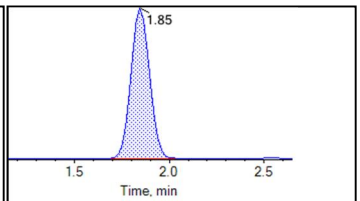
13C2-PFDoA



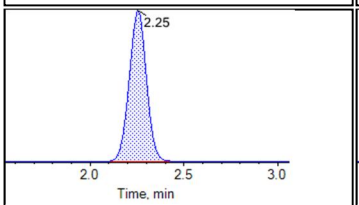
d3-MeFOSAA



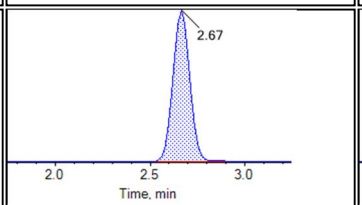
d5-EtFOSAA



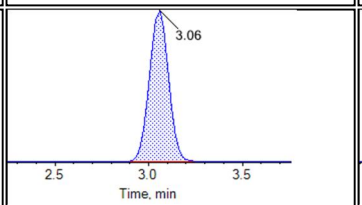
13C5-PFHxA



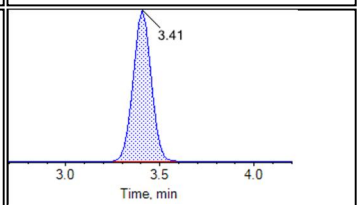
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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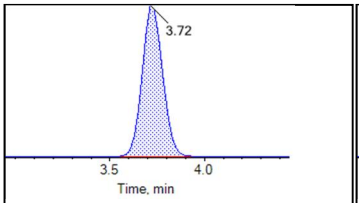
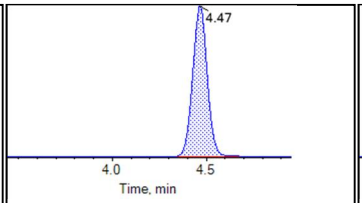
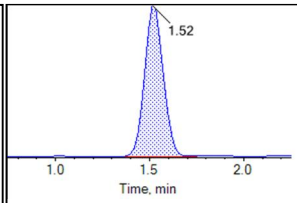


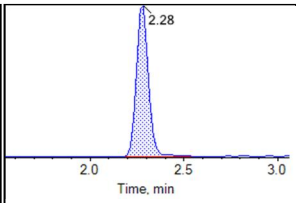
13C7-PFUnA



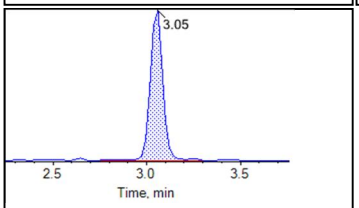
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:36:45 AM

Sample Name	KB73	**Injection Vial**	2
Sample ID	L1	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T19:46:52	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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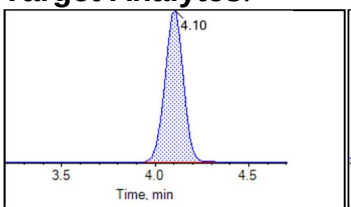
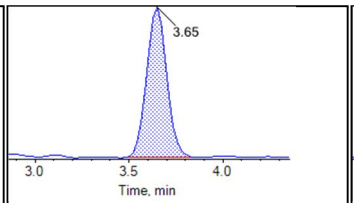
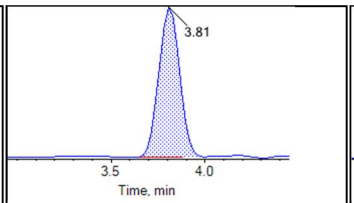


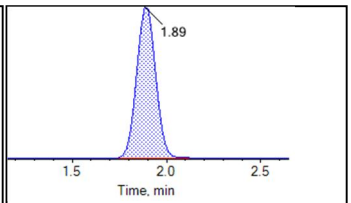
13C2-PFDoA



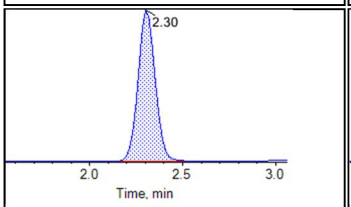
d3-MeFOSAA



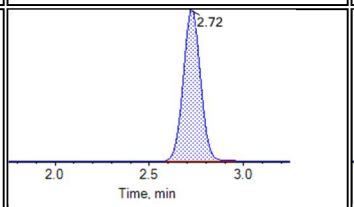
d5-EtFOSAA



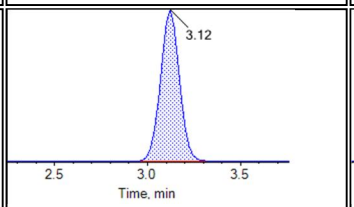
13C5-PFHxA



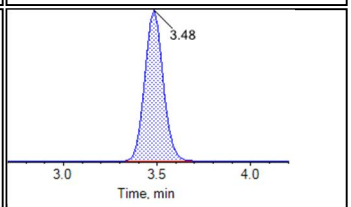
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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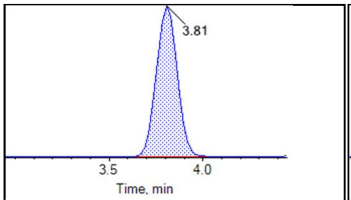
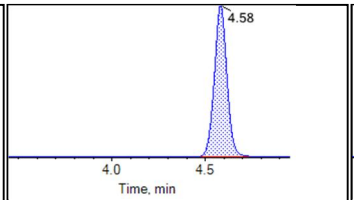
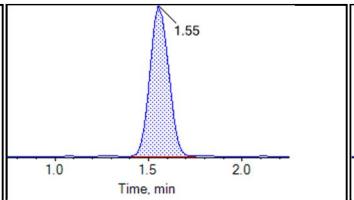
Printed: 01/11/2018 8:36:45 AM



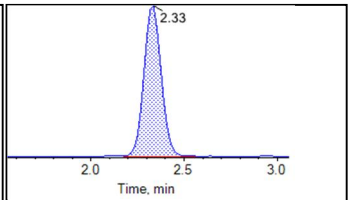
13C7-PFUnA



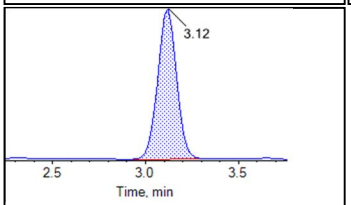
13C2-PFTeDA



13C3-PFBS

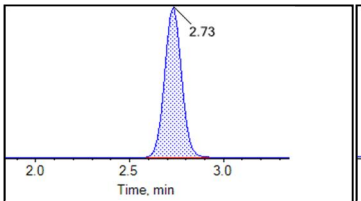


13C3-PFHxS

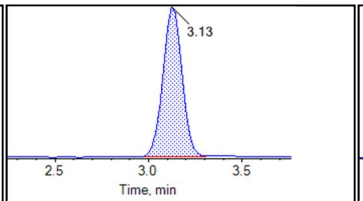


13C8-PFOS

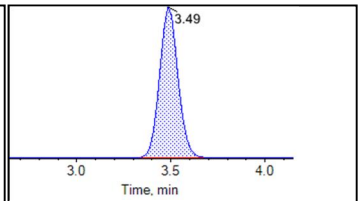
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

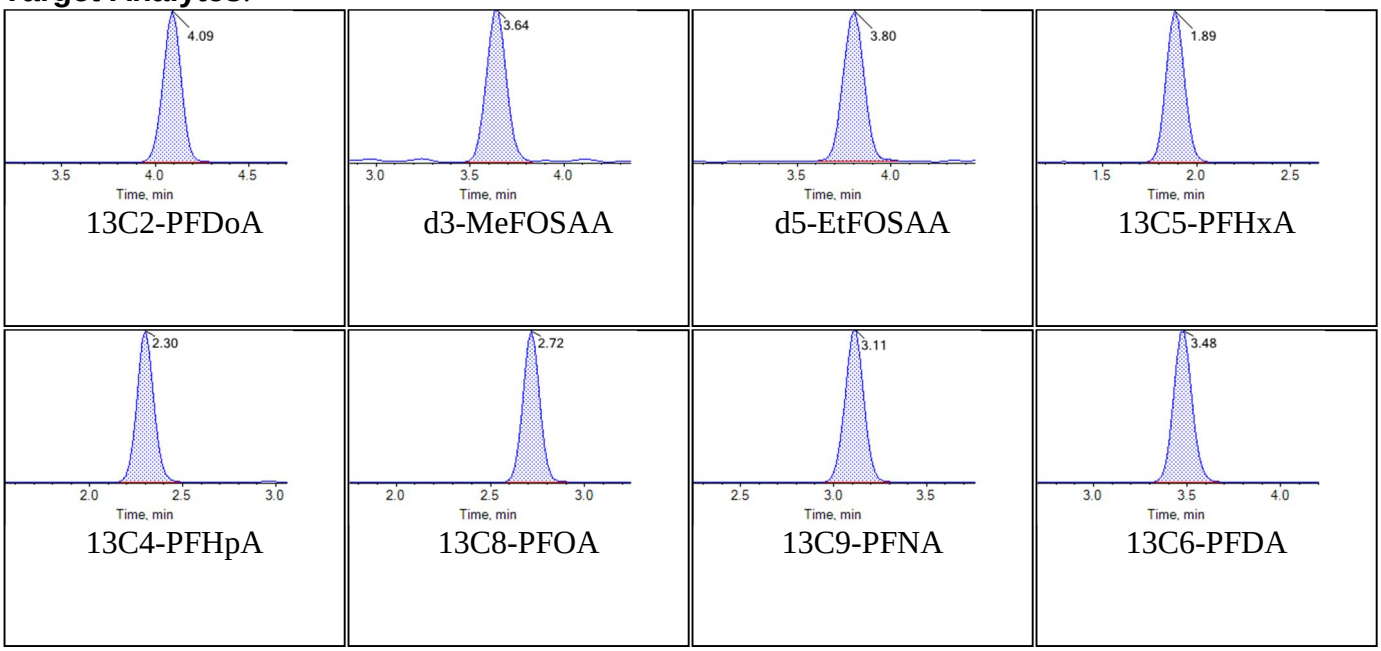
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:36:49 AM

Sample Name	KB74	**Injection Vial**	3
Sample ID	L2	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T19:57:45	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

Target Analytes:



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Chromatogram Report

Created with Analyst Reporter
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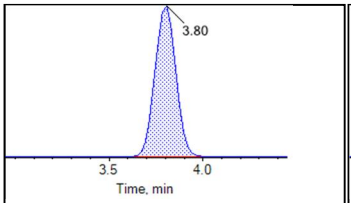
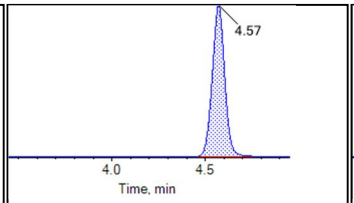
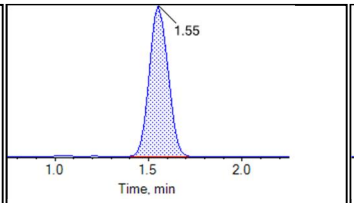


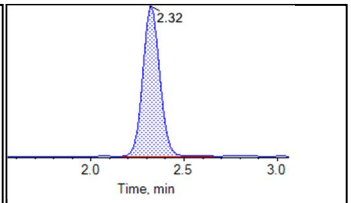
13C7-PFUnA



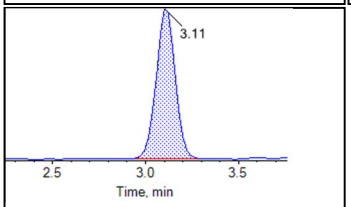
13C2-PFTeDA



13C3-PFBS

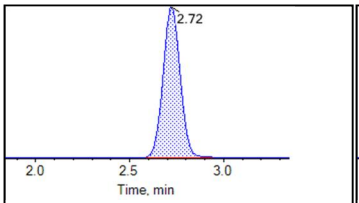


13C3-PFHxS

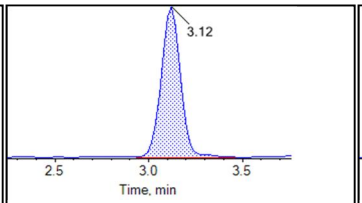


13C8-PFOS

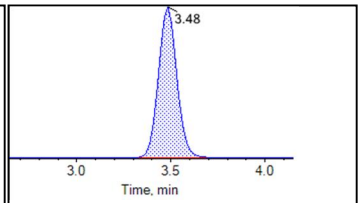
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:36:54 AM

Sample Name	KB75	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T20:08:39	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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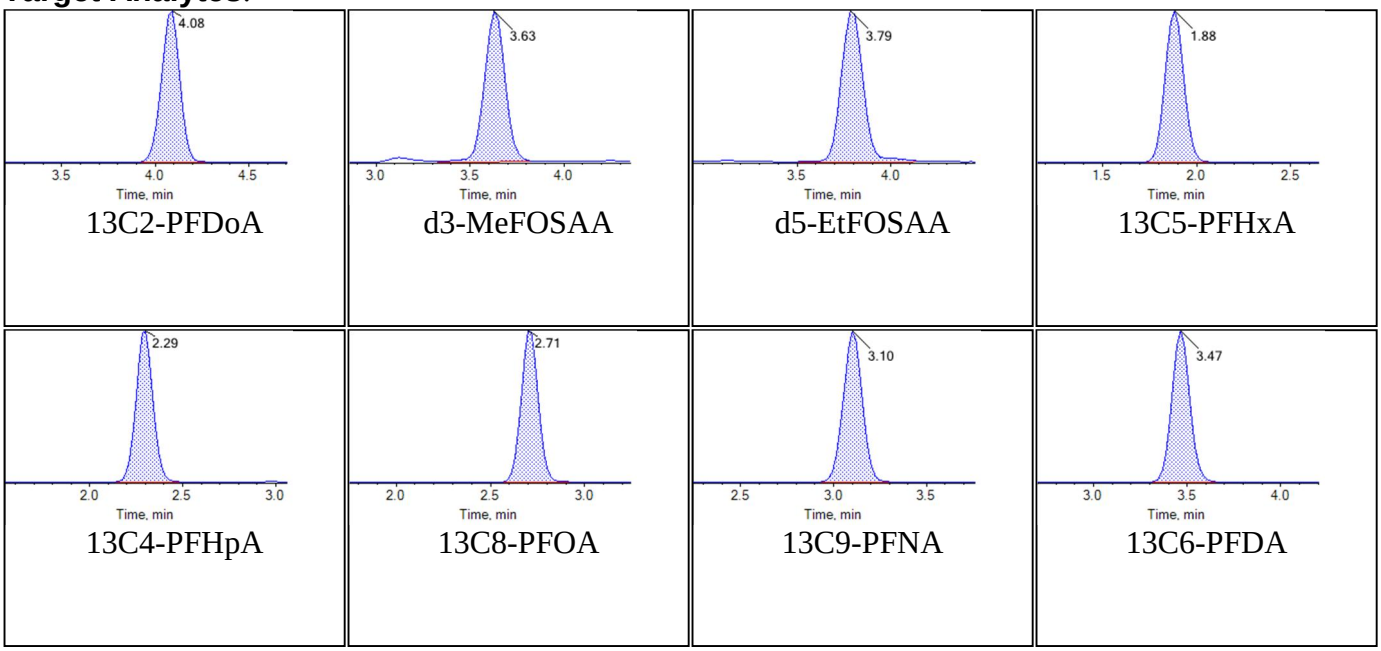

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Chromatogram Report

Created with Analyst Reporter
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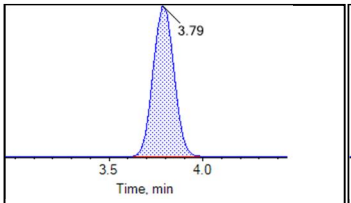
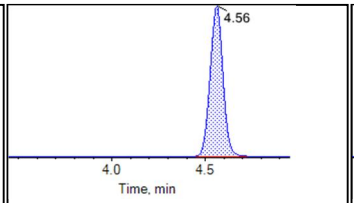
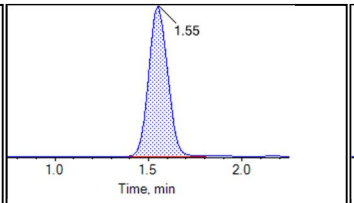


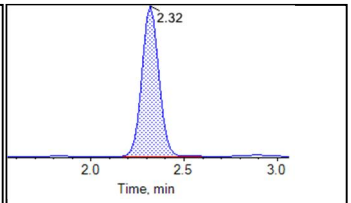
13C7-PFUnA



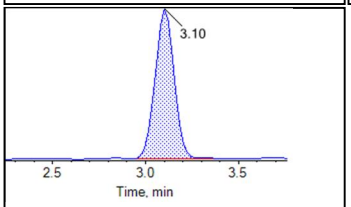
13C2-PFTeDA



13C3-PFBS

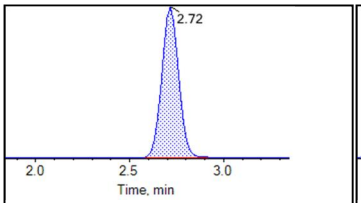


13C3-PFHxS

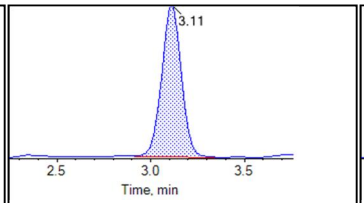


13C8-PFOS

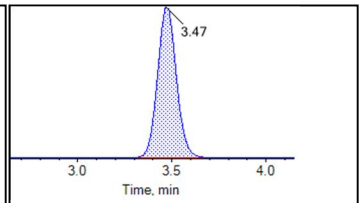
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

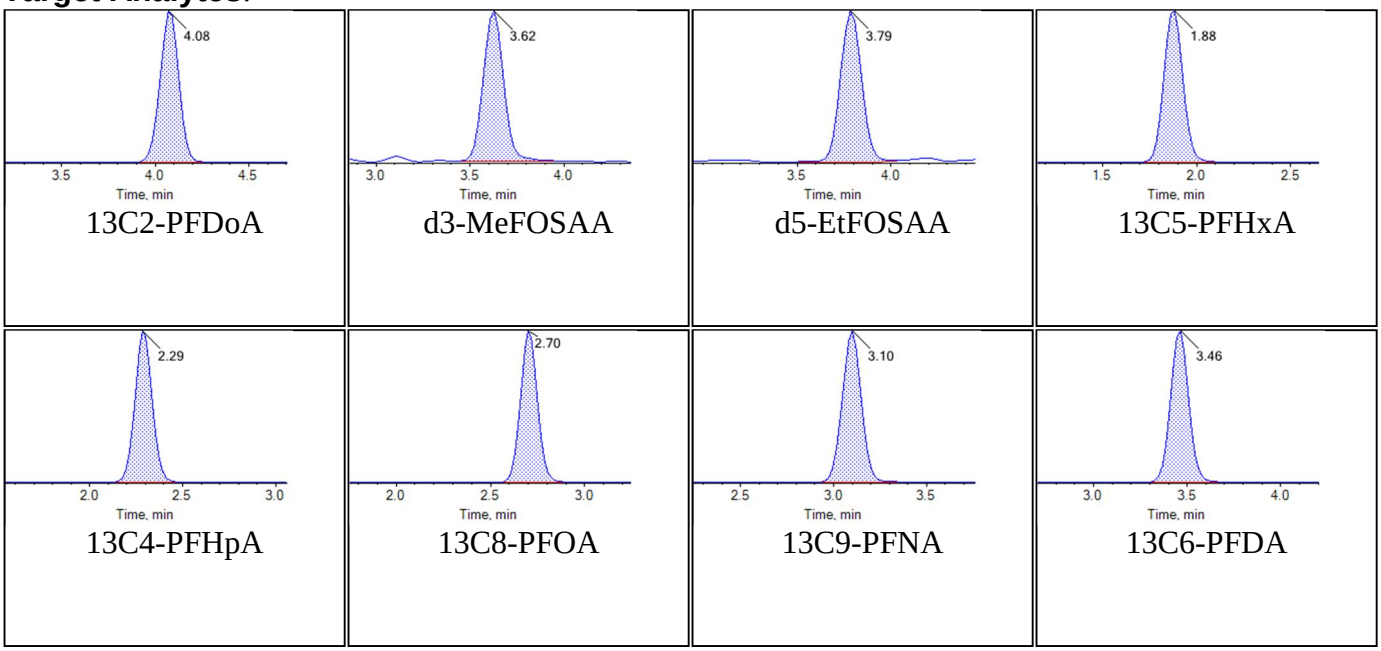
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:36:58 AM

Sample Name	KB76	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T20:19:32	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

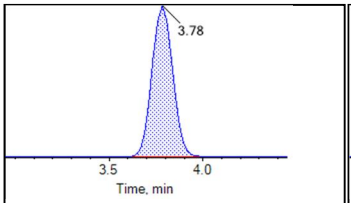
Target Analytes:



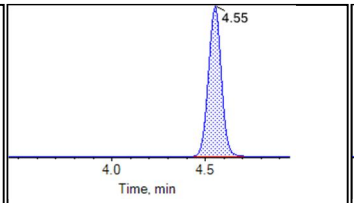
BATTELLE

Chromatogram Report

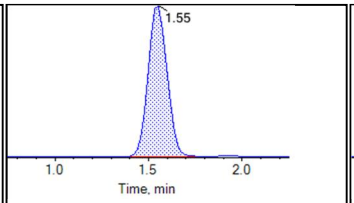
Created with Analyst Reporter
Printed: 01/11/2018 8:36:58 AM



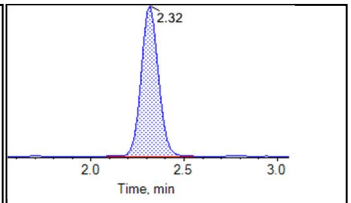
13C7-PFUnA



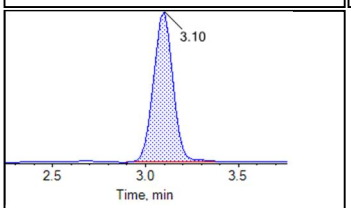
13C2-PFTeDA



13C3-PFBS

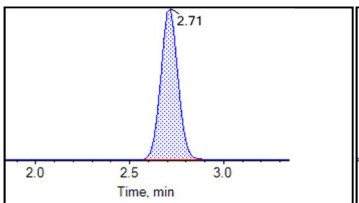


13C3-PFHxS

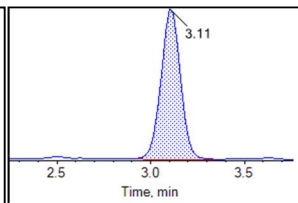


13C8-PFOS

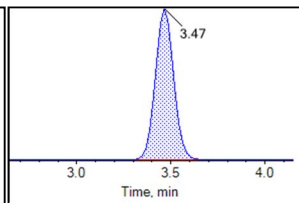
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

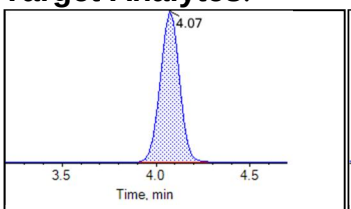
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:37:03 AM

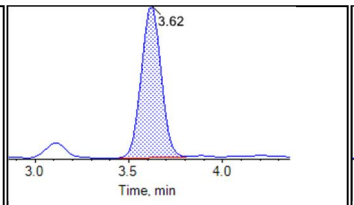
Sample Name	KB77	**Injection Vial**	6
Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T20:30:23	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

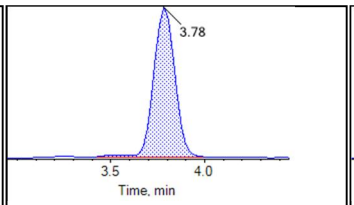
Target Analytes:



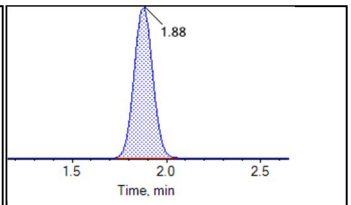
13C2-PFDoA



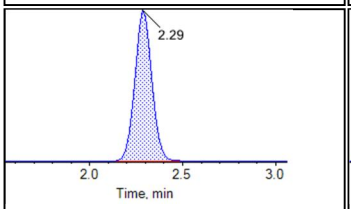
d3-MeFOSAA



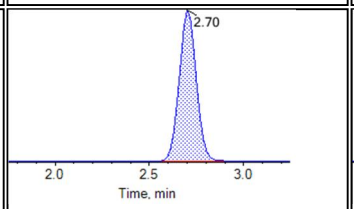
d5-EtFOSAA



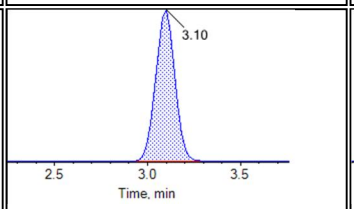
13C5-PFHxA



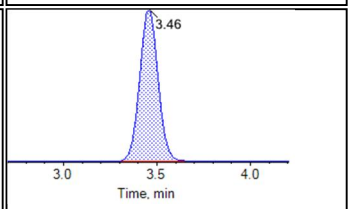
13C4-PFHpA



13C8-PFOA



13C9-PFNA

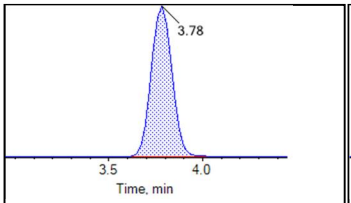


13C6-PFDA

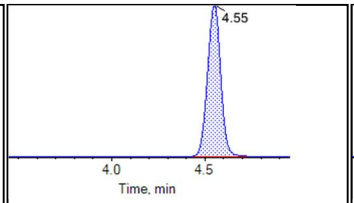
BATTELLE

Chromatogram Report

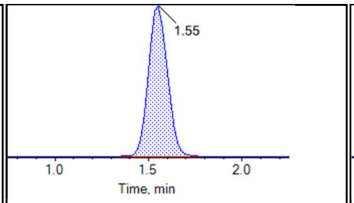
Created with Analyst Reporter
Printed: 01/11/2018 8:37:03 AM



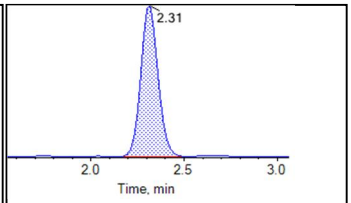
13C7-PFUnA



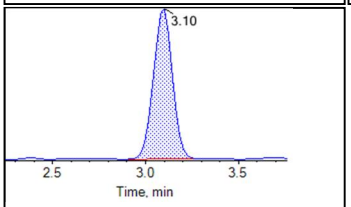
13C2-PFTeDA



13C3-PFBS

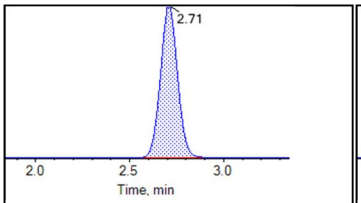


13C3-PFHxS

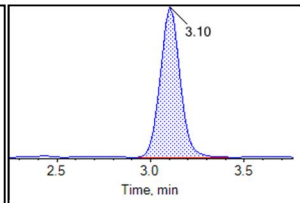


13C8-PFOS

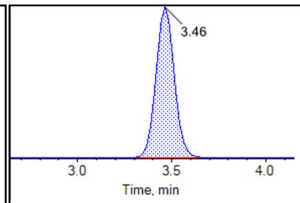
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

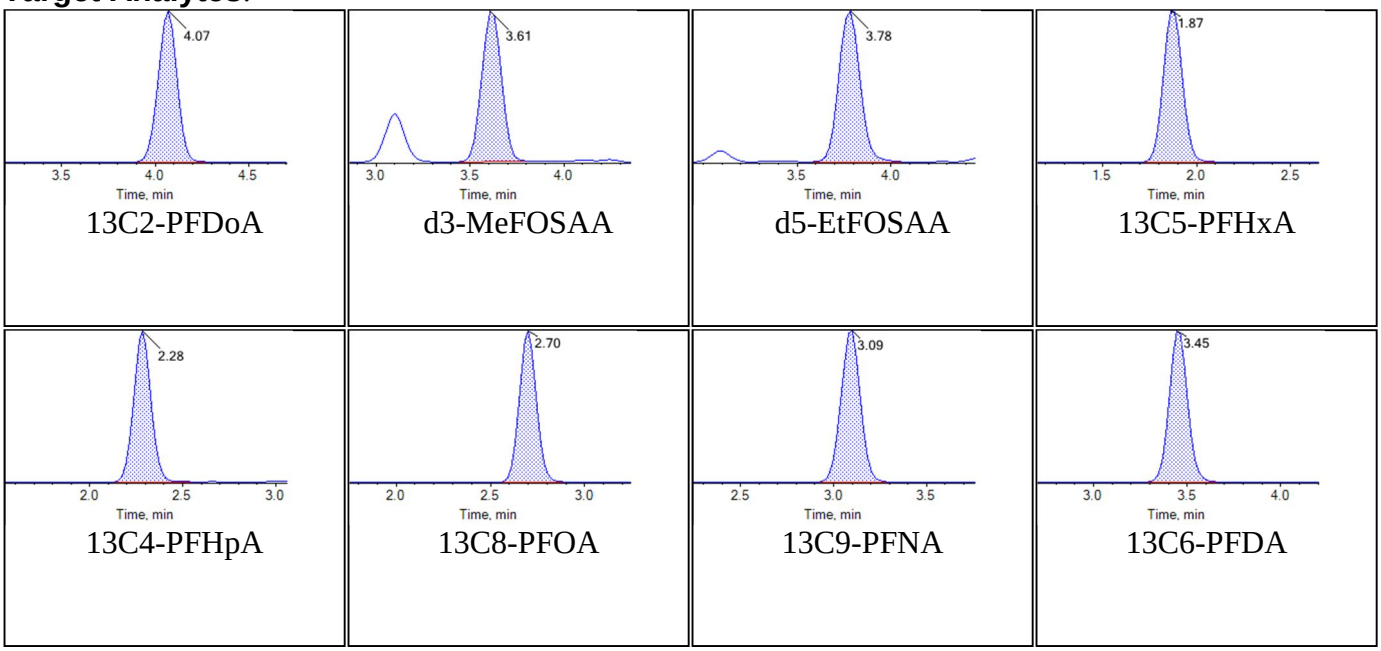
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:37:08 AM

Sample Name	KB78	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T20:41:14	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

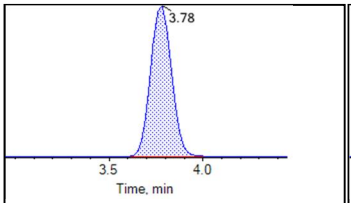
Target Analytes:



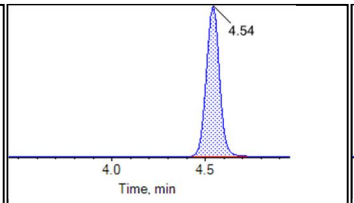
BATTELLE

Chromatogram Report

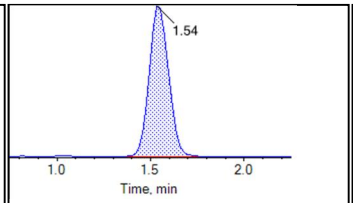
Created with Analyst Reporter
Printed: 01/11/2018 8:37:08 AM



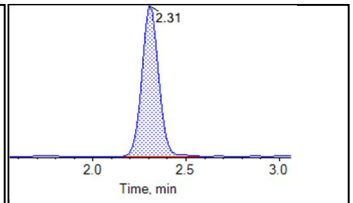
13C7-PFUnA



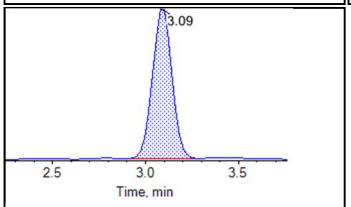
13C2-PFTeDA



13C3-PFBS

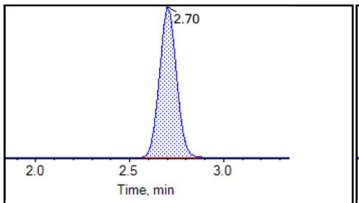


13C3-PFHxS

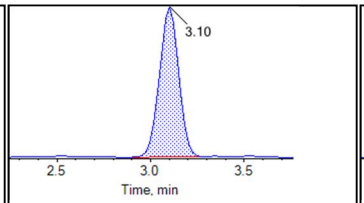


13C8-PFOS

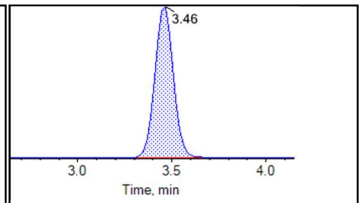
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

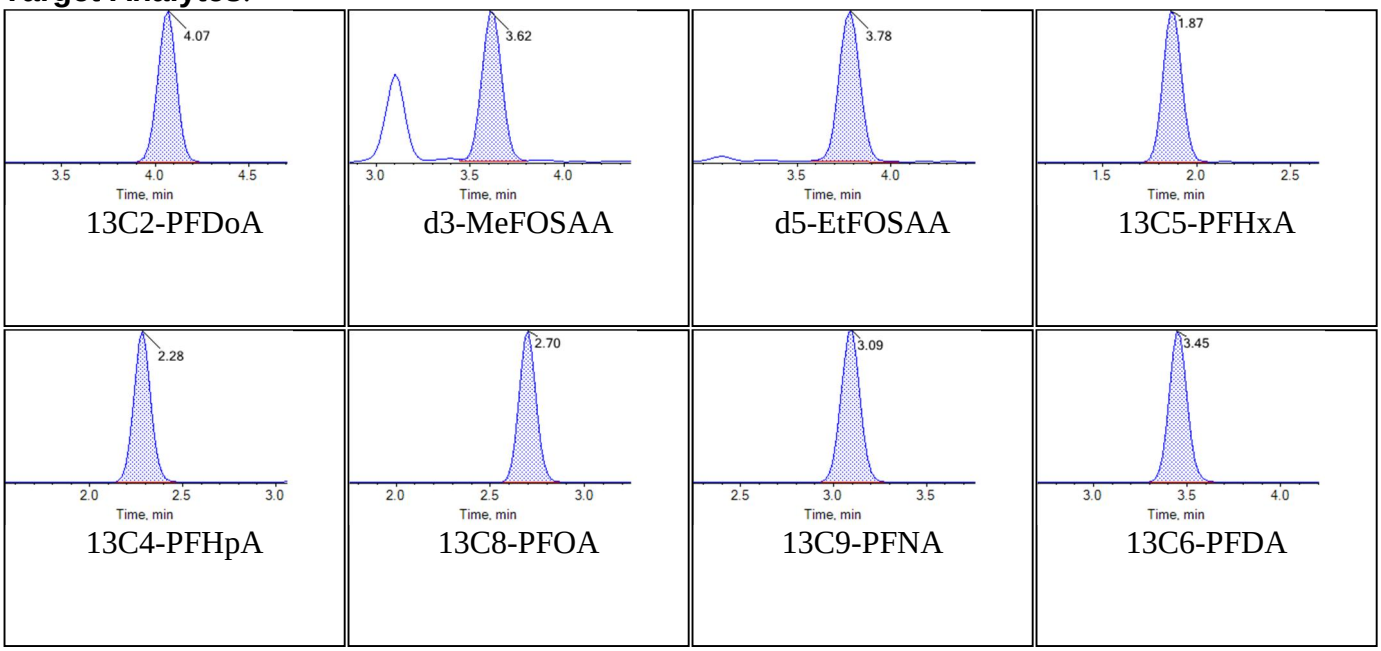
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:37:13 AM

Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T20:52:06	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

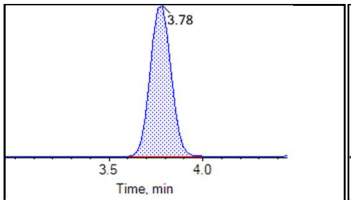
Target Analytes:



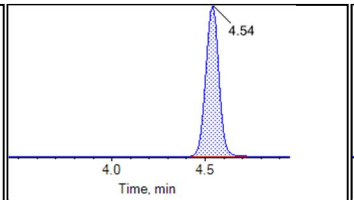
BATTELLE

Chromatogram Report

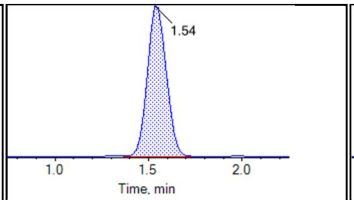
Created with Analyst Reporter
Printed: 01/11/2018 8:37:13 AM



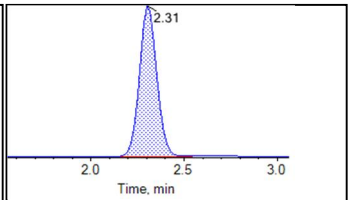
13C7-PFUnA



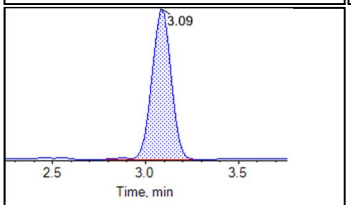
13C2-PFTeDA



13C3-PFBS

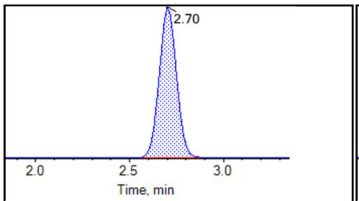


13C3-PFHxS

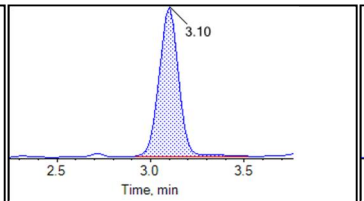


13C8-PFOS

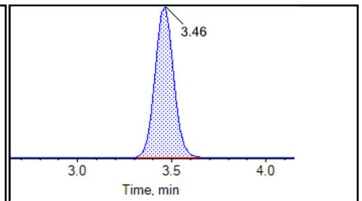
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

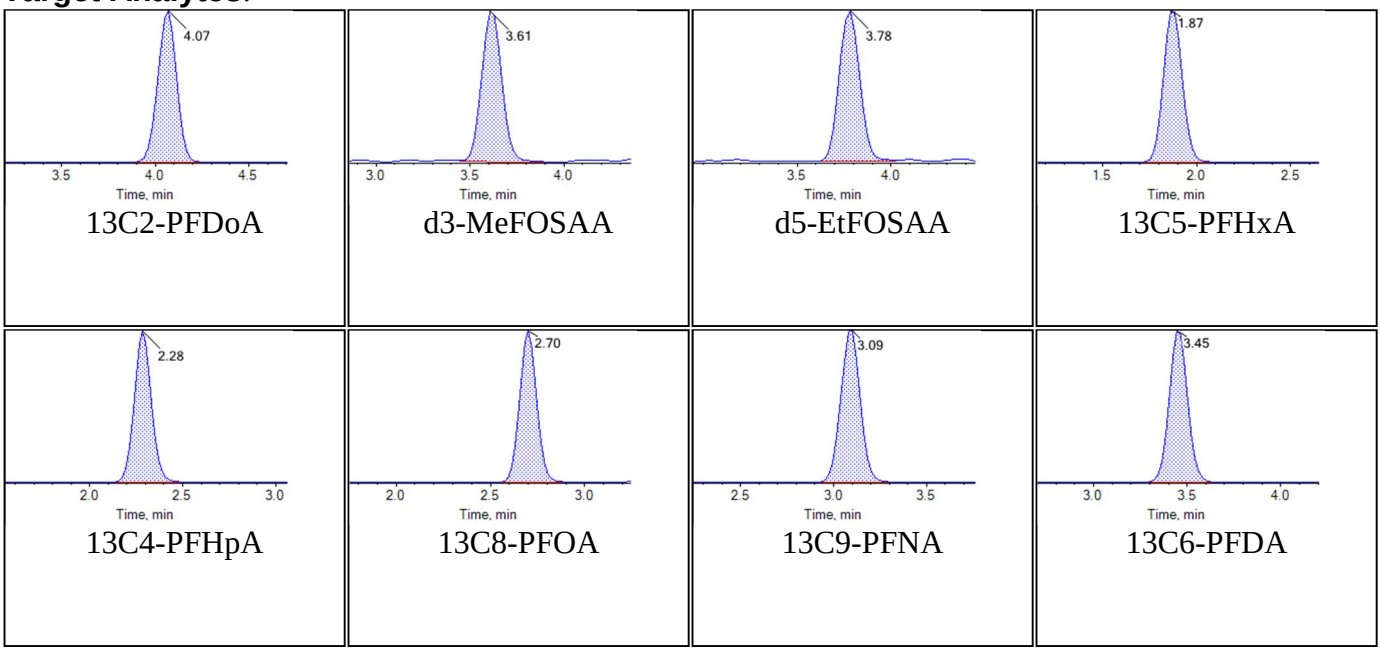
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:37:18 AM

Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:02:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

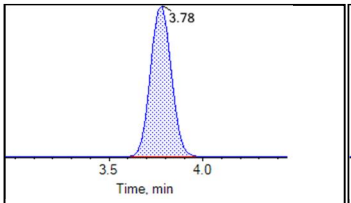
Target Analytes:



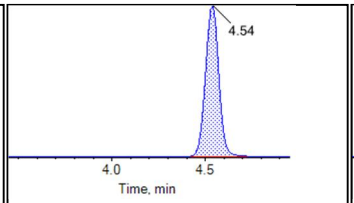
BATTELLE

Chromatogram Report

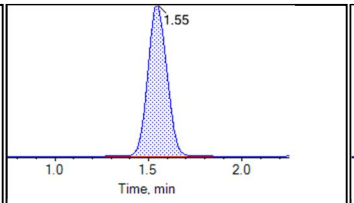
Created with Analyst Reporter
Printed: 01/11/2018 8:37:18 AM



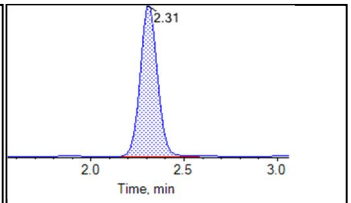
13C7-PFUnA



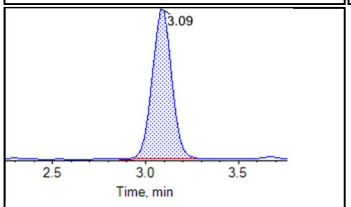
13C2-PFTeDA



13C3-PFBS

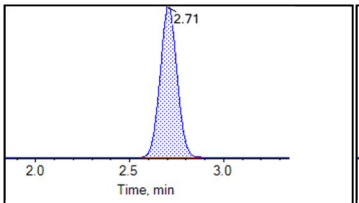


13C3-PFHxS

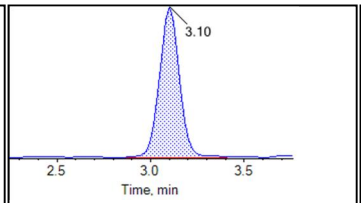


13C8-PFOS

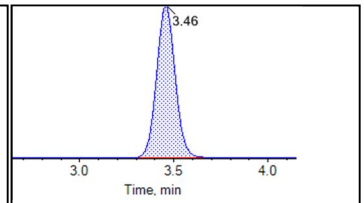
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:37:23 AM

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:13:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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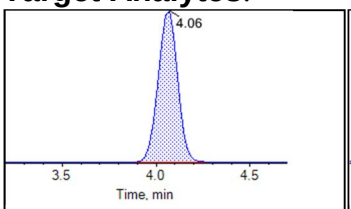
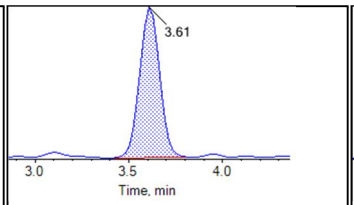
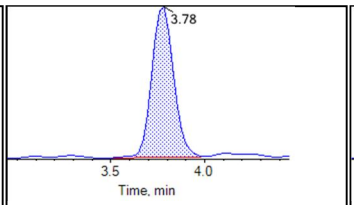


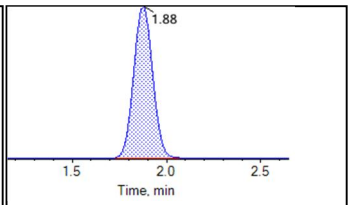
13C2-PFDoA



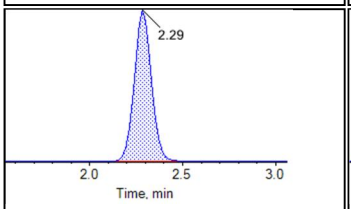
d3-MeFOSAA



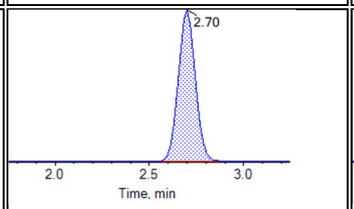
d5-EtFOSAA



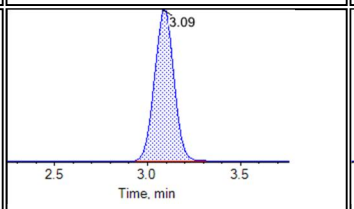
13C5-PFHxA



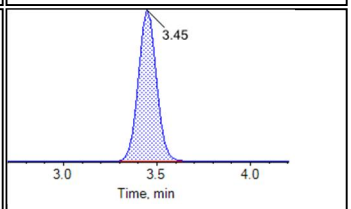
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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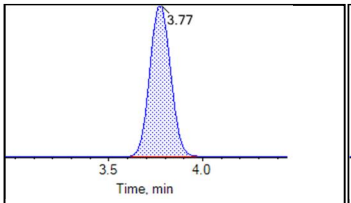
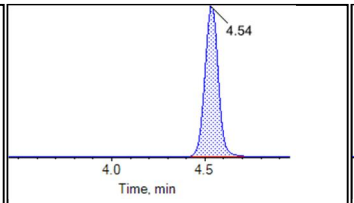
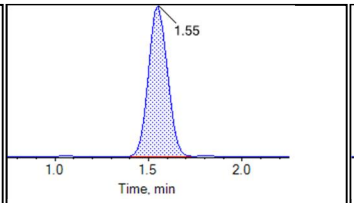


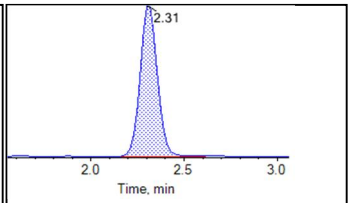
13C7-PFUnA



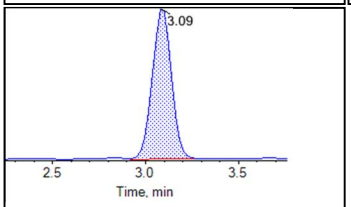
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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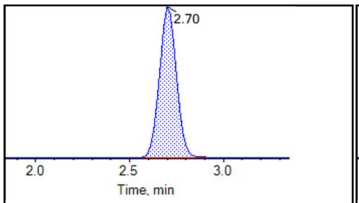
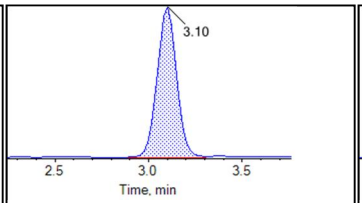
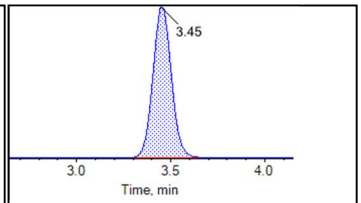


13C2-PFOA



13C4-PFOS



13C2-PFDA

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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:37:33 AM

Sample Name	KB75 ISC	**Injection Vial**	1
Sample ID	ISC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T16:26:43	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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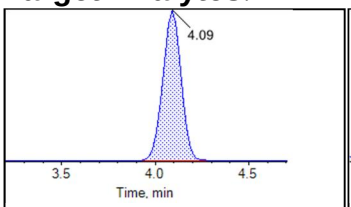
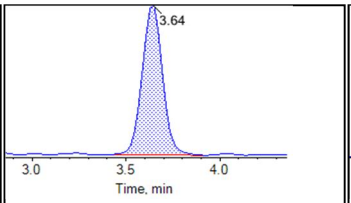
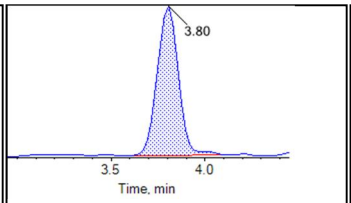


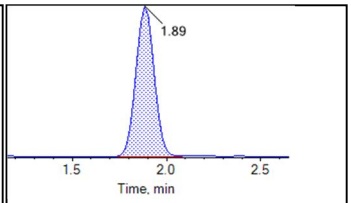
13C2-PFDoA



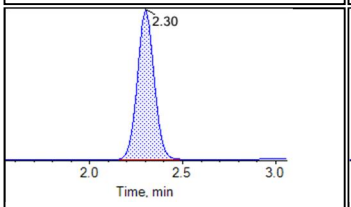
d3-MeFOSAA



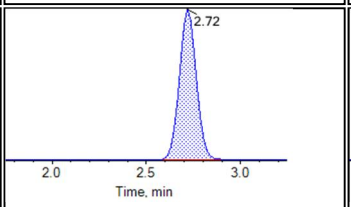
d5-EtFOSAA



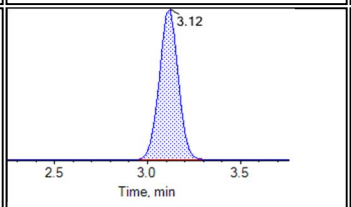
13C5-PFHxA



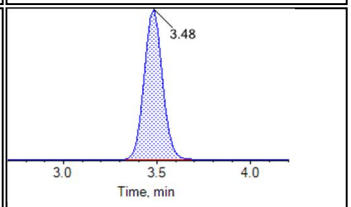
13C4-PFHpA



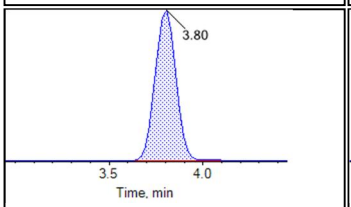
13C8-PFOA



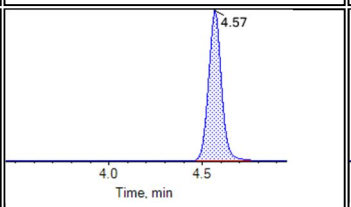
13C9-PFNA



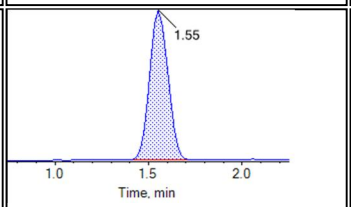
13C6-PFDA



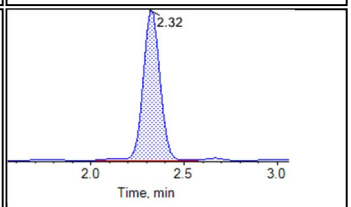
13C7-PFUnA



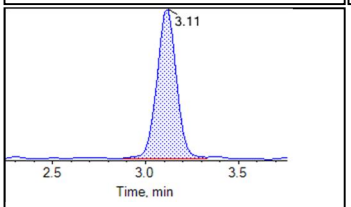
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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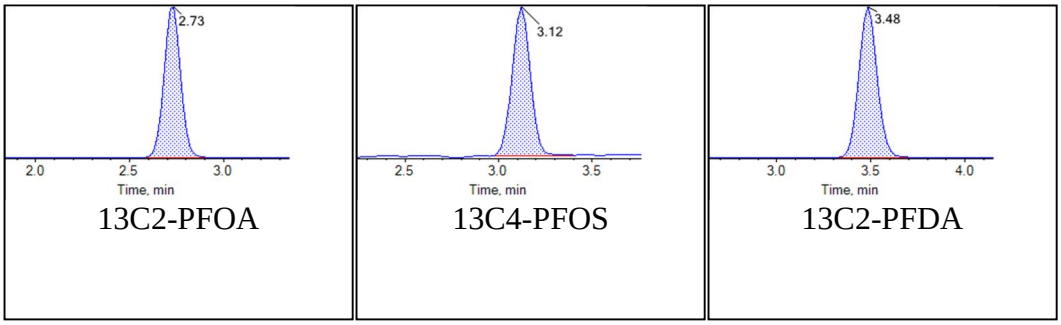

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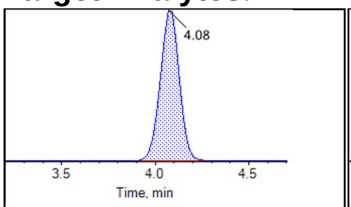
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:37:38 AM

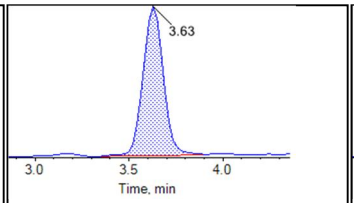
Sample Name	KB80 IB	**Injection Vial**	2
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T16:37:35	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

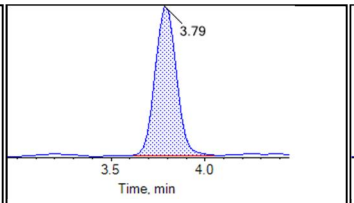
Target Analytes:



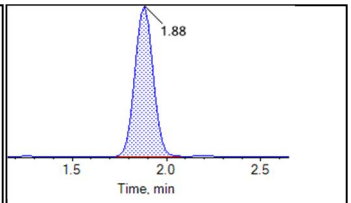
13C2-PFDoA



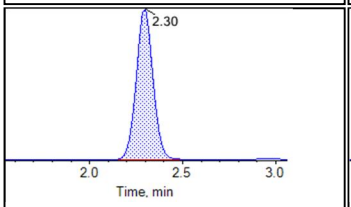
d3-MeFOSAA



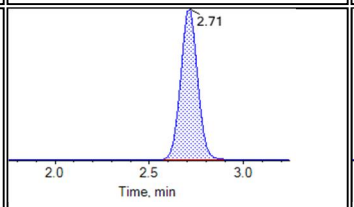
d5-EtFOSAA



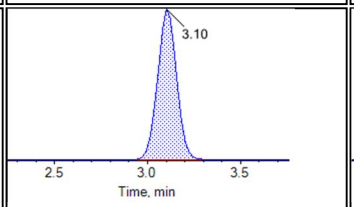
13C5-PFHxA



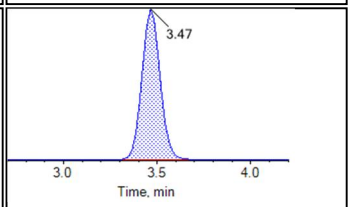
13C4-PFHpA



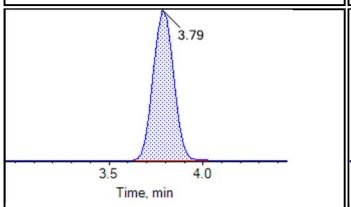
13C8-PFOA



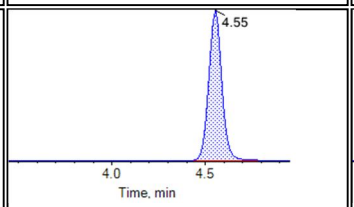
13C9-PFNA



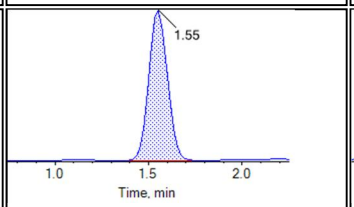
13C6-PFDA



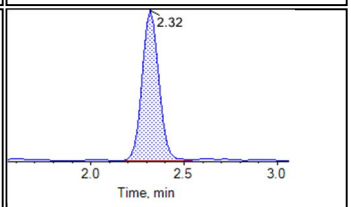
13C7-PFUnA



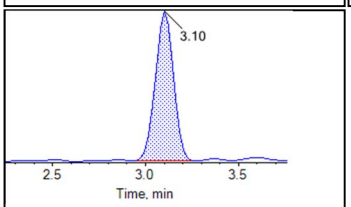
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

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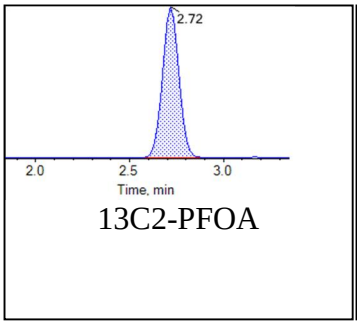
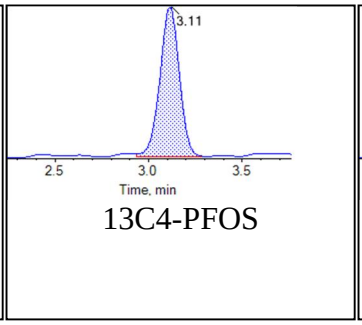
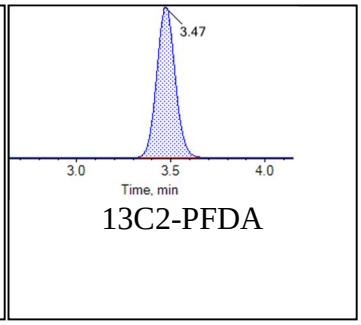
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

Chromatogram Report

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Printed: 01/11/2018 8:37:43 AM

Sample Name	KB76	**Injection Vial**	11
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:27:08	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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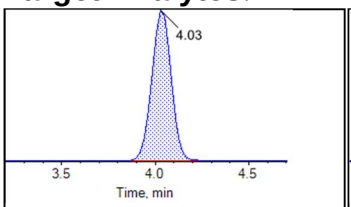
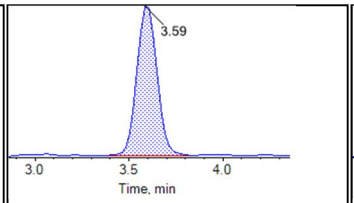
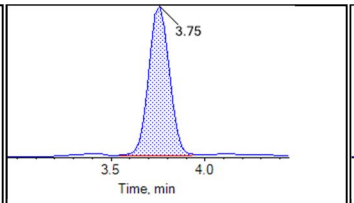


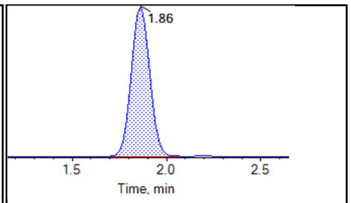
13C2-PFDoA



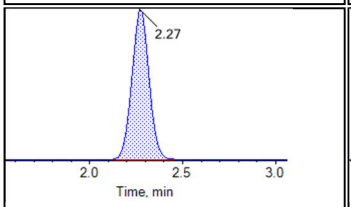
d3-MeFOSAA



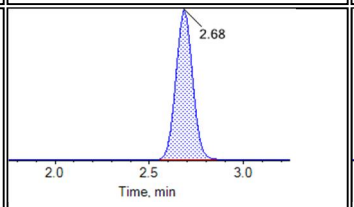
d5-EtFOSAA



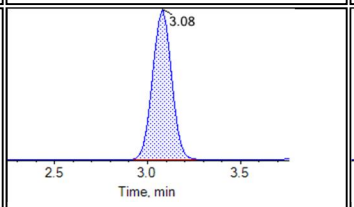
13C5-PFHxA



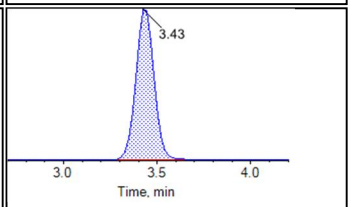
13C4-PFHpA



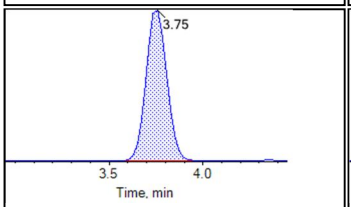
13C8-PFOA



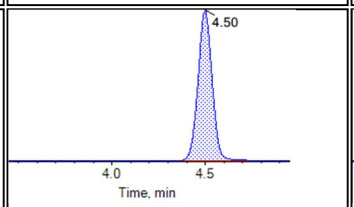
13C9-PFNA



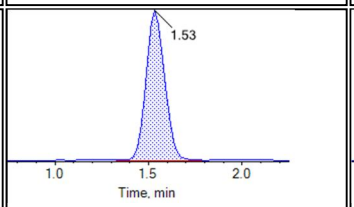
13C6-PFDA



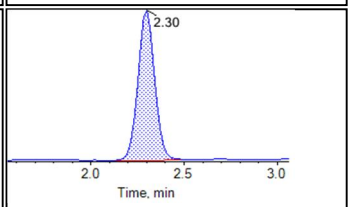
13C7-PFUnA



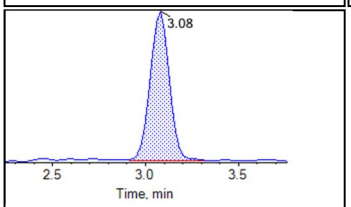
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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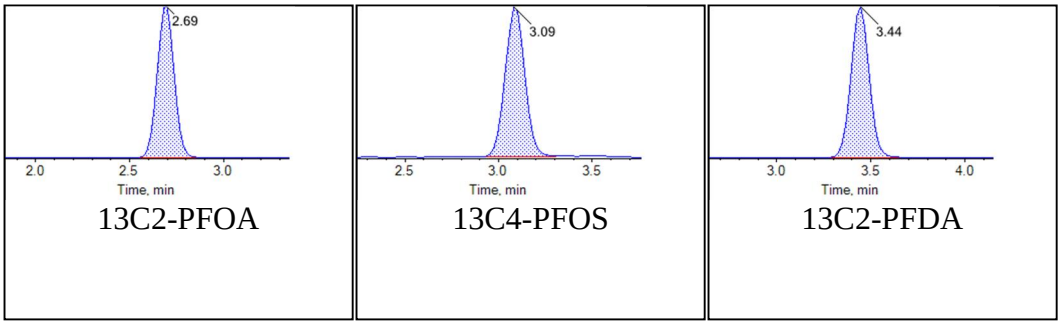
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:37:43 AM

Internal Standards:



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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:37:48 AM

Sample Name	CR986PB-FS(0)	**Injection Vial**	13
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:48:52	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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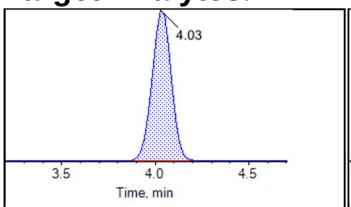
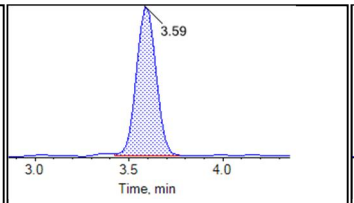
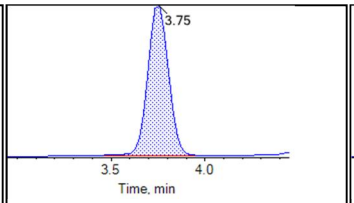


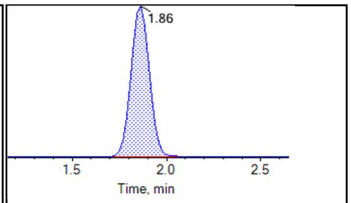
13C2-PFDoA



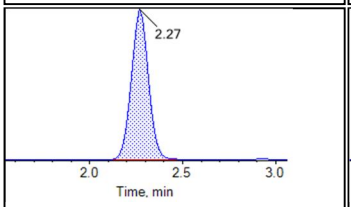
d3-MeFOSAA



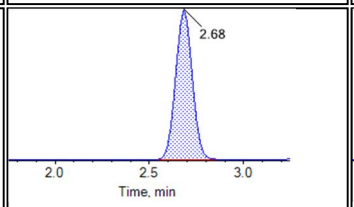
d5-EtFOSAA



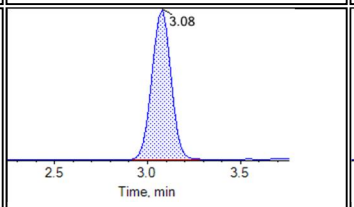
13C5-PFHxA



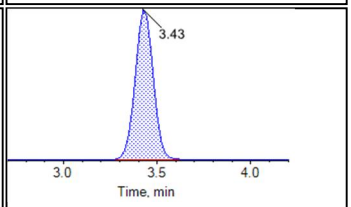
13C4-PFHpA



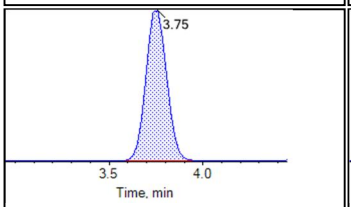
13C8-PFOA



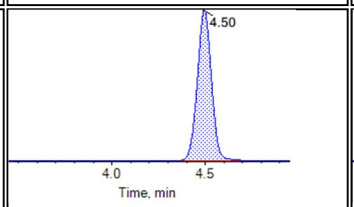
13C9-PFNA



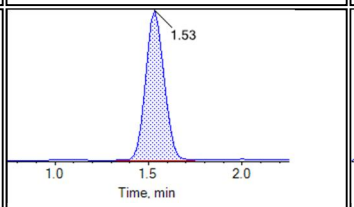
13C6-PFDA



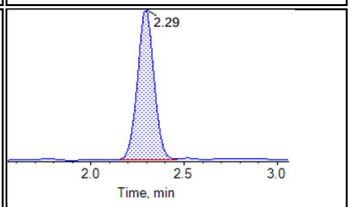
13C7-PFUnA



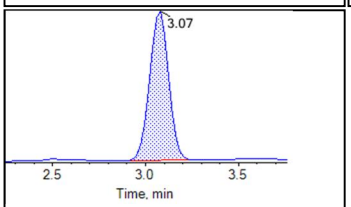
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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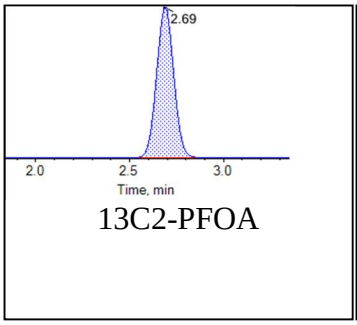
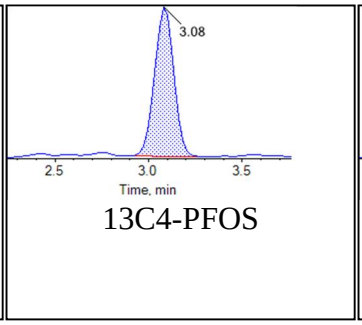
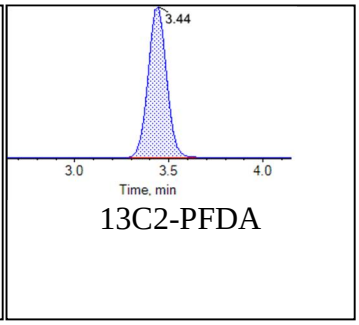


13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:37:59 AM

Sample Name	J8667-FS(0)	**Injection Vial**	15
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:10:37	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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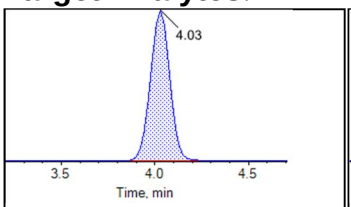
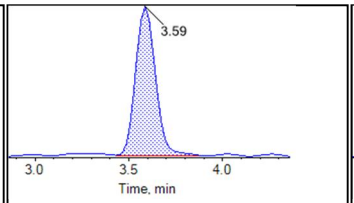
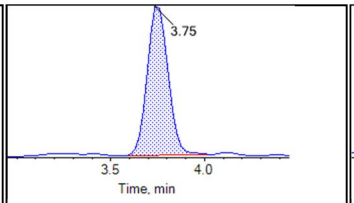


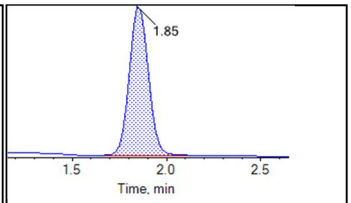
13C2-PFDoA



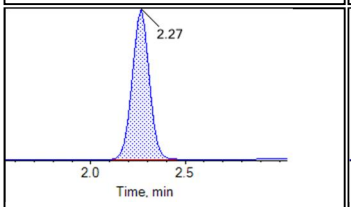
d3-MeFOSAA



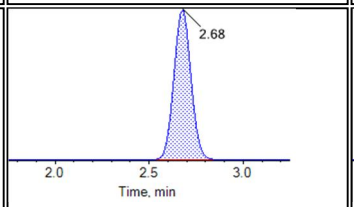
d5-EtFOSAA



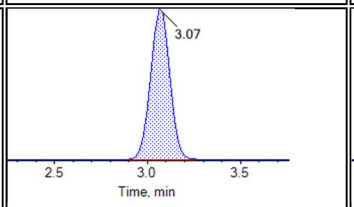
13C5-PFHxA



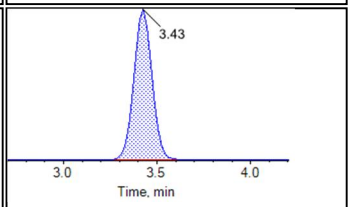
13C4-PFHpA



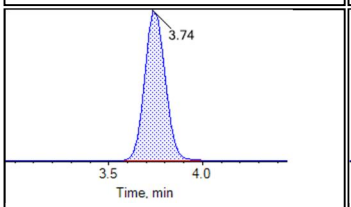
13C8-PFOA



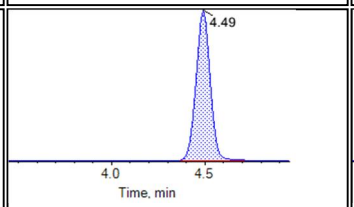
13C9-PFNA



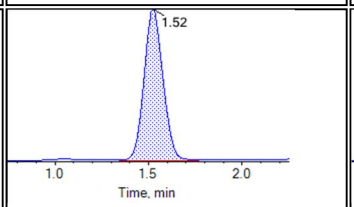
13C6-PFDA



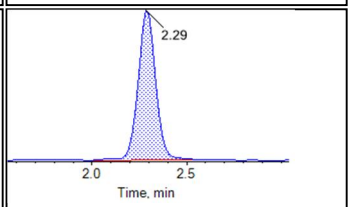
13C7-PFUnA



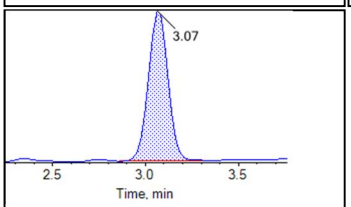
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

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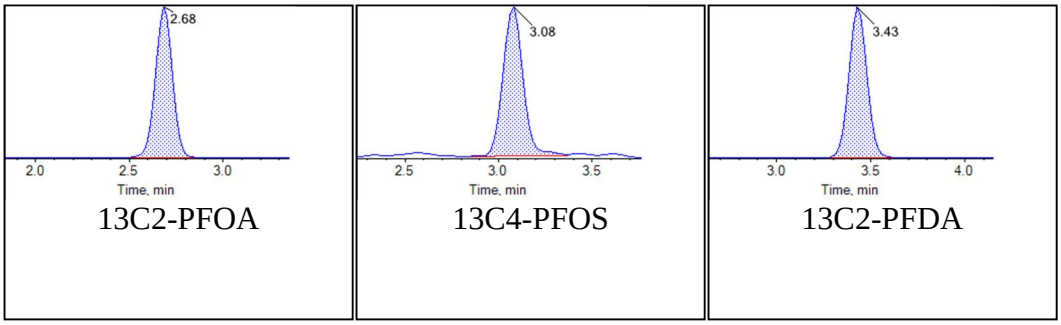


BATTELLE

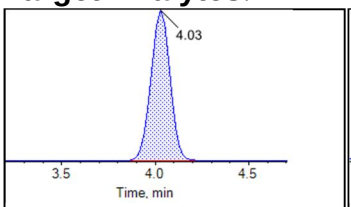
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:38:09 AM

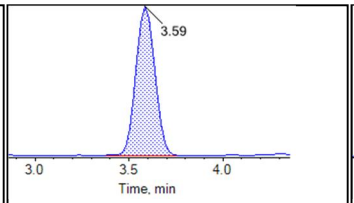
Sample Name	J8667-FS-D(5)	**Injection Vial**	17
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:32:22	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

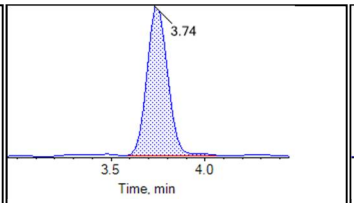
Target Analytes:



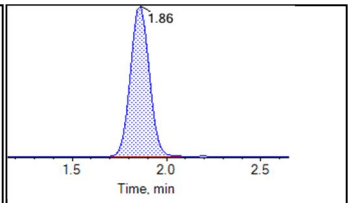
13C2-PFDoA



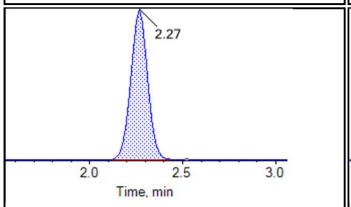
d3-MeFOSAA



d5-EtFOSAA



13C5-PFHxA



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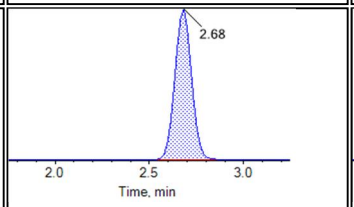
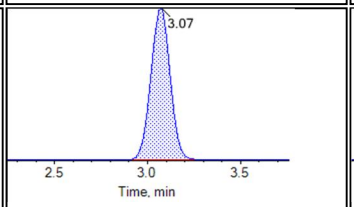
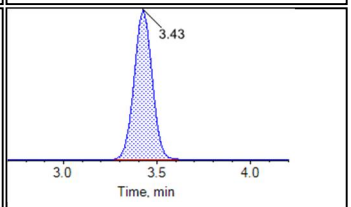


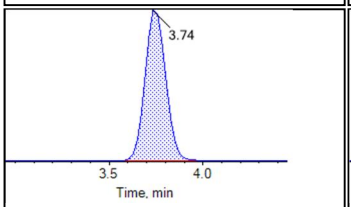
13C8-PFOA



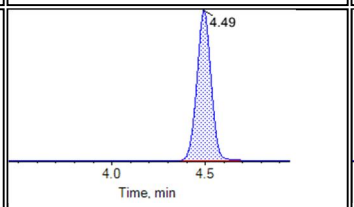
13C9-PFNA



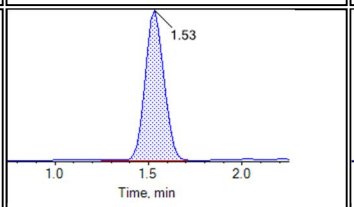
13C6-PFDA



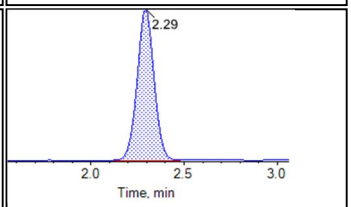
13C7-PFUnA



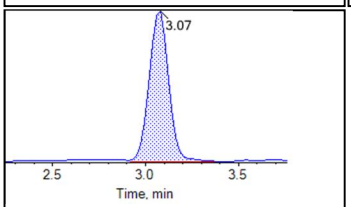
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

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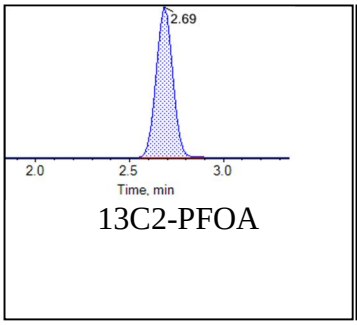
Internal Standards:



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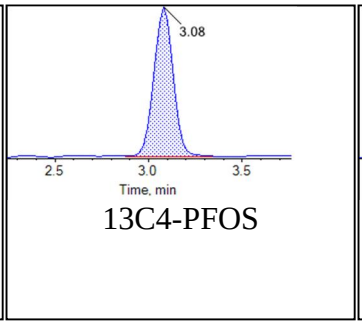
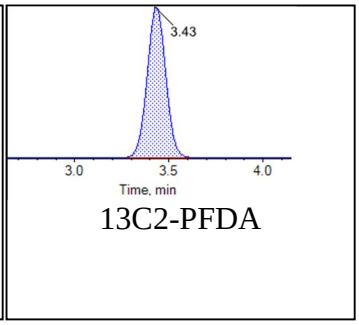


13C4-PFOS



13C2-PFDA

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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:38:19 AM

Sample Name	J8668-FS(0)	**Injection Vial**	19
Sample ID	VC-CS12-DW01P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:54:05	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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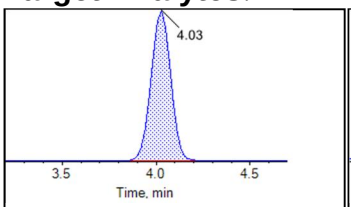
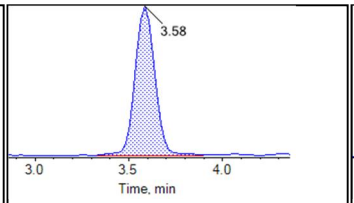


13C2-PFDoA



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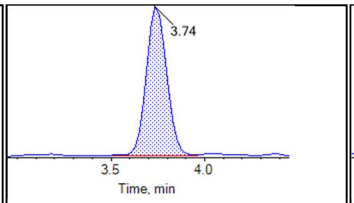

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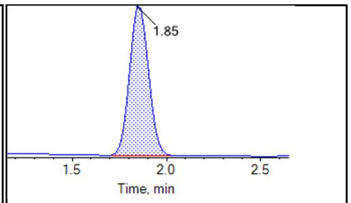

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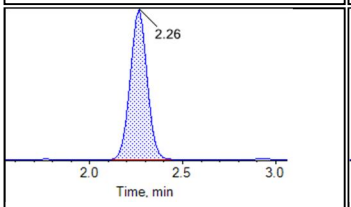

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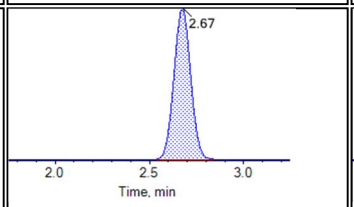
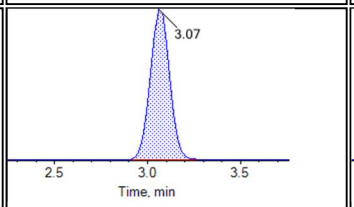
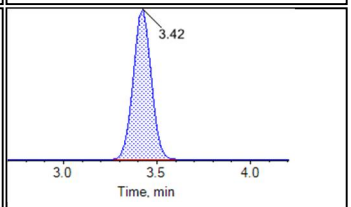


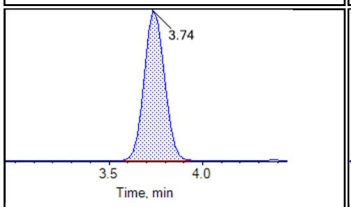
13C8-PFOA



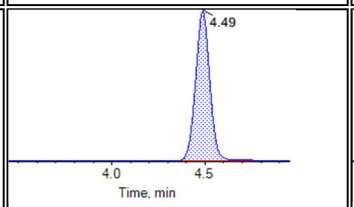
13C9-PFNA



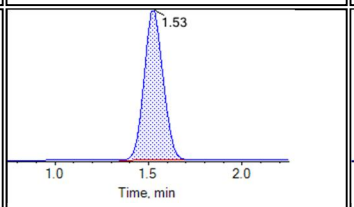
13C6-PFDA



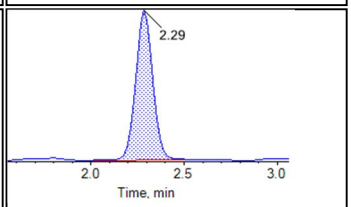
13C7-PFUnA



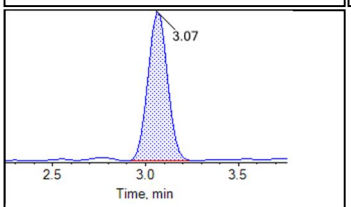
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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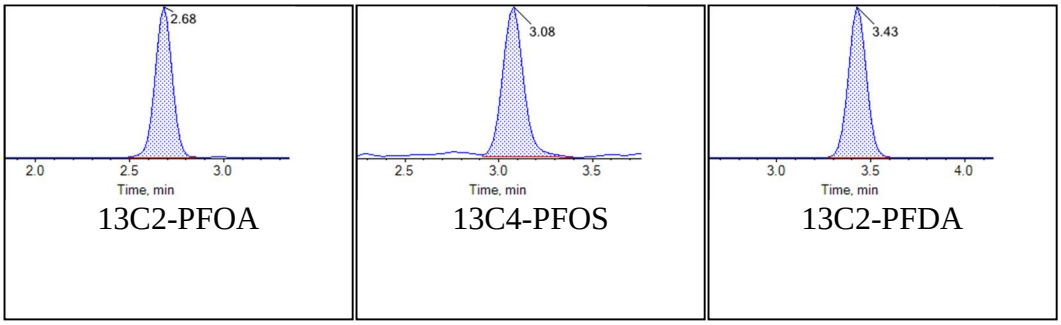

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Chromatogram Report

Created with Analyst Reporter
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Sample Name	J8668-FS-D(3)	**Injection Vial**	20
Sample ID	VC-CS12-DW01P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:04:57	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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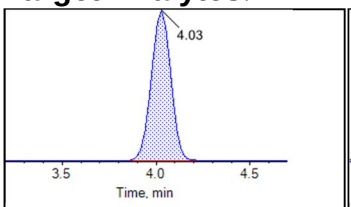
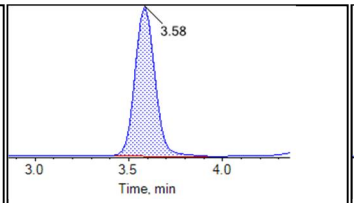
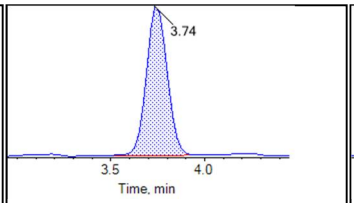


13C2-PFDoA



d3-MeFOSAA



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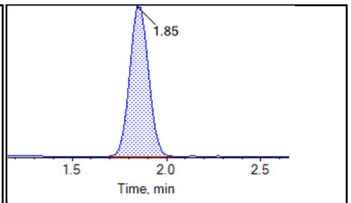
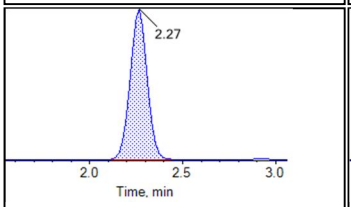


13C5-PFHxA



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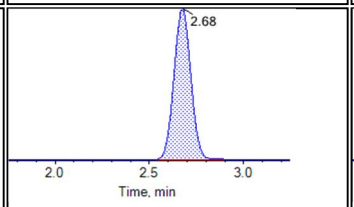
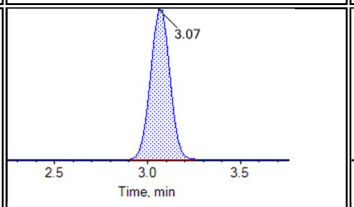
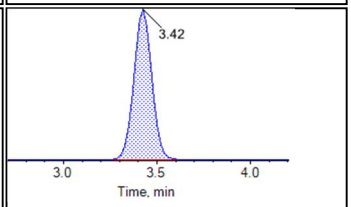


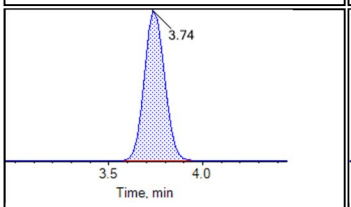
13C8-PFOA



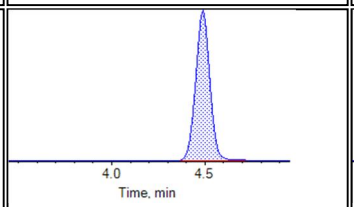
13C9-PFNA



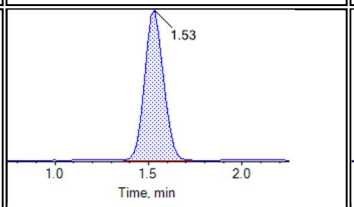
13C6-PFDA



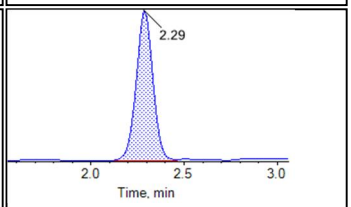
13C7-PFUnA



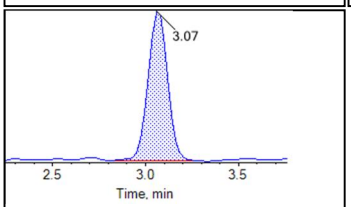
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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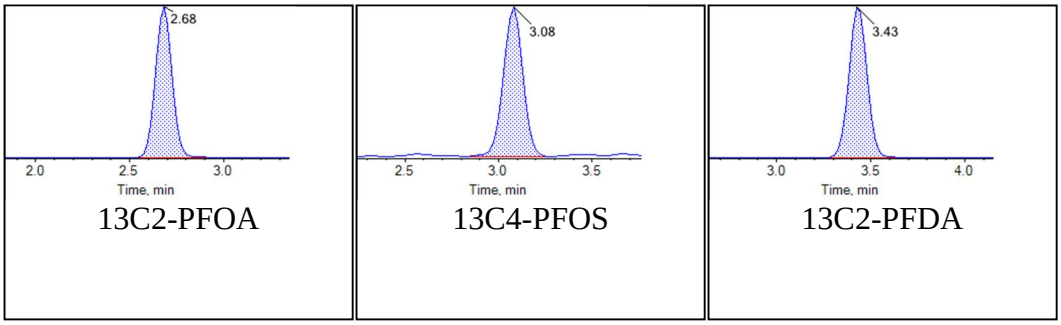

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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:38:35 AM

Sample Name	KB77	**Injection Vial**	23
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:37:35	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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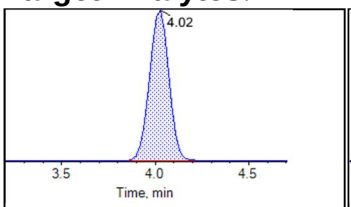
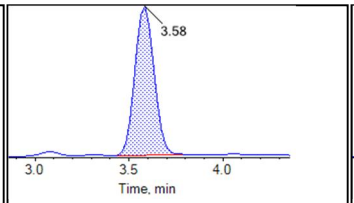
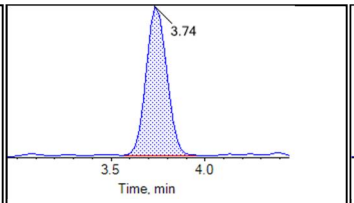


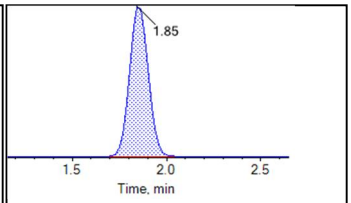
13C2-PFDoA



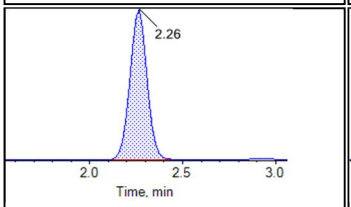
d3-MeFOSAA



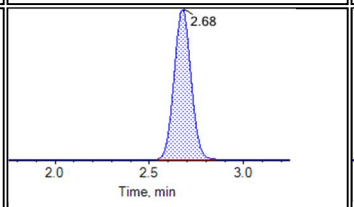
d5-EtFOSAA



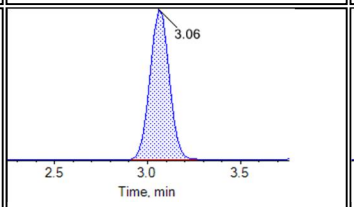
13C5-PFHxA



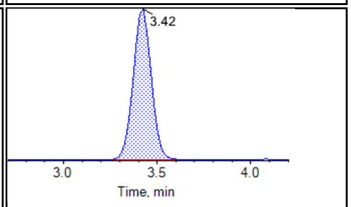
13C4-PFHpA



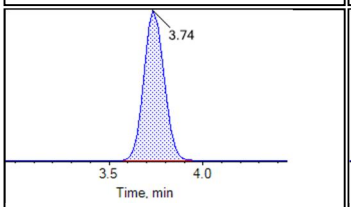
13C8-PFOA



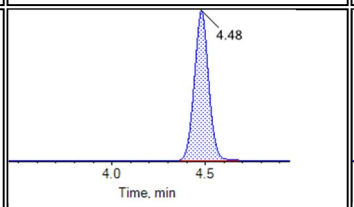
13C9-PFNA



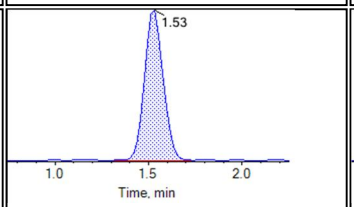
13C6-PFDA



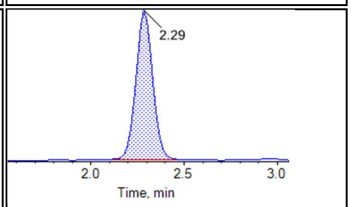
13C7-PFUnA



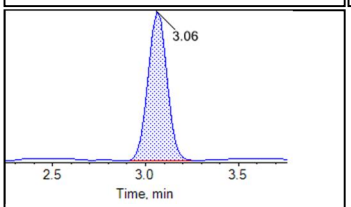
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

Created with Analyst Reporter
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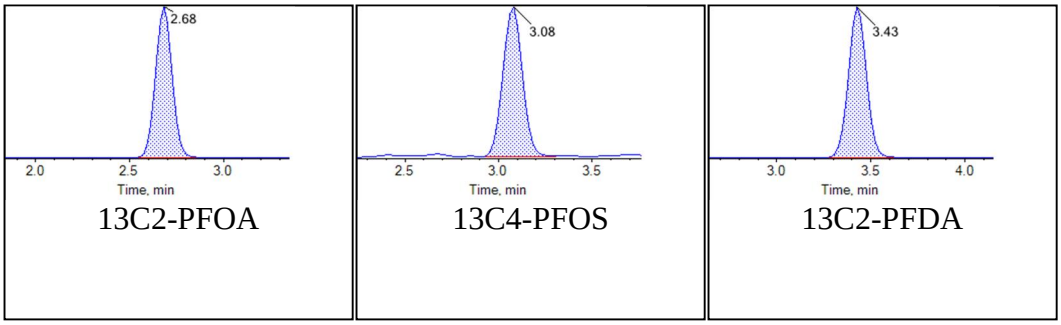
Internal Standards:



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Chromatogram Report

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Printed: 01/11/2018 8:38:40 AM

Sample Name	J8669-FS(0)	**Injection Vial**	24
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:48:27	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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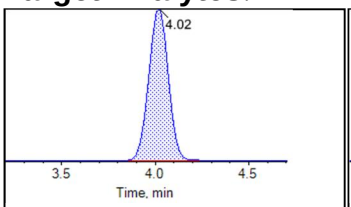
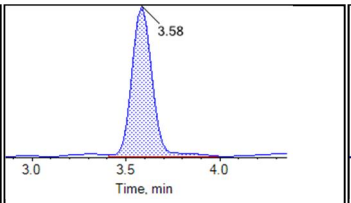
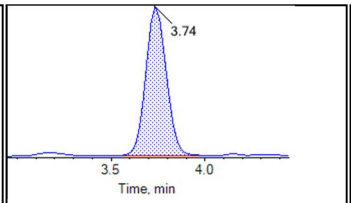


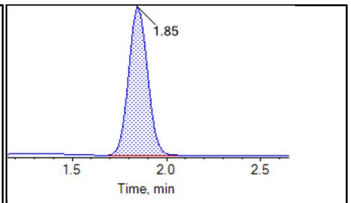
13C2-PFDoA



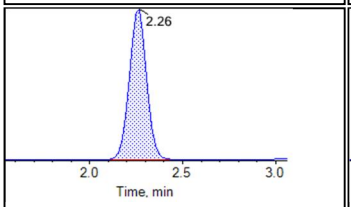
d3-MeFOSAA



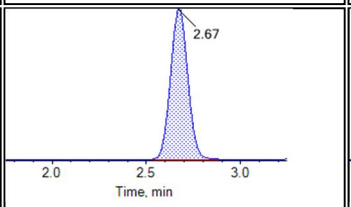
d5-EtFOSAA



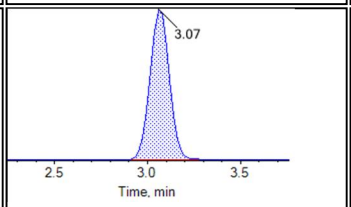
13C5-PFHxA



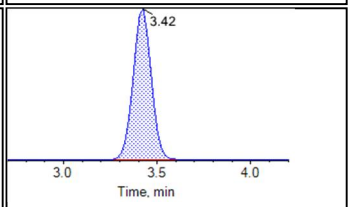
13C4-PFHpA



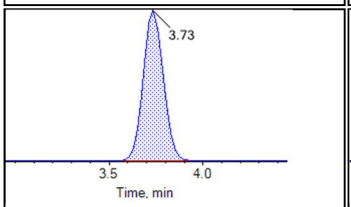
13C8-PFOA



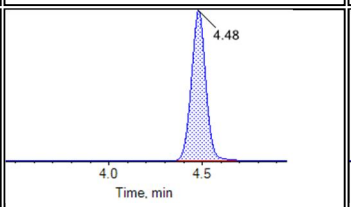
13C9-PFNA



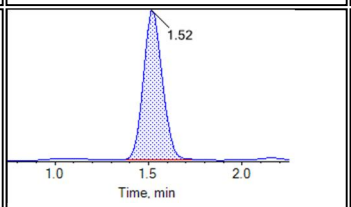
13C6-PFDA



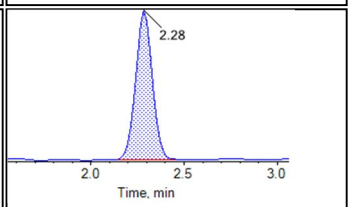
13C7-PFUnA



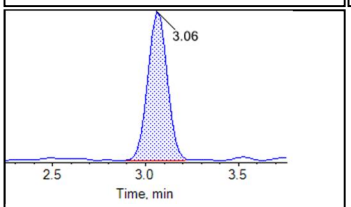
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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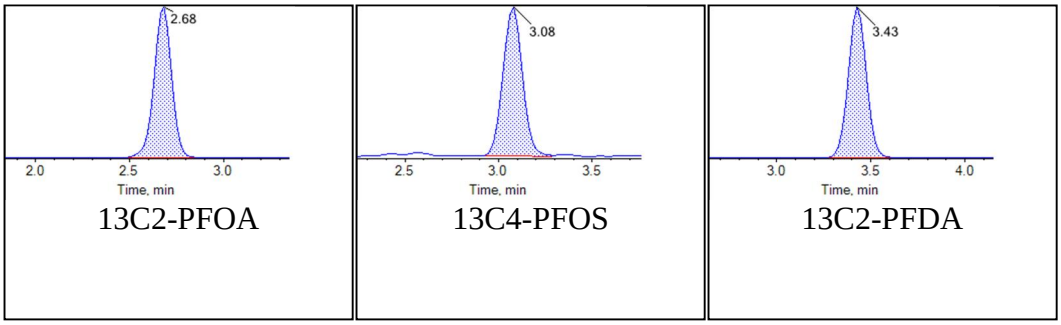

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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:38:45 AM

Sample Name	J8669-FS-D(3)	**Injection Vial**	25
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T20:59:18	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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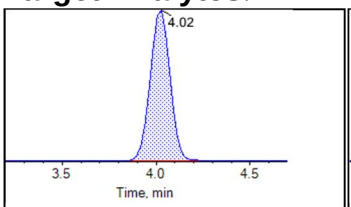
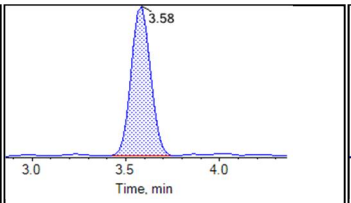
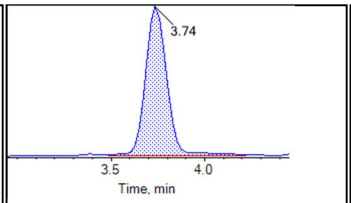


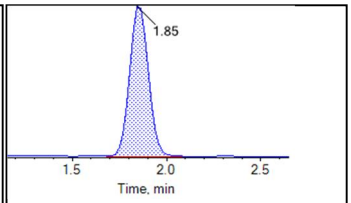
13C2-PFDoA



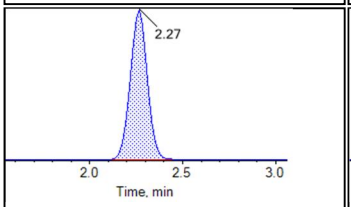
d3-MeFOSAA



d5-EtFOSAA



13C5-PFHxA



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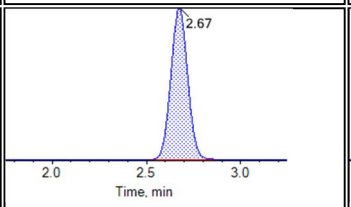
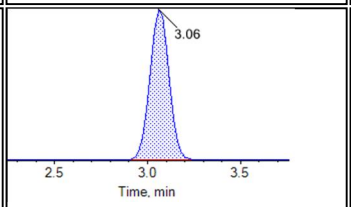


13C8-PFOA



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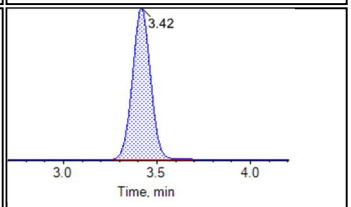
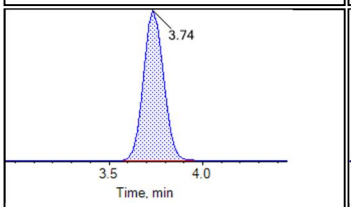
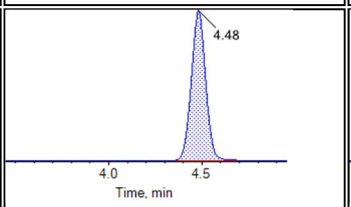


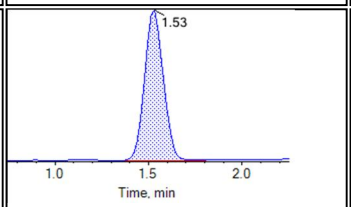
13C6-PFDA



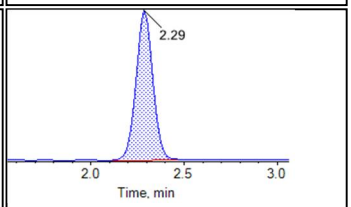
13C7-PFUnA



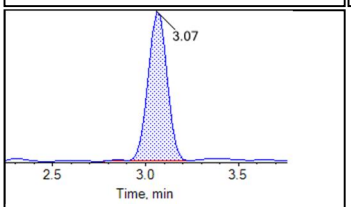
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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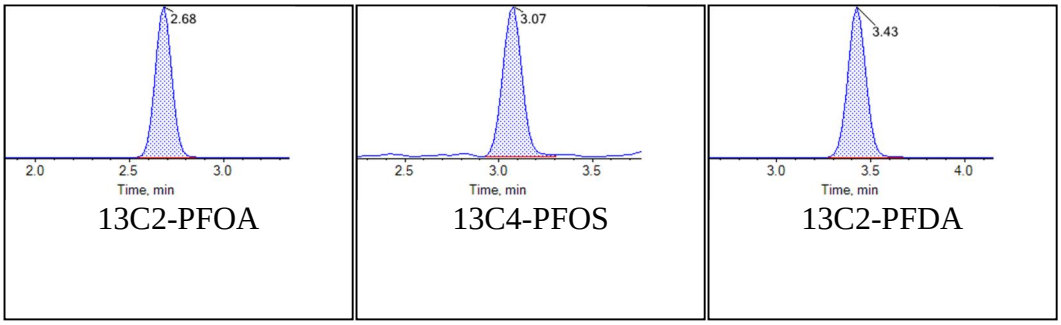

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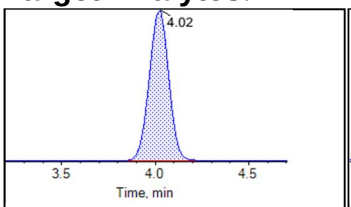
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:38:50 AM

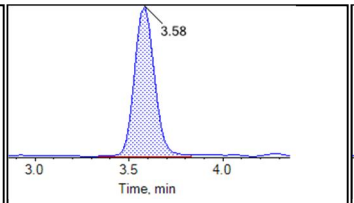
Sample Name	J8669-FS-D(5)	**Injection Vial**	26
Sample ID	VC-CS12-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:10:10	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

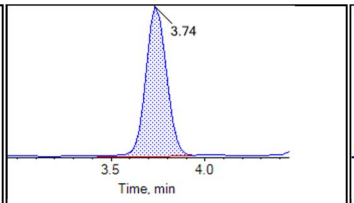
Target Analytes:



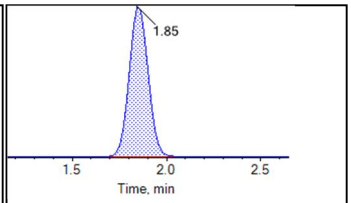
13C2-PFDoA



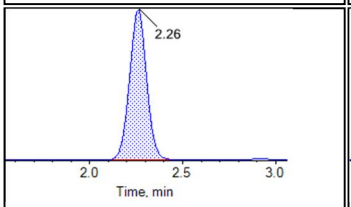
d3-MeFOSAA



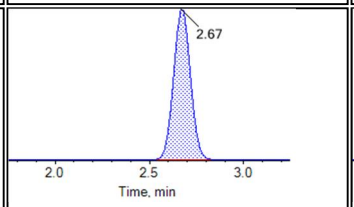
d5-EtFOSAA



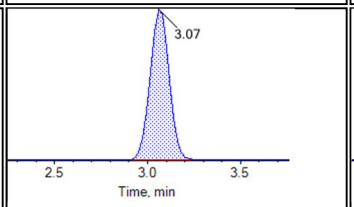
13C5-PFHxA



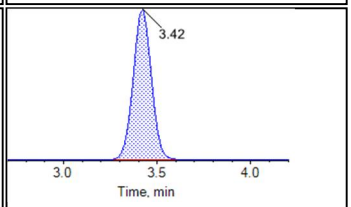
13C4-PFHpA



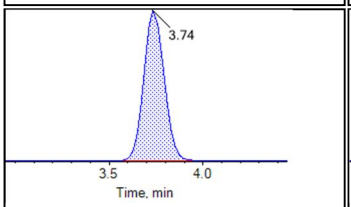
13C8-PFOA



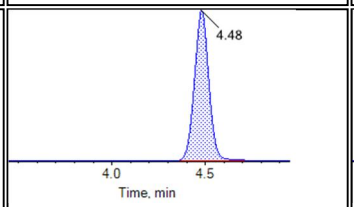
13C9-PFNA



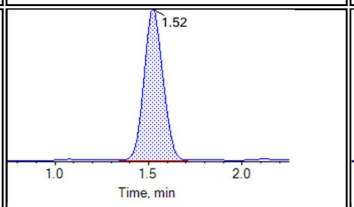
13C6-PFDA



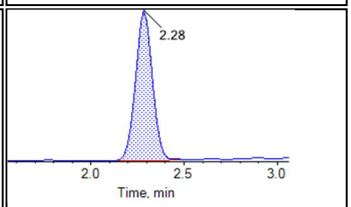
13C7-PFUnA



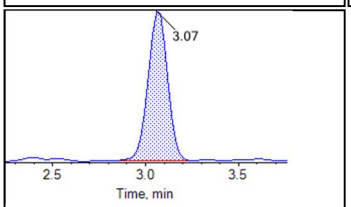
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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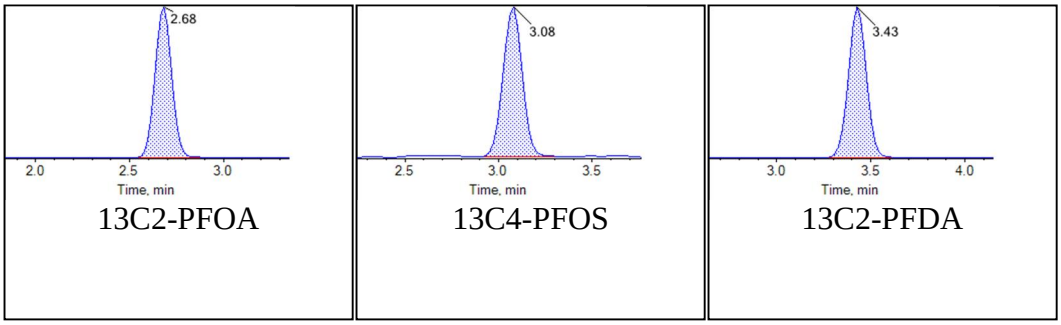

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Chromatogram Report

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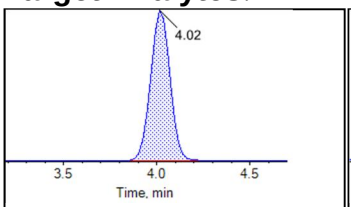
Printed: 01/11/2018 8:38:55 AM

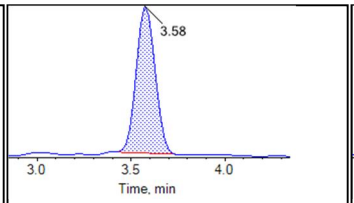
Sample Name	J8670-FS(0)	**Injection Vial**	27
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:21:03	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

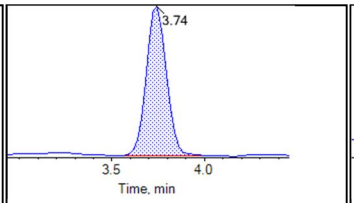
Target Analytes:



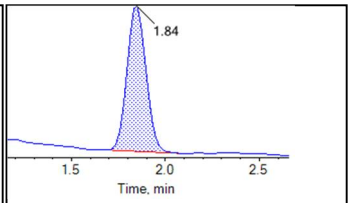
13C2-PFDoA



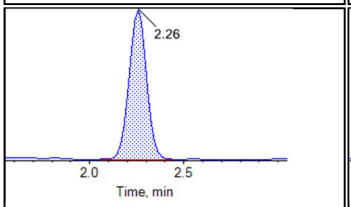
d3-MeFOSAA



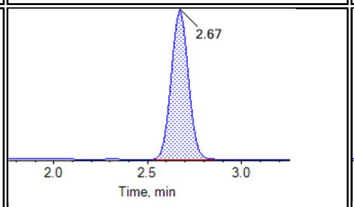
d5-EtFOSAA



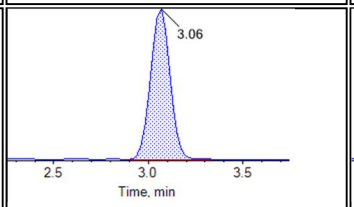
13C5-PFHxA



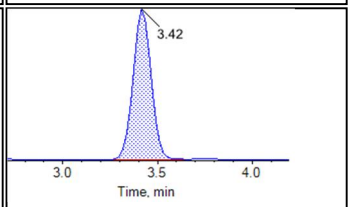
13C4-PFHpA



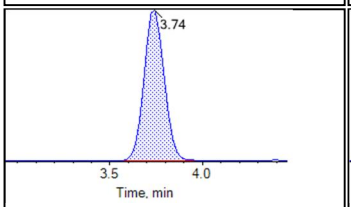
13C8-PFOA



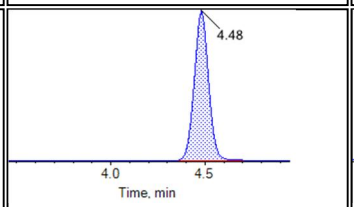
13C9-PFNA



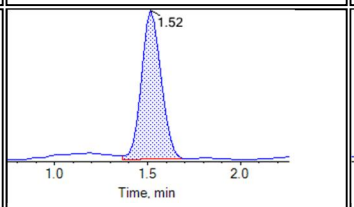
13C6-PFDA



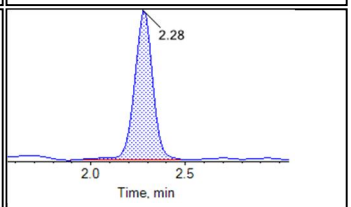
13C7-PFUnA



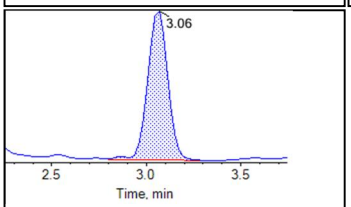
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

Created with Analyst Reporter
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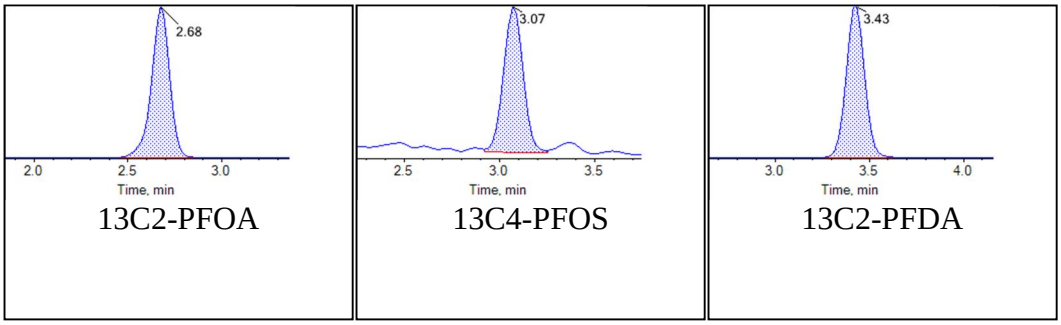
Internal Standards:



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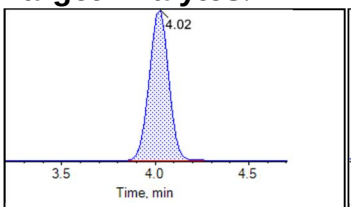
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:39:01 AM

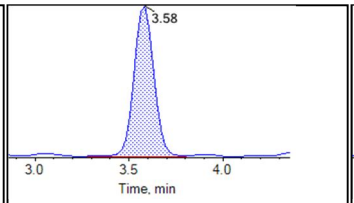
Sample Name	J8670-FS-D(3)	**Injection Vial**	28
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:31:54	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

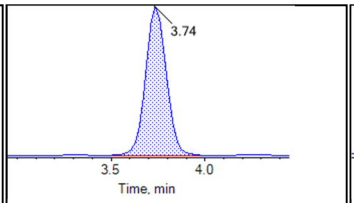
Target Analytes:



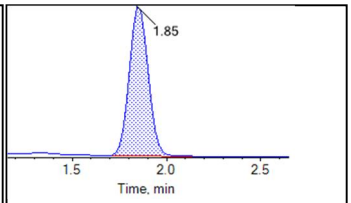
13C2-PFDoA



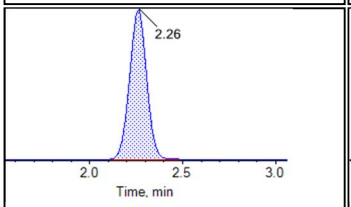
d3-MeFOSAA



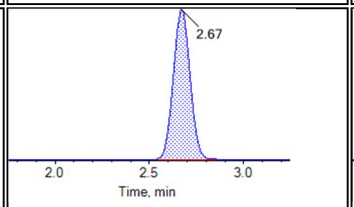
d5-EtFOSAA



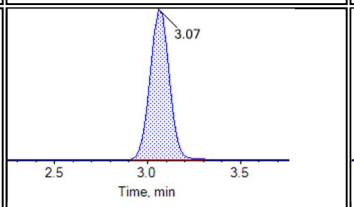
13C5-PFHxA



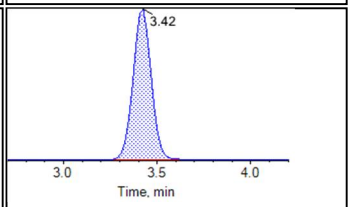
13C4-PFHpA



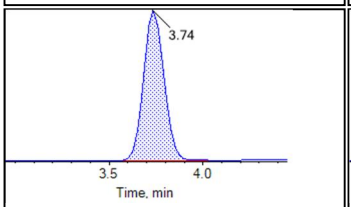
13C8-PFOA



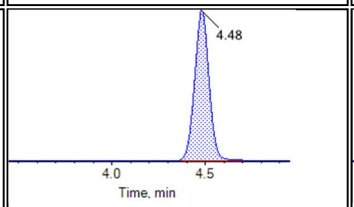
13C9-PFNA



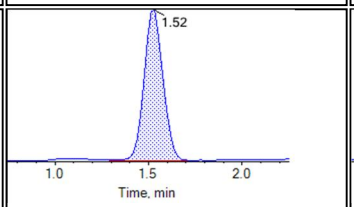
13C6-PFDA



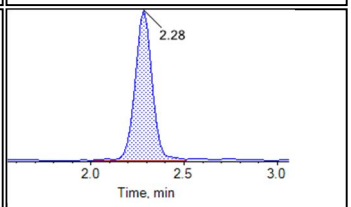
13C7-PFUnA



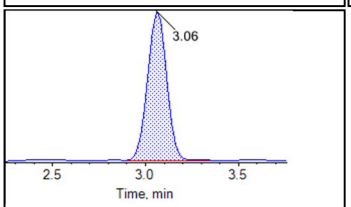
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



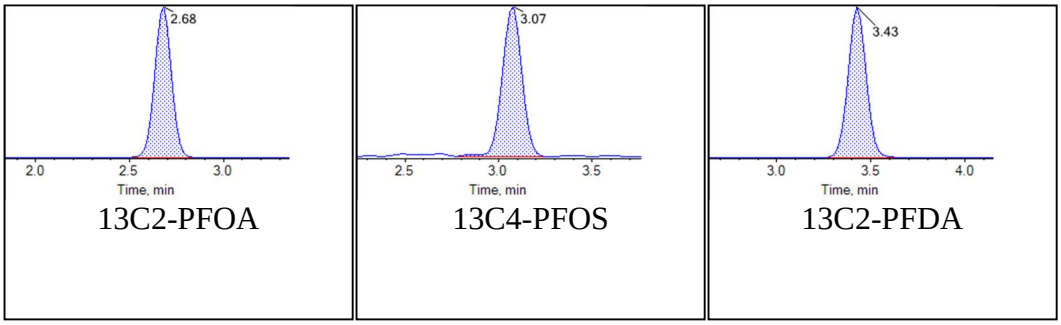
13C8-PFOS

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:39:01 AM

Internal Standards:



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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:39:06 AM

Sample Name	J8670-FS-D(5)	**Injection Vial**	29
Sample ID	VC-CS12-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:42:46	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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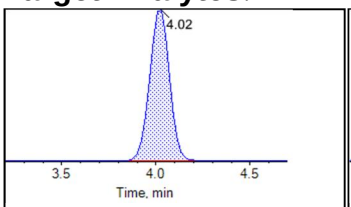
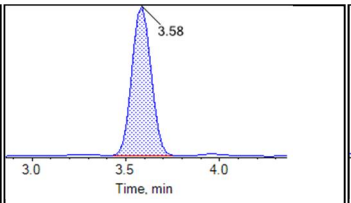
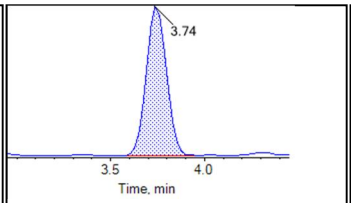


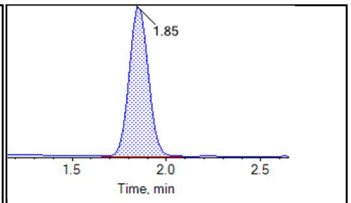
13C2-PFDoA



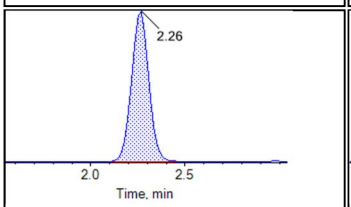
d3-MeFOSAA



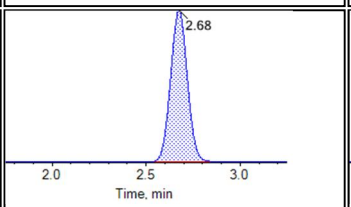
d5-EtFOSAA



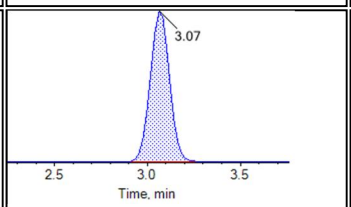
13C5-PFHxA



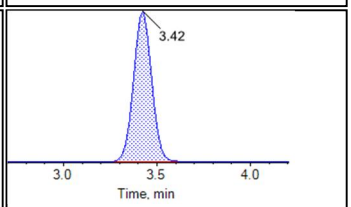
13C4-PFHpA



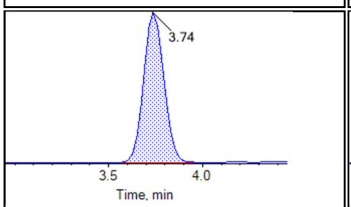
13C8-PFOA



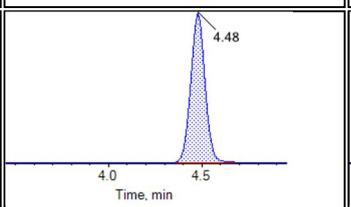
13C9-PFNA



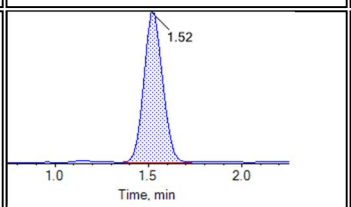
13C6-PFDA



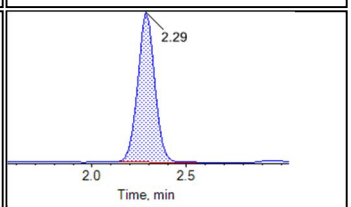
13C7-PFUnA



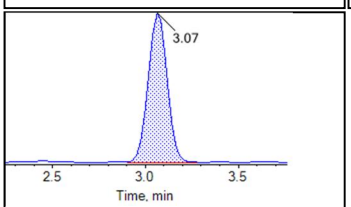
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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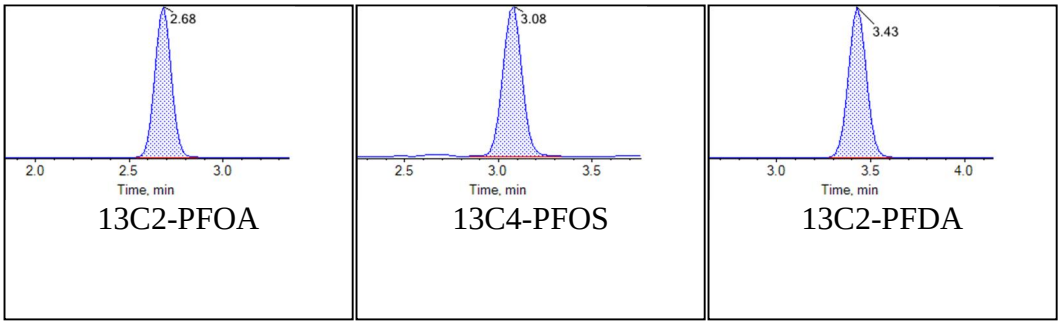
Internal Standards:



BATTELLE

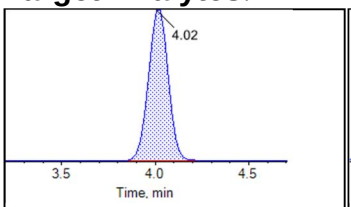
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:39:11 AM

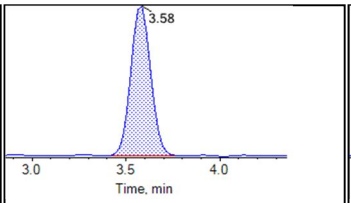
Sample Name	J8683-FS(0)	**Injection Vial**	30
Sample ID	VC-CS10-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T21:53:38	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

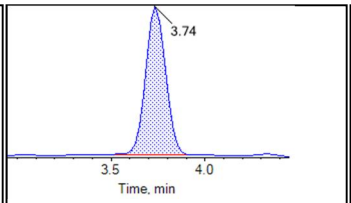
Target Analytes:



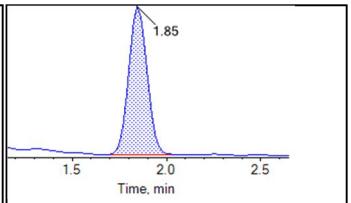
13C2-PFDoA



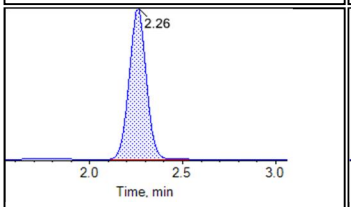
d3-MeFOSAA



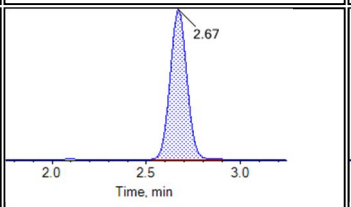
d5-EtFOSAA



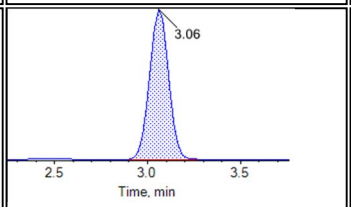
13C5-PFHxA



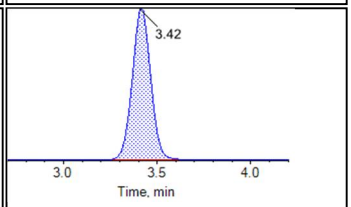
13C4-PFHpA



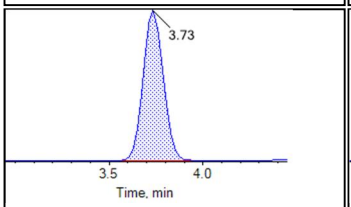
13C8-PFOA



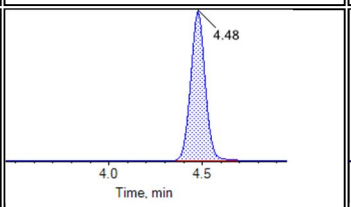
13C9-PFNA



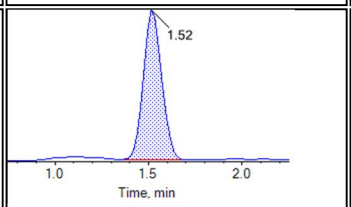
13C6-PFDA



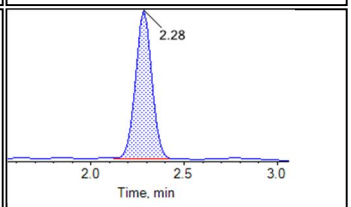
13C7-PFUnA



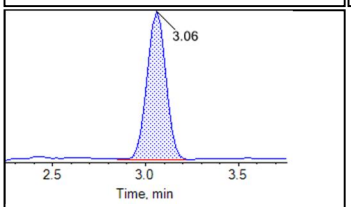
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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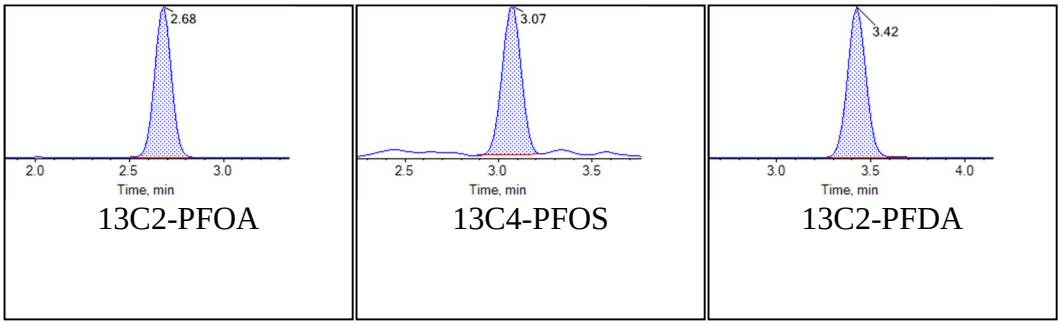
Printed: 01/11/2018 8:39:11 AM

Internal Standards:



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Chromatogram Report

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Printed: 01/11/2018 8:39:16 AM

Sample Name	J8683-FS-D(3)	**Injection Vial**	31
Sample ID	VC-CS10-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:04:29	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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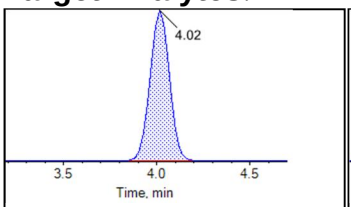
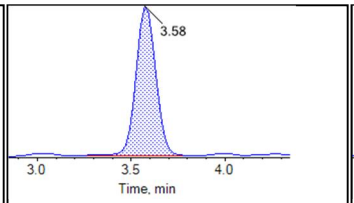
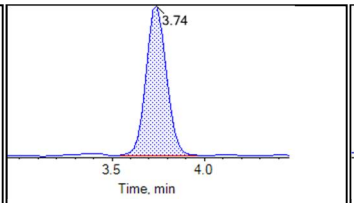


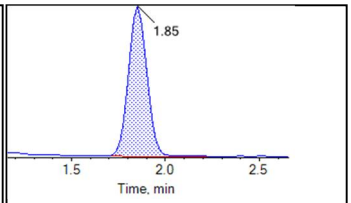
13C2-PFDoA



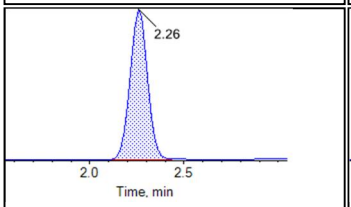
d3-MeFOSAA



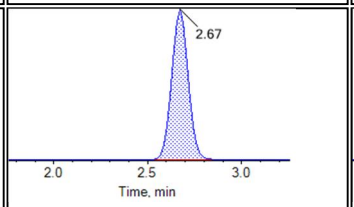
d5-EtFOSAA



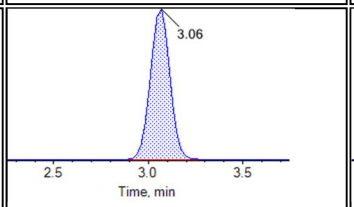
13C5-PFHxA



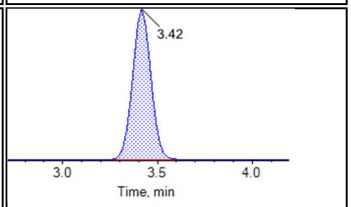
13C4-PFHpA



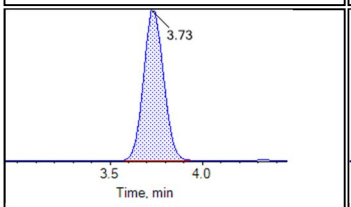
13C8-PFOA



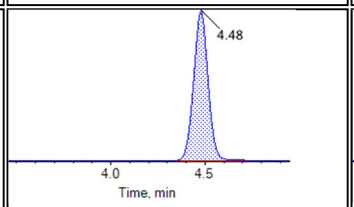
13C9-PFNA



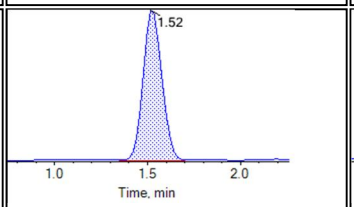
13C6-PFDA



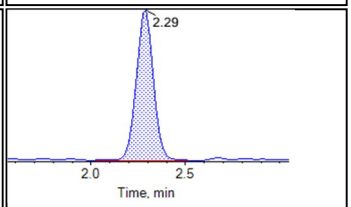
13C7-PFUnA



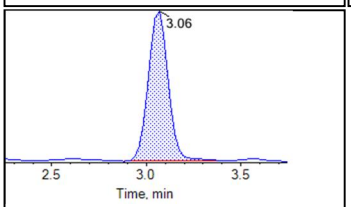
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

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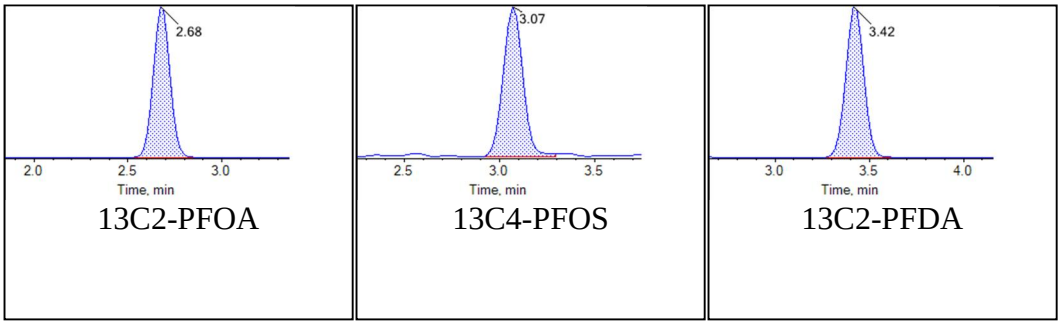
Internal Standards:



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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:39:21 AM

Sample Name	KB76	**Injection Vial**	33
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:26:13	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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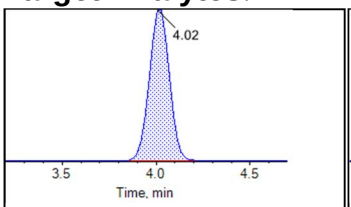
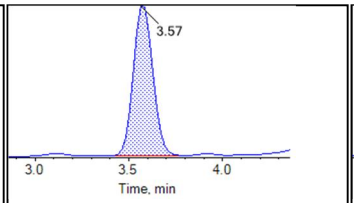
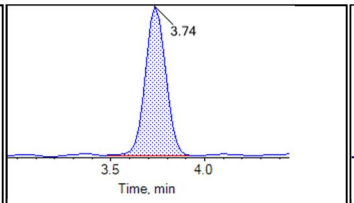


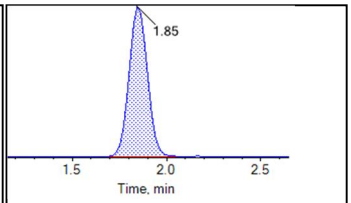
13C2-PFDoA



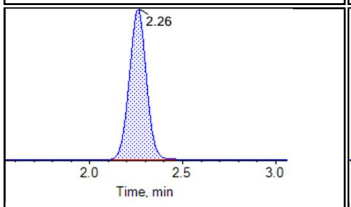
d3-MeFOSAA



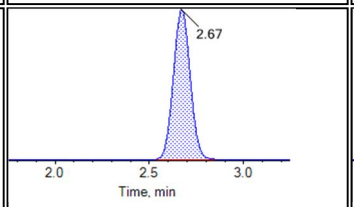
d5-EtFOSAA



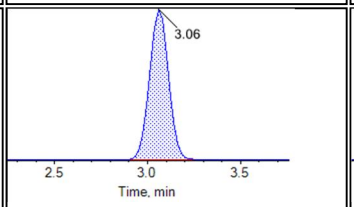
13C5-PFHxA



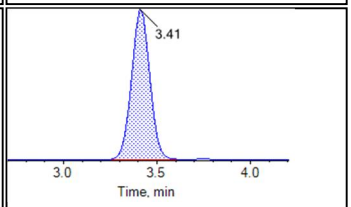
13C4-PFHpA



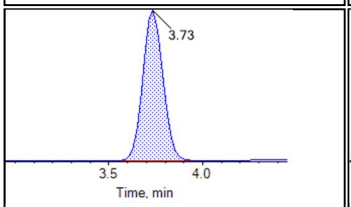
13C8-PFOA



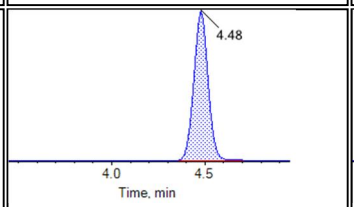
13C9-PFNA



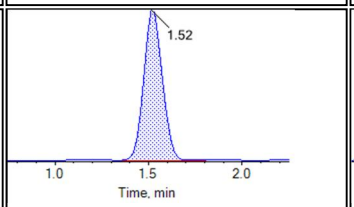
13C6-PFDA



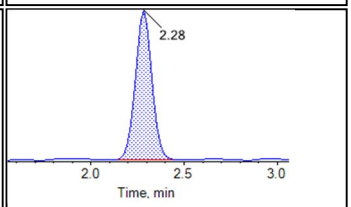
13C7-PFUnA



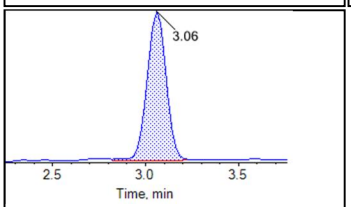
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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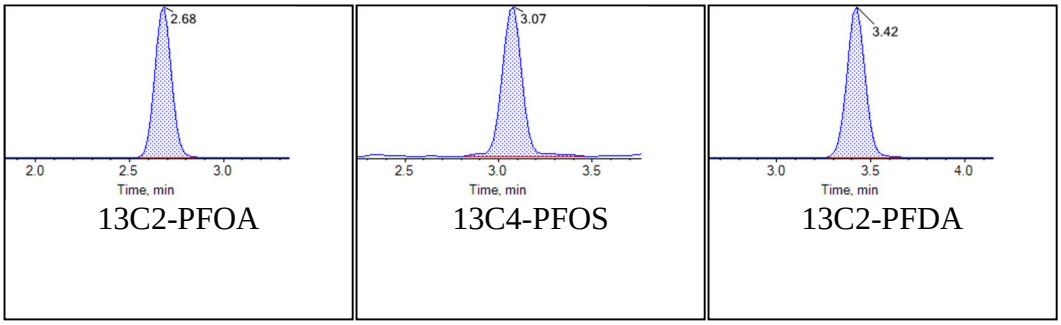

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Chromatogram Report

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Printed: 01/11/2018 8:39:27 AM

Sample Name	J8684-FS(0)	**Injection Vial**	34
Sample ID	VC-CS10-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:37:05	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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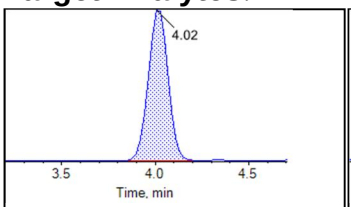
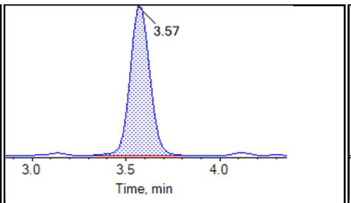
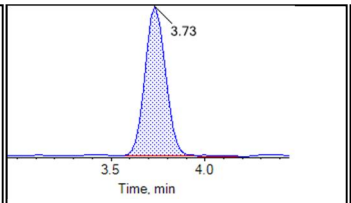


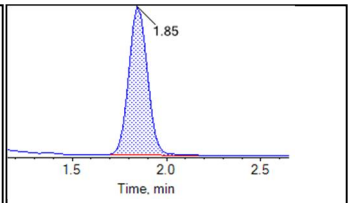
13C2-PFDoA



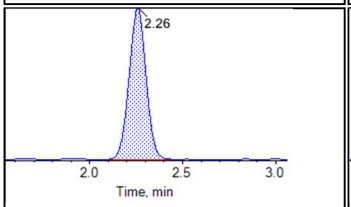
d3-MeFOSAA



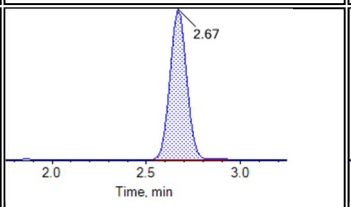
d5-EtFOSAA



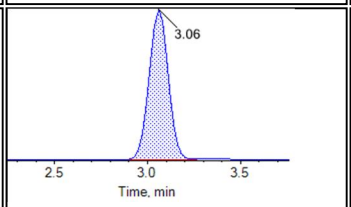
13C5-PFHxA



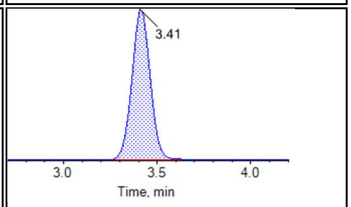
13C4-PFHpA



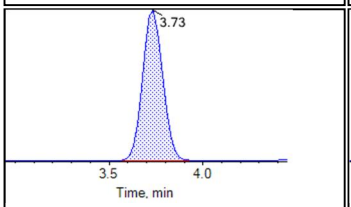
13C8-PFOA



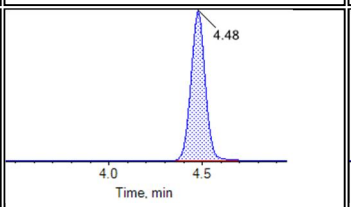
13C9-PFNA



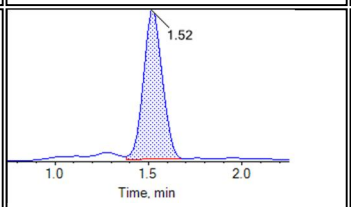
13C6-PFDA



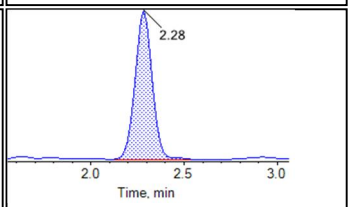
13C7-PFUnA



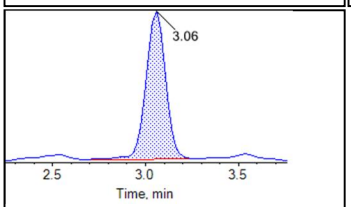
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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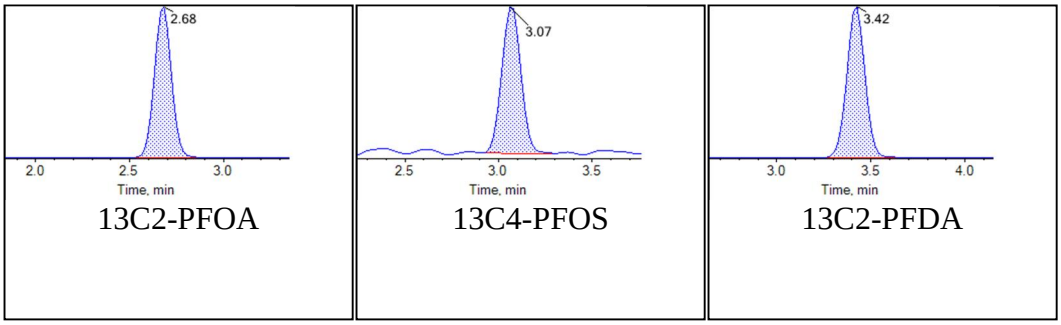
Internal Standards:



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Chromatogram Report

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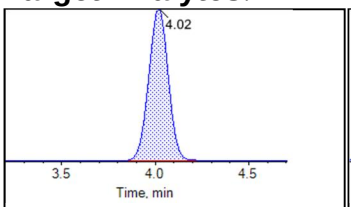
Printed: 01/11/2018 8:39:32 AM

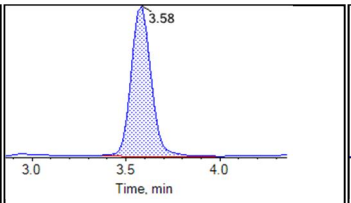
Sample Name	J8684-FS-D(3)	**Injection Vial**	35
Sample ID	VC-CS10-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:47:57	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

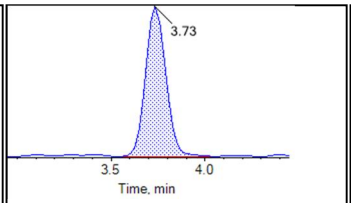
Target Analytes:



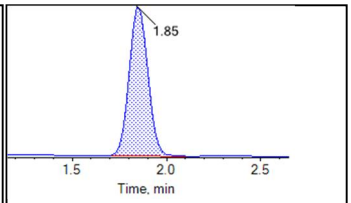
13C2-PFDoA



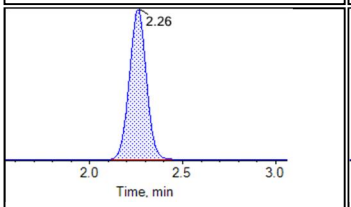
d3-MeFOSAA



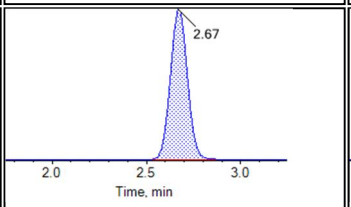
d5-EtFOSAA



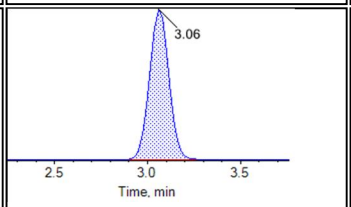
13C5-PFHxA



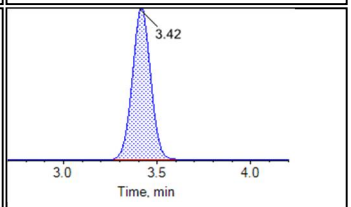
13C4-PFHpA



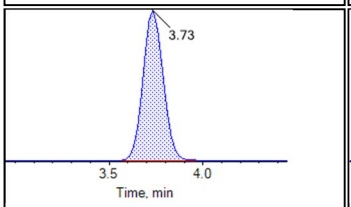
13C8-PFOA



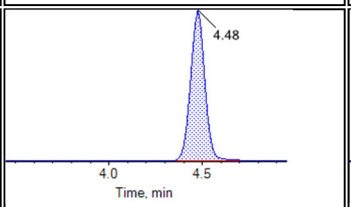
13C9-PFNA



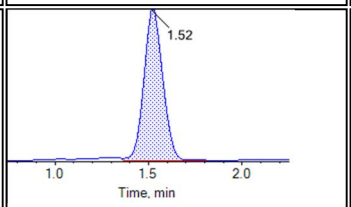
13C6-PFDA



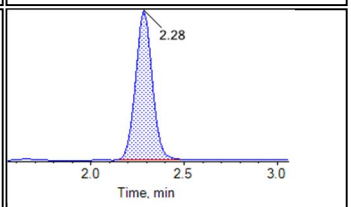
13C7-PFUnA



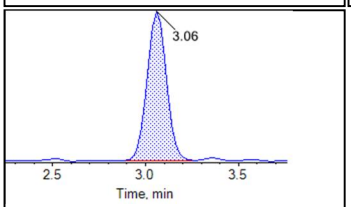
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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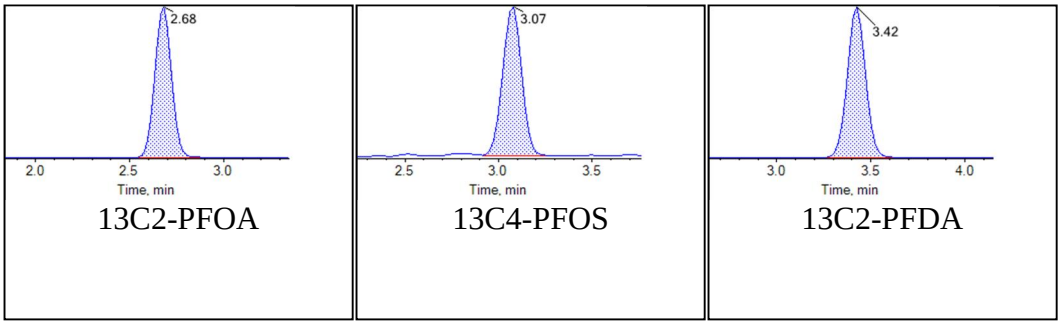
Internal Standards:



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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:39:37 AM

Sample Name	J8685-FS(0)	**Injection Vial**	36
Sample ID	VC-CS10-DW02P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T22:58:48	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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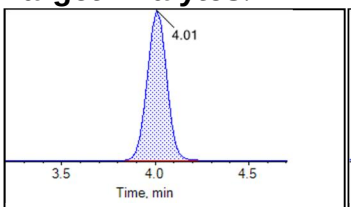
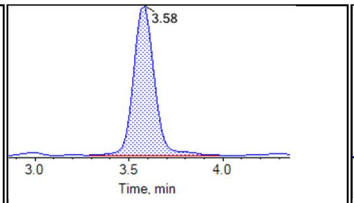
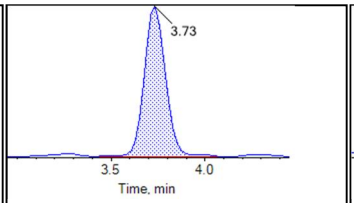


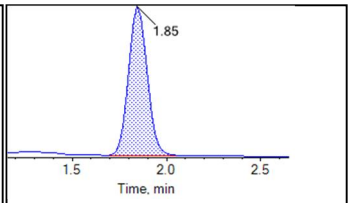
13C2-PFDoA



d3-MeFOSAA



d5-EtFOSAA



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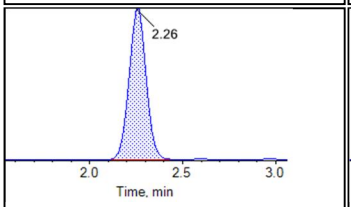

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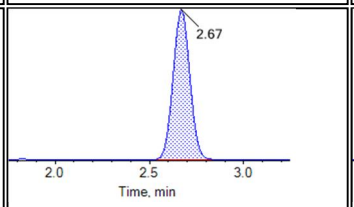
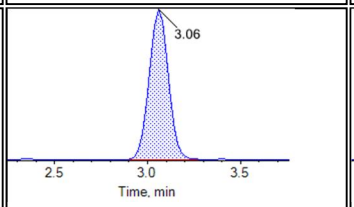
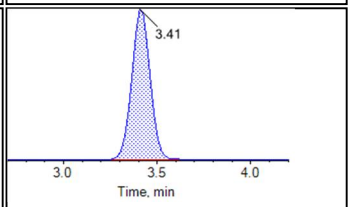


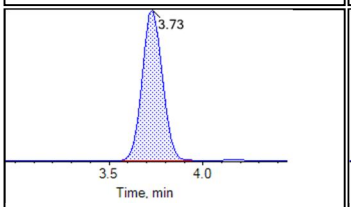
13C8-PFOA



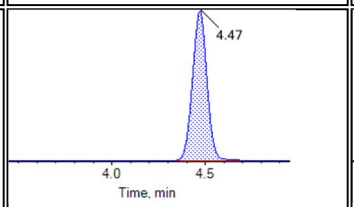
13C9-PFNA



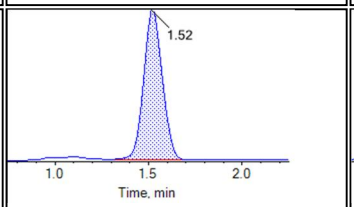
13C6-PFDA



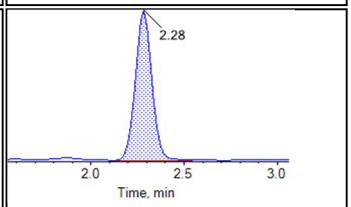
13C7-PFUnA



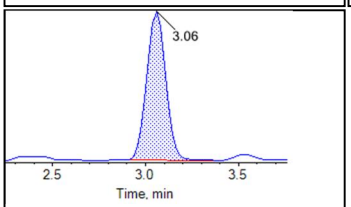
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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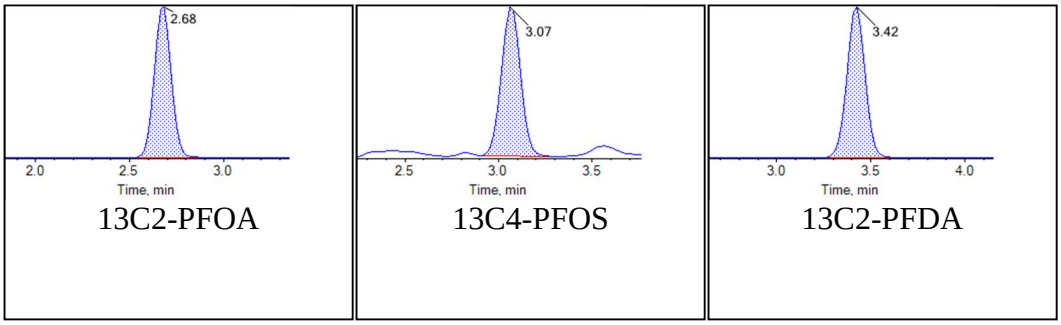
Internal Standards:



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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:39:43 AM

Sample Name	J8686-FS(0)	**Injection Vial**	37
Sample ID	VC-CS10-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:09:39	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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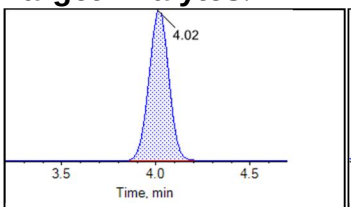
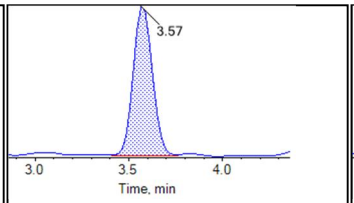
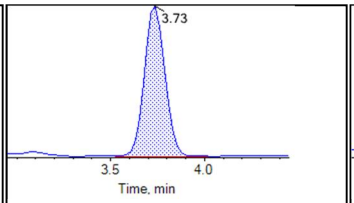


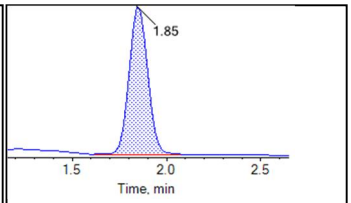
13C2-PFDoA



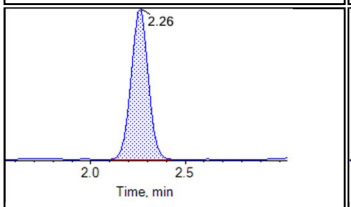
d3-MeFOSAA



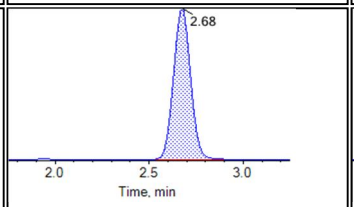
d5-EtFOSAA



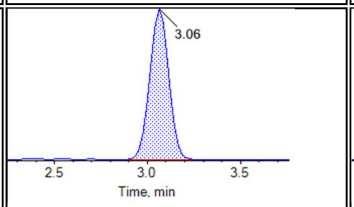
13C5-PFHxA



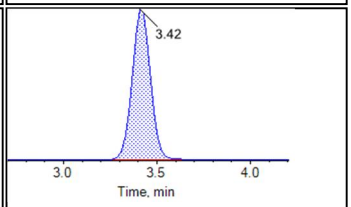
13C4-PFHpA



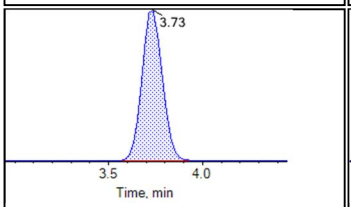
13C8-PFOA



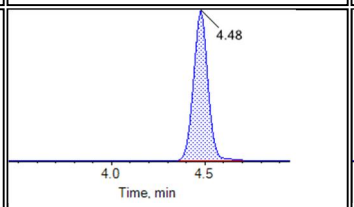
13C9-PFNA



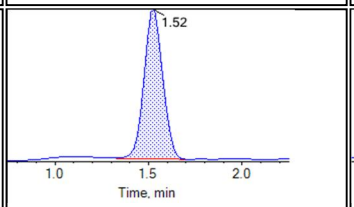
13C6-PFDA



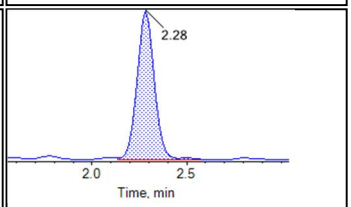
13C7-PFUnA



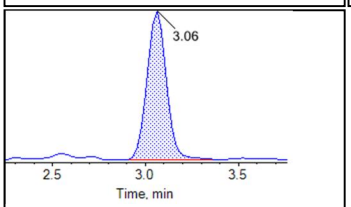
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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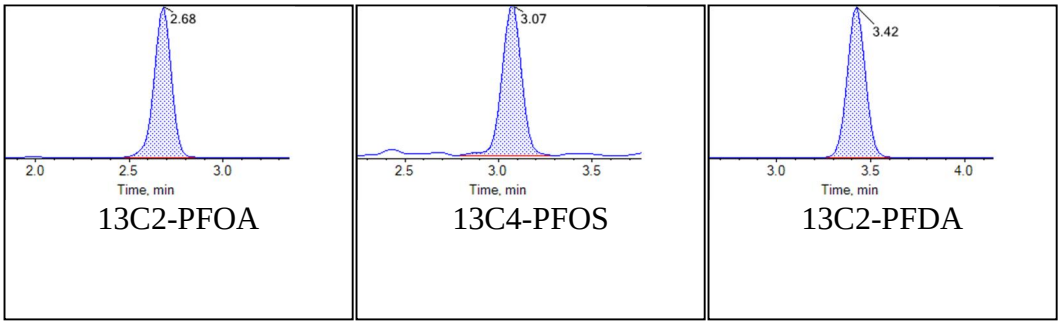

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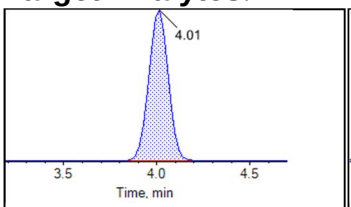
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:39:47 AM

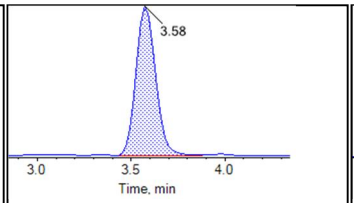
Sample Name	J8686-FS-D(3)	**Injection Vial**	38
Sample ID	VC-CS10-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:20:32	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

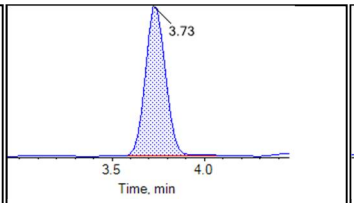
Target Analytes:



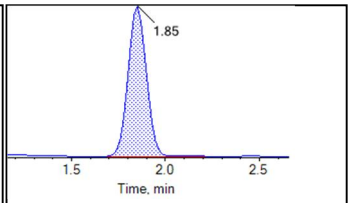
13C2-PFDoA



d3-MeFOSAA



d5-EtFOSAA



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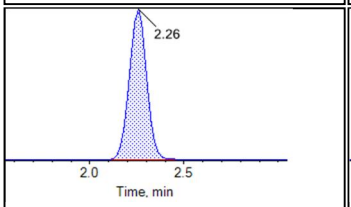
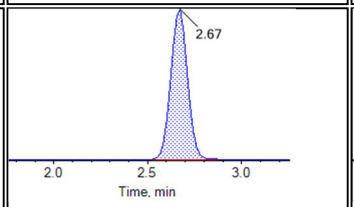
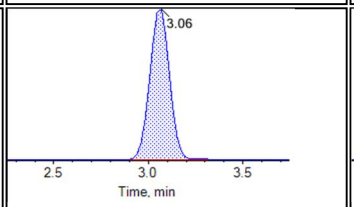


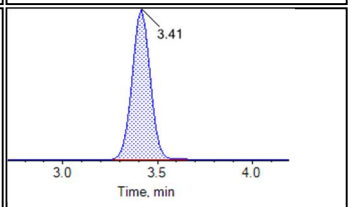
13C4-PFHpA



13C8-PFOA



13C9-PFNA



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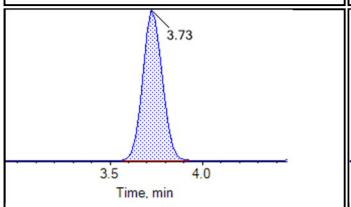
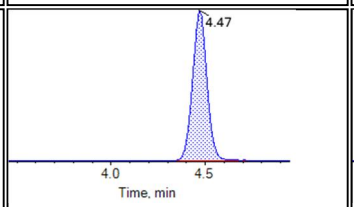
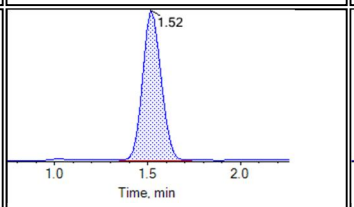


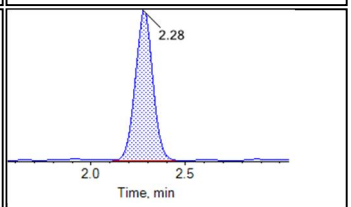
13C7-PFUnA



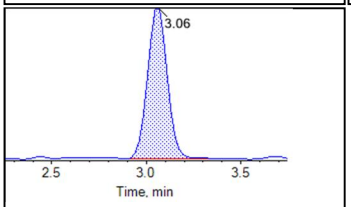
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

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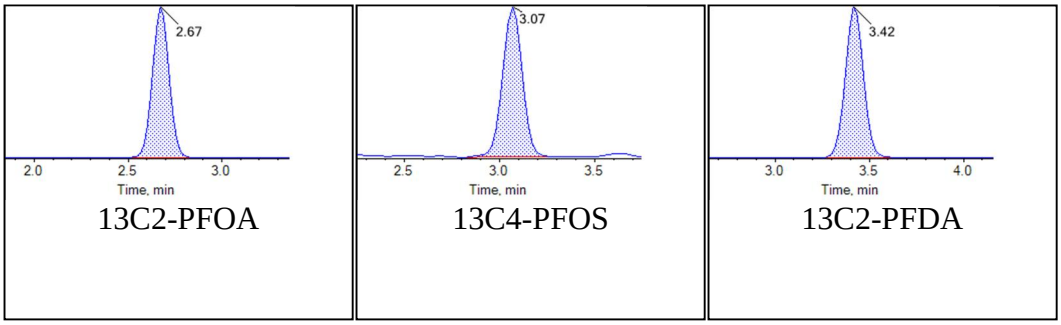
Internal Standards:



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Chromatogram Report

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Printed: 01/11/2018 8:39:52 AM

Sample Name	J8687-FS(0)	**Injection Vial**	39
Sample ID	VC-CS10-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T23:31:23	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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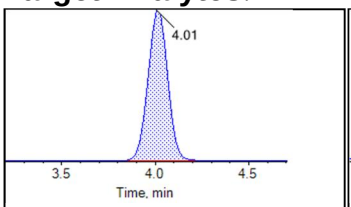
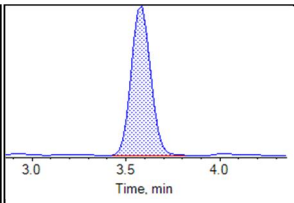
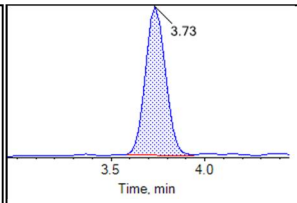


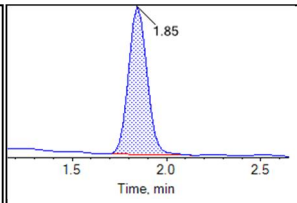
13C2-PFDoA



d3-MeFOSAA



d5-EtFOSAA



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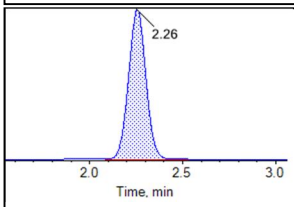
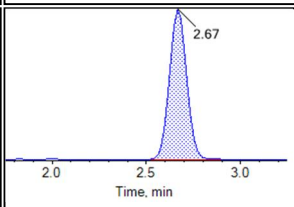
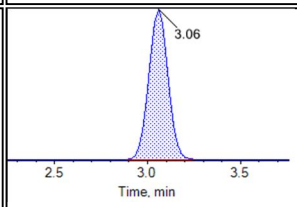


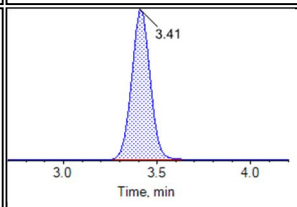
13C4-PFHpA



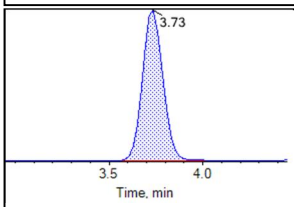
13C8-PFOA



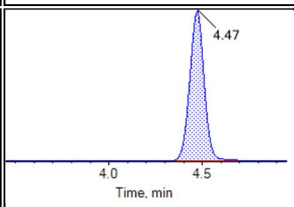
13C9-PFNA



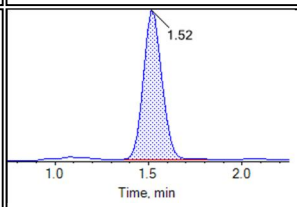
13C6-PFDA



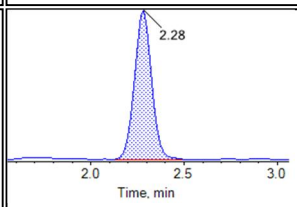
13C7-PFUnA



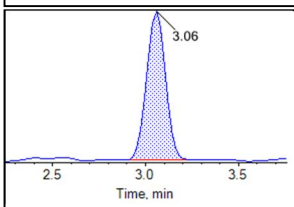
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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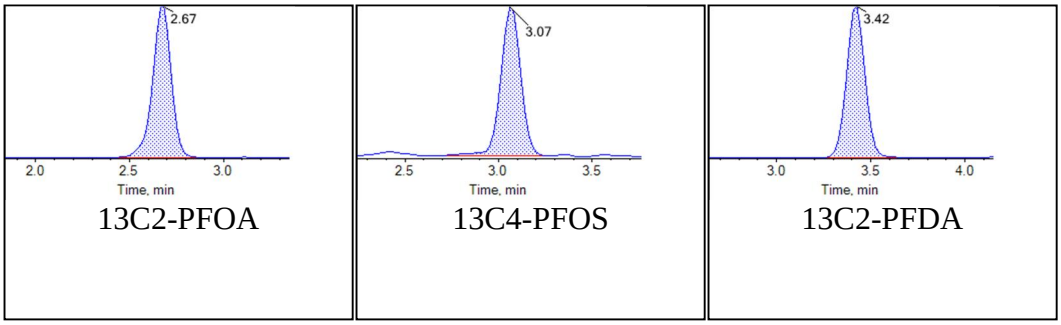
Printed: 01/11/2018 8:39:52 AM

Internal Standards:



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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:40:07 AM

Sample Name	KB77	**Injection Vial**	43
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:14:50	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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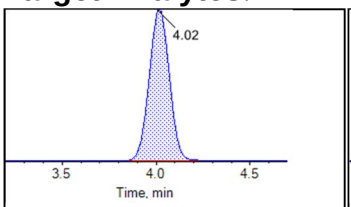
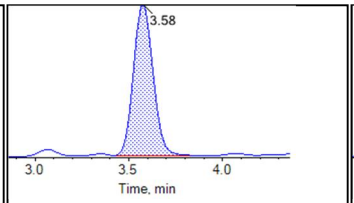
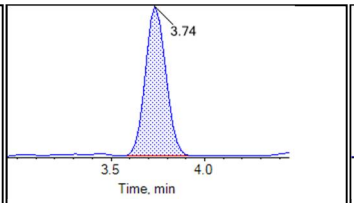


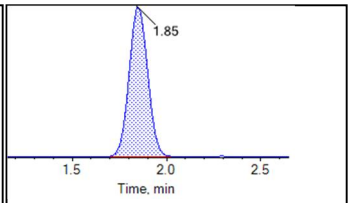
13C2-PFDoA



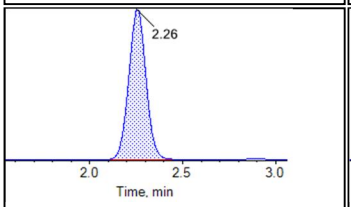
d3-MeFOSAA



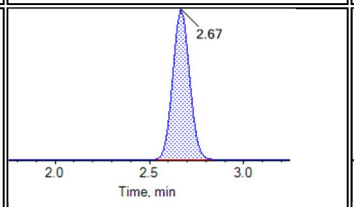
d5-EtFOSAA



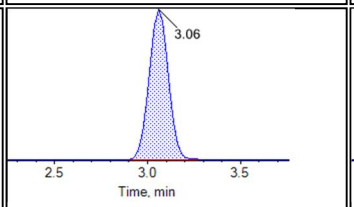
13C5-PFHxA



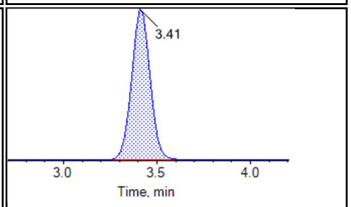
13C4-PFHpA



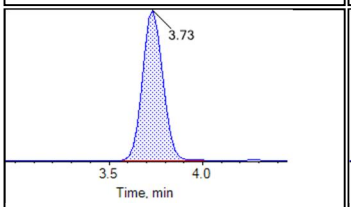
13C8-PFOA



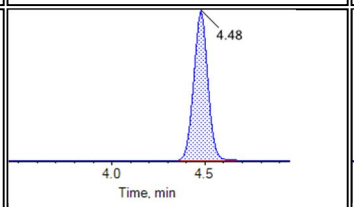
13C9-PFNA



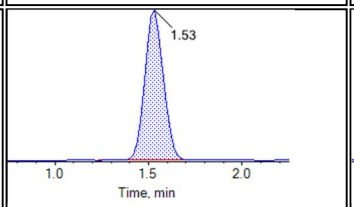
13C6-PFDA



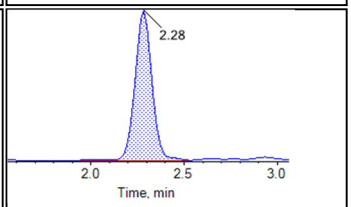
13C7-PFUnA



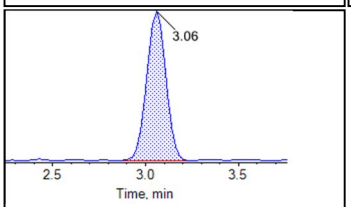
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

Created with Analyst Reporter
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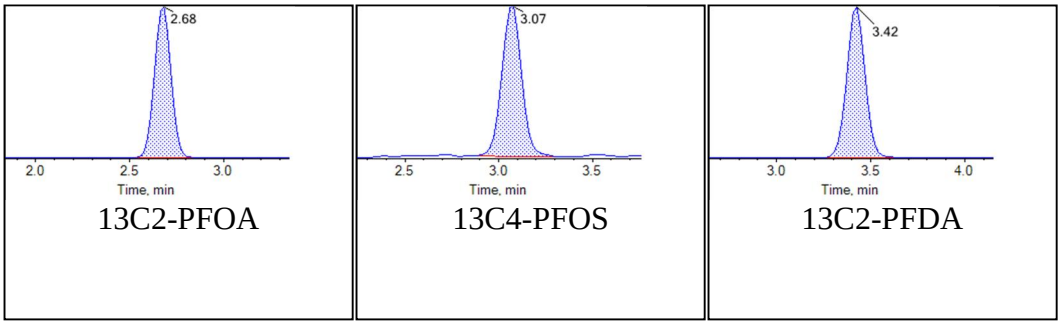
Internal Standards:



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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:40:11 AM

Sample Name	J8688-FS(0)	**Injection Vial**	44
Sample ID	VC-CS18-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:25:42	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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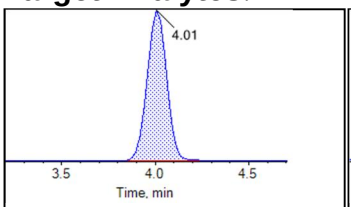
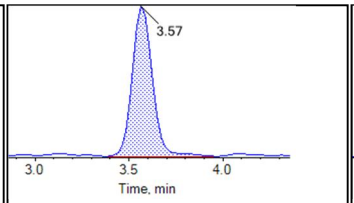
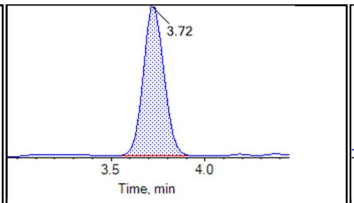


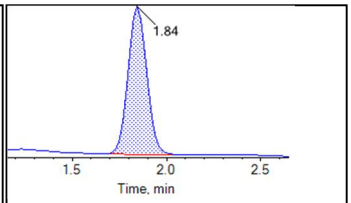
13C2-PFDoA



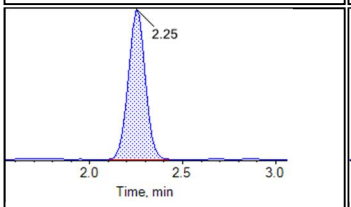
d3-MeFOSAA



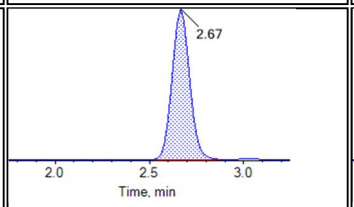
d5-EtFOSAA



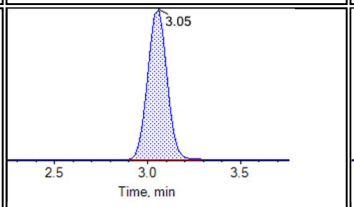
13C5-PFHxA



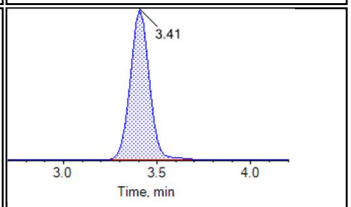
13C4-PFHpA



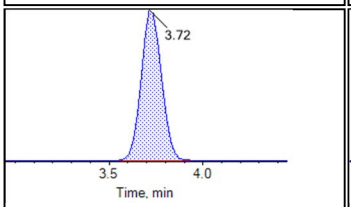
13C8-PFOA



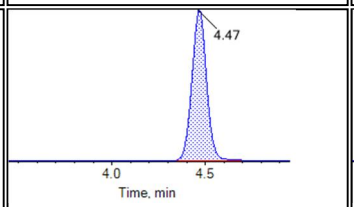
13C9-PFNA



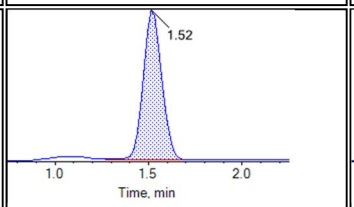
13C6-PFDA



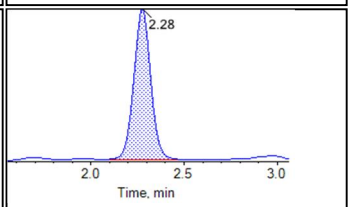
13C7-PFUnA



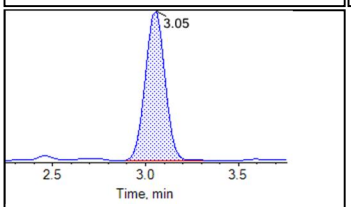
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

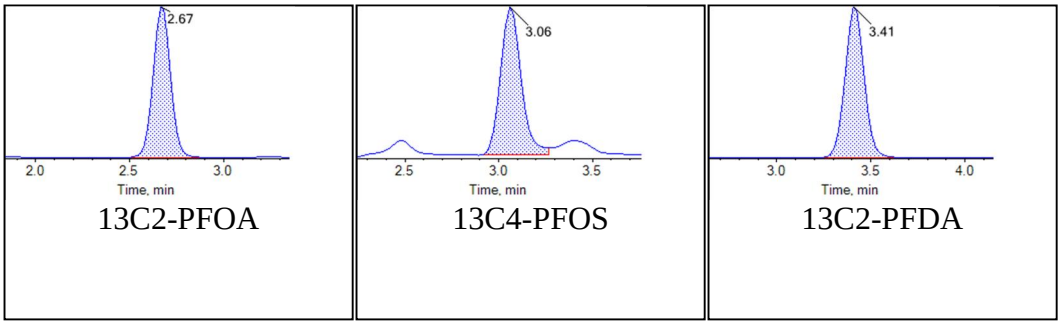


13C8-PFOS

Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:40:11 AM

Internal Standards:



BATTELLE

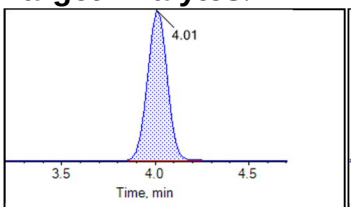
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:40:16 AM

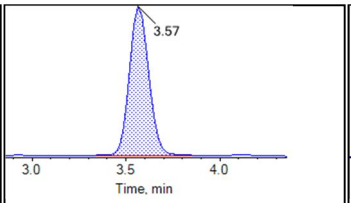
Sample Name	J8714-FS(0)	**Injection Vial**	45
Sample ID	VC-SO-FB11-10062018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:36:33	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

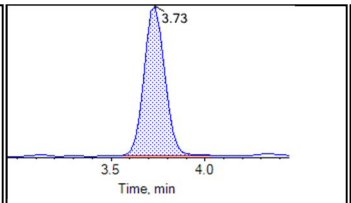
Target Analytes:



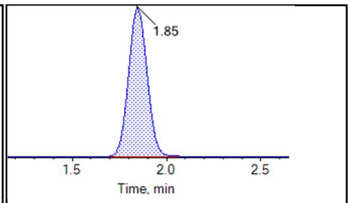
13C2-PFDoA



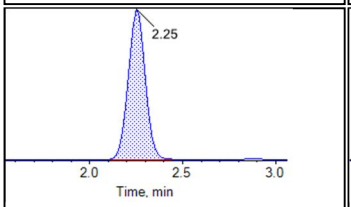
d3-MeFOSAA



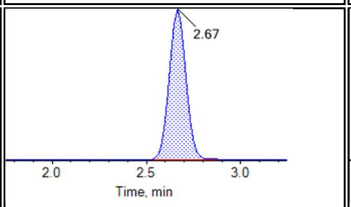
d5-EtFOSAA



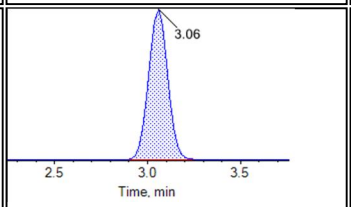
13C5-PFHxA



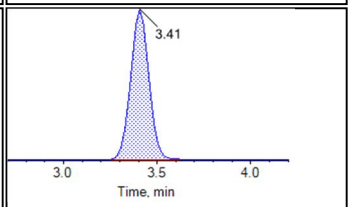
13C4-PFHpA



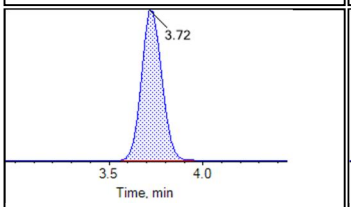
13C8-PFOA



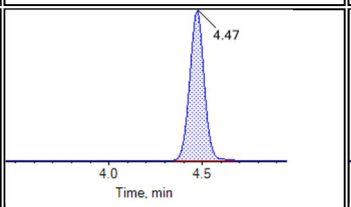
13C9-PFNA



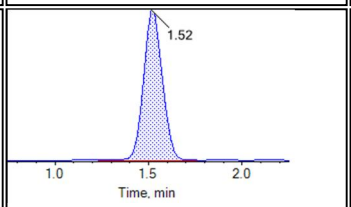
13C6-PFDA



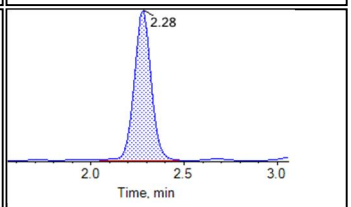
13C7-PFUnA



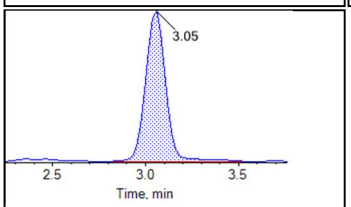
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

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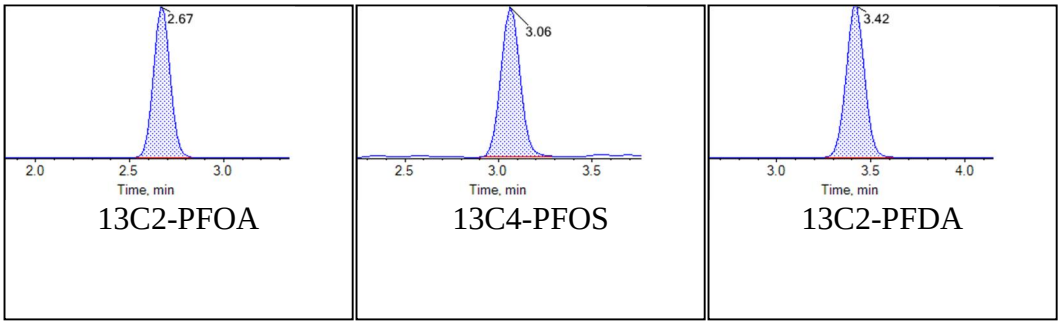
Internal Standards:



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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:40:21 AM

Sample Name	J8715-FS(0)	**Injection Vial**	46
Sample ID	VC-SO-EB11-10062018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:47:24	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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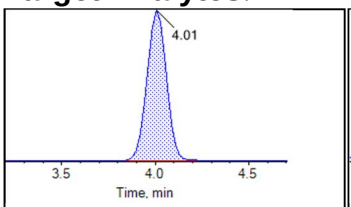
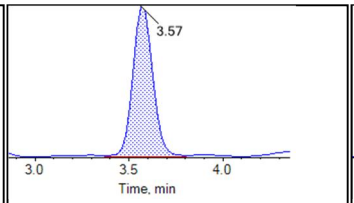


13C2-PFDoA



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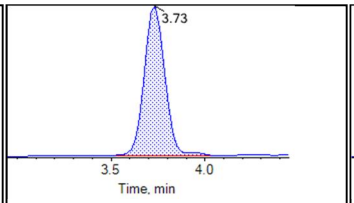
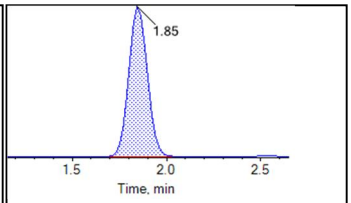


d5-EtFOSAA



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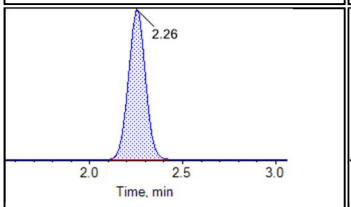

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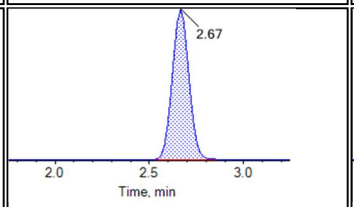
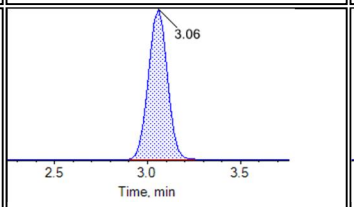
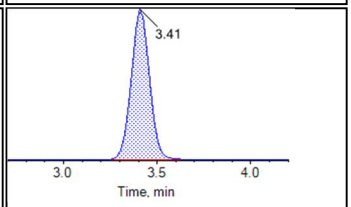


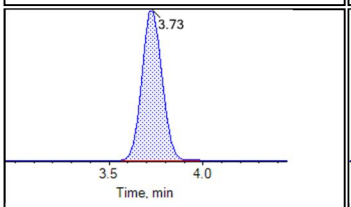
13C8-PFOA



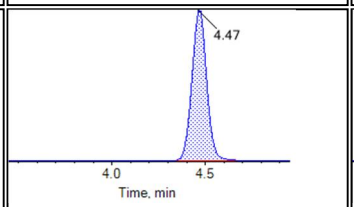
13C9-PFNA



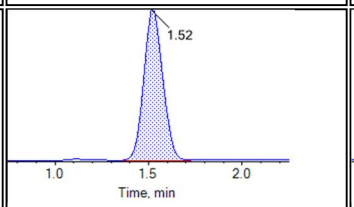
13C6-PFDA



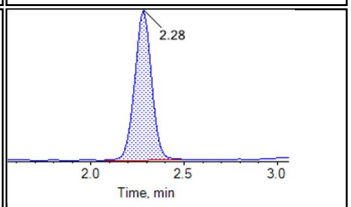
13C7-PFUnA



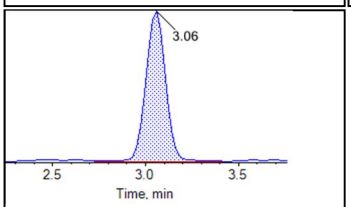
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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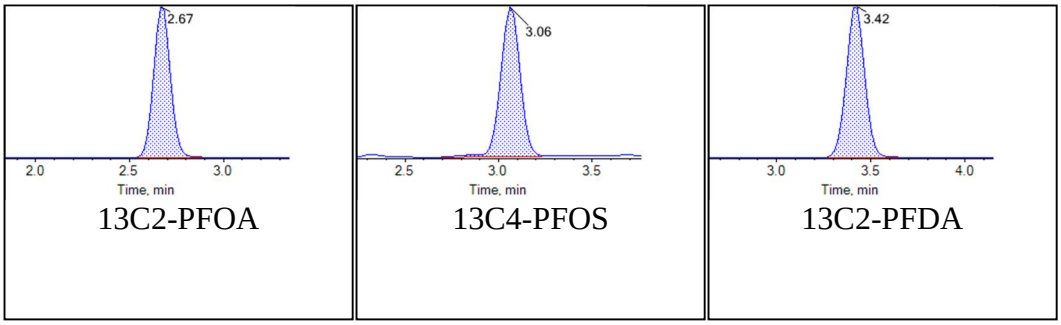
Internal Standards:



BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:40:25 AM

Sample Name	J8716-FS(0)	**Injection Vial**	47
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T00:58:16	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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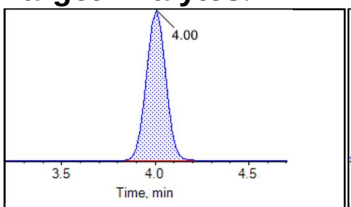

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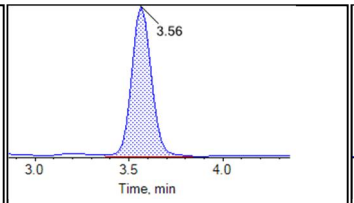
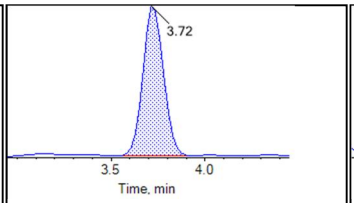
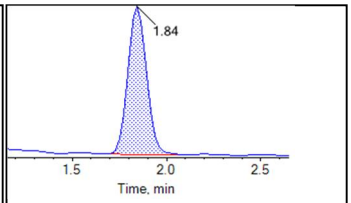


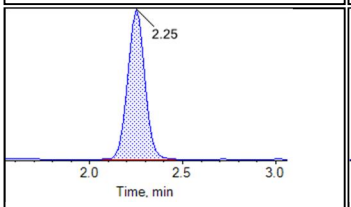
d3-MeFOSAA



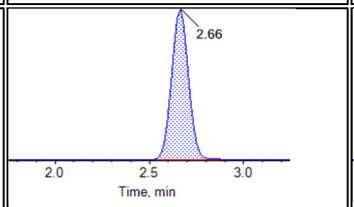
d5-EtFOSAA



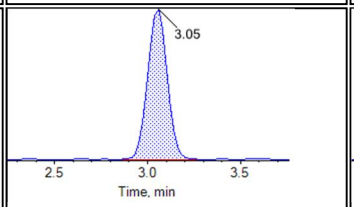
13C5-PFHxA



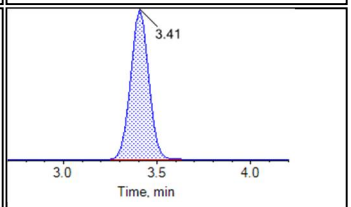
13C4-PFHpA



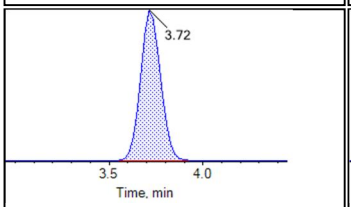
13C8-PFOA



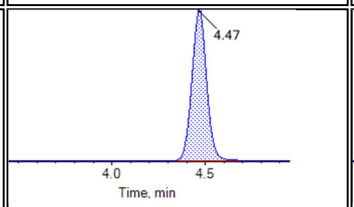
13C9-PFNA



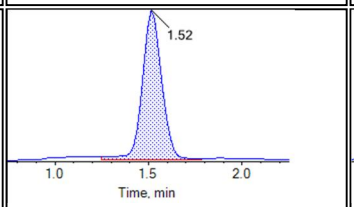
13C6-PFDA



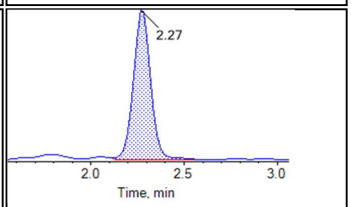
13C7-PFUnA



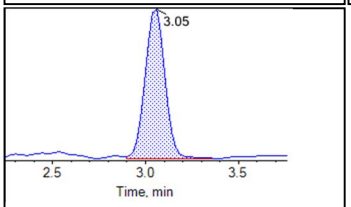
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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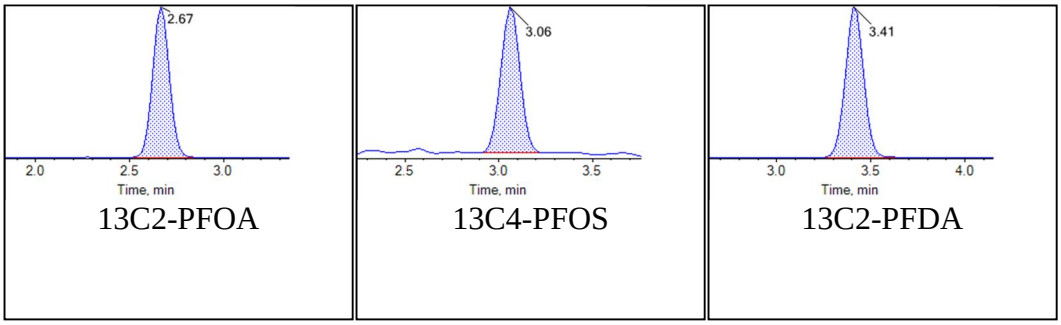

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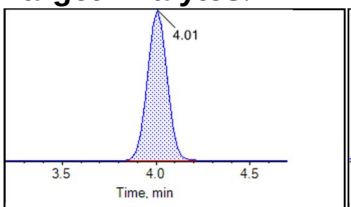
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:40:30 AM

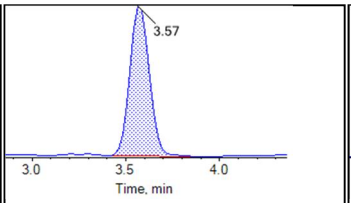
Sample Name	J8716-FS-D(3)	**Injection Vial**	48
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:09:09	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

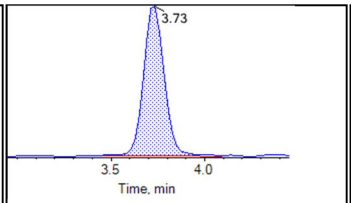
Target Analytes:



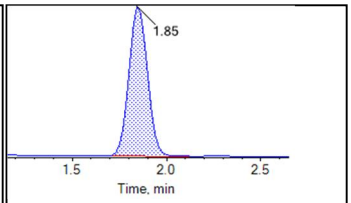
13C2-PFDoA



d3-MeFOSAA



d5-EtFOSAA



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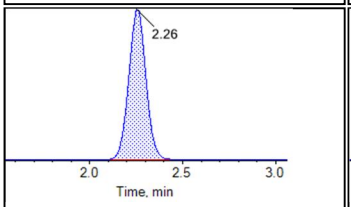
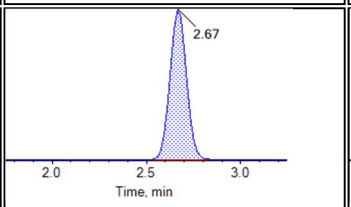
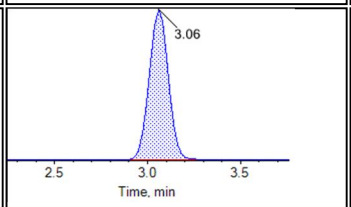


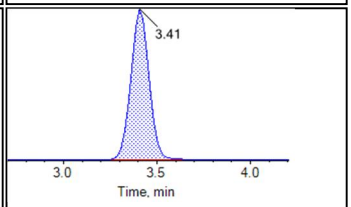
13C4-PFHpA



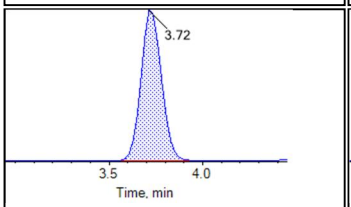
13C8-PFOA



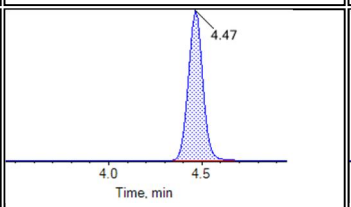
13C9-PFNA



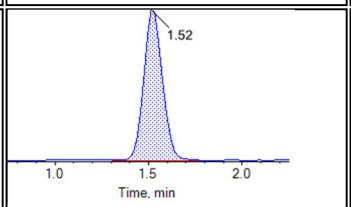
13C6-PFDA



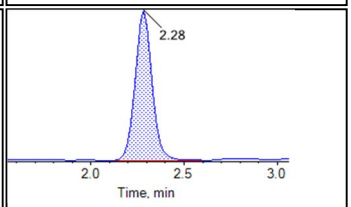
13C7-PFUnA



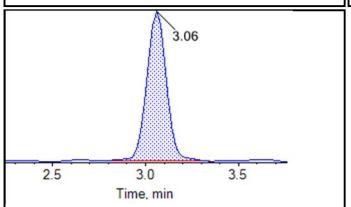
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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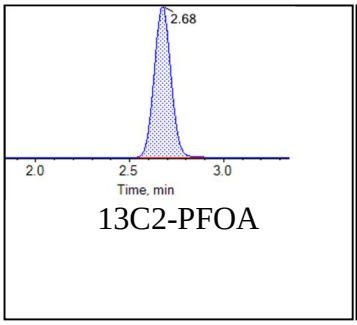
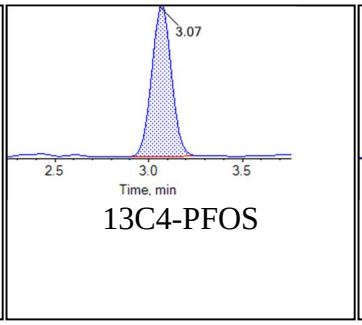
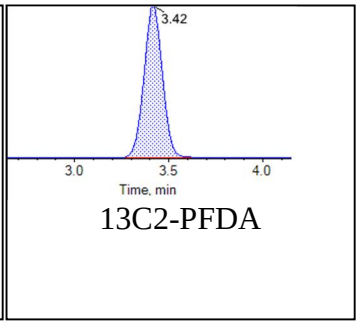


13C2-PFOA



13C4-PFOS



13C2-PFDA

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Chromatogram Report

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Sample Name	J8717-FS(0)	**Injection Vial**	49
Sample ID	VC-CS00-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:20:02	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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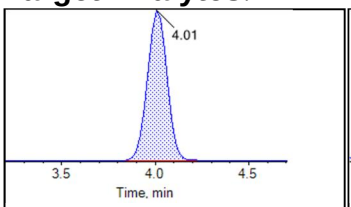
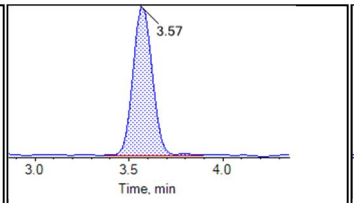
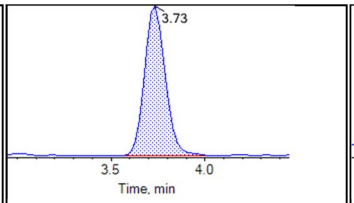


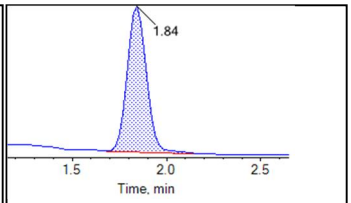
13C2-PFDoA



d3-MeFOSAA



d5-EtFOSAA



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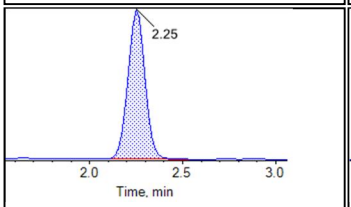

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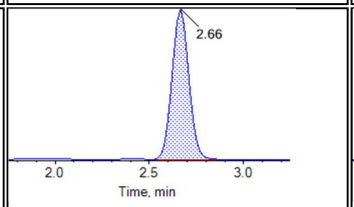
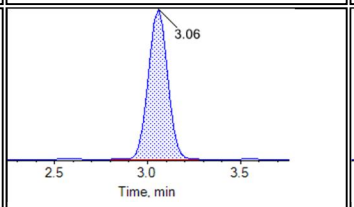
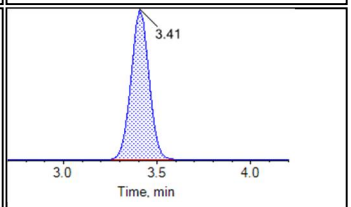


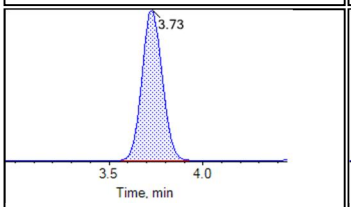
13C8-PFOA



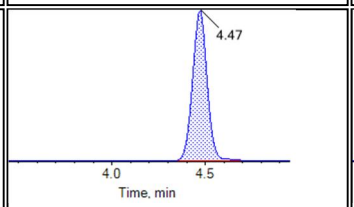
13C9-PFNA



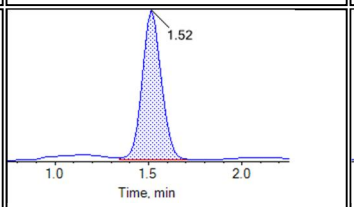
13C6-PFDA



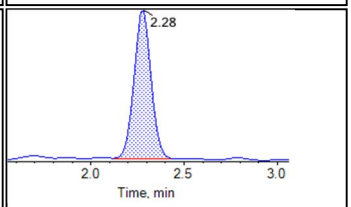
13C7-PFUnA



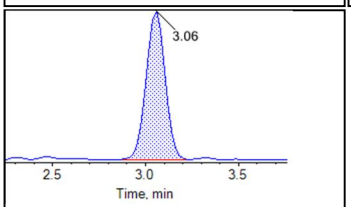
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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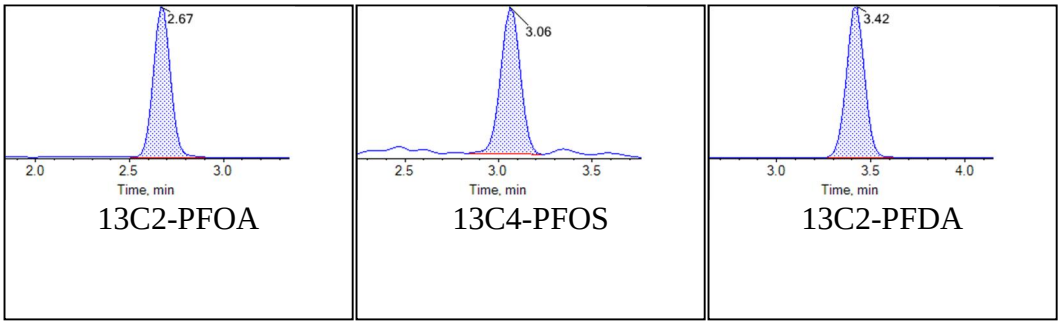

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Chromatogram Report

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Sample Name	J8718-FS(0)	**Injection Vial**	50
Sample ID	VC-CS00-DW02P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:30:53	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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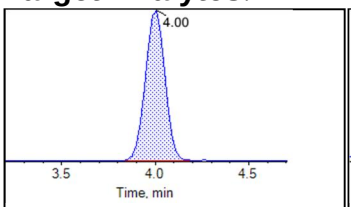

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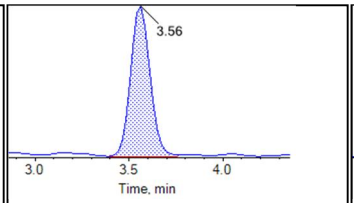
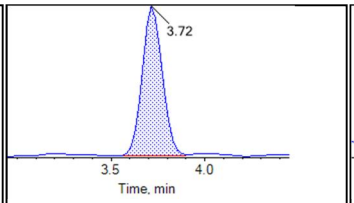
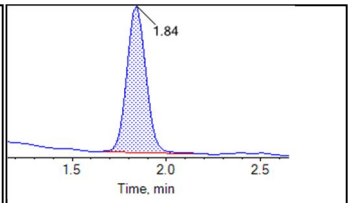


d3-MeFOSAA



d5-EtFOSAA



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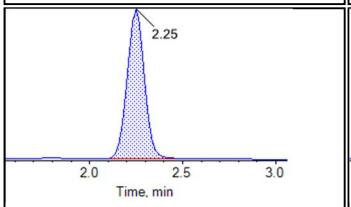

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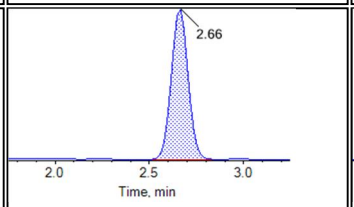
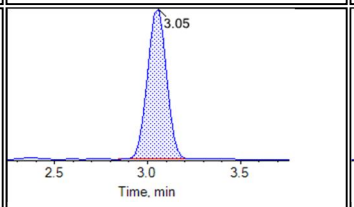
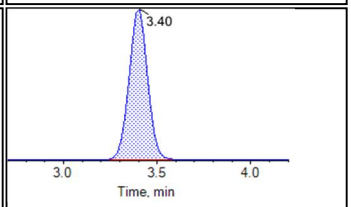


13C8-PFOA



13C9-PFNA



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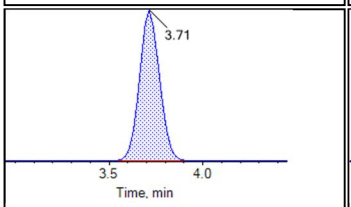
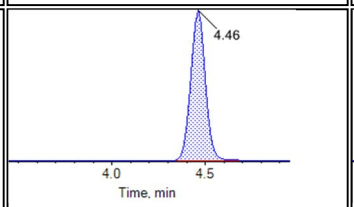
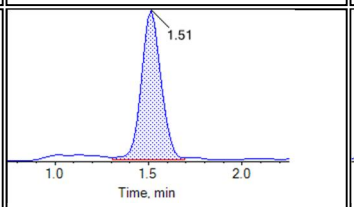


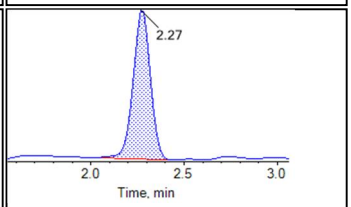
13C7-PFUnA



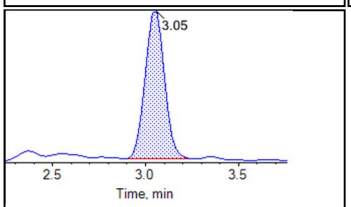
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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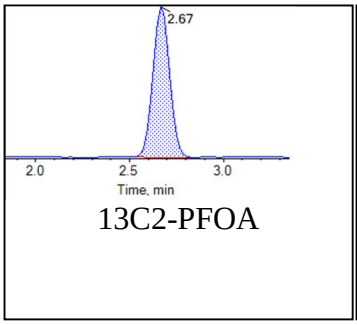

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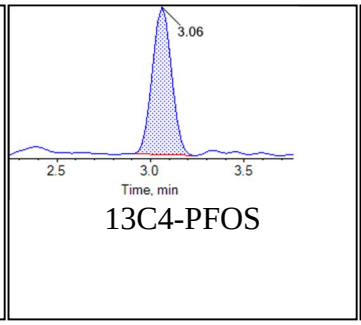

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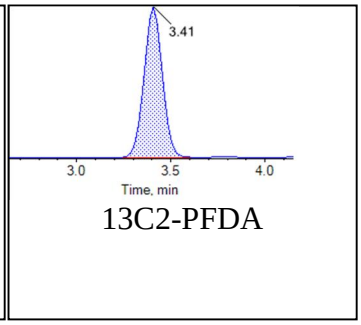

13C2-PFDA

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Sample Name	J8719-FS(0)	**Injection Vial**	51
Sample ID	VC-CS00-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T01:41:45	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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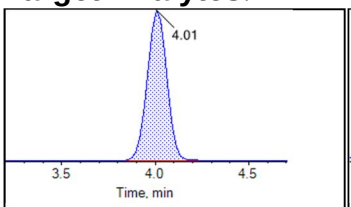
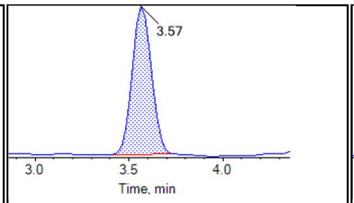
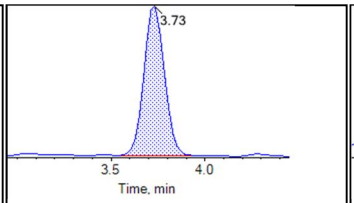


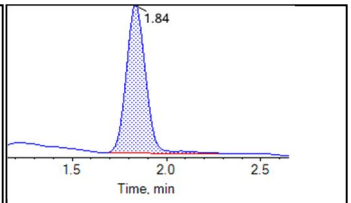
13C2-PFDoA



d3-MeFOSAA



d5-EtFOSAA



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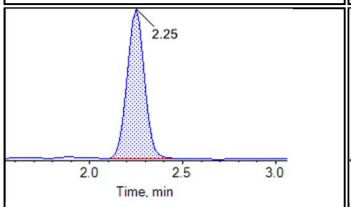

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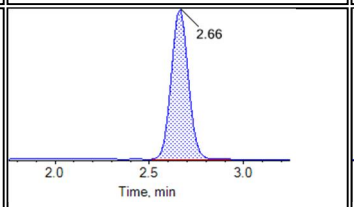
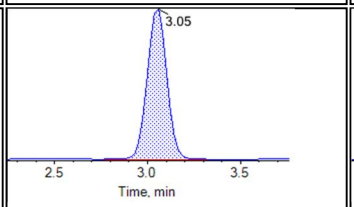
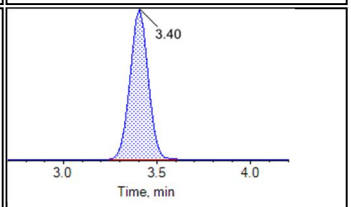


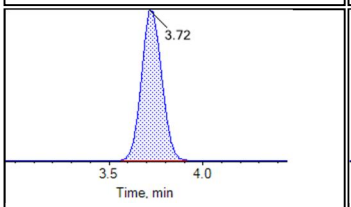
13C8-PFOA



13C9-PFNA



13C6-PFDA



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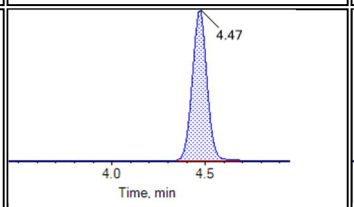
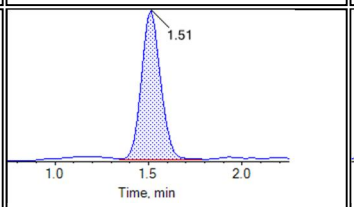
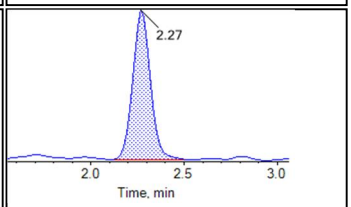


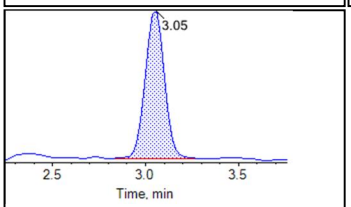
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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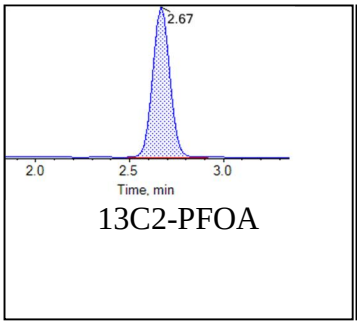
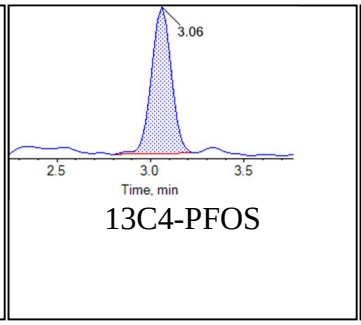
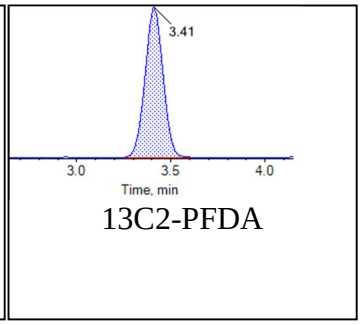


13C2-PFOA



13C4-PFOS



13C2-PFDA

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Chromatogram Report

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Printed: 01/11/2018 8:40:49 AM

Sample Name	KB76	**Injection Vial**	52
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:03:28	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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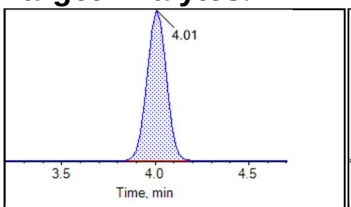
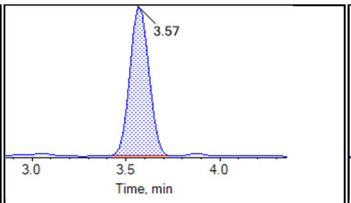
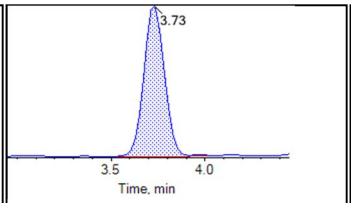


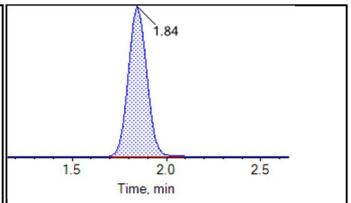
13C2-PFDoA



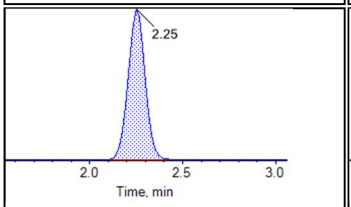
d3-MeFOSAA



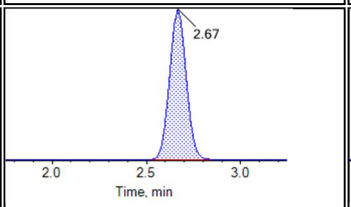
d5-EtFOSAA



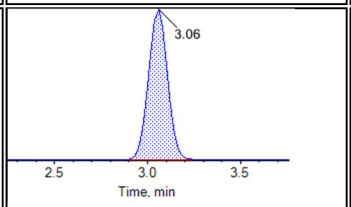
13C5-PFHxA



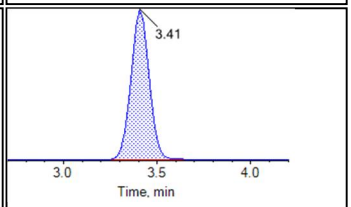
13C4-PFHpA



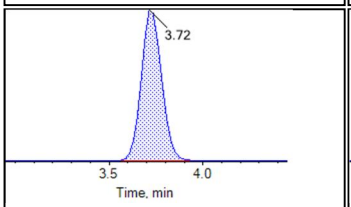
13C8-PFOA



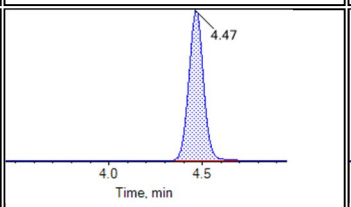
13C9-PFNA



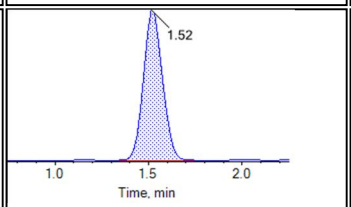
13C6-PFDA



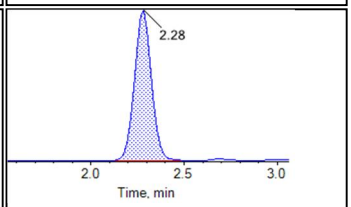
13C7-PFUnA



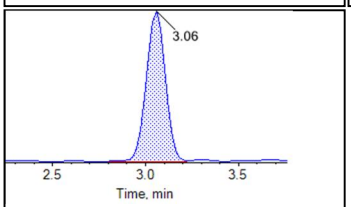
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

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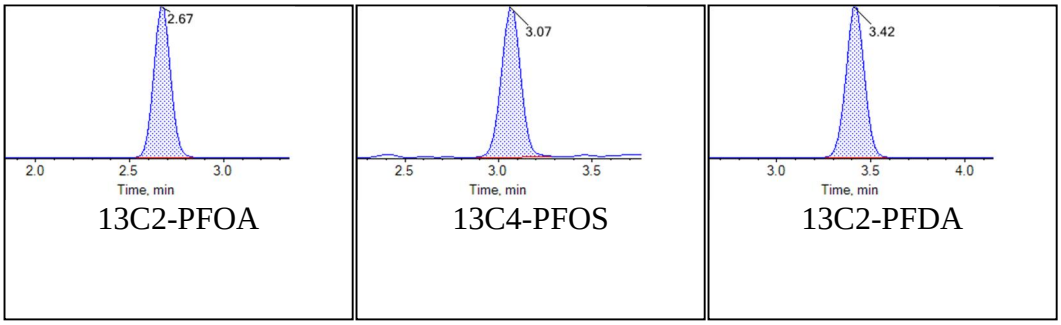
Printed: 01/11/2018 8:40:49 AM

Internal Standards:



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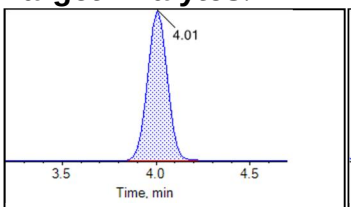
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:40:54 AM

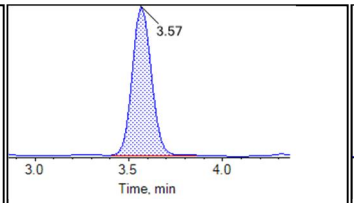
Sample Name	J8720-FS(0)	**Injection Vial**	53
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:14:19	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

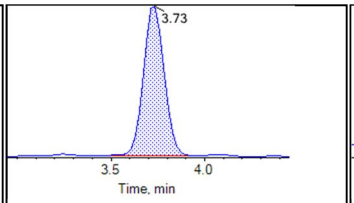
Target Analytes:



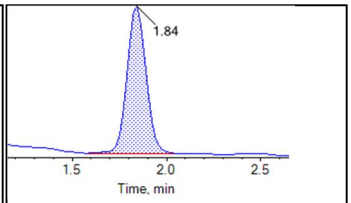
13C2-PFDoA



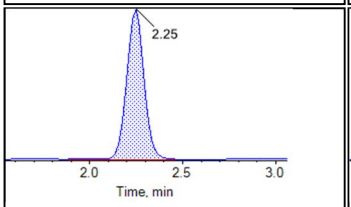
d3-MeFOSAA



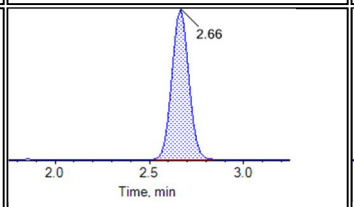
d5-EtFOSAA



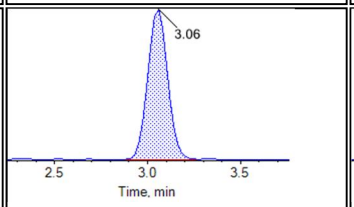
13C5-PFHxA



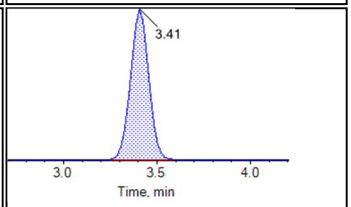
13C4-PFHpA



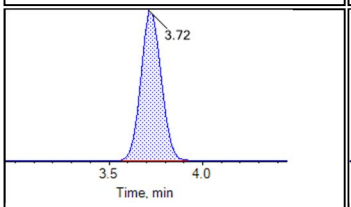
13C8-PFOA



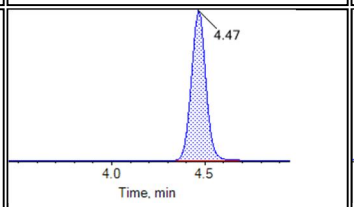
13C9-PFNA



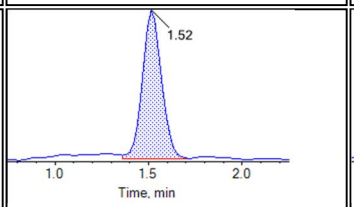
13C6-PFDA



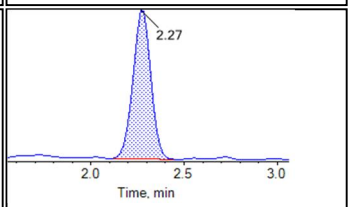
13C7-PFUnA



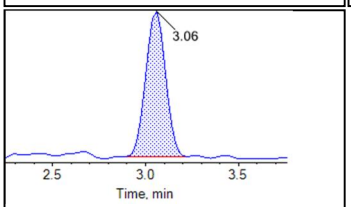
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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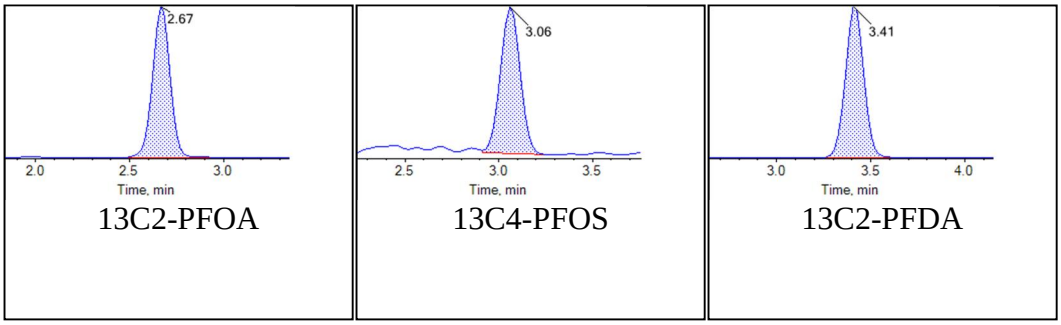
Printed: 01/11/2018 8:40:54 AM

Internal Standards:



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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:40:59 AM

Sample Name	J8720-FS-D(3)	**Injection Vial**	54
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:25:10	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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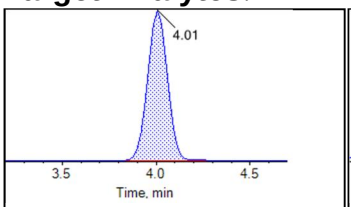
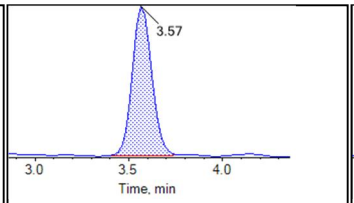
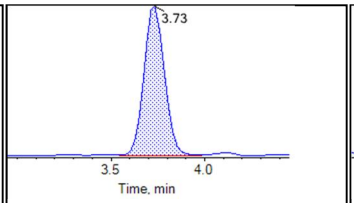


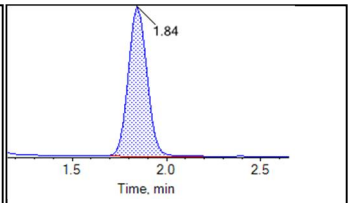
13C2-PFDoA



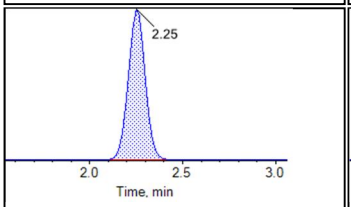
d3-MeFOSAA



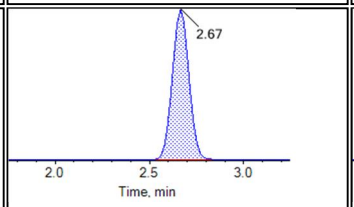
d5-EtFOSAA



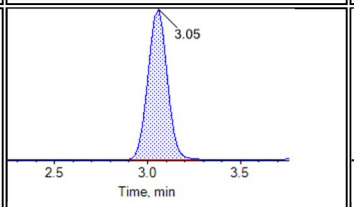
13C5-PFHxA



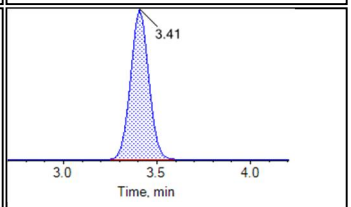
13C4-PFHpA



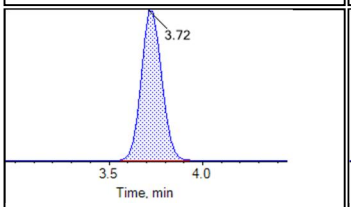
13C8-PFOA



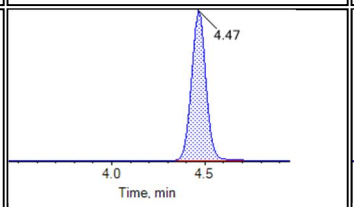
13C9-PFNA



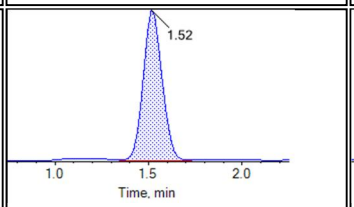
13C6-PFDA



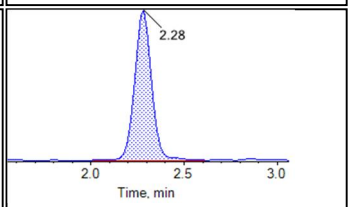
13C7-PFUnA



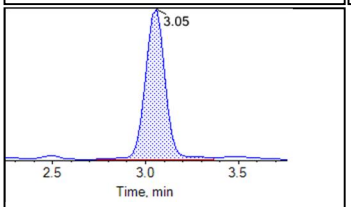
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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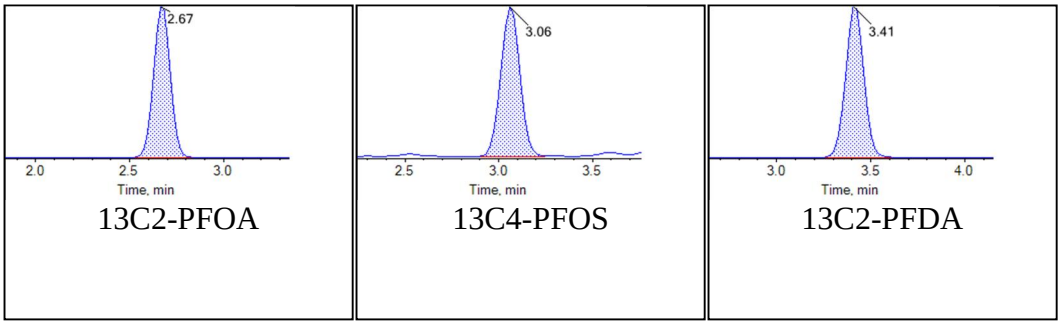
Printed: 01/11/2018 8:40:59 AM

Internal Standards:



BATTELLE

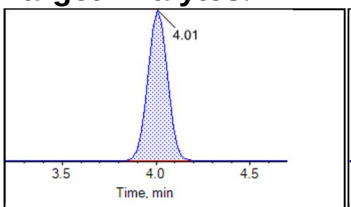
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:41:05 AM

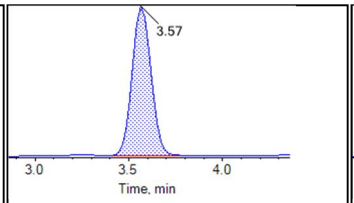
Sample Name	J8720-FS-D(5)	**Injection Vial**	1
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:36:01	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

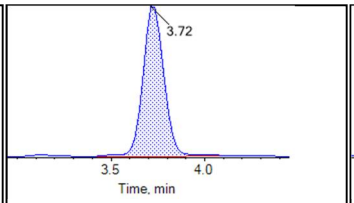
Target Analytes:



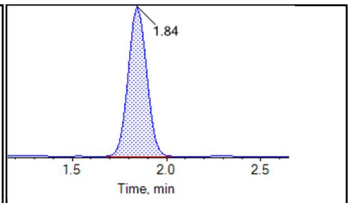
13C2-PFDoA



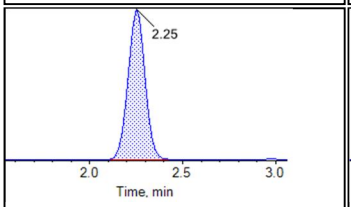
d3-MeFOSAA



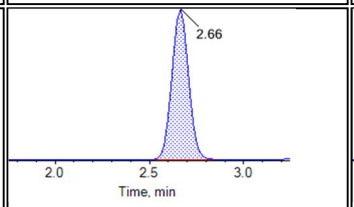
d5-EtFOSAA



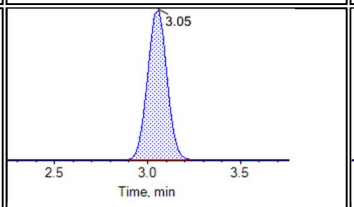
13C5-PFHxA



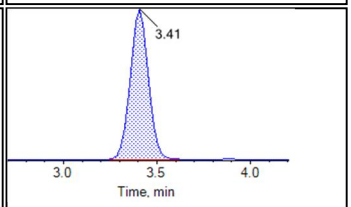
13C4-PFHpA



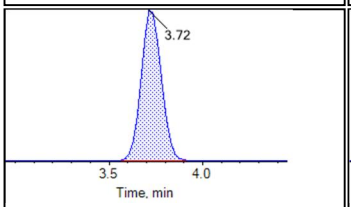
13C8-PFOA



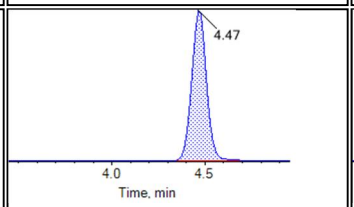
13C9-PFNA



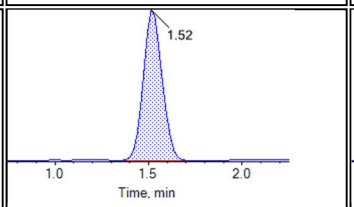
13C6-PFDA



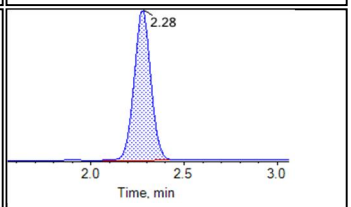
13C7-PFUnA



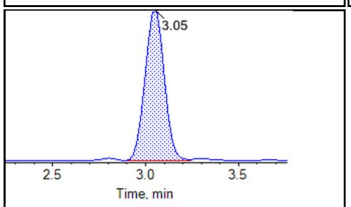
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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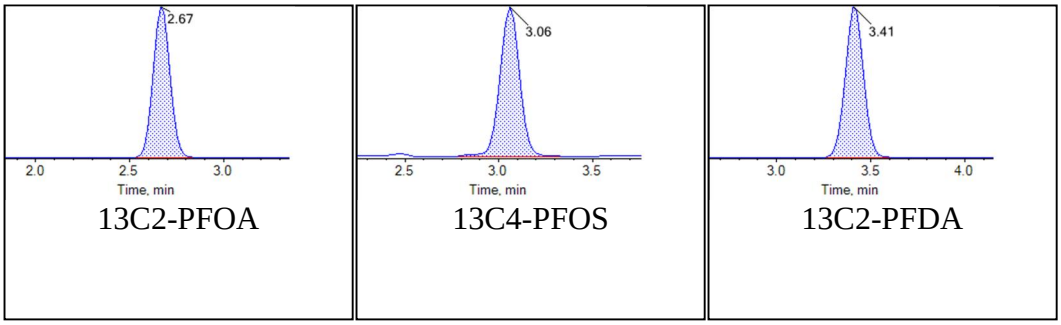
Internal Standards:



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Chromatogram Report

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Printed: 01/11/2018 8:41:10 AM

Sample Name	J8721-FS(0)	**Injection Vial**	2
Sample ID	VC-CS00-DW05-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:46:54	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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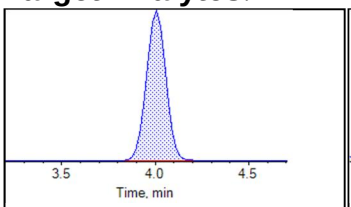
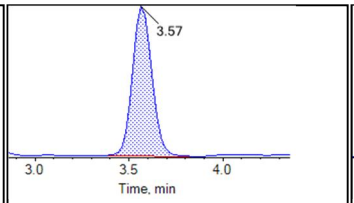


13C2-PFDoA



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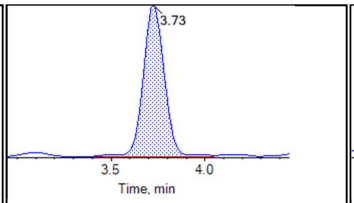
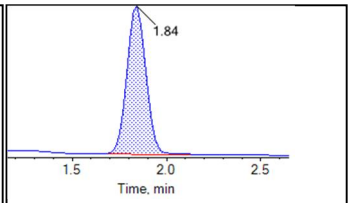


d5-EtFOSAA



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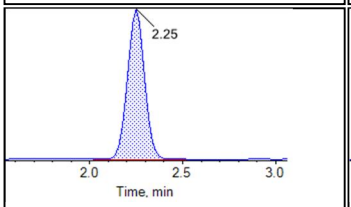

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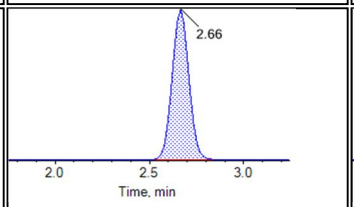
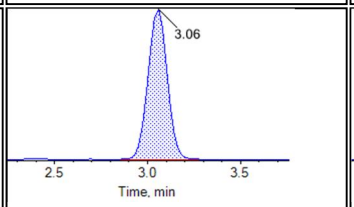
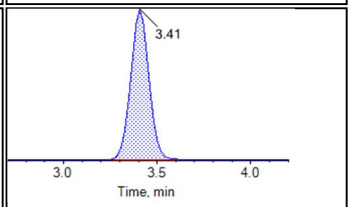


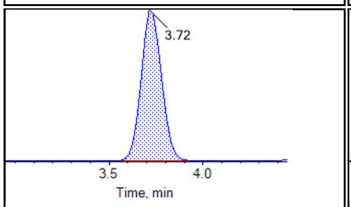
13C8-PFOA



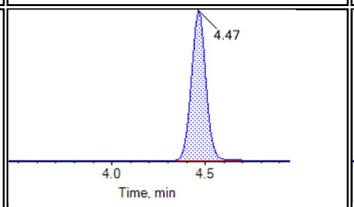
13C9-PFNA



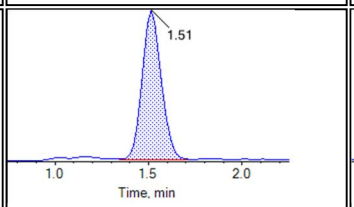
13C6-PFDA



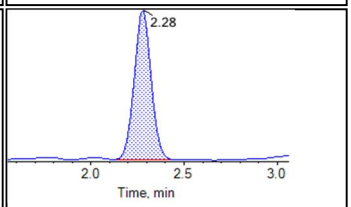
13C7-PFUnA



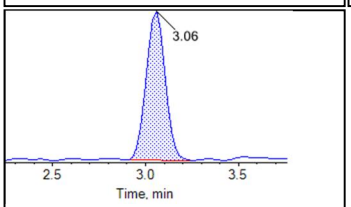
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Chromatogram Report

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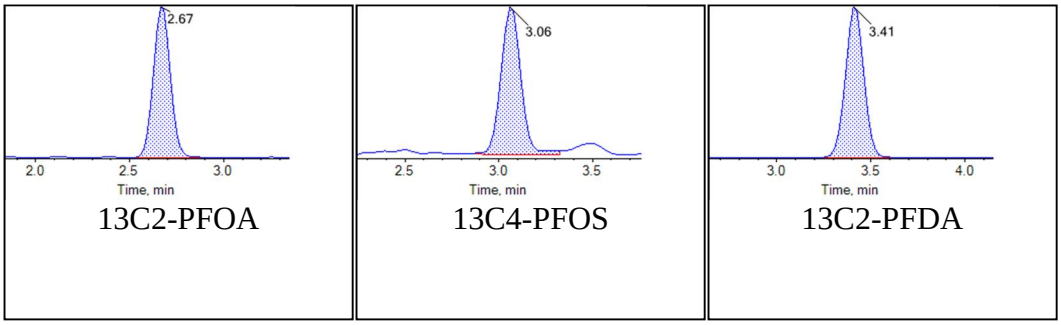

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Chromatogram Report

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Sample Name	J8722-FS(0)	**Injection Vial**	3
Sample ID		**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T02:57:47	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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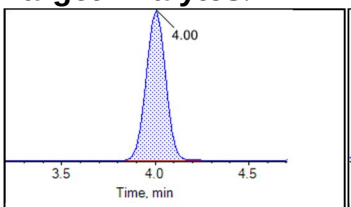
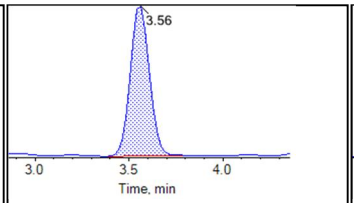
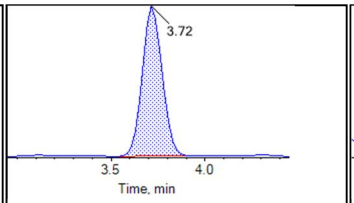


13C2-PFDoA



d3-MeFOSAA



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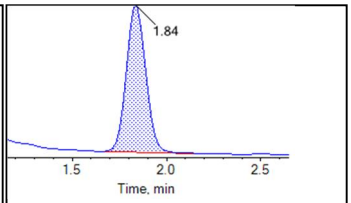

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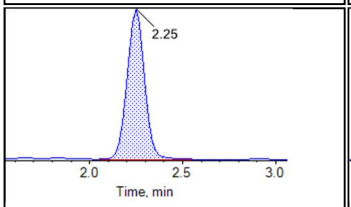
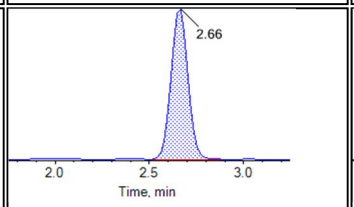
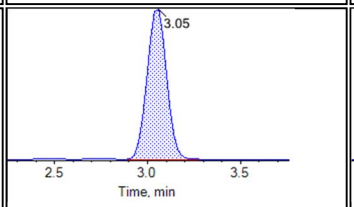


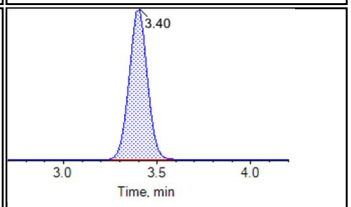
13C4-PFHpA



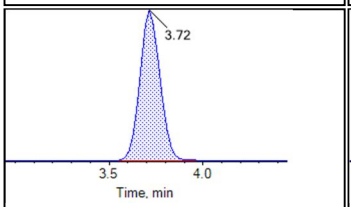
13C8-PFOA



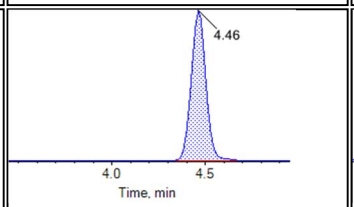
13C9-PFNA



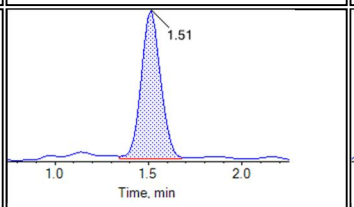
13C6-PFDA



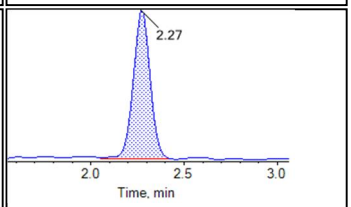
13C7-PFUnA



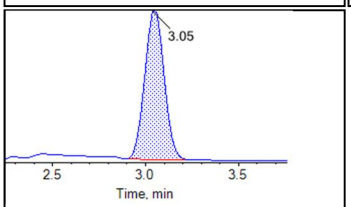
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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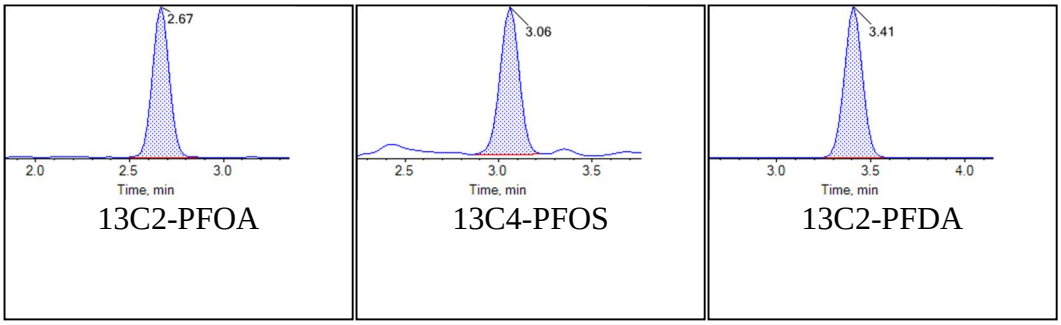

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Sample Name	KB77	**Injection Vial**	5
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T03:19:32	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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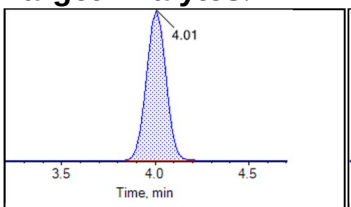
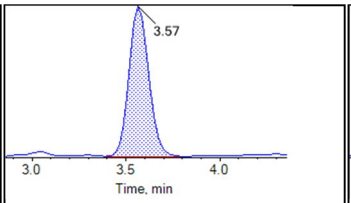
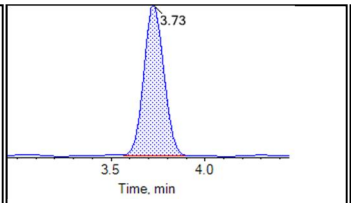


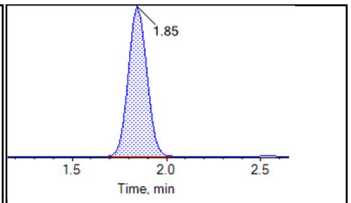
13C2-PFDoA



d3-MeFOSAA



d5-EtFOSAA



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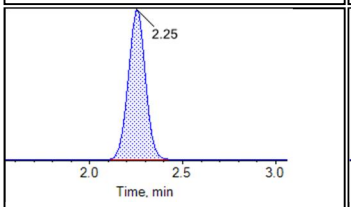
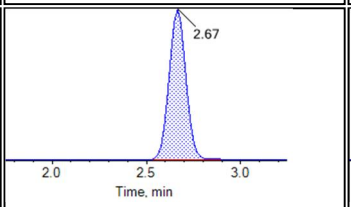
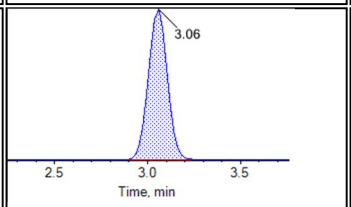


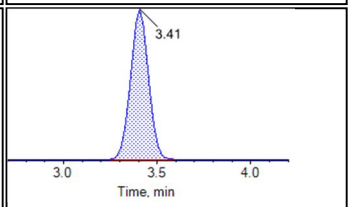
13C4-PFHpA



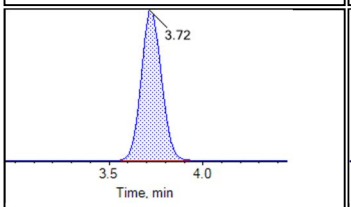
13C8-PFOA



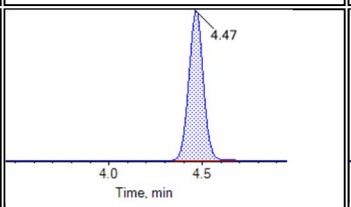
13C9-PFNA



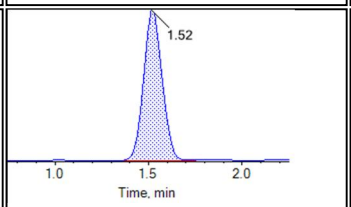
13C6-PFDA



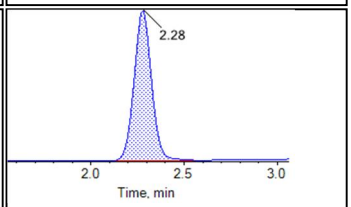
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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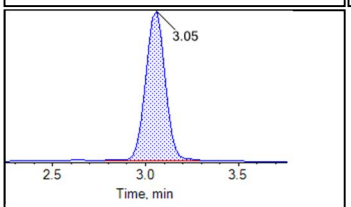

13C8-PFOS

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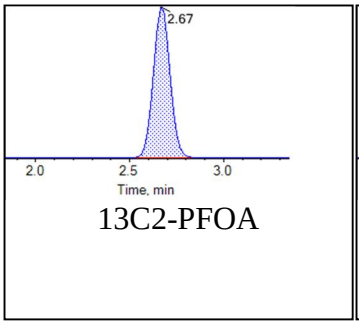
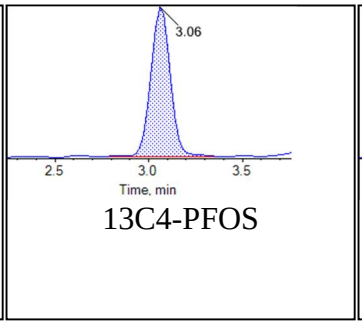
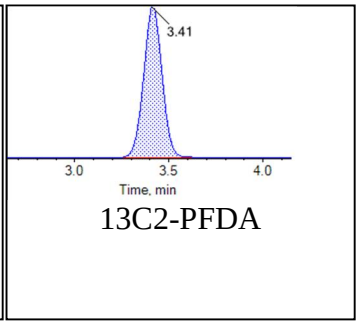


13C2-PFOA



13C4-PFOS



13C2-PFDA

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Chromatogram Report

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Printed: 01/11/2018 8:52:22 AM

Sample Name	KB75 ISC	**Injection Vial**	2
Sample ID	ISC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T11:41:21	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Chromatograms

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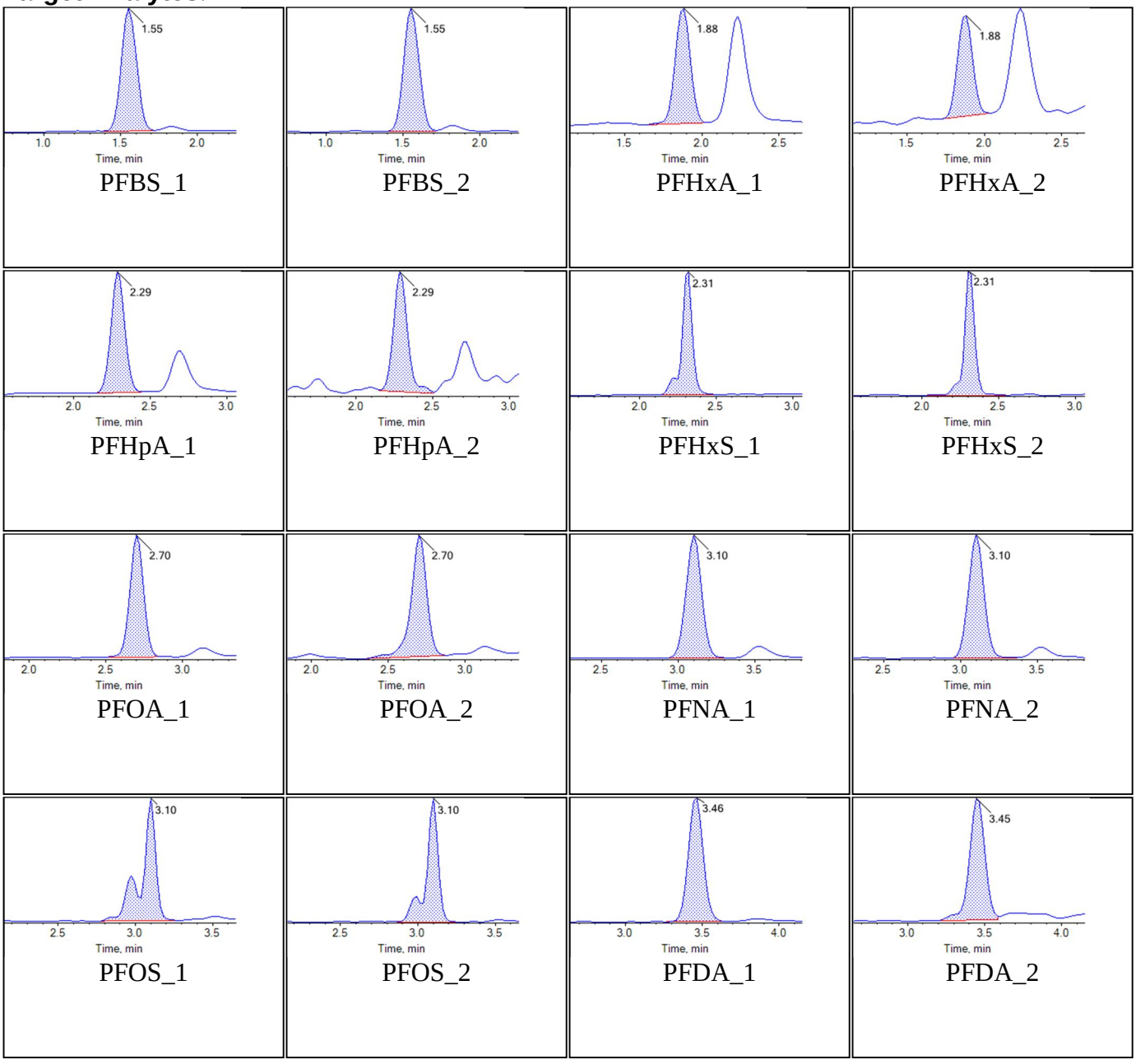

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Chromatogram Report

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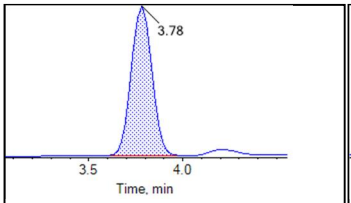

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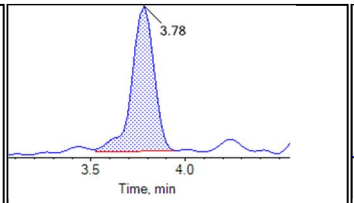

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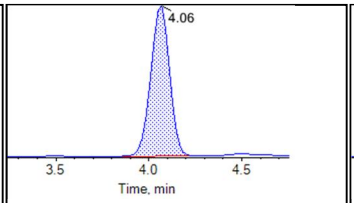

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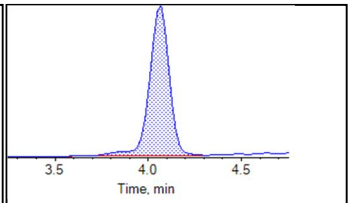
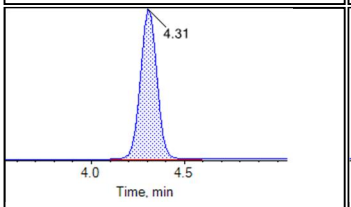
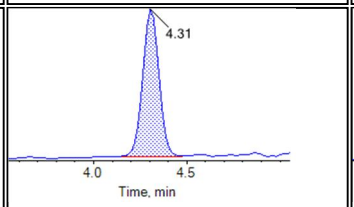


PFDoA_2



PFTrDA_1



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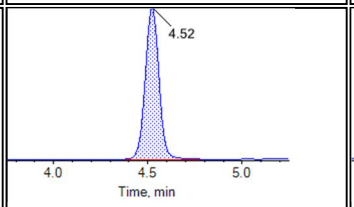

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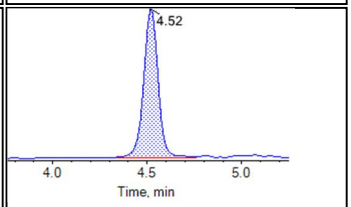

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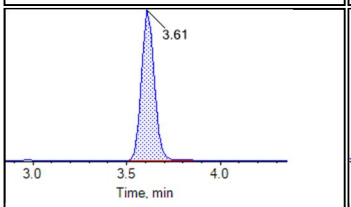

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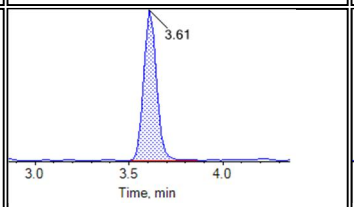

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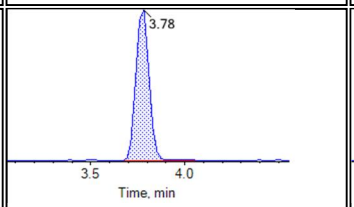

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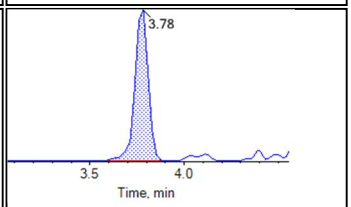

NEtFOSAA_2

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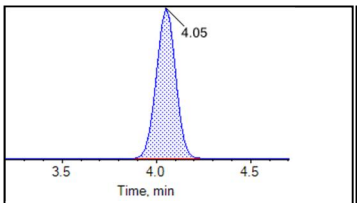
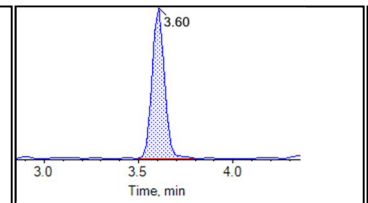
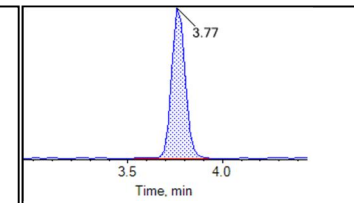


13C2-PFDoA



d3-MeFOSAA



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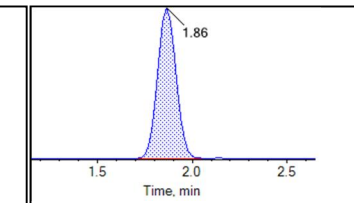

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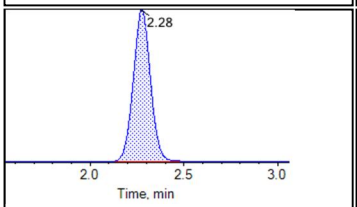

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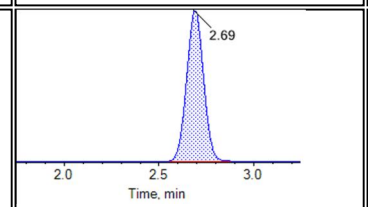

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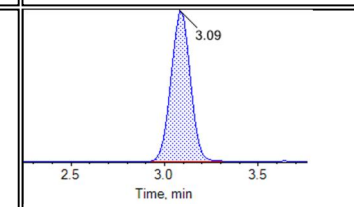

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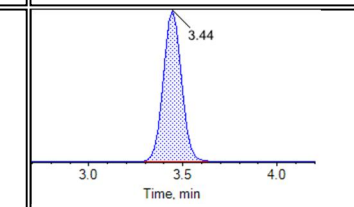

13C6-PFDA

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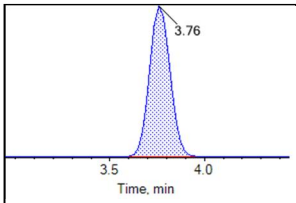
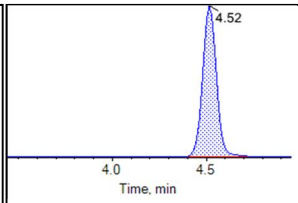
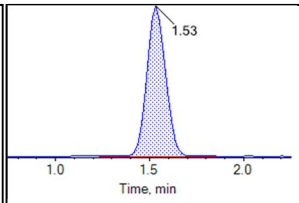


13C7-PFUnA



13C2-PFTeDA



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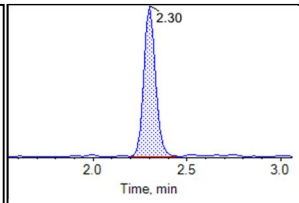

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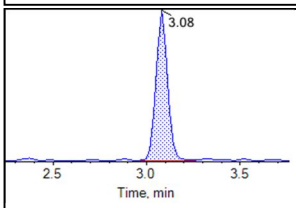

13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:52:28 AM

Sample Name	KB80 IB	**Injection Vial**	3
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T11:52:13	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Chromatograms

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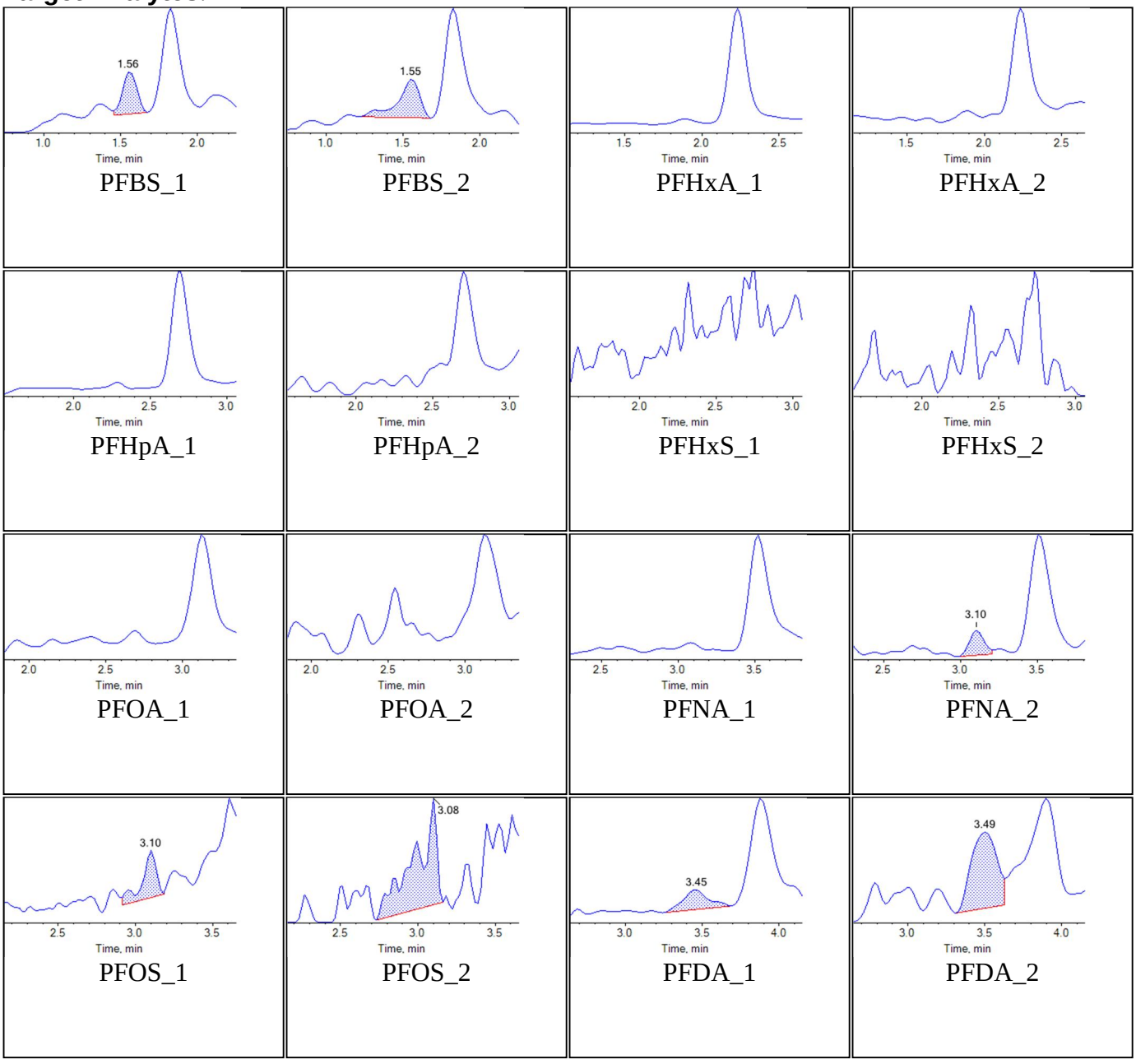

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Chromatogram Report

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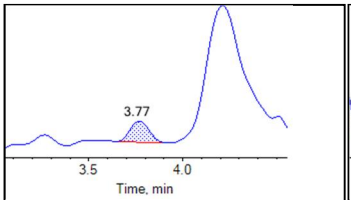
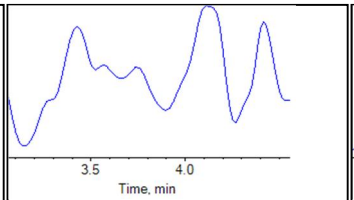
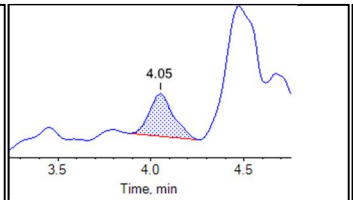


PFUnA_1



PFUnA_2



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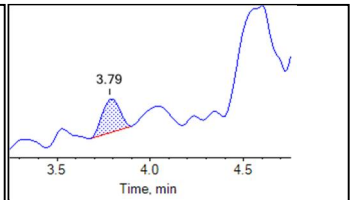
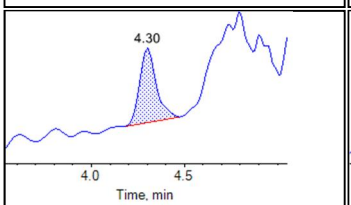


PFDoA_2



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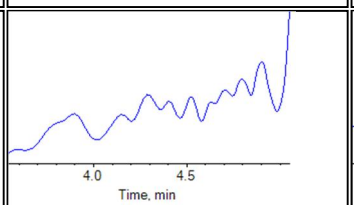

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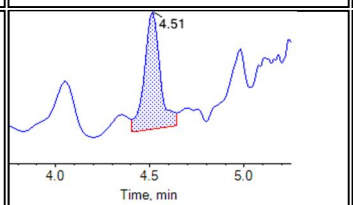

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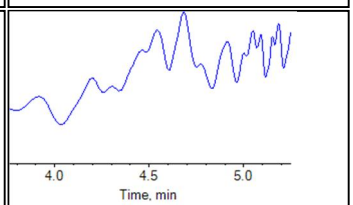

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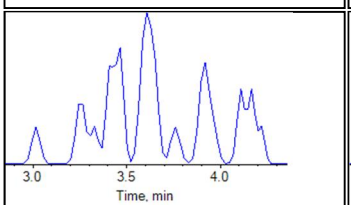

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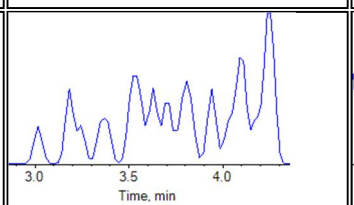

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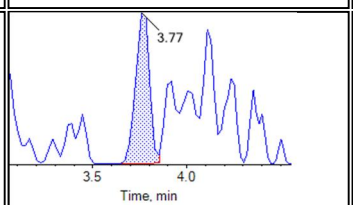

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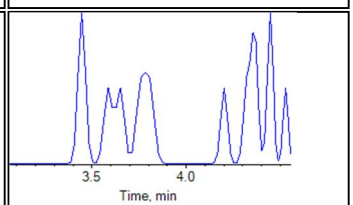
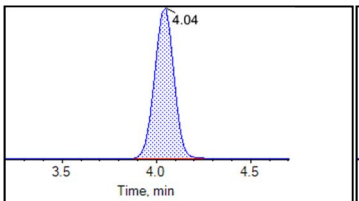


NEtFOSAA_2

Internal Standards:



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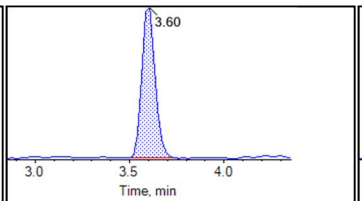
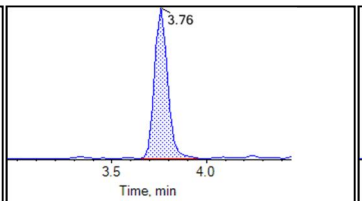
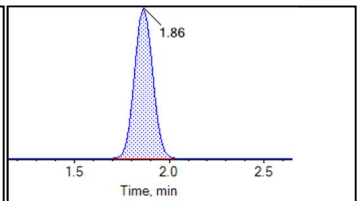


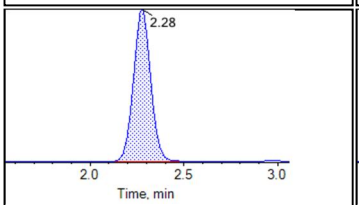
d3-MeFOSAA



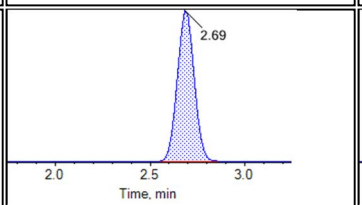
d5-EtFOSAA



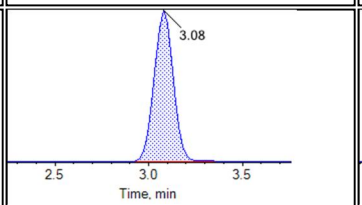
13C5-PFHxA



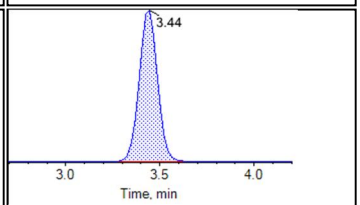
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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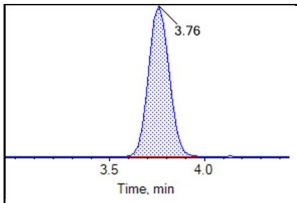
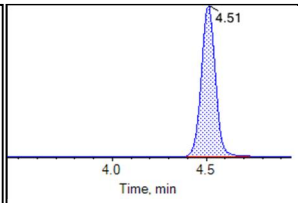
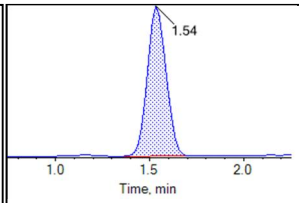


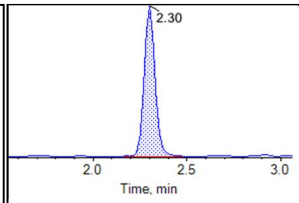
13C7-PFUnA



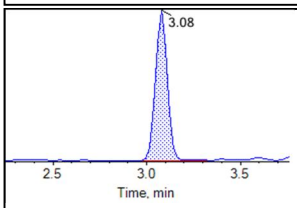
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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Sample Name	J8722-FS-D(3)	**Injection Vial**	7
Sample ID	VC-CS00-DW06-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:35:44	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Chromatograms

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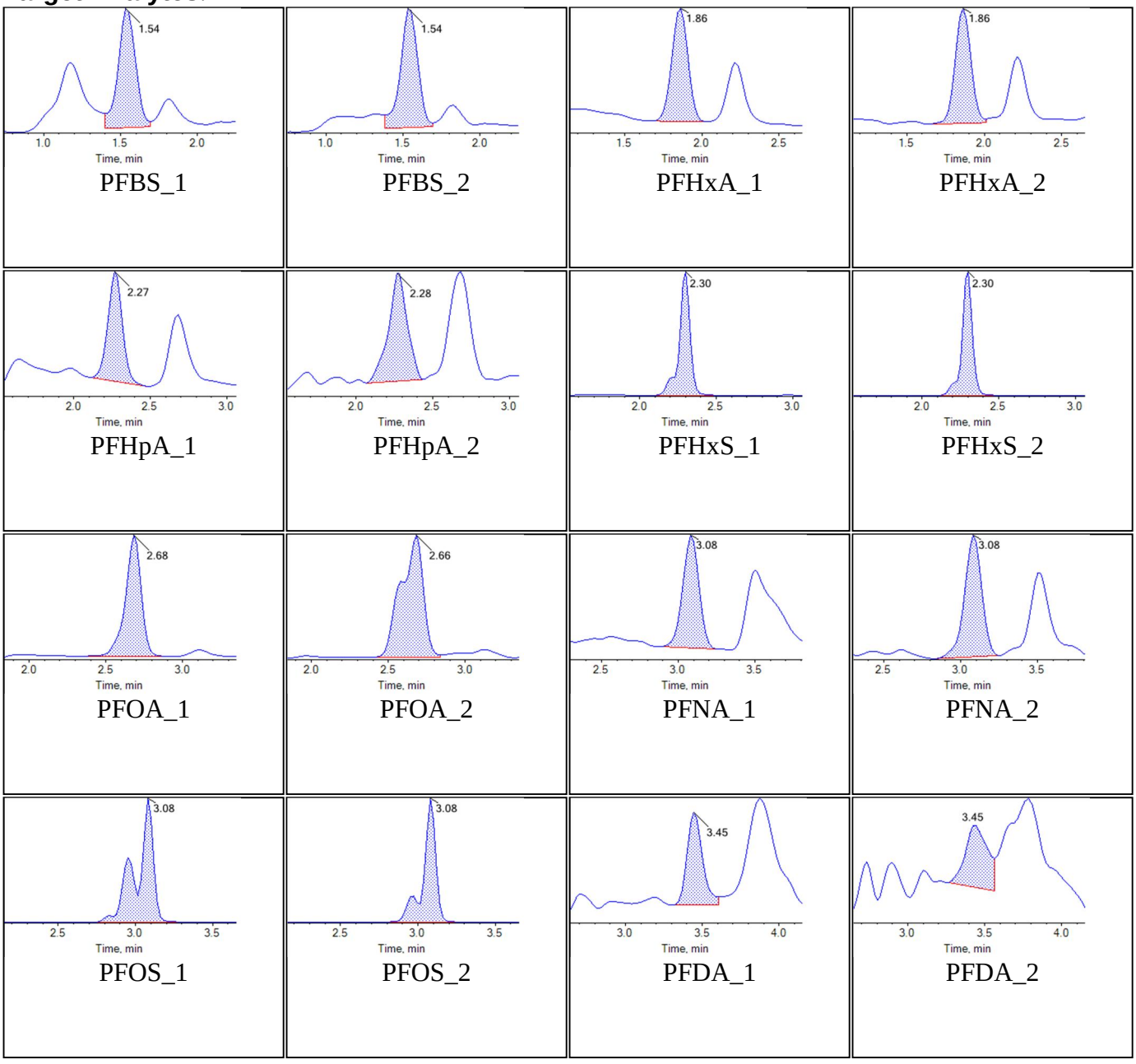

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Chromatogram Report

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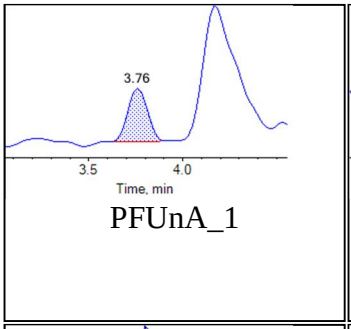

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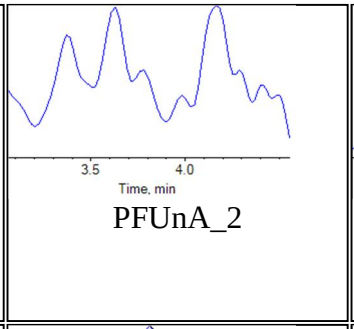
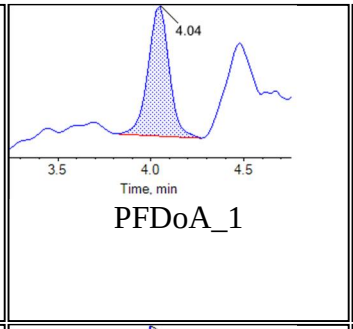


PFUnA_2



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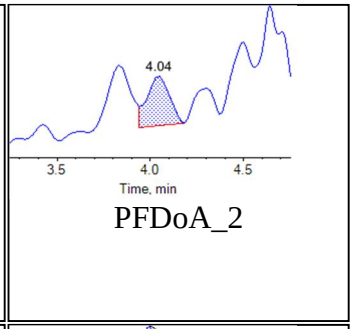
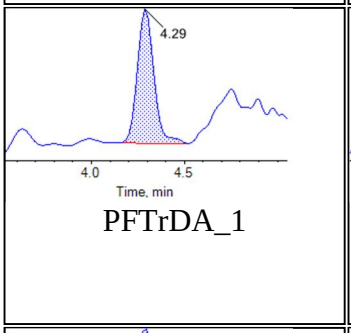
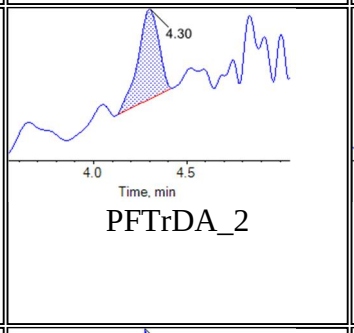


PFDoA_2



PFTrDA_1



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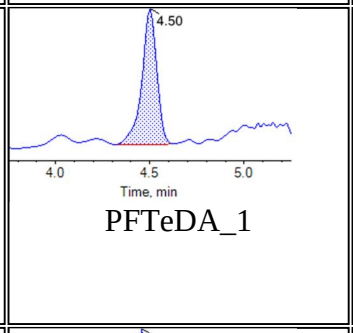

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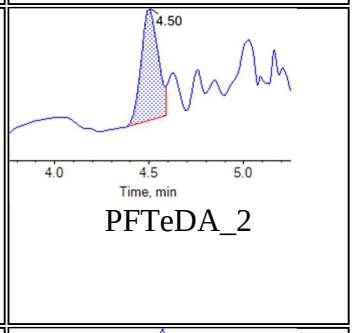

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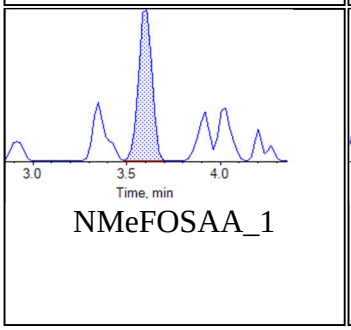
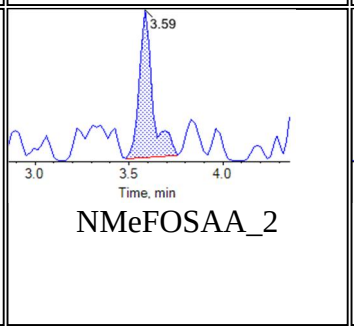
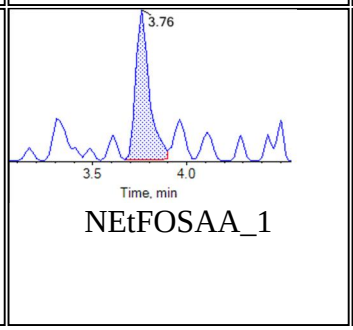


NMeFOSAA_1



NMeFOSAA_2



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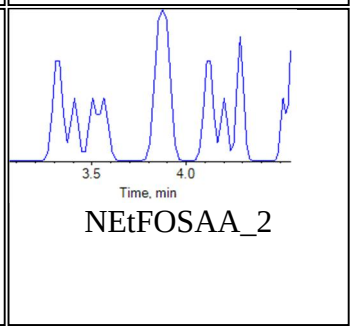

NEtFOSAA_2

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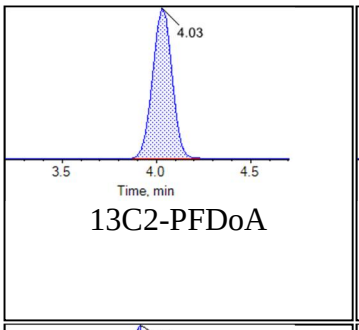
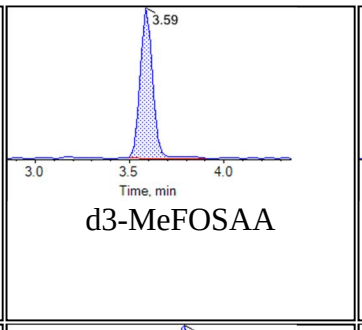
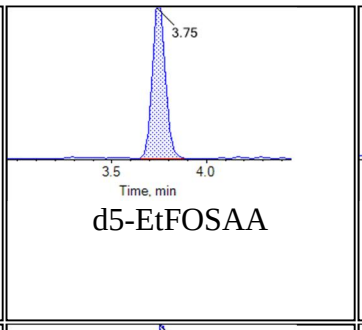


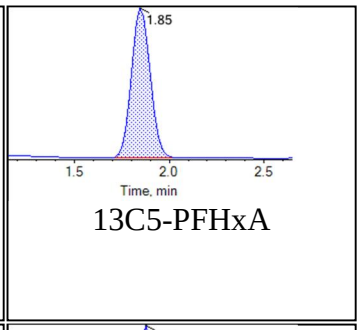
13C2-PFDoA



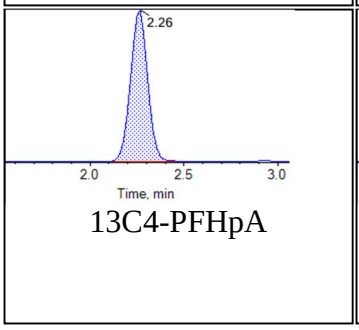
d3-MeFOSAA



d5-EtFOSAA



13C5-PFHxA



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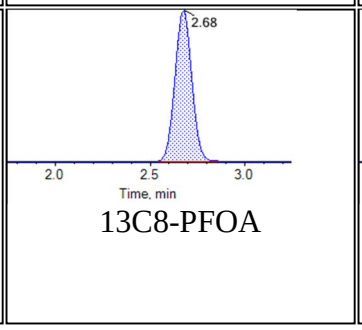
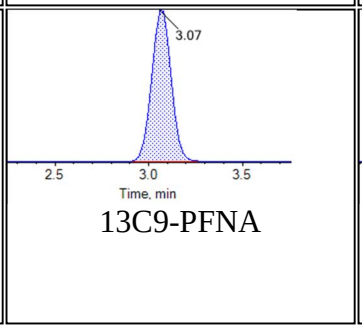
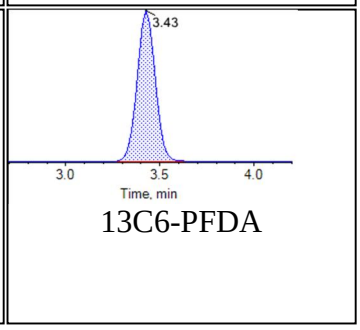


13C8-PFOA



13C9-PFNA



13C6-PFDA

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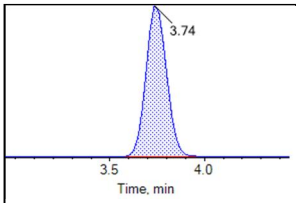
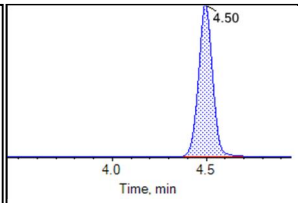


13C7-PFUnA



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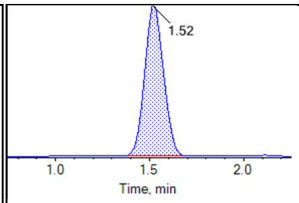

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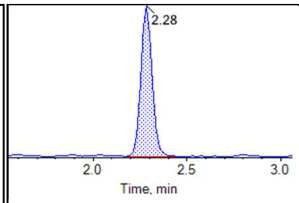

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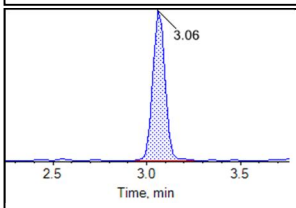

13C8-PFOS

BATTELLE

Chromatogram Report

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Sample Name	J8720-FS-D(7)	**Injection Vial**	8
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:46:35	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Chromatograms

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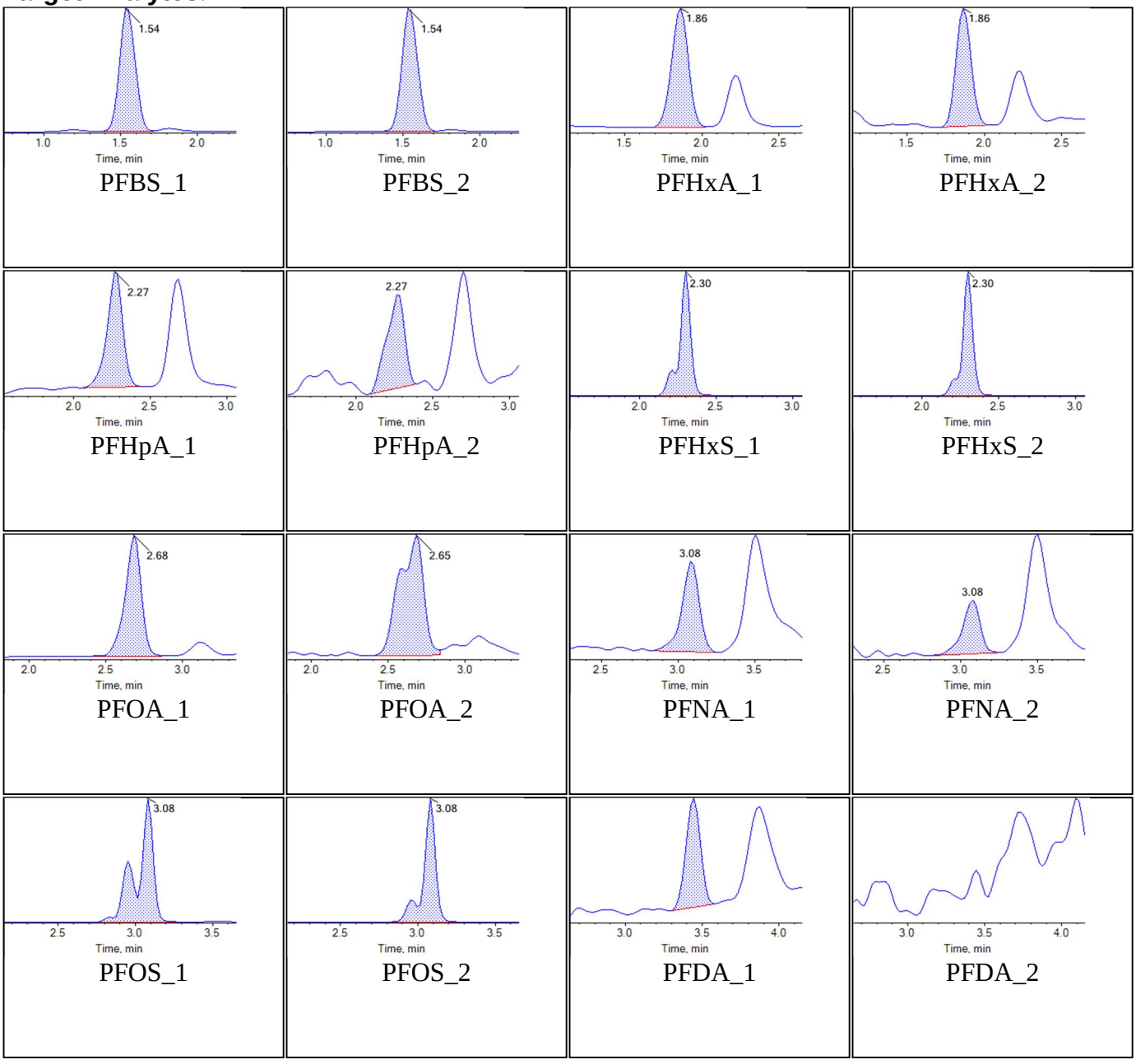

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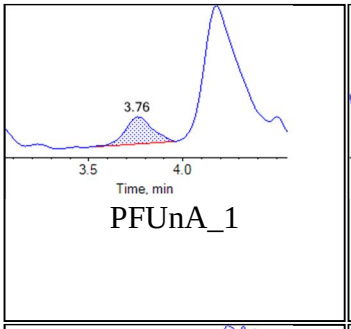

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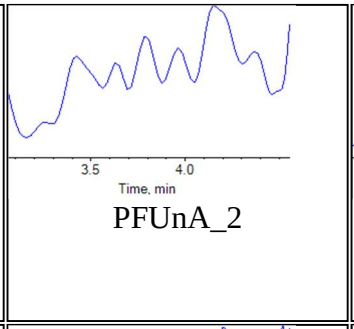
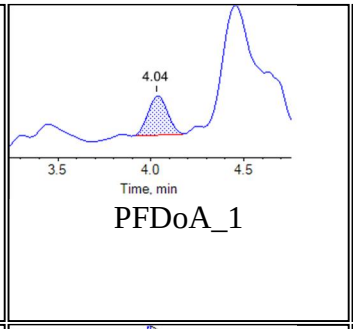


PFUnA_2



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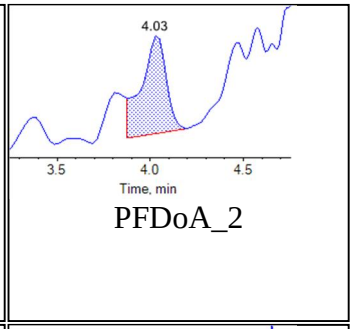
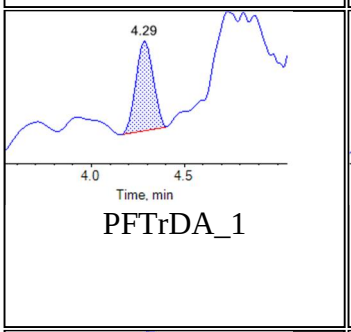


PFDoA_2



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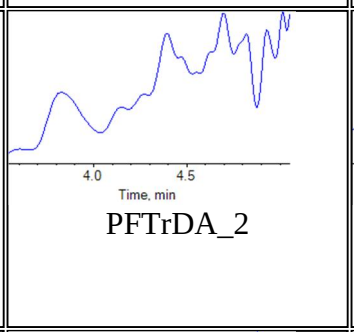

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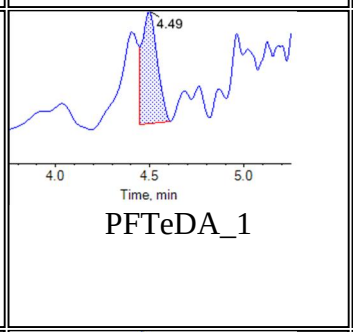

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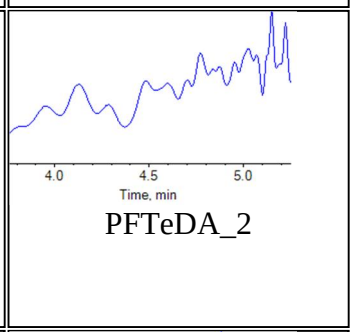

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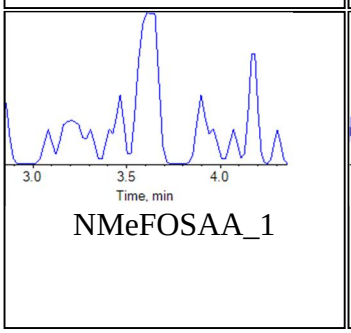

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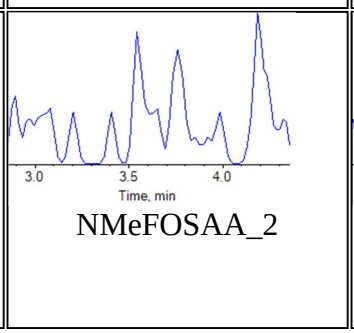

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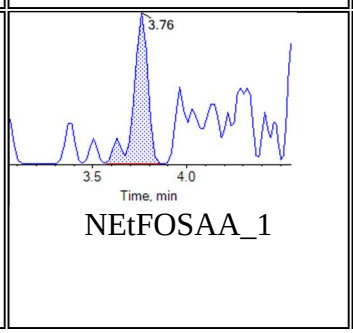

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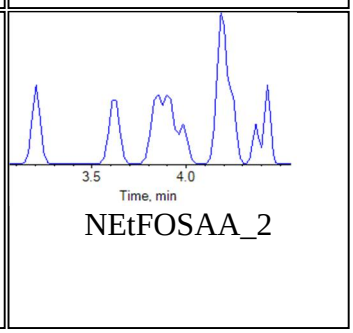
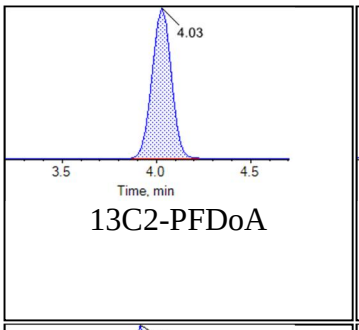
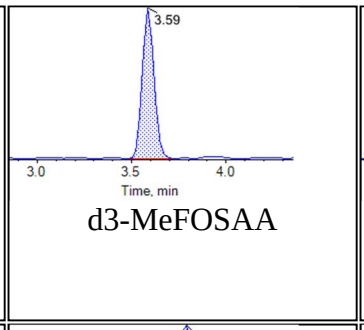


NEtFOSAA_2

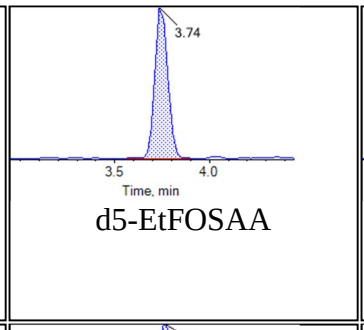
Internal Standards:



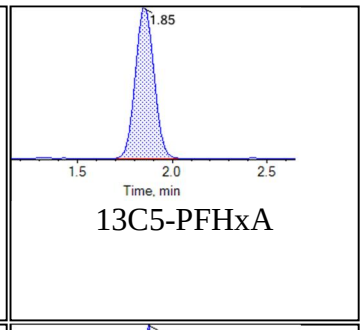
13C2-PFDoA



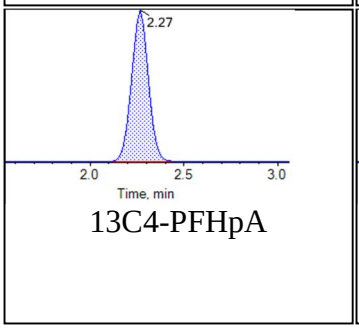
d3-MeFOSAA



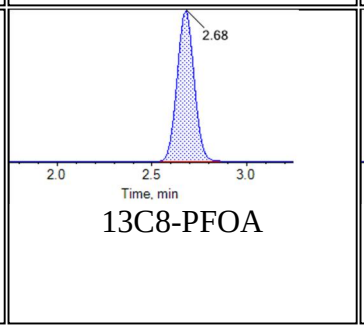
d5-EtFOSAA



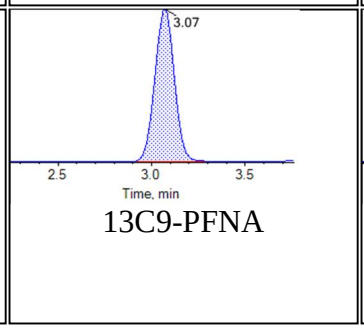
13C5-PFHxA



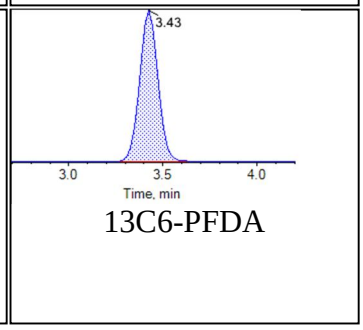
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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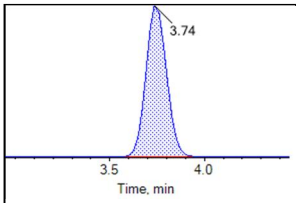
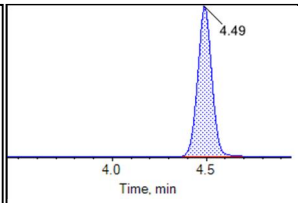
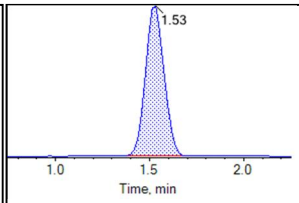


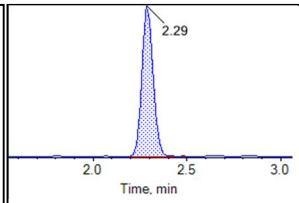
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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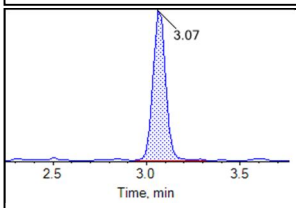

13C8-PFOS

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Chromatogram Report

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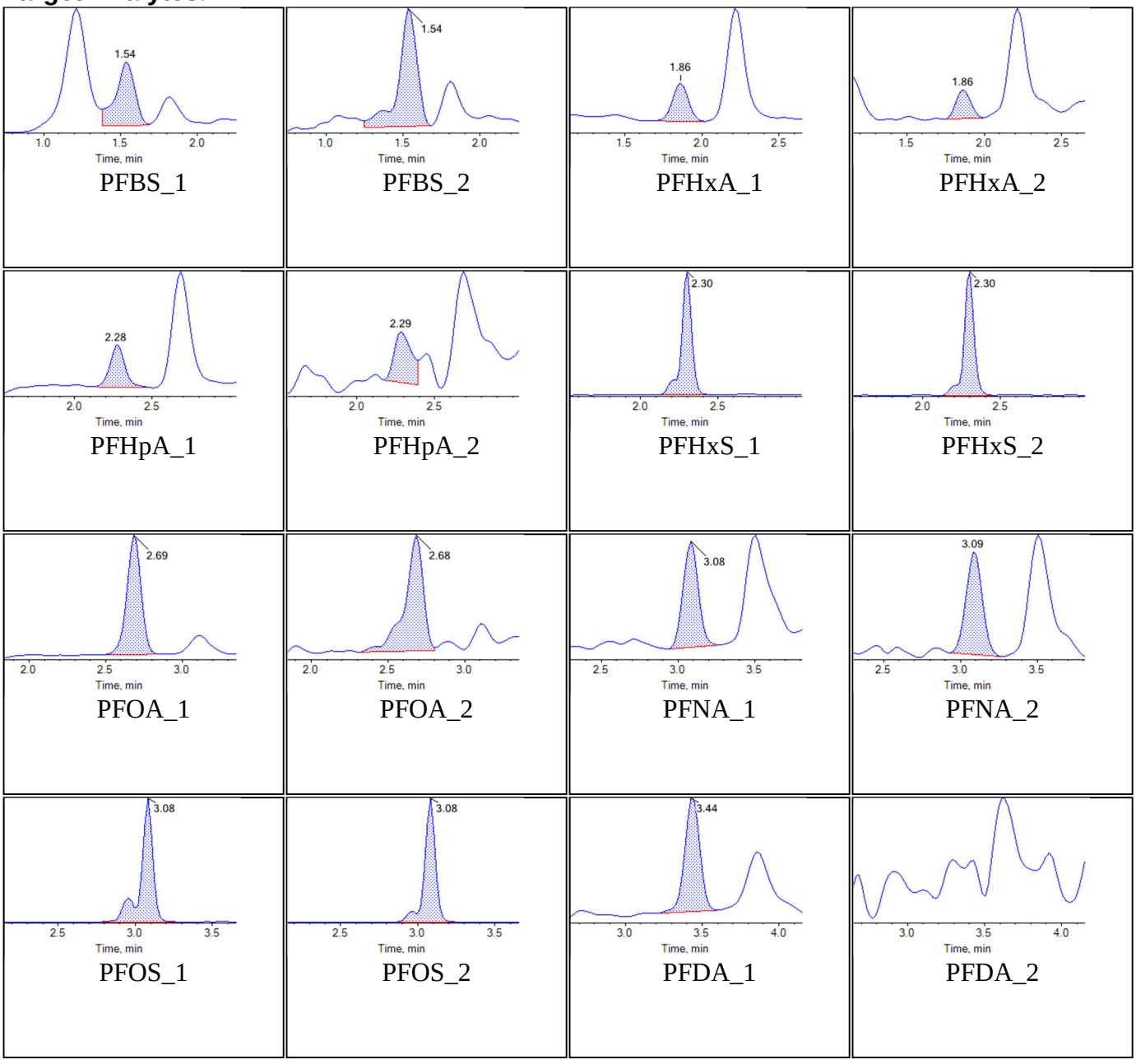
Sample Name	J8716-FS-D(5)	**Injection Vial**	9
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:57:26	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Chromatograms

Target Analytes:



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Chromatogram Report

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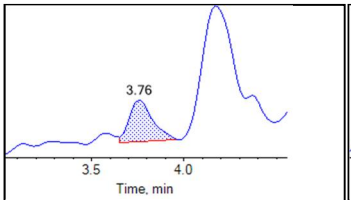

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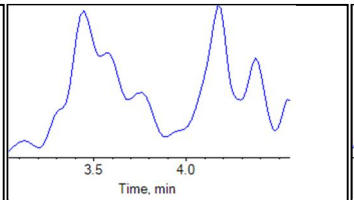
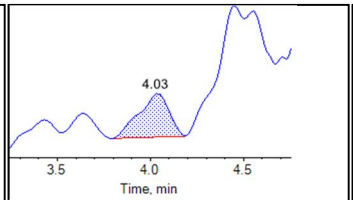


PFUnA_2



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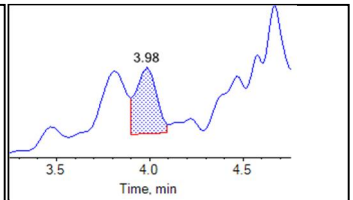
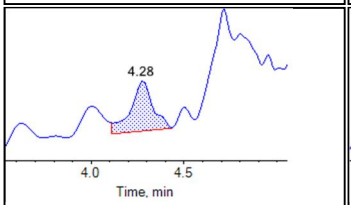


PFDoA_2



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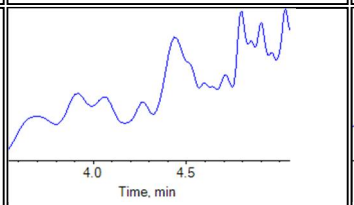
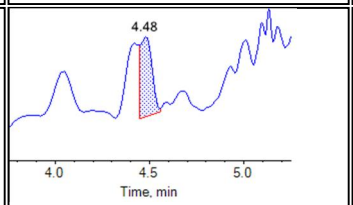


PFTrDA_2



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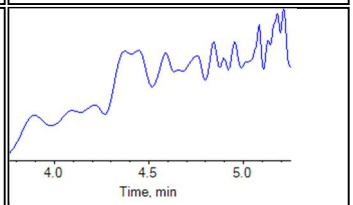
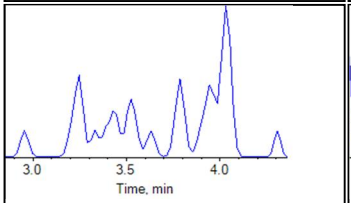
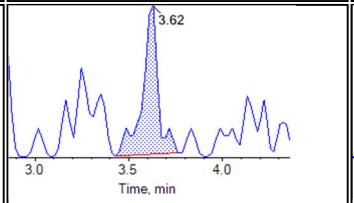


PFTeDA_2



NMeFOSAA_1



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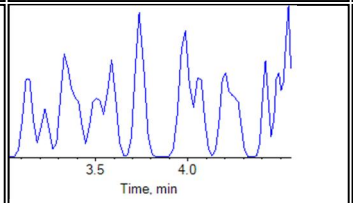
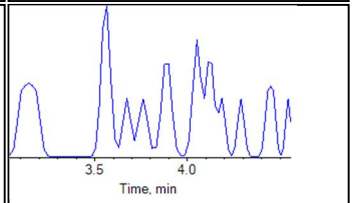
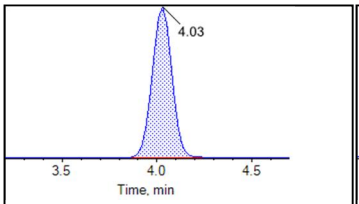


NEtFOSAA_1

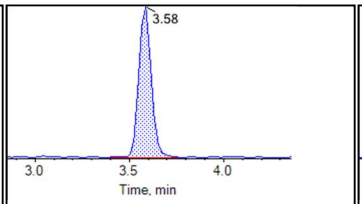


NEtFOSAA_2

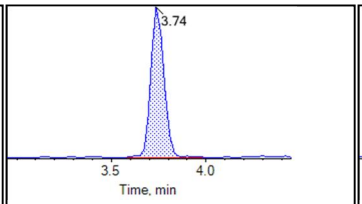
Internal Standards:



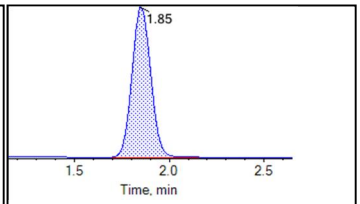
13C2-PFDoA



d3-MeFOSAA



d5-EtFOSAA



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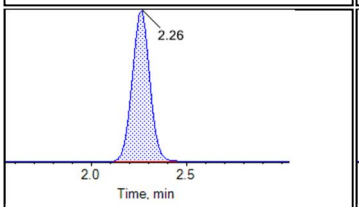

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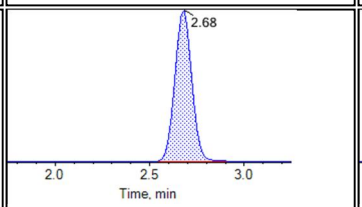
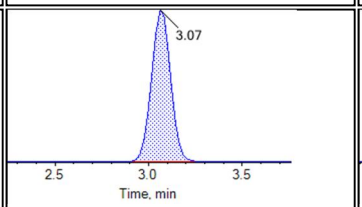
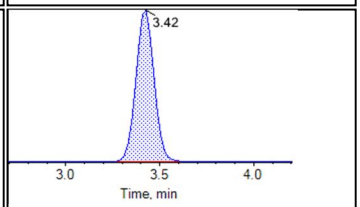


13C8-PFOA



13C9-PFNA



13C6-PFDA

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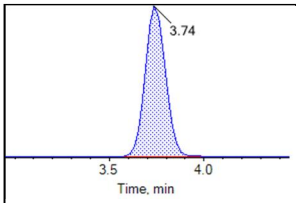
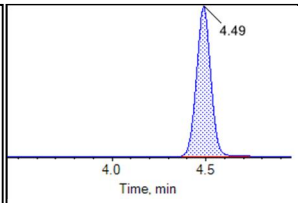
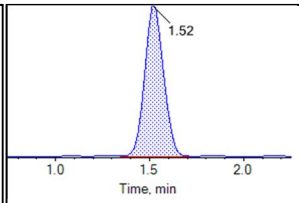


13C7-PFUnA



13C2-PFTeDA



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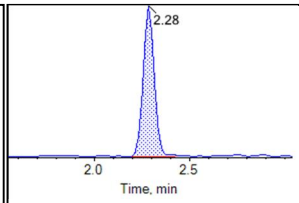

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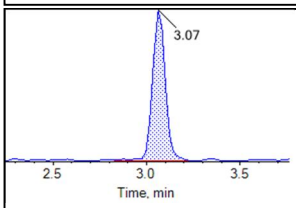

13C8-PFOS

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Chromatogram Report

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Sample Name	J8688-FS-D(3)	**Injection Vial**	10
Sample ID	VC-CS18-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:08:19	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Chromatograms

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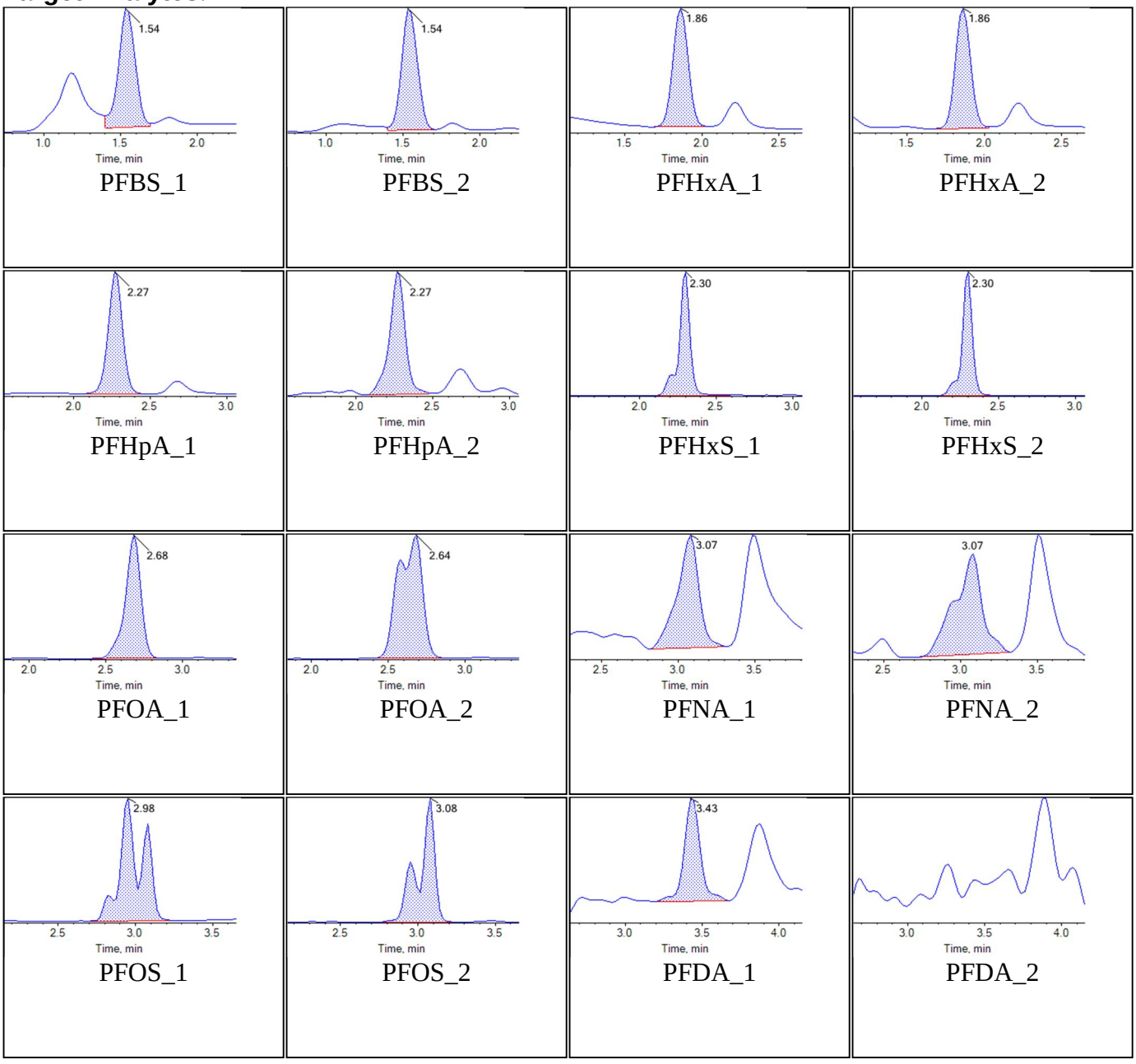

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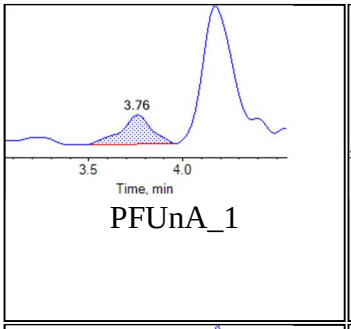

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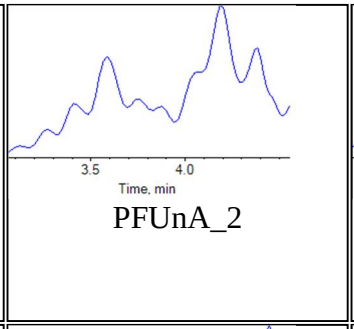
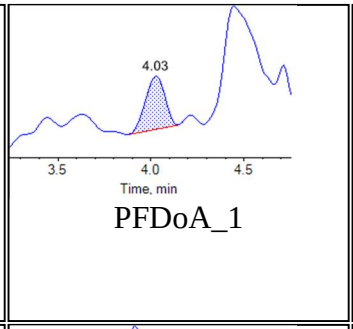


PFUnA_2



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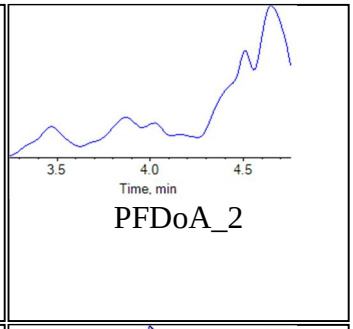
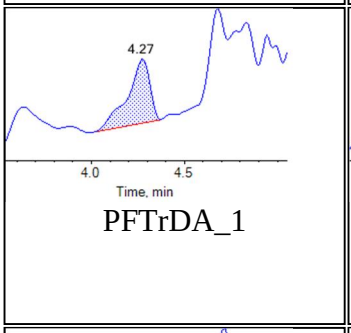
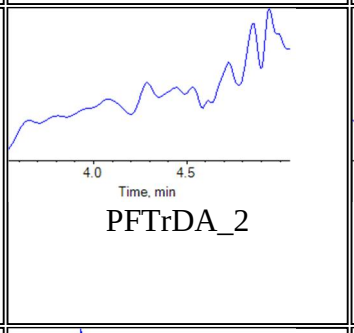


PFDoA_2



PFTrDA_1



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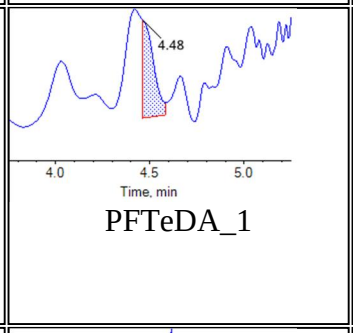

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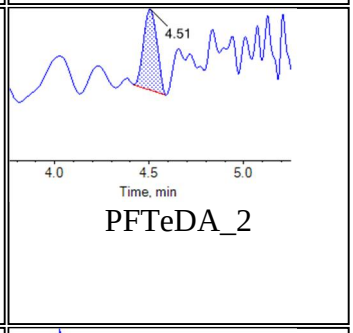

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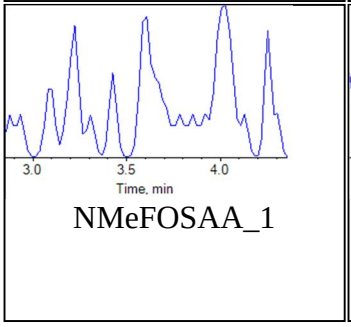

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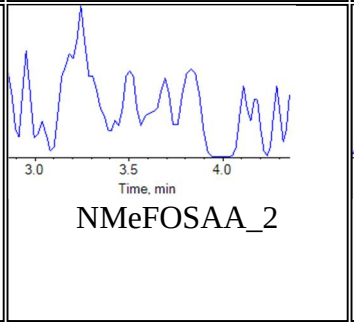

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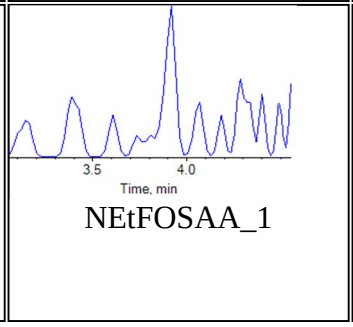

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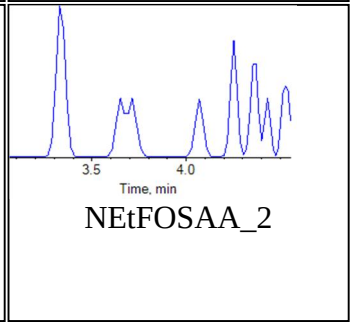
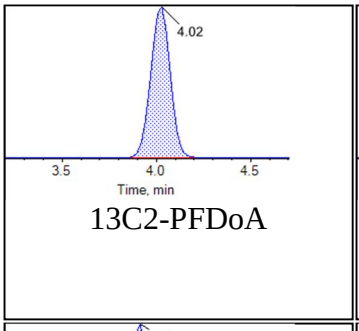


NEtFOSAA_2

Internal Standards:



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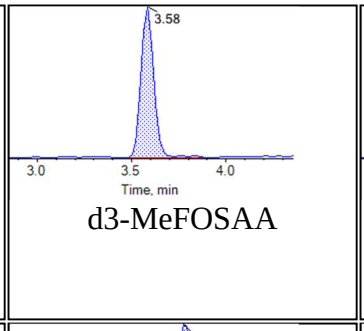
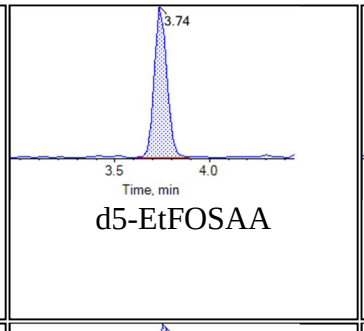
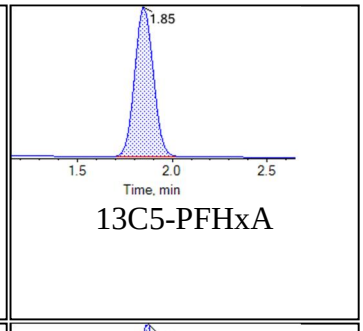


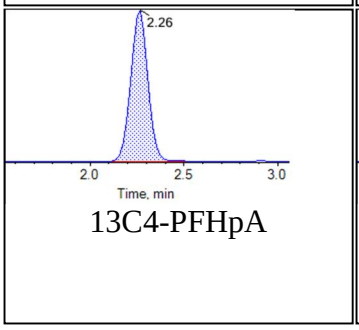
d3-MeFOSAA



d5-EtFOSAA



13C5-PFHxA



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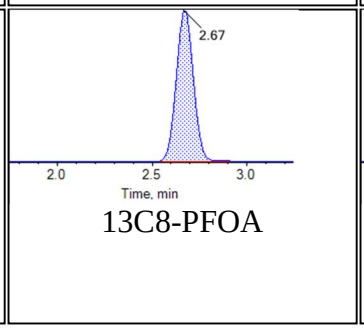
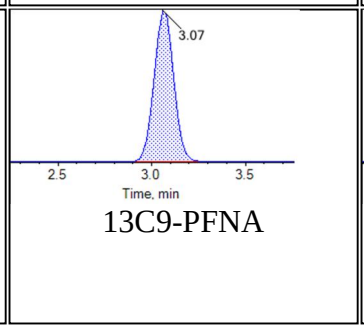
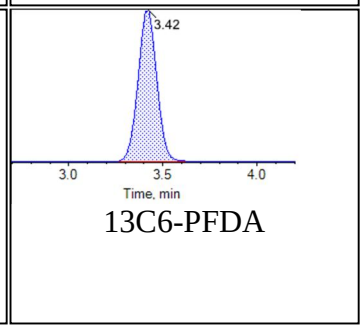


13C8-PFOA



13C9-PFNA



13C6-PFDA

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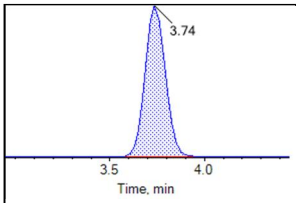
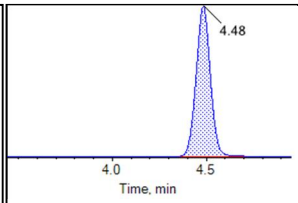
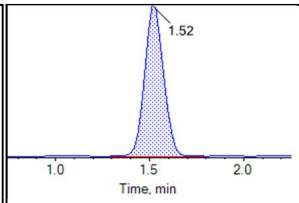


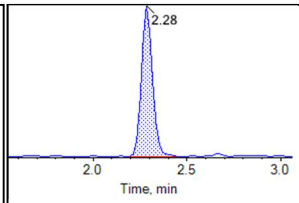
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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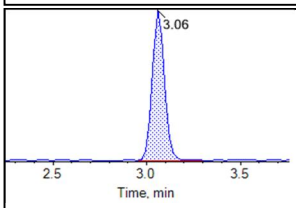

13C8-PFOS

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Chromatogram Report

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Sample Name	J8687-FS-D(7)	**Injection Vial**	11
Sample ID	VC-CS10-DW04-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:19:10	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Chromatograms

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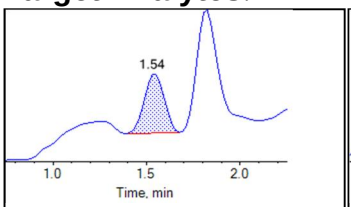

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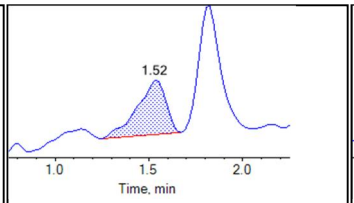

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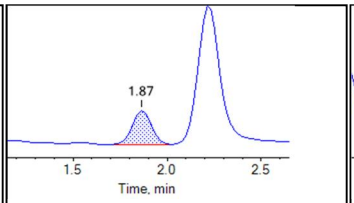

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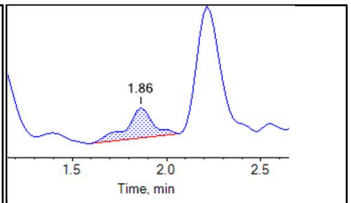

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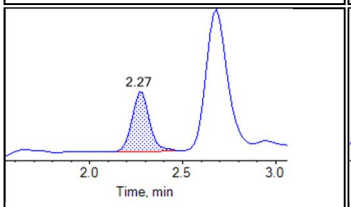
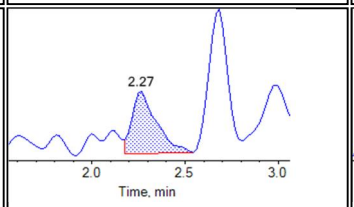


PFHpA_1



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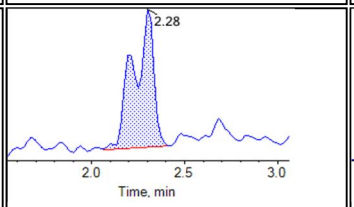

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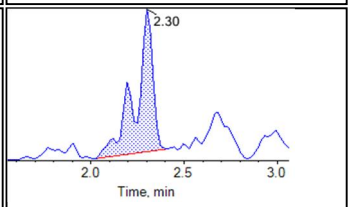

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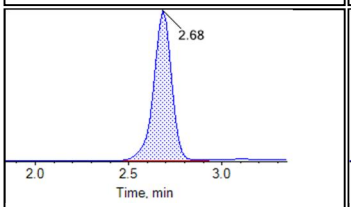

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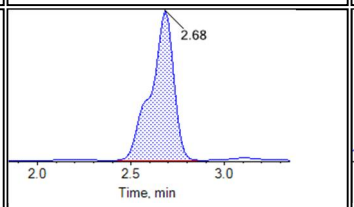

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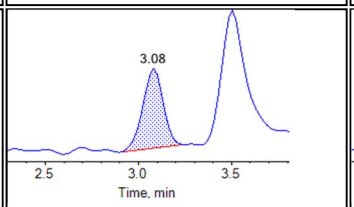

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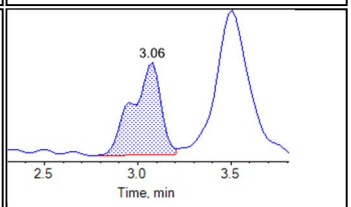

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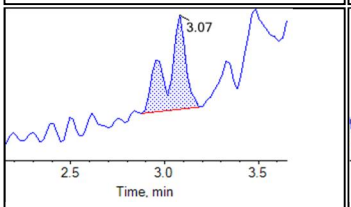

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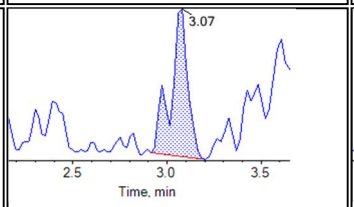

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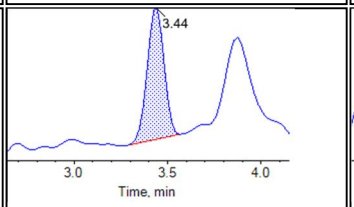

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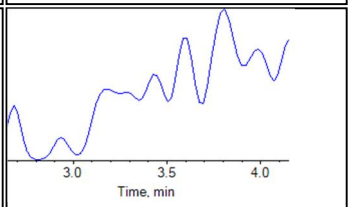

PFDA_2

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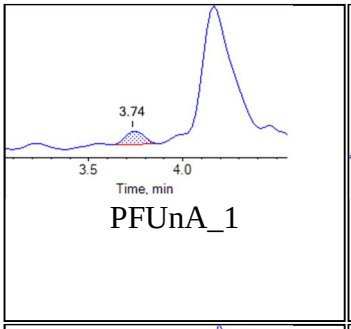

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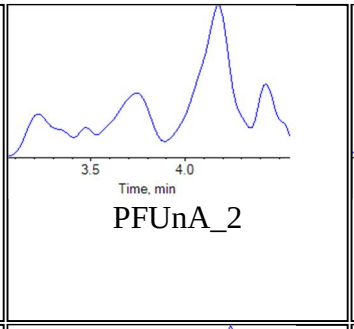

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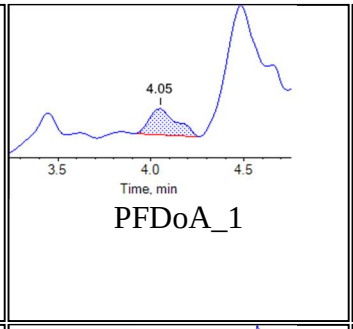

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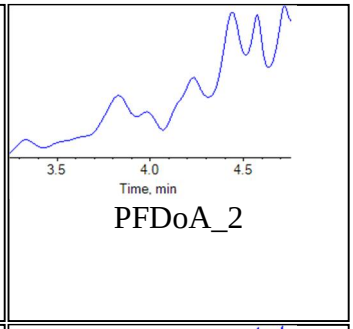

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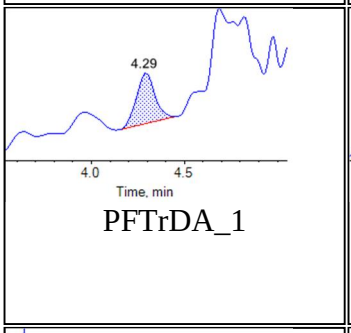

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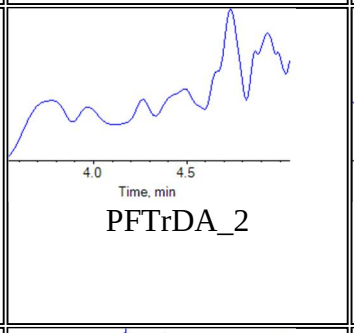

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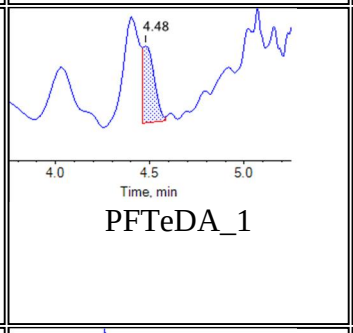

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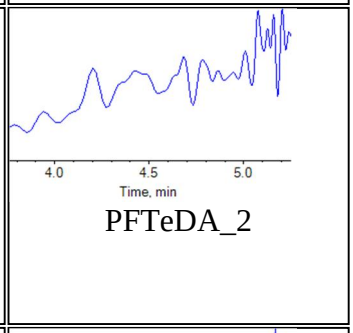

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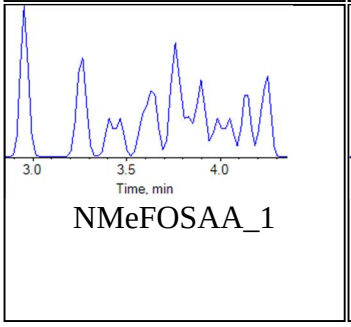

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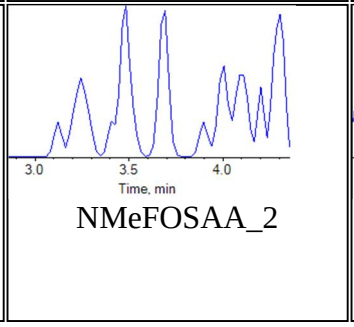

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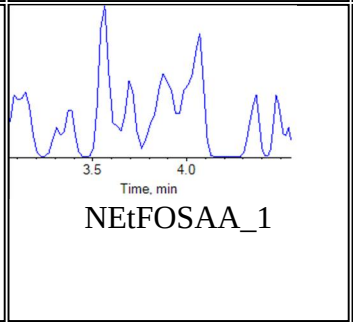

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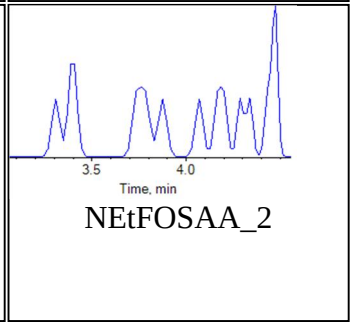
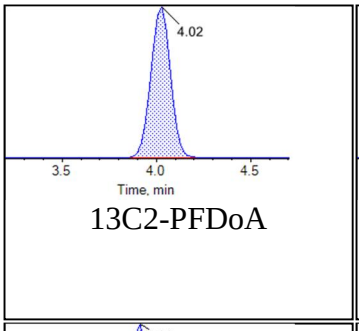


NEtFOSAA_2

Internal Standards:



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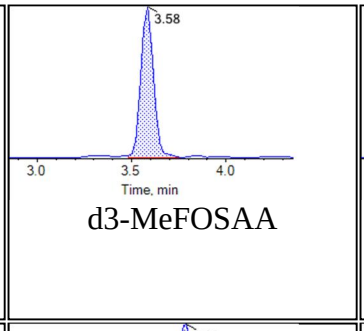
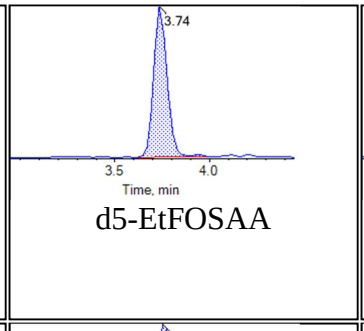


d3-MeFOSAA



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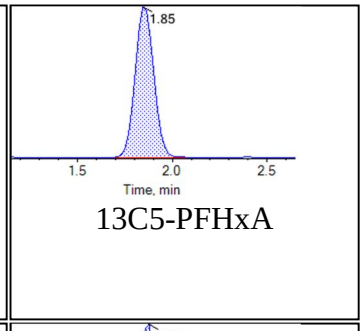
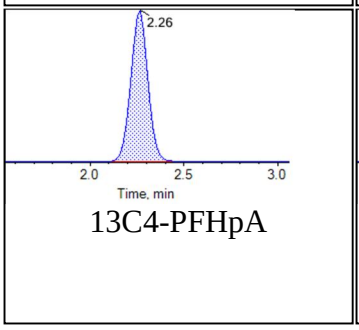


13C5-PFHxA



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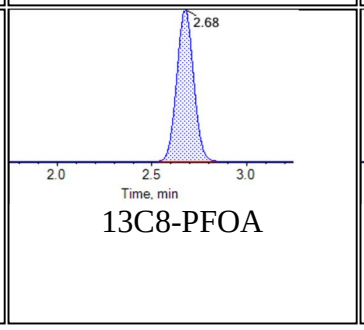
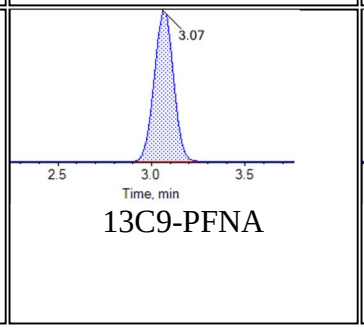


13C8-PFOA



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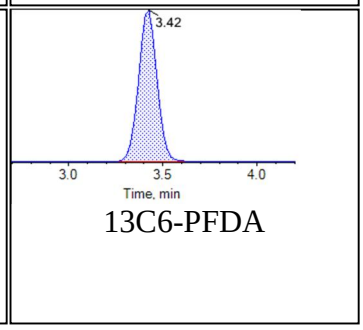

13C6-PFDA

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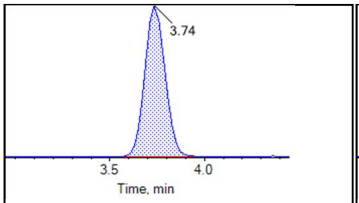
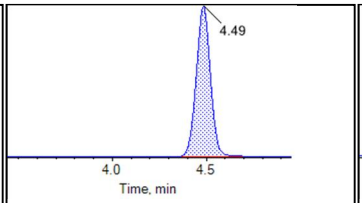
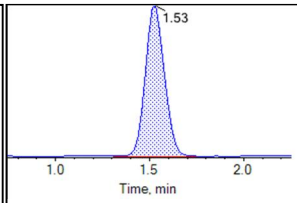


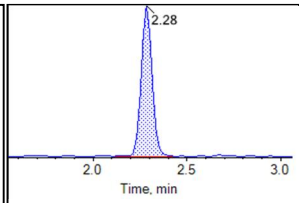
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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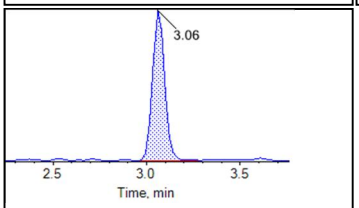

13C8-PFOS

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Chromatogram Report

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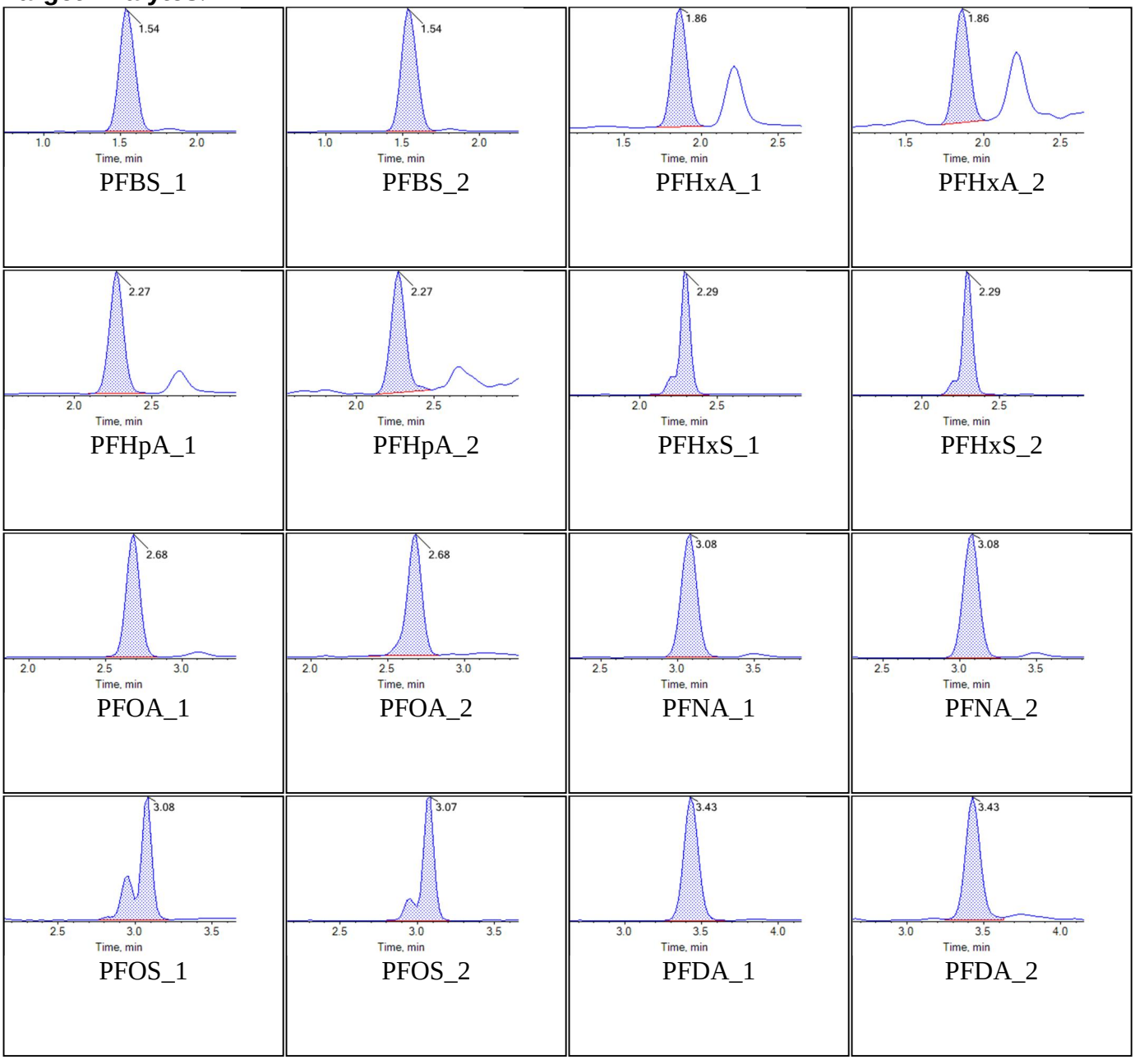
Sample Name	KB76	**Injection Vial**	13
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:40:54	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Chromatograms

Target Analytes:



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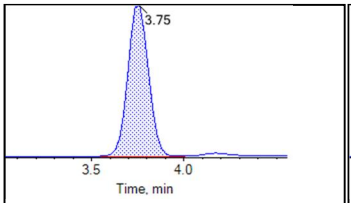

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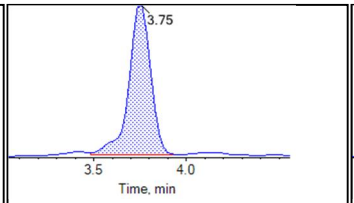

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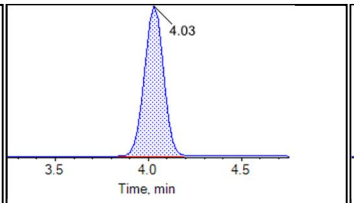

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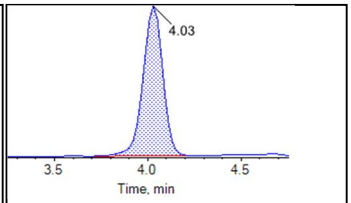

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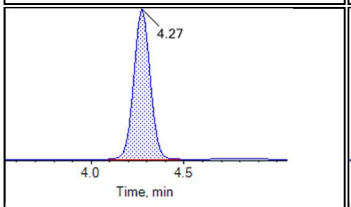

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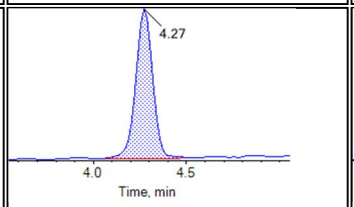

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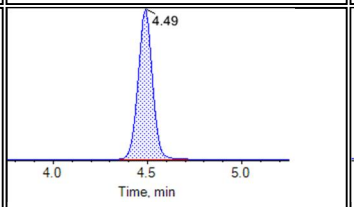

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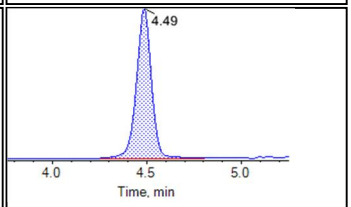

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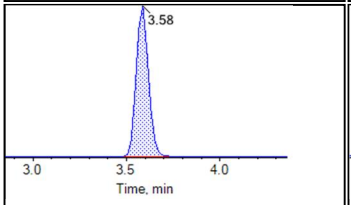
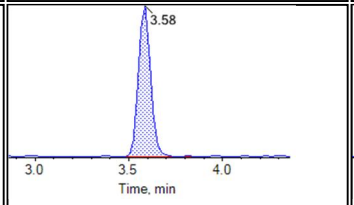


NMeFOSAA_1



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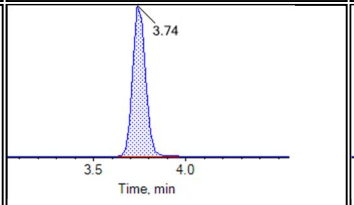

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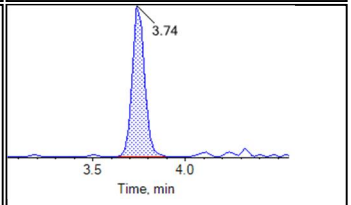

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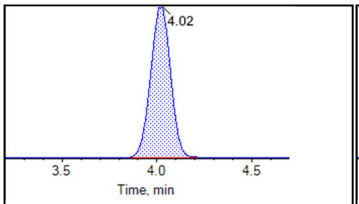
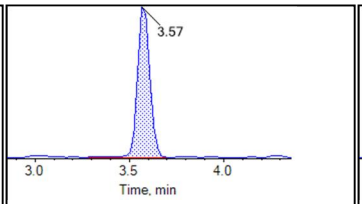
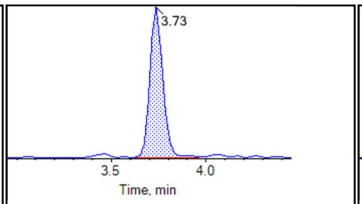


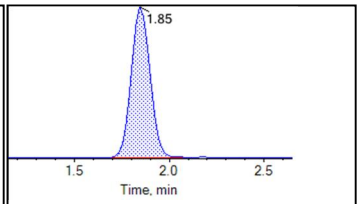
13C2-PFDoA



d3-MeFOSAA



d5-EtFOSAA



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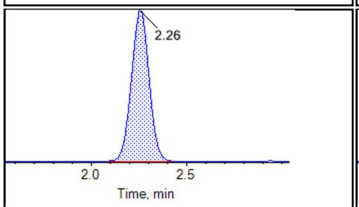

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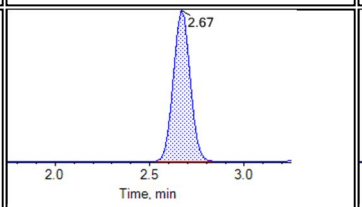
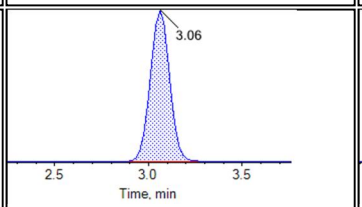
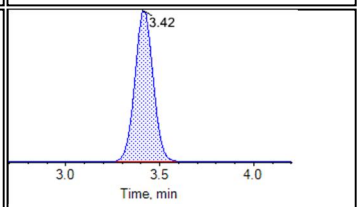


13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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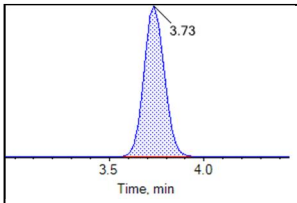
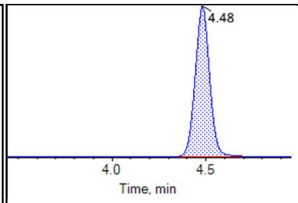
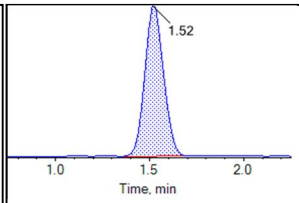


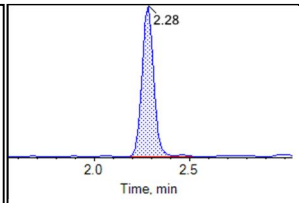
13C7-PFUnA



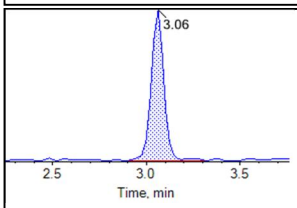
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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Printed: 01/11/2018 8:53:21 AM

Sample Name	CR987LCS-FS(0)	**Injection Vial**	14
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:51:45	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Chromatograms

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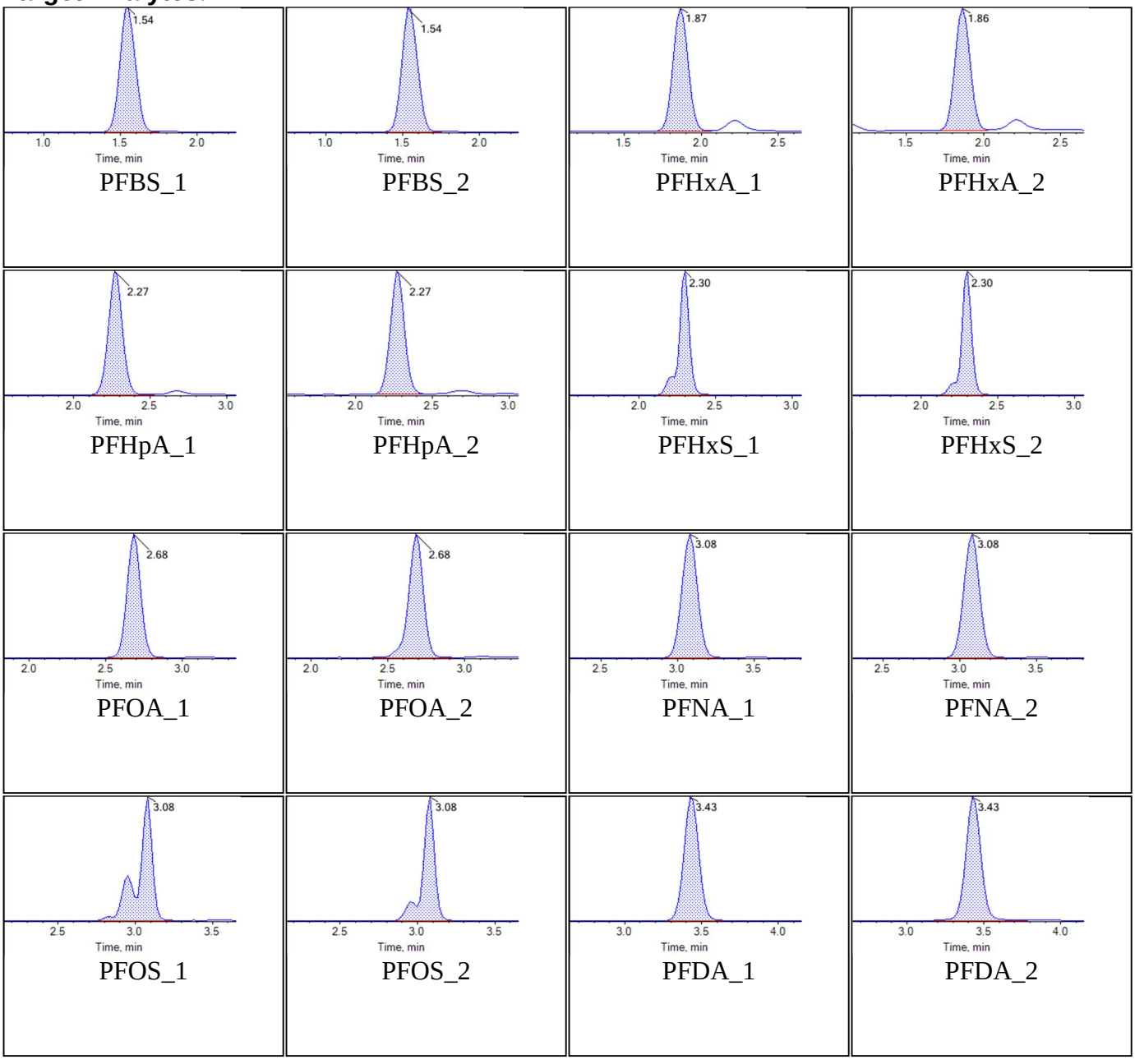

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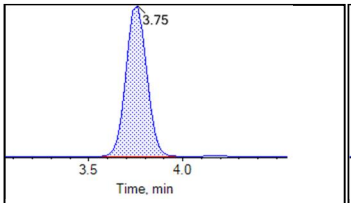

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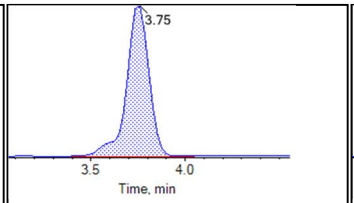

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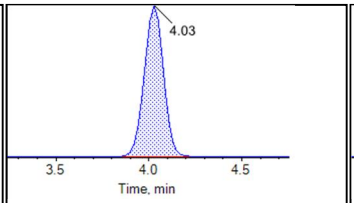

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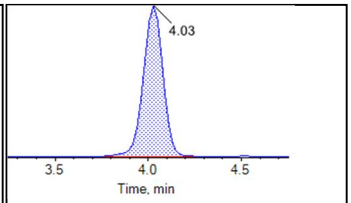

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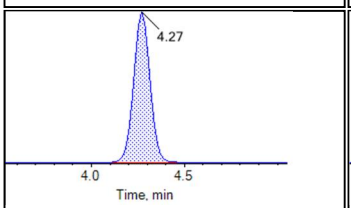

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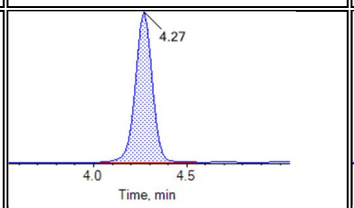

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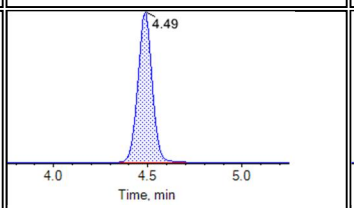

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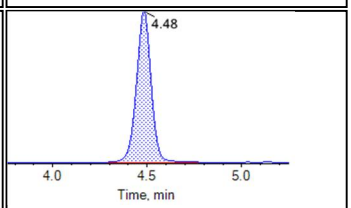

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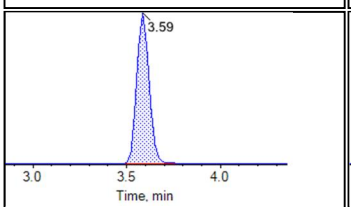

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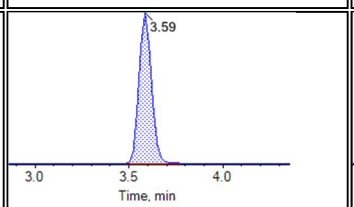

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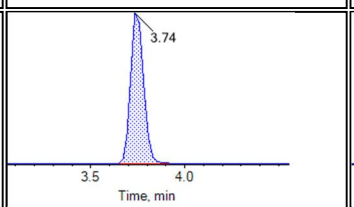

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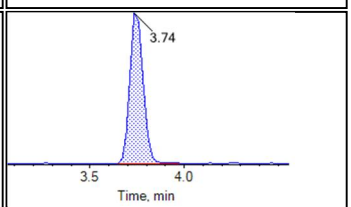

NEtFOSAA_2

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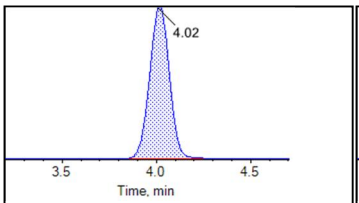
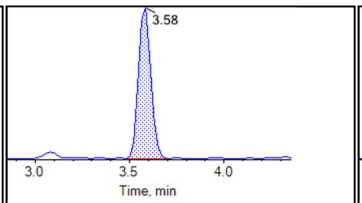
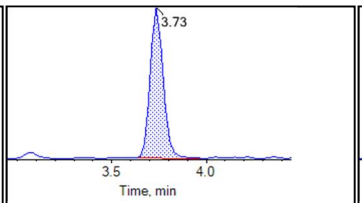


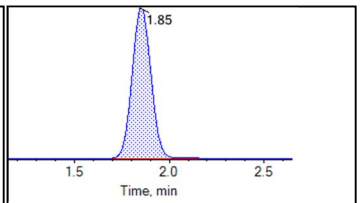
13C2-PFDoA



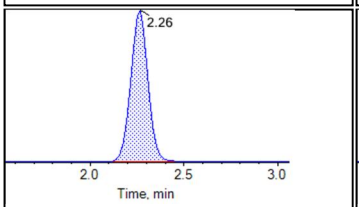
d3-MeFOSAA



d5-EtFOSAA



13C5-PFHxA



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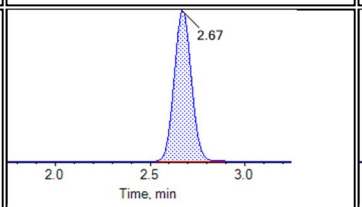

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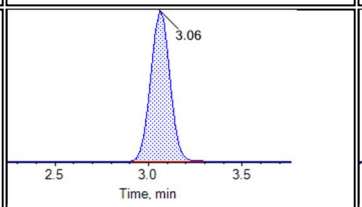
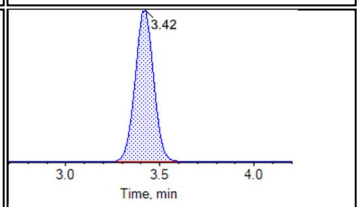


13C9-PFNA



13C6-PFDA

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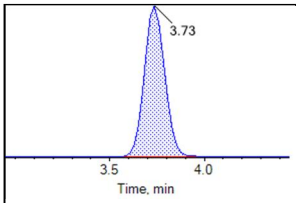
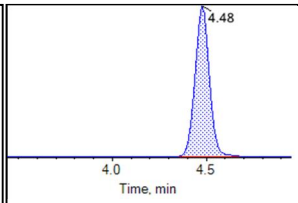
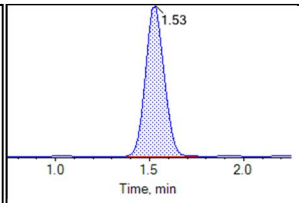


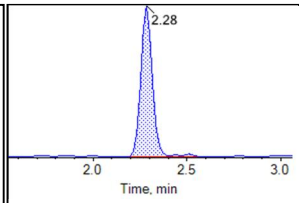
13C7-PFUnA



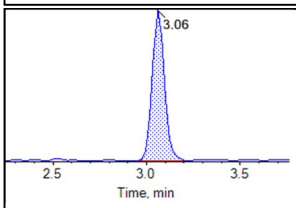
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

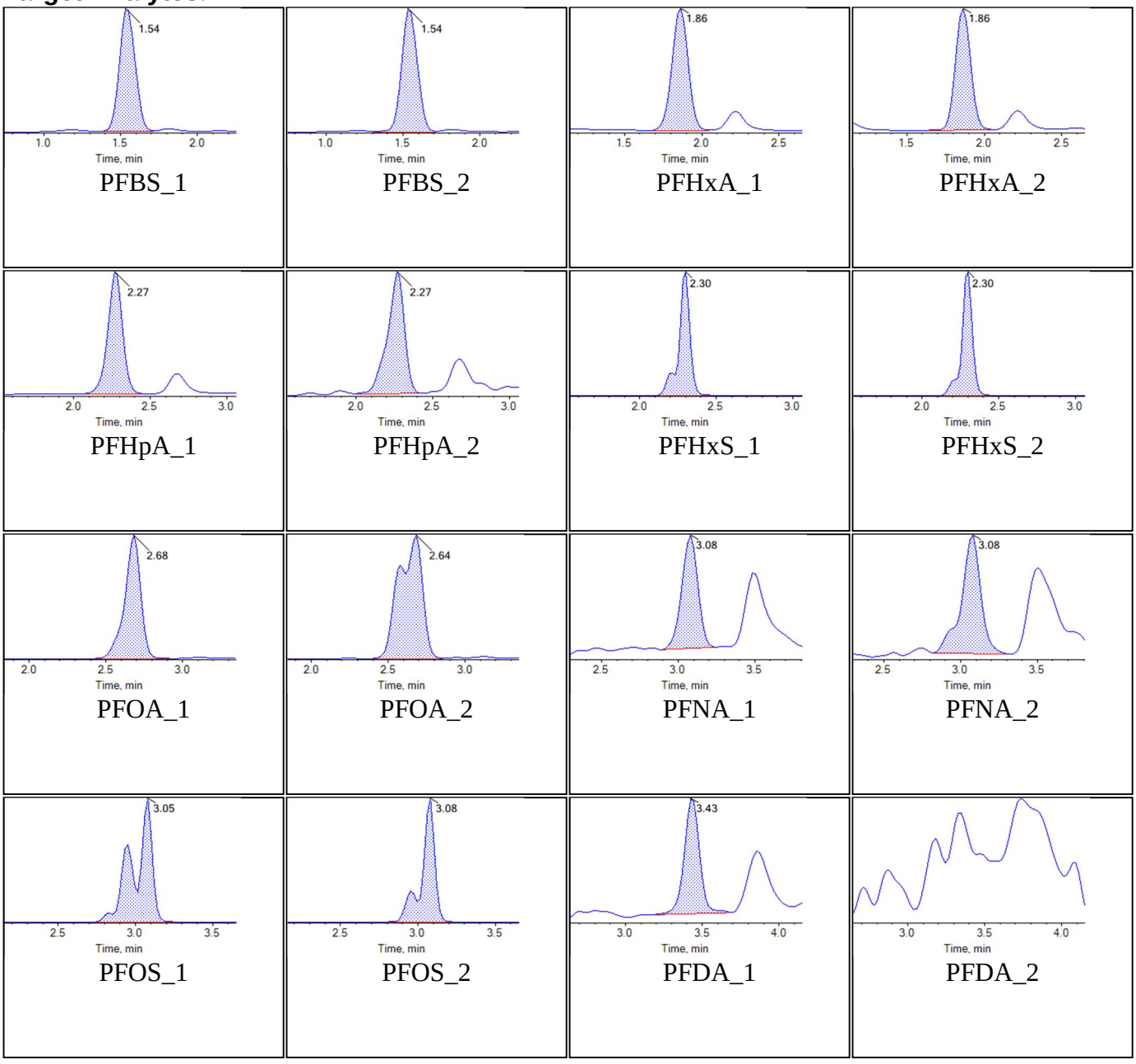
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:53:26 AM

Sample Name	J8667-FS-D(3)	**Injection Vial**	15
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:02:37	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Chromatograms

Target Analytes:



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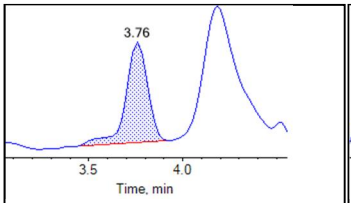
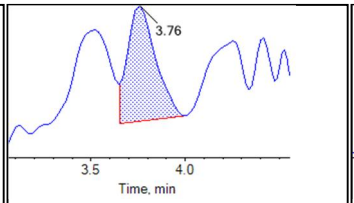
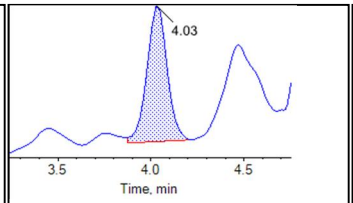


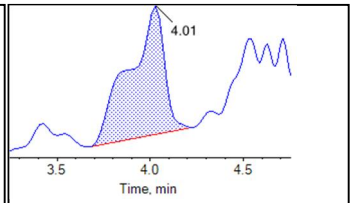
PFUnA_1



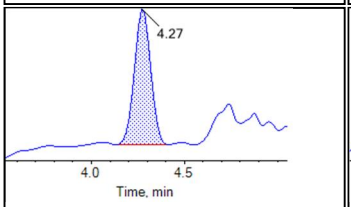
PFUnA_2



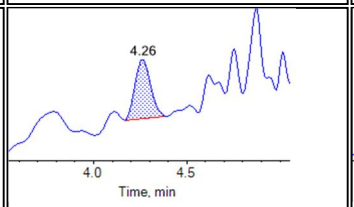
PFDoA_1



PFDoA_2



PFTrDA_1



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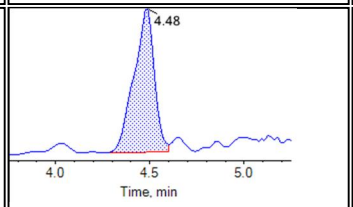

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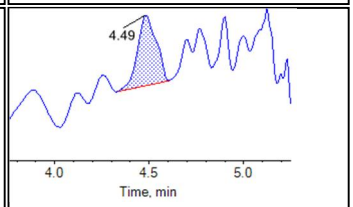

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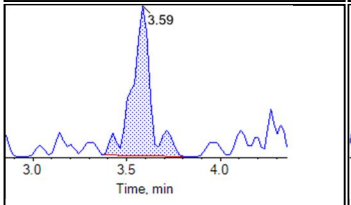

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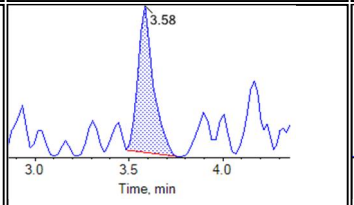

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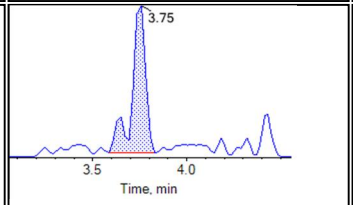

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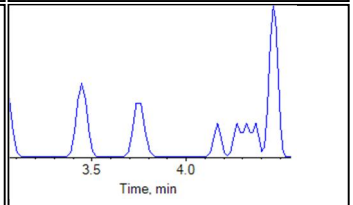

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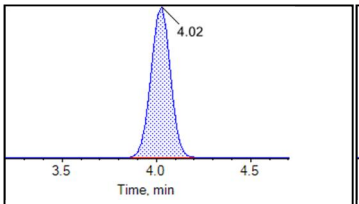
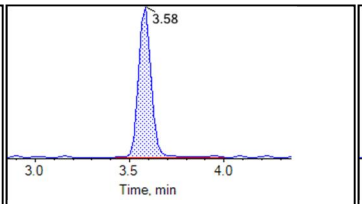


13C2-PFDoA



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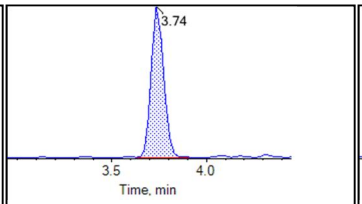

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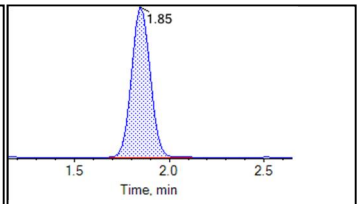

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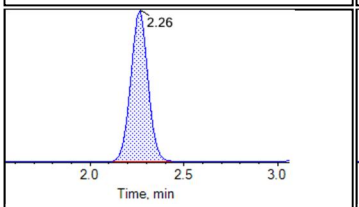
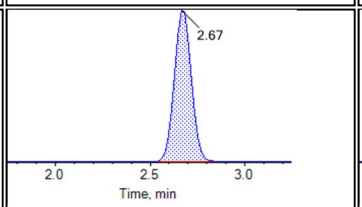


13C4-PFHpA



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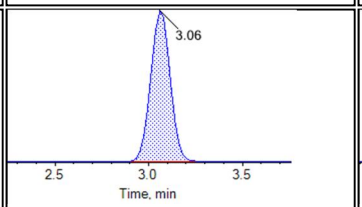
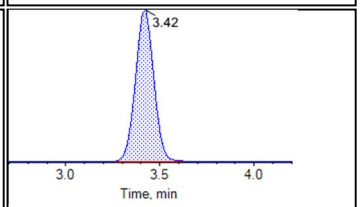


13C9-PFNA



13C6-PFDA

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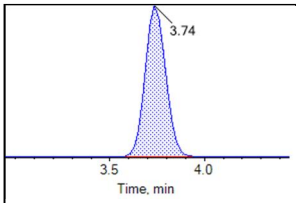
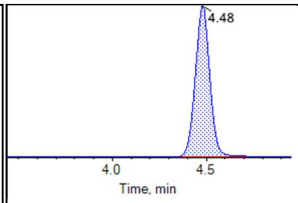


13C7-PFUnA



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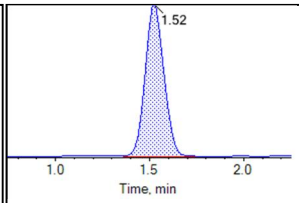
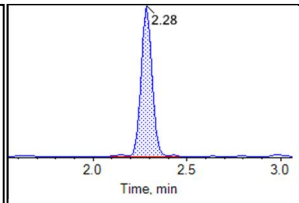


13C3-PFBS



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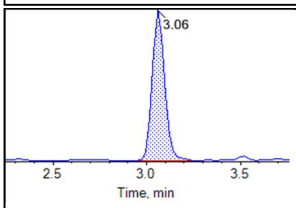

13C8-PFOS

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Chromatogram Report

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Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T15:07:47	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Chromatograms

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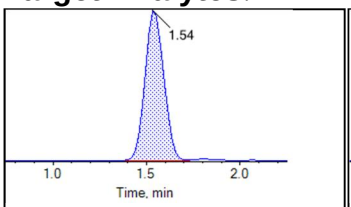

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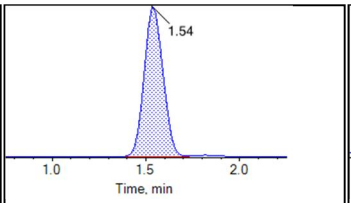

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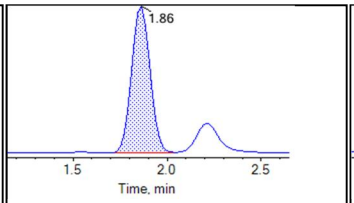

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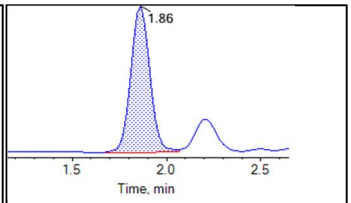

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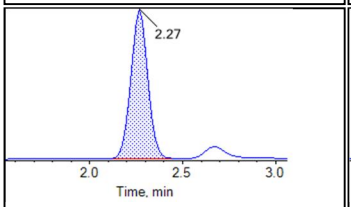

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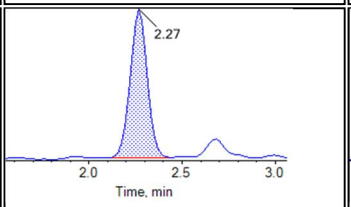

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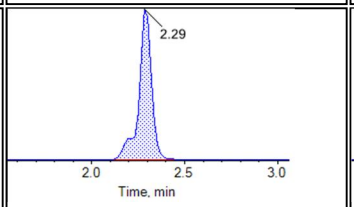

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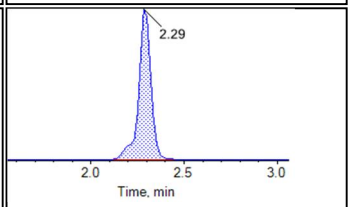

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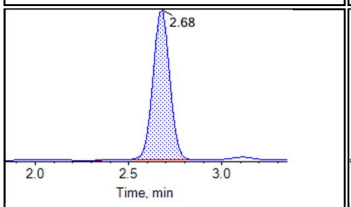

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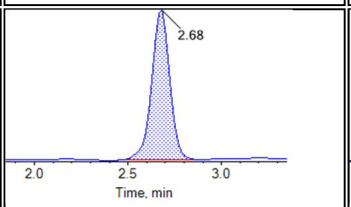

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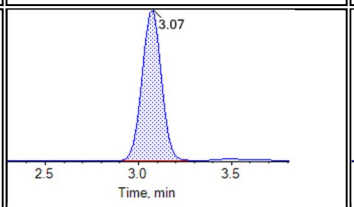

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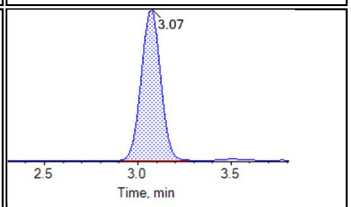

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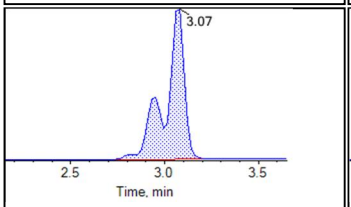

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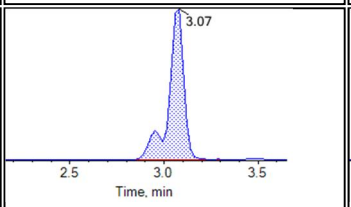

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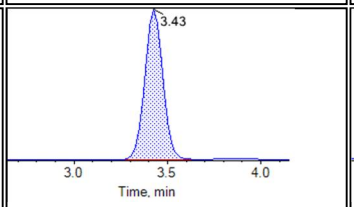

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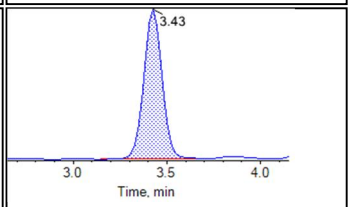

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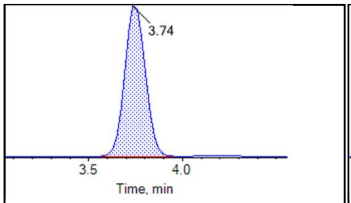

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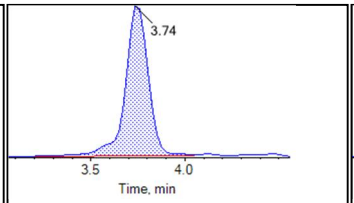

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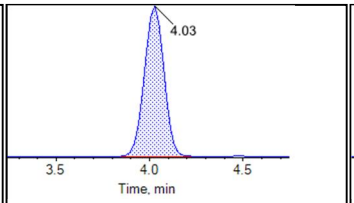

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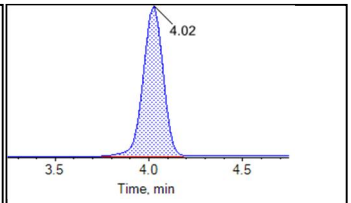

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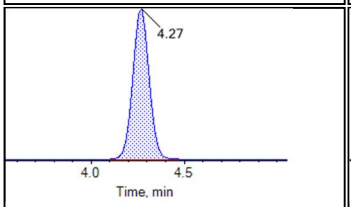

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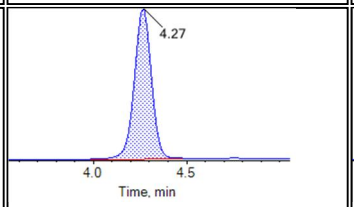

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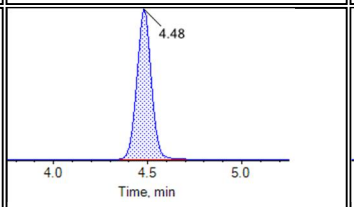

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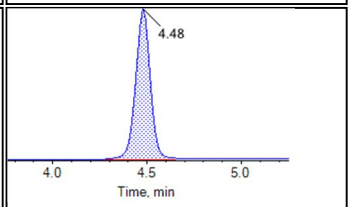

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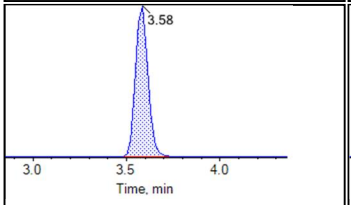

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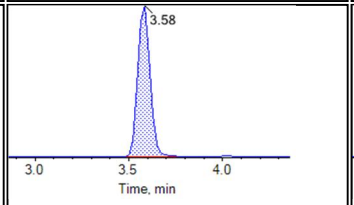

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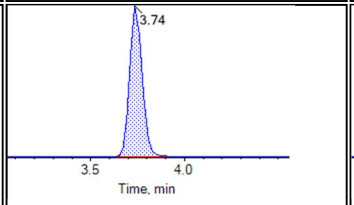

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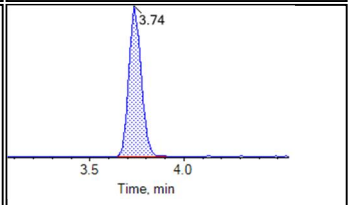

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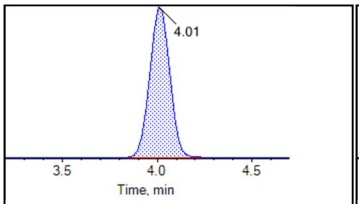

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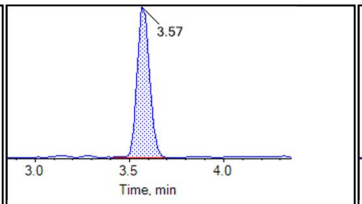
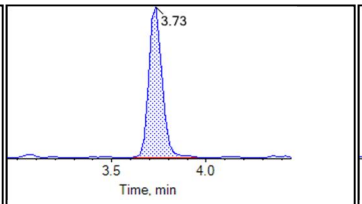


d3-MeFOSAA



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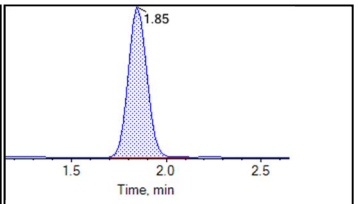
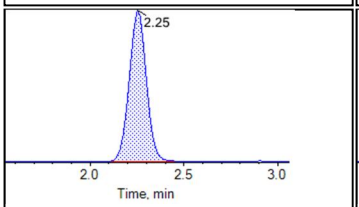
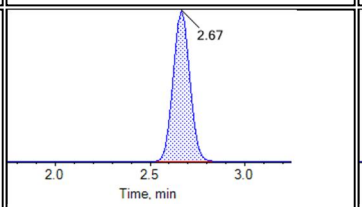


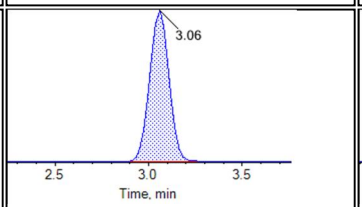
13C5-PFHxA



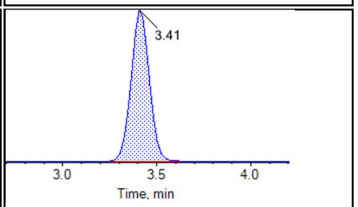
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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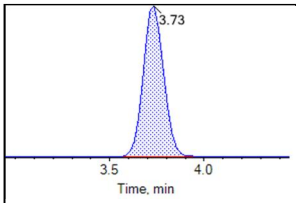
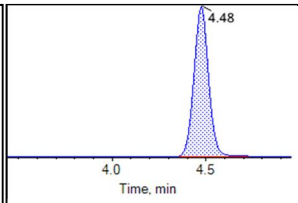
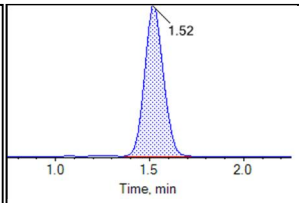


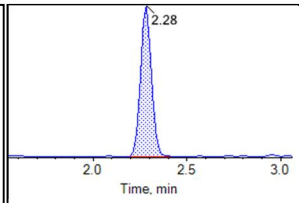
13C7-PFUnA



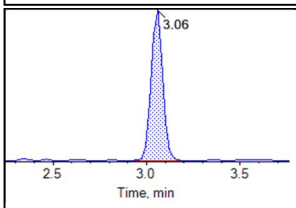
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:49:35 AM

Sample Name	KB75 ISC	**Injection Vial**	2
Sample ID	ISC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T11:41:21	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Chromatograms

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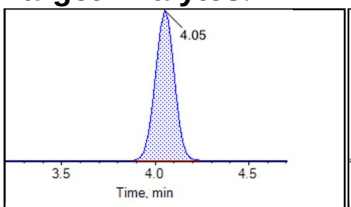
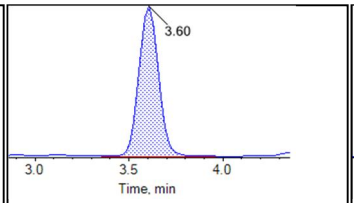
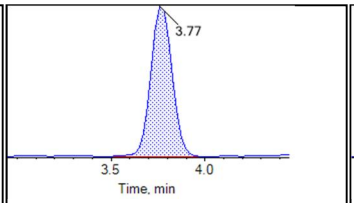


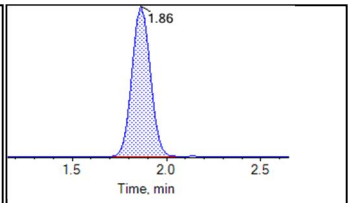
13C2-PFDoA



d3-MeFOSAA



d5-EtFOSAA



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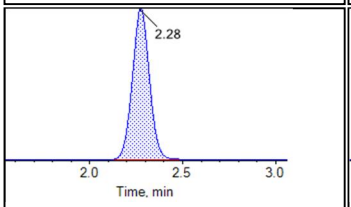
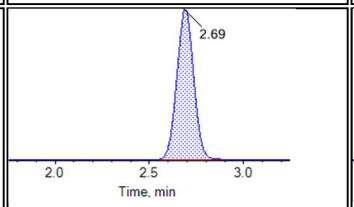
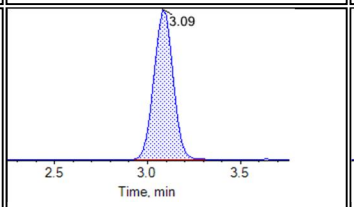


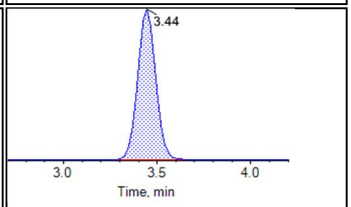
13C4-PFHpA



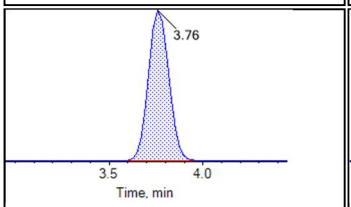
13C8-PFOA



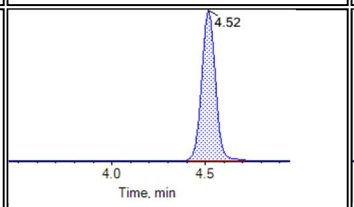
13C9-PFNA



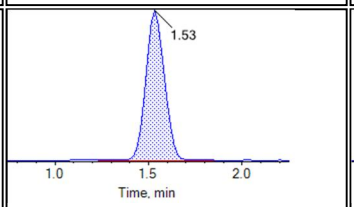
13C6-PFDA



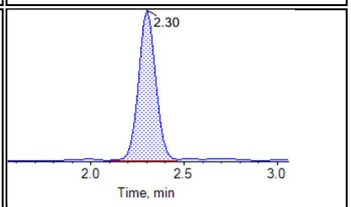
13C7-PFUnA



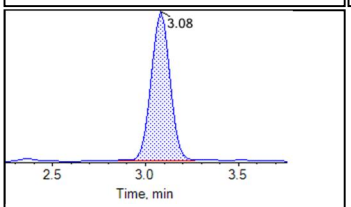
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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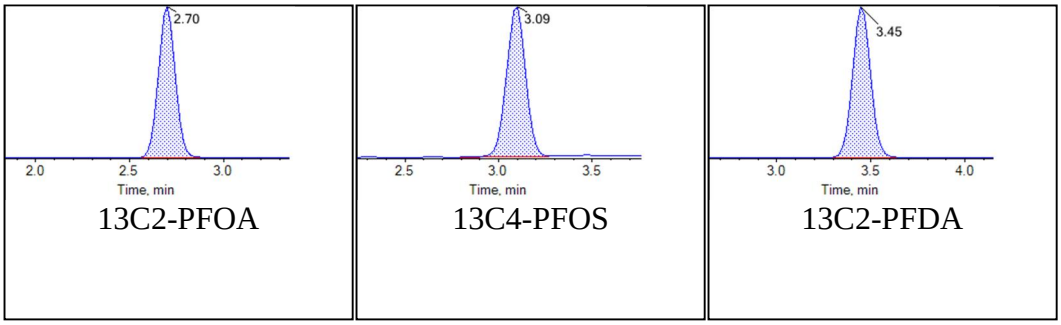

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Chromatogram Report

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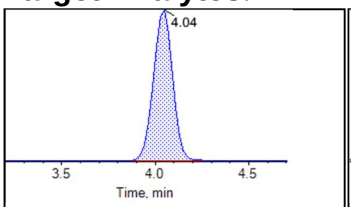
Printed: 01/11/2018 8:49:40 AM

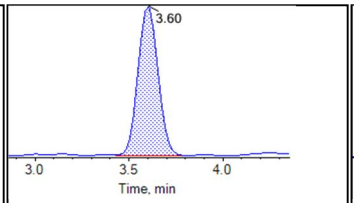
Sample Name	KB80 IB	**Injection Vial**	3
Sample ID	IB	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T11:52:13	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Chromatograms

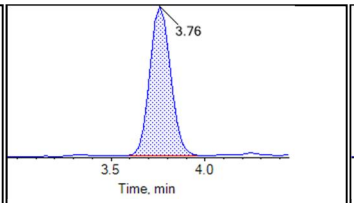
Target Analytes:



13C2-PFDoA



d3-MeFOSAA



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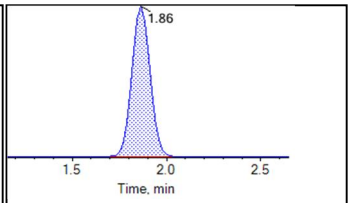

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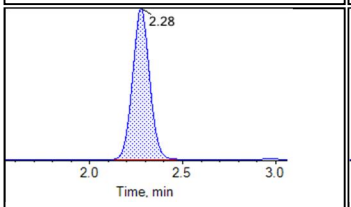

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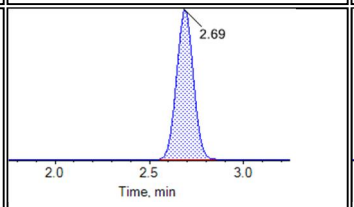
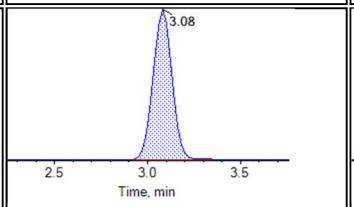
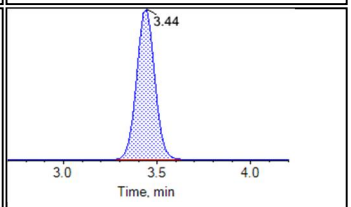


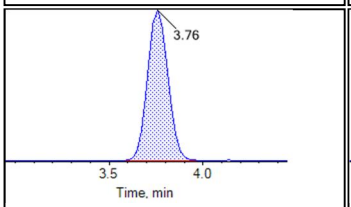
13C8-PFOA



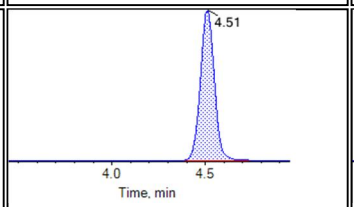
13C9-PFNA



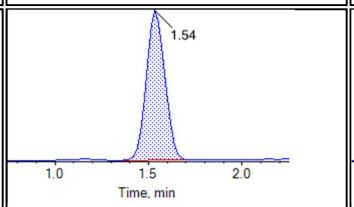
13C6-PFDA



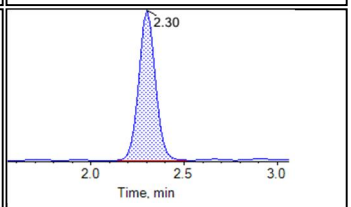
13C7-PFUnA



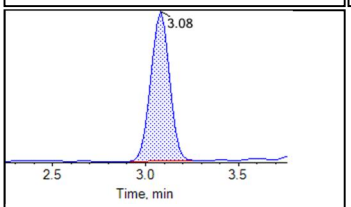
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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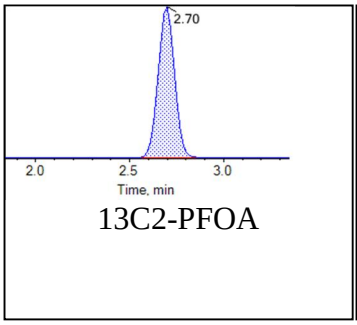
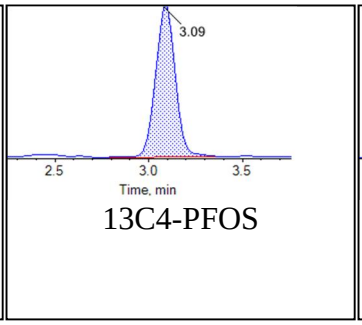
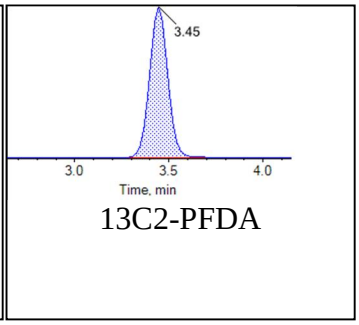


13C2-PFOA



13C4-PFOS



13C2-PFDA

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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:49:59 AM

Sample Name	J8722-FS-D(3)	**Injection Vial**	7
Sample ID	VC-CS00-DW06-1018	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:35:44	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Chromatograms

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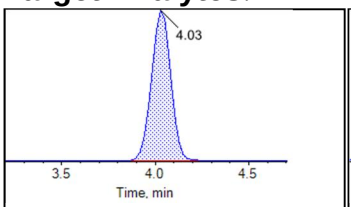
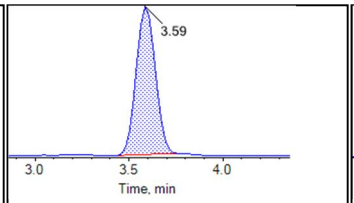
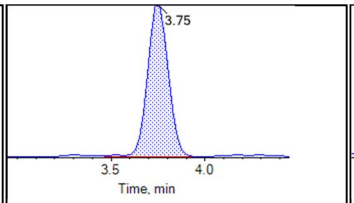


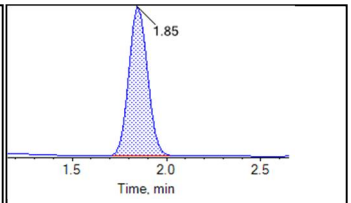
13C2-PFDoA



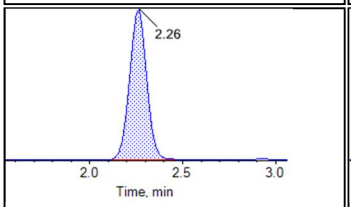
d3-MeFOSAA



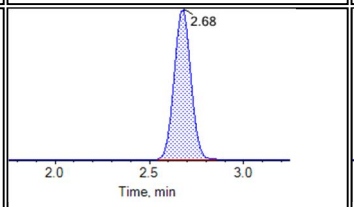
d5-EtFOSAA



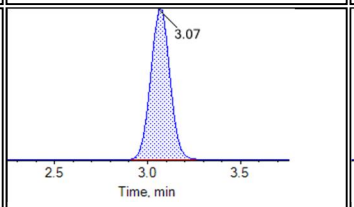
13C5-PFHxA



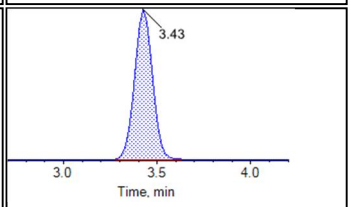
13C4-PFHpA



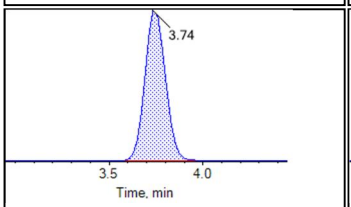
13C8-PFOA



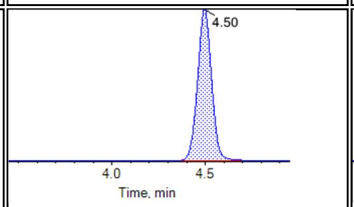
13C9-PFNA



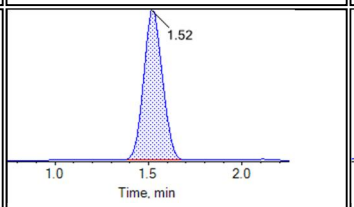
13C6-PFDA



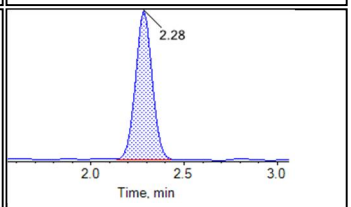
13C7-PFUnA



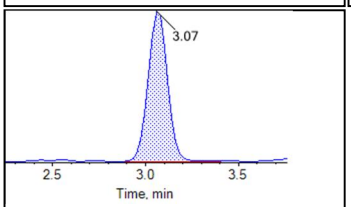
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

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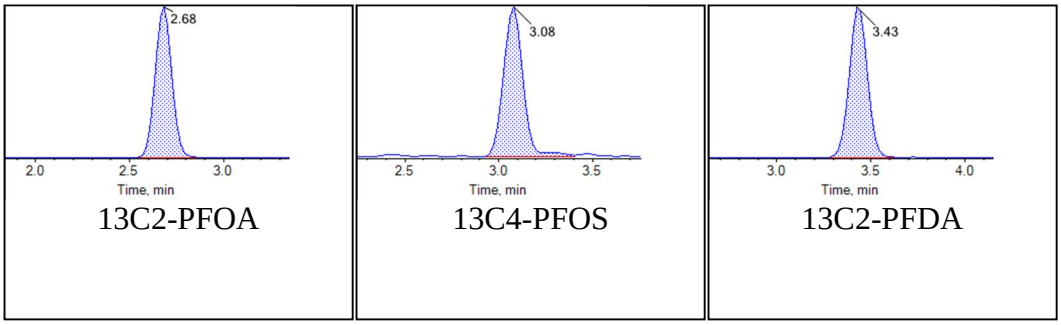
Internal Standards:



BATTELLE

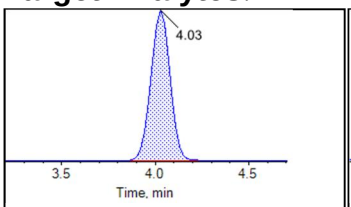
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:50:04 AM

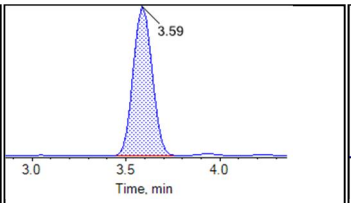
Sample Name	J8720-FS-D(7)	**Injection Vial**	8
Sample ID	VC-CS00-DW04-1018	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:46:35	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Chromatograms

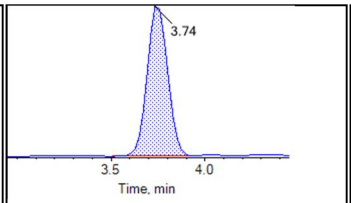
Target Analytes:



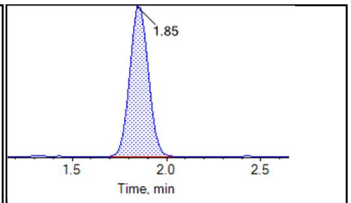
13C2-PFDoA



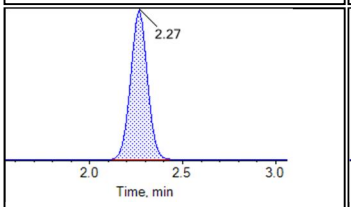
d3-MeFOSAA



d5-EtFOSAA



13C5-PFHxA



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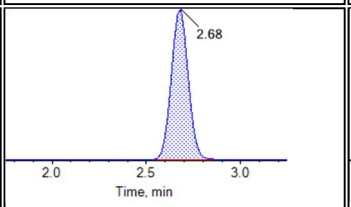
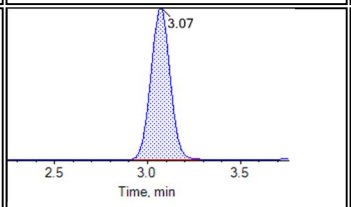
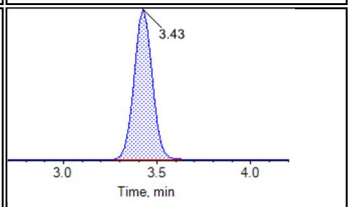


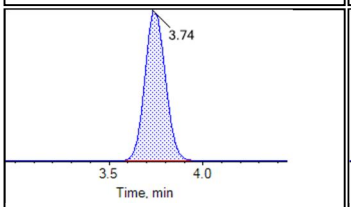
13C8-PFOA



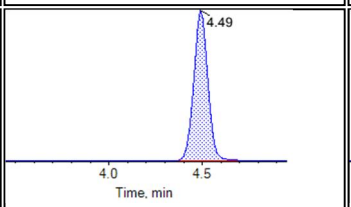
13C9-PFNA



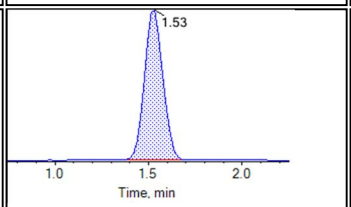
13C6-PFDA



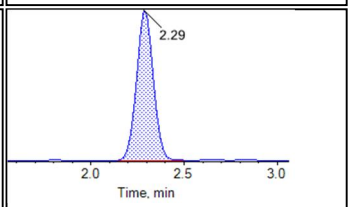
13C7-PFUnA



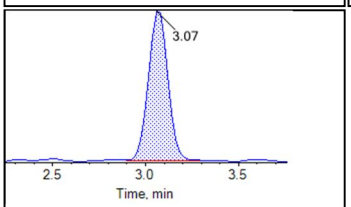
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:50:04 AM

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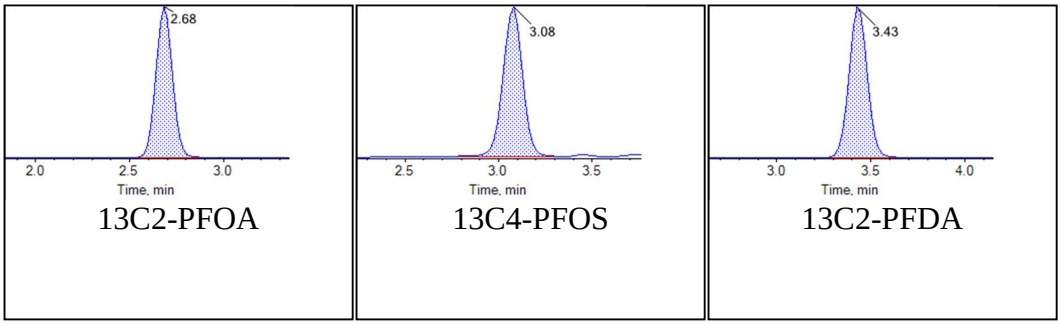

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:50:08 AM

Sample Name	J8716-FS-D(5)	**Injection Vial**	9
Sample ID	VC-CS00-DW01-1018	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T12:57:26	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Chromatograms

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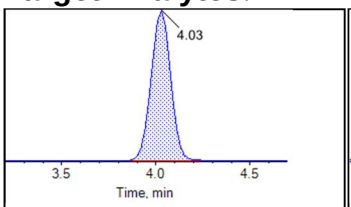
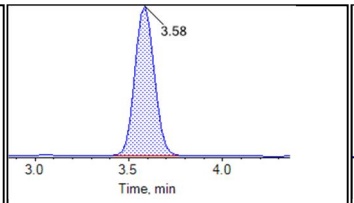
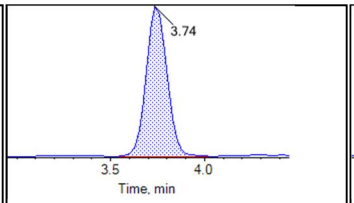


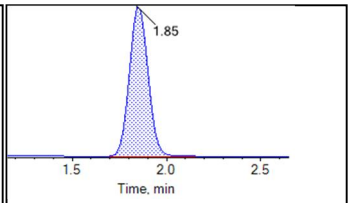
13C2-PFDoA



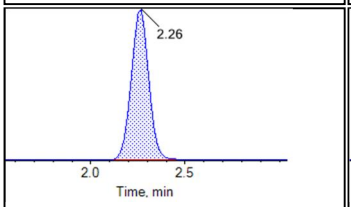
d3-MeFOSAA



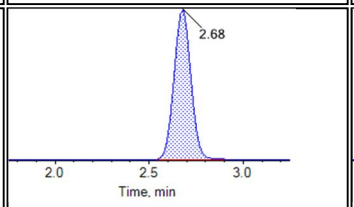
d5-EtFOSAA



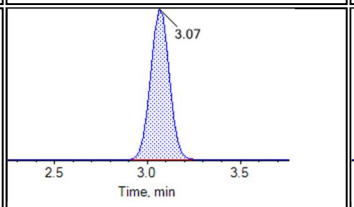
13C5-PFHxA



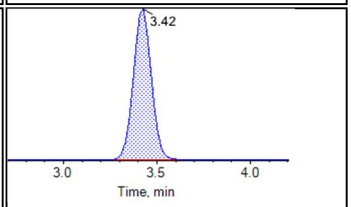
13C4-PFHpA



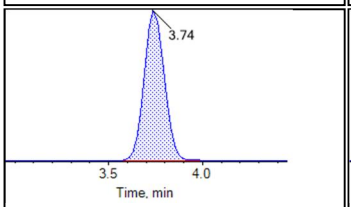
13C8-PFOA



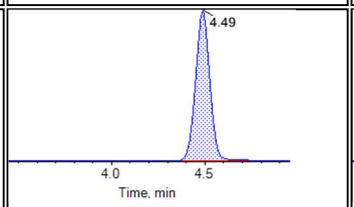
13C9-PFNA



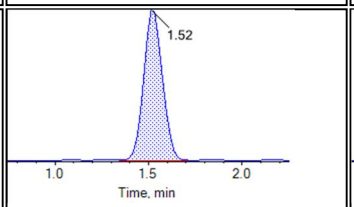
13C6-PFDA



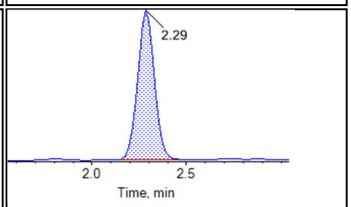
13C7-PFUnA



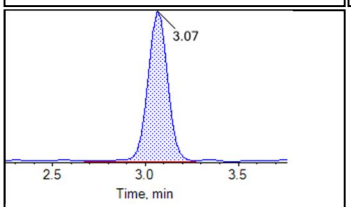
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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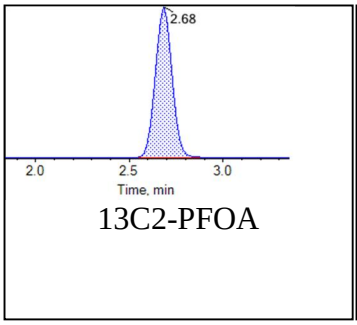
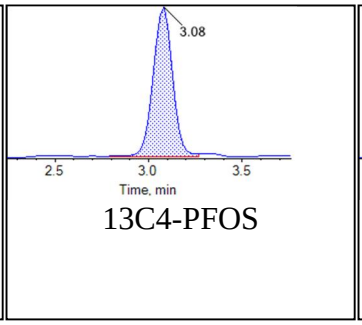
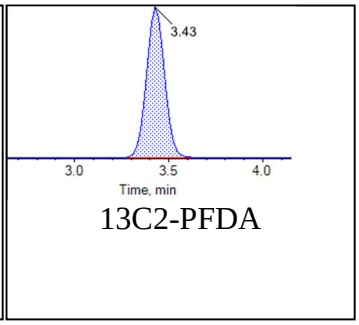


13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

Chromatogram Report

Created with Analyst Reporter
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Sample Name	J8688-FS-D(3)	**Injection Vial**	10
Sample ID	VC-CS18-DW01-1018	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:08:19	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Chromatograms

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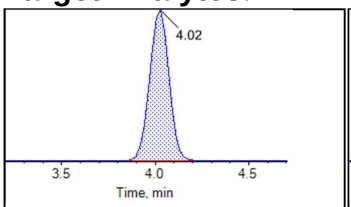
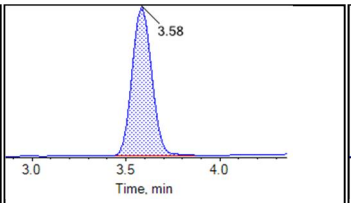
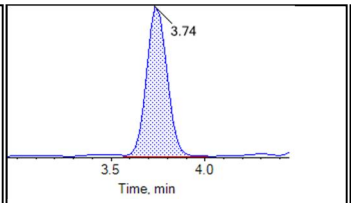


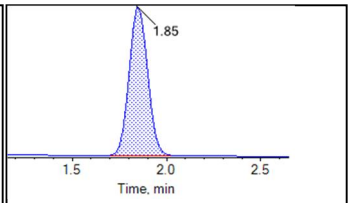
13C2-PFDoA



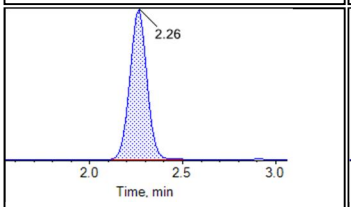
d3-MeFOSAA



d5-EtFOSAA



13C5-PFHxA



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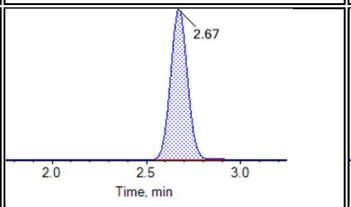
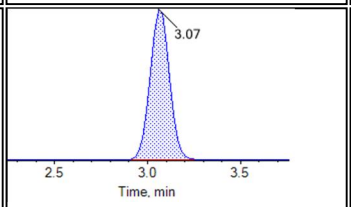
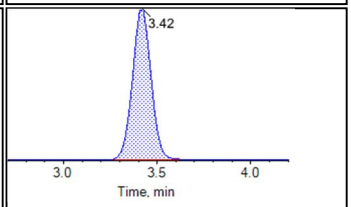


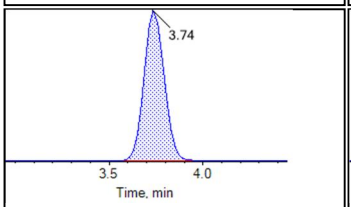
13C8-PFOA



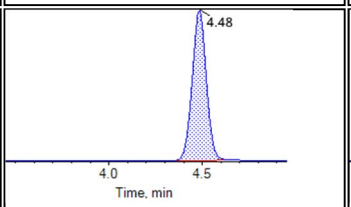
13C9-PFNA



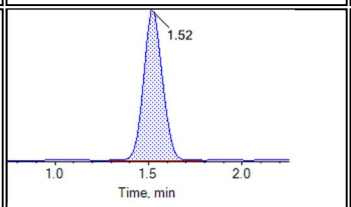
13C6-PFDA



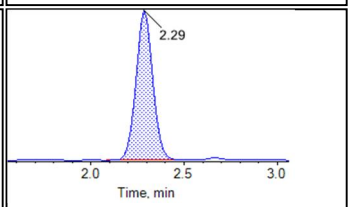
13C7-PFUnA



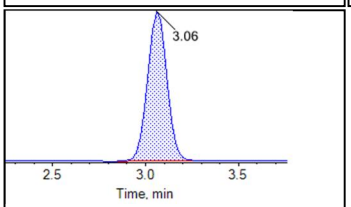
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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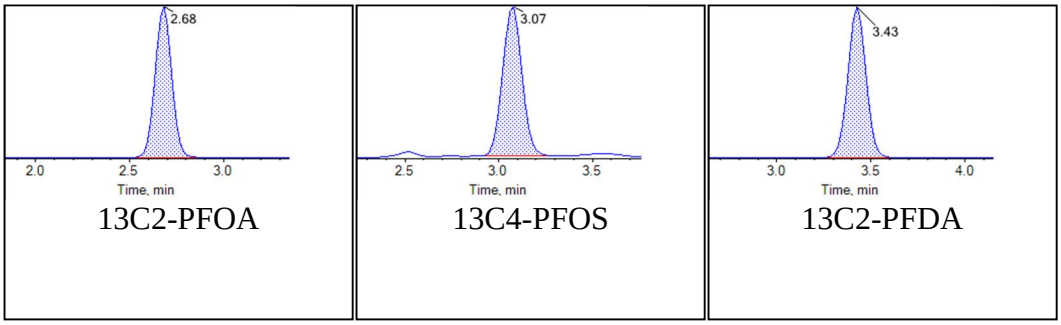


BATTELLE

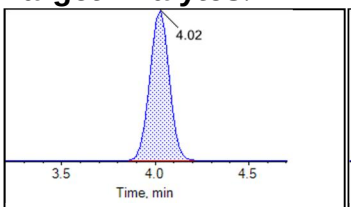
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:50:17 AM

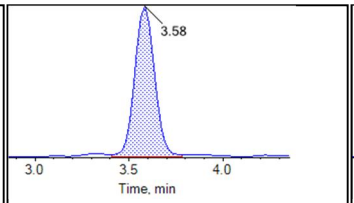
Sample Name	J8687-FS-D(7)	**Injection Vial**	11
Sample ID	VC-CS10-DW04-1018	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:19:10	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Chromatograms

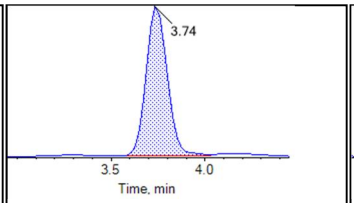
Target Analytes:



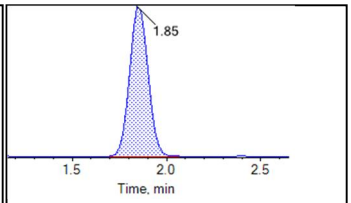
13C2-PFDoA



d3-MeFOSAA



d5-EtFOSAA



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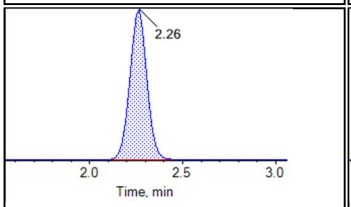

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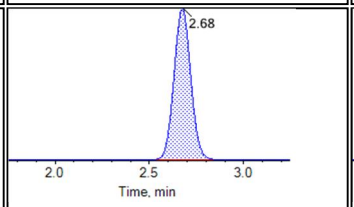
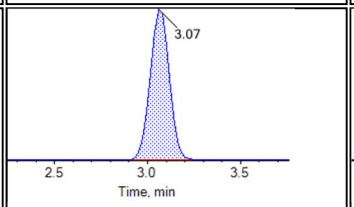
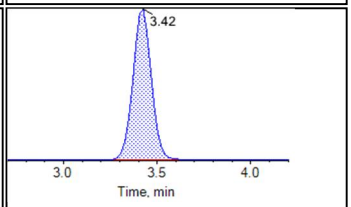


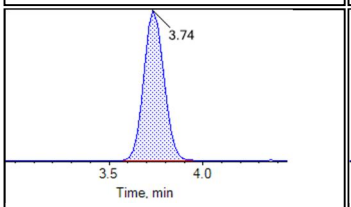
13C8-PFOA



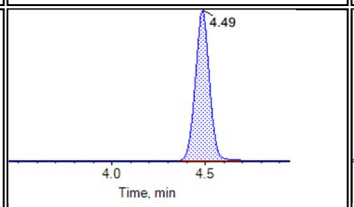
13C9-PFNA



13C6-PFDA



13C7-PFUnA



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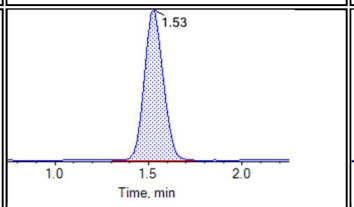
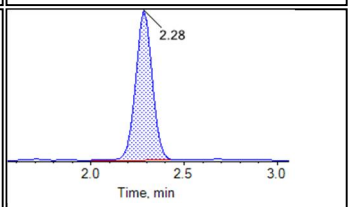
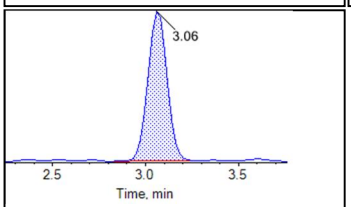


13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

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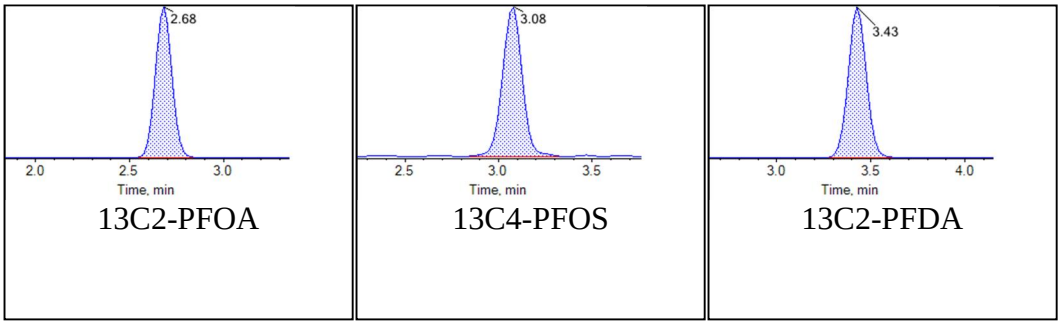
Internal Standards:



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Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:50:22 AM

Sample Name	KB76	**Injection Vial**	13
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:40:54	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Chromatograms

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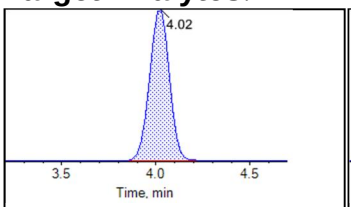

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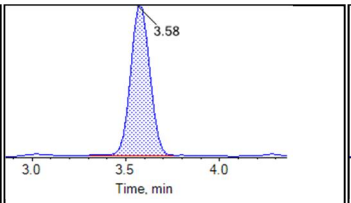

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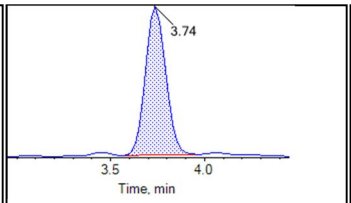
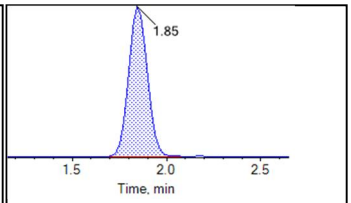


d5-EtFOSAA



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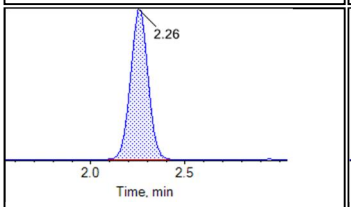

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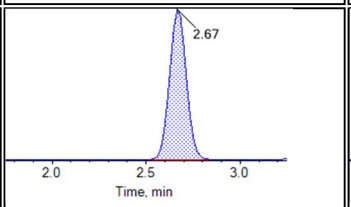

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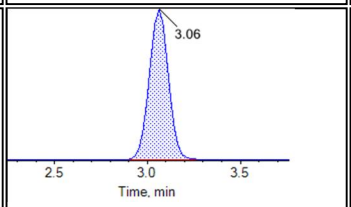
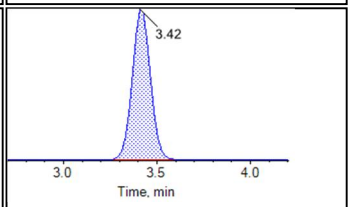
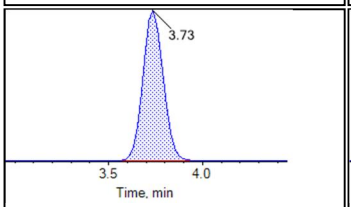


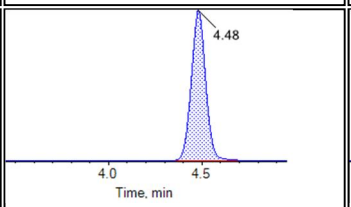
13C9-PFNA



13C6-PFDA



13C7-PFUnA



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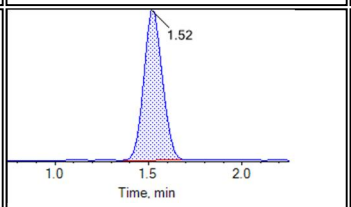
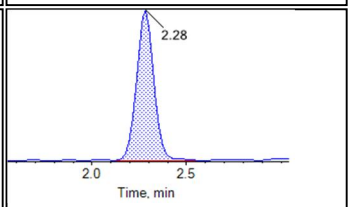


13C3-PFBS



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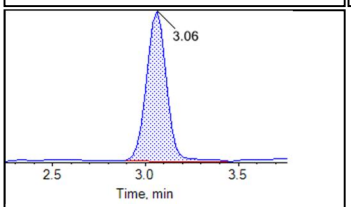

13C8-PFOS

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Chromatogram Report

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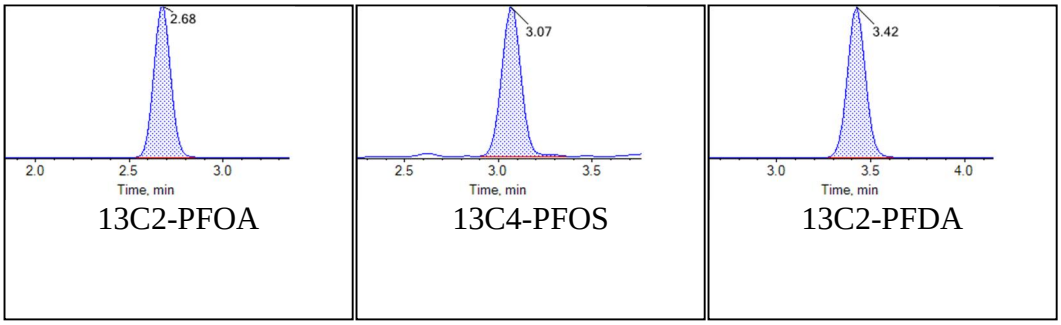

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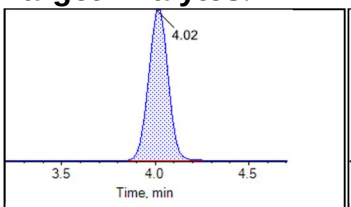
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:50:26 AM

Sample Name	CR987LCS-FS(0)	**Injection Vial**	14
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T13:51:45	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Chromatograms

Target Analytes:



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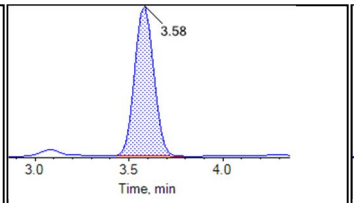
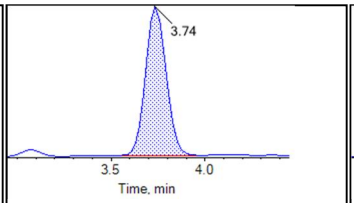


d3-MeFOSAA



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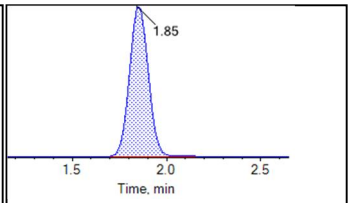

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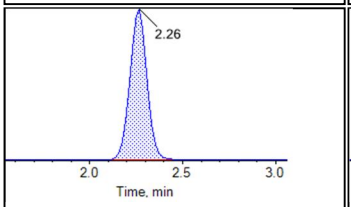

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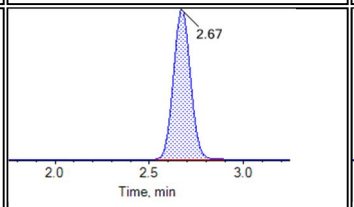

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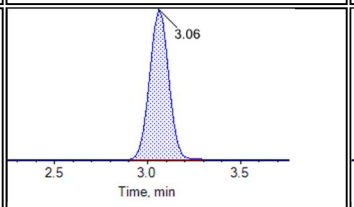
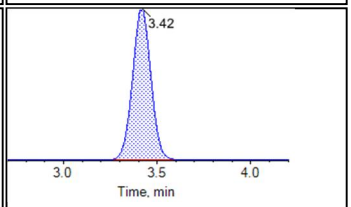
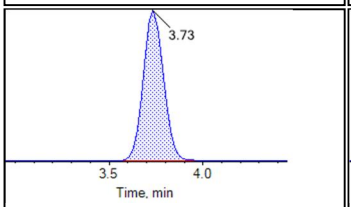


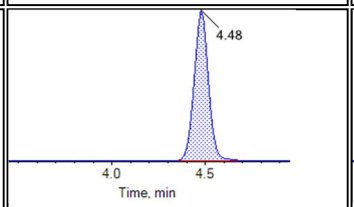
13C9-PFNA



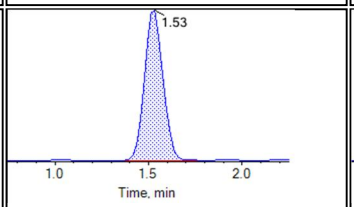
13C6-PFDA



13C7-PFUnA



13C2-PFTeDA



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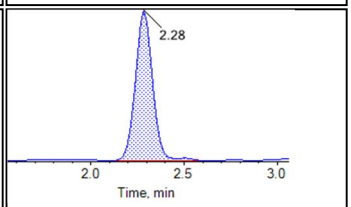
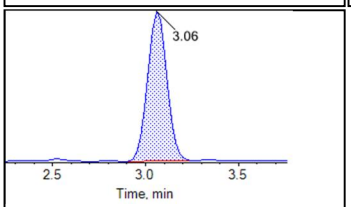


13C3-PFHxS



13C8-PFOS

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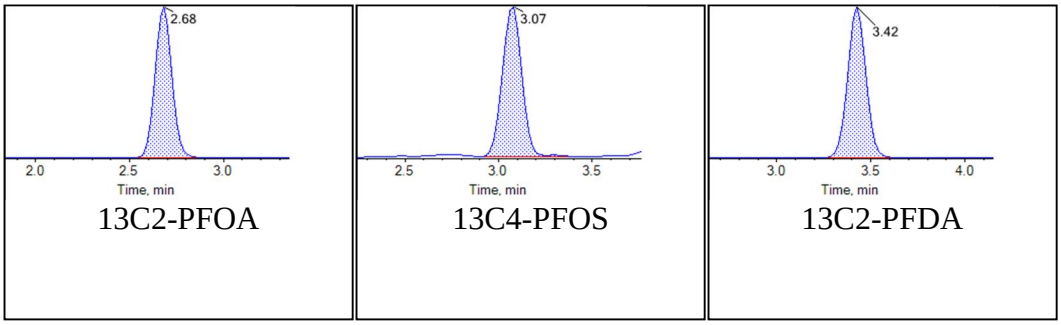

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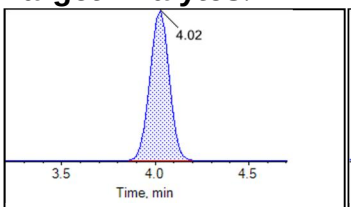
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:50:31 AM

Sample Name	J8667-FS-D(3)	**Injection Vial**	15
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:02:37	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Chromatograms

Target Analytes:



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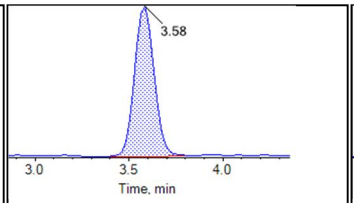

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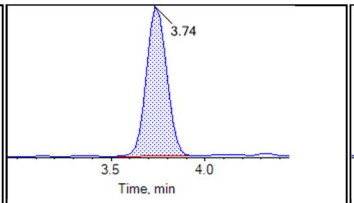

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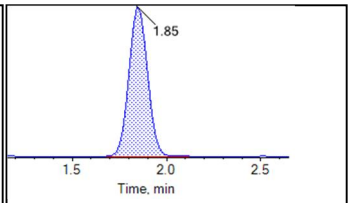

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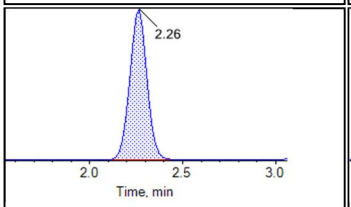

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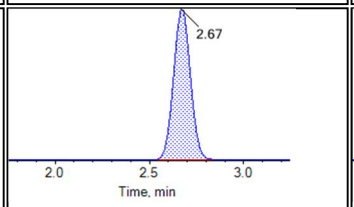
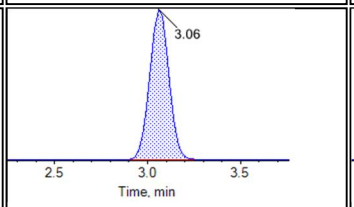
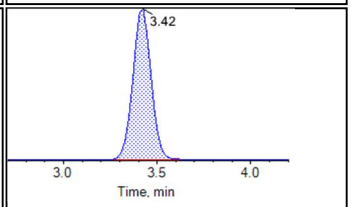


13C8-PFOA



13C9-PFNA



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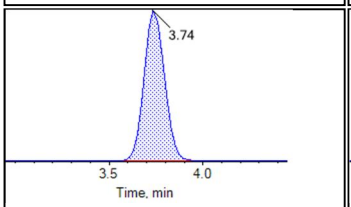
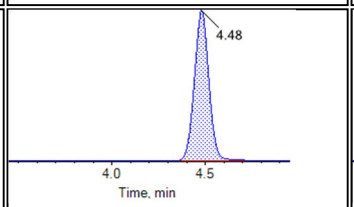
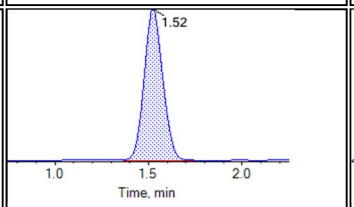


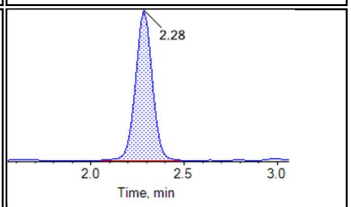
13C7-PFUnA



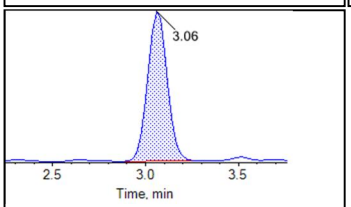
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



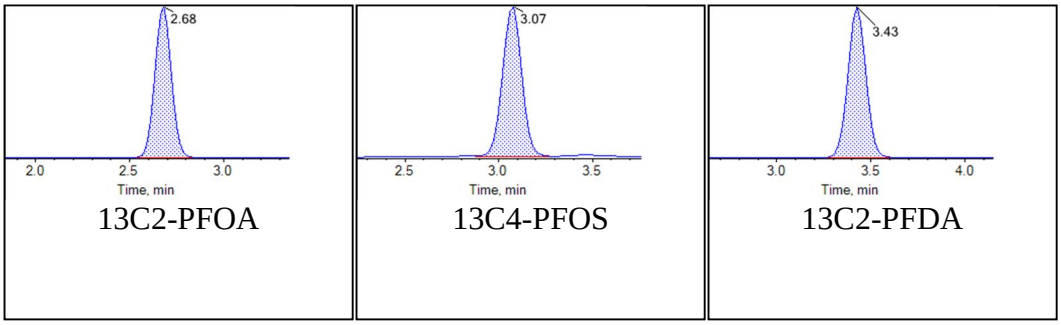
13C8-PFOS

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:50:31 AM

Internal Standards:



BATTELLE

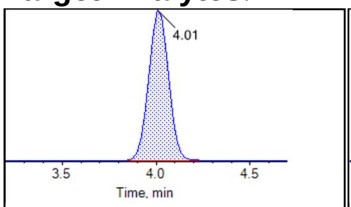
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:50:58 AM

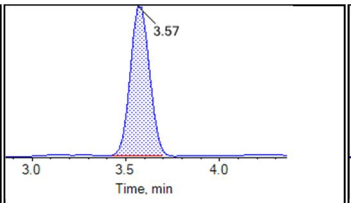
Sample Name	KB77	**Injection Vial**	21
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T15:07:47	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Chromatograms

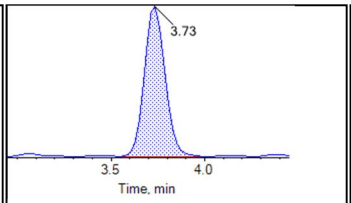
Target Analytes:



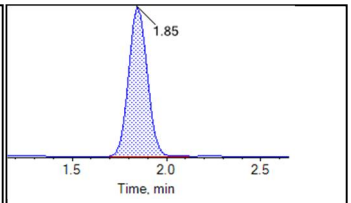
13C2-PFDoA



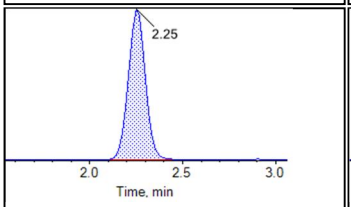
d3-MeFOSAA



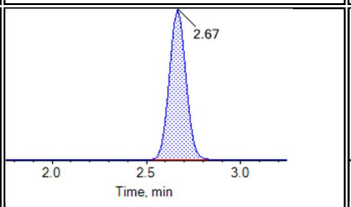
d5-EtFOSAA



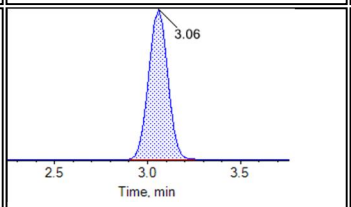
13C5-PFHxA



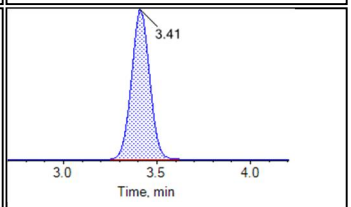
13C4-PFHpA



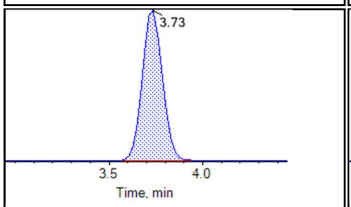
13C8-PFOA



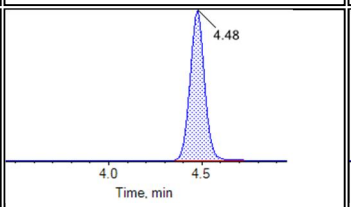
13C9-PFNA



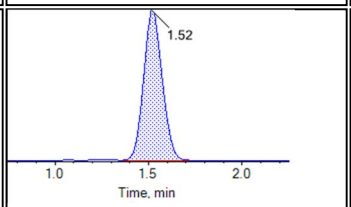
13C6-PFDA



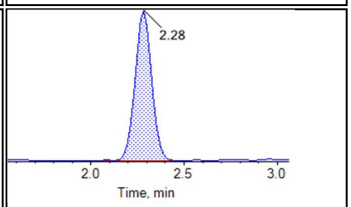
13C7-PFUnA



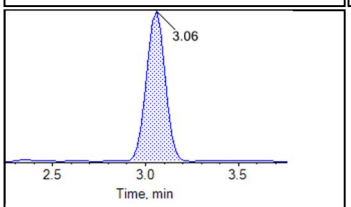
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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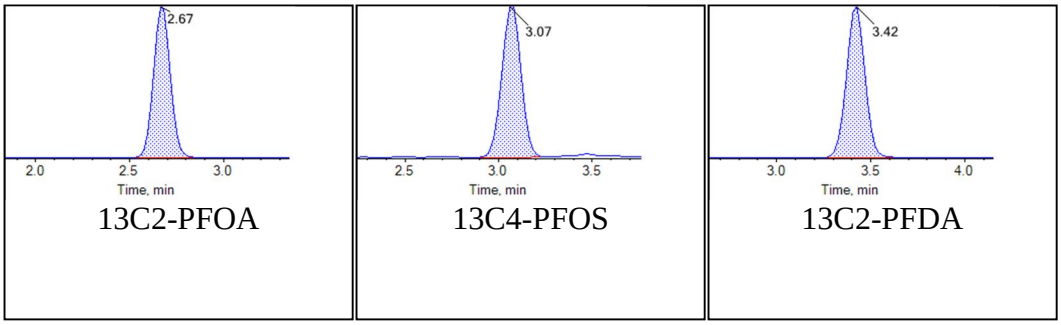
Printed: 01/11/2018 8:50:58 AM

Internal Standards:



Unused Data

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 05/11/2018 5:35:11 PM

Sample Name	CR987LCS-FS(0)	**Injection Vial**	14
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:59:43	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	233513.39	4587.958687	340.0	false
PFBS_2	298.9 / 99.0	1.56	70151.11	4695.168381	334.8	false
PFHxA_1	313.0 / 269.0	1.88	188054.91	4519.108203	64.2	false
PFHxA_2	313.0 / 119.0	1.88	15125.02	4865.906624	51.6	false
PFHpA_1	363.0 / 319.0	2.29	197821.31	5143.915070	148.0	false
PFHpA_2	363.0 / 169.0	2.29	3899.03	4721.358059	90.5	false
PFHxS_1	399.0 / 80.0	2.31	267302.15	5807.408996	226.9	false
PFHxS_2	399.0 / 99.0	2.31	75203.64	5855.333309	360.1	false
PFOA_1	413.0 / 369.0	2.70	294853.67	5094.312877	219.9	false
PFOA_2	413.0 / 169.0	2.70	17128.29	4556.111292	175.5	false
PFNA_1	463.0 / 419.0	3.09	259396.44	6293.364676	308.2	false
PFNA_2	463.0 / 219.0	3.09	77978.31	6133.109407	297.7	false
PFOS_1	499.0 / 80.0	3.09	397958.37	4916.142828	194.1	false
PFOS_2	499.0 / 99.0	3.09	68789.63	4893.647735	313.7	false
PFDA_1	513.0 / 469.0	3.44	299297.10	5192.552176	320.0	false
PFDA_2	513.0 / 219.0	3.44	14340.84	6040.985917	150.8	false
PFUnA_1	563.0 / 519.0	3.76	272928.85	4836.614628	279.5	false
PFUnA_2	563.0 / 269.0	3.76	15127.45	5395.834403	178.6	false
PFDoA_1	613.0 / 569.0	4.04	262782.72	5370.176003	341.6	false
PFDoA_2	613.0 / 319.0	4.04	44273.93	5806.921453	266.0	false
PFTrDA_1	663.0 / 619.0	4.29	241560.27	5372.158380	544.4	false
PFTrDA_2	663.0 / 169.0	4.28	16577.73	5611.240958	302.3	false
PFTeDA_1	713.0 / 669.0	4.50	274391.01	5382.987139	1146.7	false
PFTeDA_2	713.0 / 169.0	4.50	13658.30	5534.031132	440.6	false
NMeFOSAA_1	570.0 / 419.0	3.60	56126.73	5089.984862	1304.4	false
NMeFOSAA_2	570.0 / 512.0	3.60	30797.10	5133.473266	348.5	false
NEtFOSAA_1	584.0 / 419.0	3.76	52180.56	6339.874684	686.6	false
NEtFOSAA_2	584.0 / 483.0	3.76	3481.49	7229.684428	55924.8	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:11:55 AM

Sample Name	J8667-FS-D(3)	**Injection Vial**	16
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:21:29	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	1.02e5	824.556700	205.3	false
PFBS_2	298.9 / 99.0	1.56	3.12e4	864.494753	170.6	false
PFHxA_1	313.0 / 269.0	1.88	3.35e5	3965.481940	78.7	false
PFHxA_2	313.0 / 119.0	1.88	2.24e4	3536.736960	64.7	false
PFHpA_1	363.0 / 319.0	2.28	8.99e4	1154.929383	84.7	false
PFHpA_2	363.0 / 169.0	2.28	2.95e3	1731.936997	64.7	false
PFHxS_1	399.0 / 80.0	2.31	1.00e6	9914.214885	423.5	false
PFHxS_2	399.0 / 99.0	2.31	2.77e5	9810.473048	506.6	false
PFOA_1	413.0 / 369.0	2.69	4.71e5	4553.836011	338.3	false
PFOA_2	413.0 / 169.0	2.65	4.22e4	6295.654070	172.8	false
PFNA_1	463.0 / 419.0	3.08	5.88e3	30.161133	26.7	false
PFNA_2	463.0 / 219.0	3.10	1.84e3	35.051124	28.2	false
PFOS_1	499.0 / 80.0	3.07	2.33e6	11707.007141	318.6	false
PFOS_2	499.0 / 99.0	3.09	3.70e5	10696.998653	687.0	false
PFDA_1	513.0 / 469.0	3.44	1.41e3	< 0	13.1	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	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.50	3.74e2	< 0	19.5	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	3.73	1.67e2	78.415131	18.5	false

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:07:16 AM

Sample Name	CR987LCS-FS(0)	**Injection Vial**	14
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:59:43	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	13449.00	243.962845	1491.3	false
d3-MeFOSAA	573.0 / 419.0	3.60	2819.80	305.450070	43.6	false
d5-EtFOSAA	589.0 / 419.0	3.75	2315.96	221.017698	75.8	false
13C5-PFHxA	318.0 / 273.0	1.87	10483.17	350.326622	272.5	false
13C4-PFHpA	367.0 / 322.0	2.28	10919.17	320.734077	380.0	false
13C8-PFOA	421.0 / 376.0	2.69	14386.67	347.388922	2823835.2	false
13C9-PFNA	472.0 / 427.0	3.07	12374.57	261.685939	315.6	false
13C6-PFDA	519.0 / 474.0	3.43	13799.47	248.460602	549.8	false
13C7-PFUnA	570.0 / 525.0	3.74	13416.00	261.499342	486.7	false
13C2-PFTeDA	715.0 / 670.0	4.49	11726.88	263.475844	664.0	false
13C3-PFBS	302.0 / 99.0	1.54	4060.76	241.455192	220.5	false
13C3-PFHxS	402.0 / 99.0	2.30	3297.92	216.405085	84.5	false
13C8-PFOS	507.0 / 99.0	3.07	3672.79	213.339019	66.6	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:07:24 AM

Sample Name	J8667-FS-D(3)	**Injection Vial**	16
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:21:29	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.03	31905.03	293.733685	828.7	false
d3-MeFOSAA	573.0 / 419.0	3.59	6993.13	367.342340	111.6	true
d5-EtFOSAA	589.0 / 419.0	3.75	5579.14	258.190366	112.2	false
13C5-PFHxA	318.0 / 273.0	1.87	21253.49	270.445049	429.9	false
13C4-PFHpA	367.0 / 322.0	2.27	21827.11	244.129299	578.9	false
13C8-PFOA	421.0 / 376.0	2.68	25679.14	236.104480	867.1	false
13C9-PFNA	472.0 / 427.0	3.07	28187.52	226.973428	729.5	false
13C6-PFDA	519.0 / 474.0	3.43	26972.35	246.476061	807.5	false
13C7-PFUnA	570.0 / 525.0	3.75	28350.91	280.462844	496.6	false
13C2-PFTeDA	715.0 / 670.0	4.49	27285.61	311.137743	1440.5	false
13C3-PFBS	302.0 / 99.0	1.54	9776.77	281.904292	282.2	false
13C3-PFHxS	402.0 / 99.0	2.29	7105.20	226.089692	156.6	false
13C8-PFOS	507.0 / 99.0	3.07	9545.11	268.863464	132.3	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:19:07 AM

Sample Name	J8717-FS(0)	**Injection Vial**	16
Sample ID	VC-CS00-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:13:28	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.51	9.53e4	393.904517	35.8	true
PFBS_2	298.9 / 99.0	1.53	1.73e4	242.583724	63.9	false
PFHxA_1	313.0 / 269.0	1.85	3.56e5	1418.655133	42.7	false
PFHxA_2	313.0 / 119.0	1.85	2.54e4	1338.529289	73.1	false
PFHpA_1	363.0 / 319.0	2.27	9.65e4	289.950625	27.4	true
PFHpA_2	363.0 / 169.0	2.25	1.10e3	76.575737	18.6	false
PFHxS_1	399.0 / 80.0	2.29	9.58e5	2567.333943	114.0	false
PFHxS_2	399.0 / 99.0	2.29	2.67e5	2561.699454	375.6	false
PFOA_1	413.0 / 369.0	2.68	6.27e5	1841.629885	124.1	false
PFOA_2	413.0 / 169.0	2.67	5.43e4	2459.678051	178.9	false
PFNA_1	463.0 / 419.0	3.07	1.63e4	21.730522	27.0	false
PFNA_2	463.0 / 219.0	3.08	5.19e3	27.497014	41.6	false
PFOS_1	499.0 / 80.0	3.07	8.00e6	17731.734901	296.2	false
PFOS_2	499.0 / 99.0	3.07	1.35e6	17217.887536	822.3	false
PFDA_1	513.0 / 469.0	3.42	7.46e3	< 0	17.9	true
PFDA_2	513.0 / 219.0	3.42	7.82e2	20.761550	21.2	false
PFUnA_1	563.0 / 519.0	3.74	3.07e3	< 0	14.8	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	4.26	1.57e3	< 0	19.2	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	4.49	1.66e2	< 0	11.3	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

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:19:11 AM

Sample Name	J8718-FS(0)	**Injection Vial**	17
Sample ID	VC-CS00-DW02P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:24:20	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.49	9.76e4	404.061955	27.8	true
PFBS_2	298.9 / 99.0	1.52	1.60e4	225.663720	79.5	false
PFHxA_1	313.0 / 269.0	1.85	3.07e5	1226.202868	40.8	false
PFHxA_2	313.0 / 119.0	1.85	2.08e4	1093.761922	57.7	false
PFHpA_1	363.0 / 319.0	2.27	1.06e5	317.255442	28.4	true
PFHpA_2	363.0 / 169.0	2.26	2.11e3	227.939315	34.8	false
PFHxS_1	399.0 / 80.0	2.29	7.01e5	2109.256251	75.7	false
PFHxS_2	399.0 / 99.0	2.29	1.82e5	1960.878033	270.7	false
PFOA_1	413.0 / 369.0	2.68	4.30e5	1346.263920	88.1	false
PFOA_2	413.0 / 169.0	2.67	3.59e4	1736.222478	166.7	false
PFNA_1	463.0 / 419.0	3.08	1.53e4	22.621521	29.1	false
PFNA_2	463.0 / 219.0	3.08	6.39e3	46.012460	46.5	false
PFOS_1	499.0 / 80.0	3.08	5.33e6	12547.676060	256.0	false
PFOS_2	499.0 / 99.0	3.08	9.42e5	12764.271126	750.0	false
PFDA_1	513.0 / 469.0	3.43	9.32e3	0.880237	22.6	true
PFDA_2	513.0 / 219.0	3.43	1.10e3	40.534796	24.0	false
PFUnA_1	563.0 / 519.0	3.73	3.07e3	< 0	17.4	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.03	1.38e3	< 0	14.3	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.27	8.10e2	< 0	18.7	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	J8719-FS(0)	**Injection Vial**	18
Sample ID	VC-CS00-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:35:12	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
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	1.52	3.32e3	47.520033	31.4	true
PFHxA_1	313.0 / 269.0	1.85	7.79e4	274.374349	22.2	false
PFHxA_2	313.0 / 119.0	1.86	5.03e3	216.254135	21.9	false
PFHpA_1	363.0 / 319.0	2.27	2.95e4	81.308439	12.6	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.29	6.14e4	159.305704	41.8	true
PFHxS_2	399.0 / 99.0	2.28	1.36e4	117.120168	78.9	false
PFOA_1	413.0 / 369.0	2.68	1.48e5	424.400649	61.5	false
PFOA_2	413.0 / 169.0	2.68	9.85e3	437.435922	91.4	false
PFNA_1	463.0 / 419.0	3.08	9.39e3	0.407222	19.4	false
PFNA_2	463.0 / 219.0	3.07	2.79e3	2.953563	33.5	false
PFOS_1	499.0 / 80.0	3.07	3.96e5	885.452652	94.1	false
PFOS_2	499.0 / 99.0	3.07	7.17e4	921.873857	236.9	false
PFDA_1	513.0 / 469.0	3.42	8.28e3	< 0	22.4	true
PFDA_2	513.0 / 219.0	3.40	1.69e3	77.687368	22.3	false
PFUnA_1	563.0 / 519.0	3.73	2.84e3	< 0	12.8	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.02	1.51e3	< 0	14.2	true
PFDoA_2	613.0 / 319.0	4.04	3.67e2	< 0	8.0	true
PFTrDA_1	663.0 / 619.0	4.25	7.76e2	< 0	19.5	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

Created with Analyst Reporter
Printed: 01/11/2018 8:19:20 AM

Sample Name	J8721-FS(0)	**Injection Vial**	19
Sample ID	VC-CS00-DW05-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:46:02	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	9.54e4	240.553952	64.2	true
PFBS_2	298.9 / 99.0	1.53	2.27e4	195.962907	83.1	false
PFHxA_1	313.0 / 269.0	1.85	3.20e5	958.933166	39.9	false
PFHxA_2	313.0 / 119.0	1.85	2.71e4	1079.074889	58.4	false
PFHpA_1	363.0 / 319.0	2.27	3.57e4	76.442916	18.7	true
PFHpA_2	363.0 / 169.0	2.24	1.15e3	56.205000	12.6	false
PFHxS_1	399.0 / 80.0	2.29	2.62e5	607.094327	89.5	false
PFHxS_2	399.0 / 99.0	2.29	7.09e4	583.094867	198.9	false
PFOA_1	413.0 / 369.0	2.68	1.61e5	463.285620	73.0	false
PFOA_2	413.0 / 169.0	2.67	1.26e4	562.059611	111.1	false
PFNA_1	463.0 / 419.0	3.07	7.33e3	< 0	17.8	false
PFNA_2	463.0 / 219.0	3.08	3.53e3	9.454610	37.5	false
PFOS_1	499.0 / 80.0	3.07	8.42e5	1662.663991	132.6	false
PFOS_2	499.0 / 99.0	3.07	1.48e5	1677.745867	338.0	false
PFDA_1	513.0 / 469.0	3.42	1.68e4	21.858169	36.6	false
PFDA_2	513.0 / 219.0	3.47	1.43e3	65.766477	26.6	false
PFUnA_1	563.0 / 519.0	3.73	6.93e3	4.998409	27.9	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.02	5.61e3	< 0	45.9	false
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.26	2.66e3	< 0	48.0	false
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	3.59	2.64e2	< 0	13.0	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	3.76	7.19e2	< 0	22.1	false
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:19:24 AM

Sample Name	J8722-FS(0)	**Injection Vial**	20
Sample ID	VC-CS00-DW06-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:56:55	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	3.16e5	1222.234195	74.8	false
PFBS_2	298.9 / 99.0	1.53	8.65e4	1138.886822	145.2	false
PFHxA_1	313.0 / 269.0	1.85	2.77e6	9832.554105	116.8	false
PFHxA_2	313.0 / 119.0	1.85	1.79e5	8500.674038	201.0	false
PFHpA_1	363.0 / 319.0	2.26	6.90e5	1992.745853	91.9	false
PFHpA_2	363.0 / 169.0	2.25	1.49e4	1971.253198	129.3	false
PFHxS_1	399.0 / 80.0	2.28	1.55e7	37922.641420	556.7	false
PFHxS_2	399.0 / 99.0	2.28	4.59e6	40284.995052	1041.2	false
PFOA_1	413.0 / 369.0	2.67	2.76e6	8125.701713	213.6	false
PFOA_2	413.0 / 169.0	2.65	2.43e5	10980.567899	310.9	false
PFNA_1	463.0 / 419.0	3.07	1.31e5	439.490870	94.1	false
PFNA_2	463.0 / 219.0	3.07	4.51e4	496.942239	170.2	false
PFOS_1	499.0 / 80.0	3.04	8.29e7	163529.246019	551.6	false
PFOS_2	499.0 / 99.0	3.07	1.45e7	164999.882425	1907.6	false
PFDA_1	513.0 / 469.0	3.42	2.74e4	43.067461	46.7	false
PFDA_2	513.0 / 219.0	3.42	1.72e3	74.446139	37.2	false
PFUnA_1	563.0 / 519.0	3.74	5.40e3	1.903328	26.9	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.03	2.01e3	< 0	25.5	false
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	4.27	7.27e2	< 0	27.4	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	3.74	2.99e2	< 0	14.6	false
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Printed: 01/11/2018 8:16:14 AM

Sample Name	J8717-FS(0)	**Injection Vial**	16
Sample ID	VC-CS00-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:13:28	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_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	104116.94	280.977168	925.1	false
d3-MeFOSAA	573.0 / 419.0	3.57	19305.46	403.319363	178.6	false
d5-EtFOSAA	589.0 / 419.0	3.73	23098.49	425.134283	250.0	false
13C5-PFHxA	318.0 / 273.0	1.84	62264.58	285.144021	187.1	false
13C4-PFHpA	367.0 / 322.0	2.25	88929.95	357.969615	390.5	false
13C8-PFOA	421.0 / 376.0	2.67	84204.87	278.634849	398.0	false
13C9-PFNA	472.0 / 427.0	3.06	90048.76	260.957923	320.9	false
13C6-PFDA	519.0 / 474.0	3.41	102396.79	274.282048	715.9	false
13C7-PFUnA	570.0 / 525.0	3.73	105037.87	304.585582	882.7	false
13C2-PFTeDA	715.0 / 670.0	4.48	71515.26	239.041240	1160.3	false
13C3-PFBS	302.0 / 99.0	1.51	19052.93	218.493208	221.7	false
13C3-PFHxS	402.0 / 99.0	2.28	25697.64	325.212684	222.6	false
13C8-PFOS	507.0 / 99.0	3.06	22543.29	252.544540	153.1	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:16:19 AM

Sample Name	J8718-FS(0)	**Injection Vial**	17
Sample ID	VC-CS00-DW02P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:24:20	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_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	98177.40	260.334147	825.6	false
d3-MeFOSAA	573.0 / 419.0	3.57	18386.13	364.664462	174.7	false
d5-EtFOSAA	589.0 / 419.0	3.73	23598.59	412.346993	305.0	false
13C5-PFHxA	318.0 / 273.0	1.84	61906.11	304.059271	155.9	false
13C4-PFHpA	367.0 / 322.0	2.26	89532.51	386.527474	312.8	false
13C8-PFOA	421.0 / 376.0	2.67	78659.97	279.160204	433.0	false
13C9-PFNA	472.0 / 427.0	3.06	83405.50	259.232196	416.4	false
13C6-PFDA	519.0 / 474.0	3.41	99827.52	262.743097	605.8	false
13C7-PFUnA	570.0 / 525.0	3.72	104893.25	298.869063	863.1	false
13C2-PFTeDA	715.0 / 670.0	4.48	68633.00	225.412044	1610.0	false
13C3-PFBS	302.0 / 99.0	1.51	19028.64	207.165806	215.7	false
13C3-PFHxS	402.0 / 99.0	2.28	23108.20	277.635300	168.6	false
13C8-PFOS	507.0 / 99.0	3.06	21429.97	227.916851	150.7	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:16:24 AM

Sample Name	J8719-FS(0)	**Injection Vial**	18
Sample ID	VC-CS00-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:35:12	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_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	91551.50	241.507683	906.7	false
d3-MeFOSAA	573.0 / 419.0	3.57	15621.36	362.739599	176.1	false
d5-EtFOSAA	589.0 / 419.0	3.73	21817.23	446.323045	227.1	false
13C5-PFHxA	318.0 / 273.0	1.84	64137.39	305.074271	204.4	false
13C4-PFHpA	367.0 / 322.0	2.25	83508.85	349.141655	341.3	false
13C8-PFOA	421.0 / 376.0	2.67	83662.88	287.542529	300.7	false
13C9-PFNA	472.0 / 427.0	3.06	85502.09	257.359677	353.7	false
13C6-PFDA	519.0 / 474.0	3.41	97446.23	255.147859	569.9	false
13C7-PFUnA	570.0 / 525.0	3.73	102618.31	290.873469	616.9	false
13C2-PFTeDA	715.0 / 670.0	4.48	77621.59	253.613588	1376.0	false
13C3-PFBS	302.0 / 99.0	1.51	17611.58	224.482001	203.8	false
13C3-PFHxS	402.0 / 99.0	2.28	24421.23	343.517641	253.0	false
13C8-PFOS	507.0 / 99.0	3.06	22022.77	274.220471	180.4	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:16:29 AM

Sample Name	J8721-FS(0)	**Injection Vial**	19
Sample ID	VC-CS00-DW05-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:46:02	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_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	120872.99	339.318805	1056.7	false
d3-MeFOSAA	573.0 / 419.0	3.57	20165.49	371.474989	233.0	true
d5-EtFOSAA	589.0 / 419.0	3.73	26319.79	427.146497	255.0	false
13C5-PFHxA	318.0 / 273.0	1.84	81688.19	337.437334	203.1	false
13C4-PFHpA	367.0 / 322.0	2.25	106313.37	386.008303	387.4	false
13C8-PFOA	421.0 / 376.0	2.67	83811.77	250.157703	427.2	false
13C9-PFNA	472.0 / 427.0	3.06	89995.01	235.245769	484.7	false
13C6-PFDA	519.0 / 474.0	3.41	92947.49	258.986878	777.8	false
13C7-PFUnA	570.0 / 525.0	3.73	110953.19	334.681925	979.5	false
13C2-PFTeDA	715.0 / 670.0	4.47	81827.83	284.514362	1512.7	false
13C3-PFBS	302.0 / 99.0	1.51	30976.23	313.225101	265.2	false
13C3-PFHxS	402.0 / 99.0	2.28	29550.45	329.754177	247.7	false
13C8-PFOS	507.0 / 99.0	3.06	24675.64	243.747945	166.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 01/11/2018 8:16:33 AM

Sample Name	J8722-FS(0)	**Injection Vial**	20
Sample ID	VC-CS00-DW06-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:56:55	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C2-PFDoA	615.0 / 570.0	4.02	96660.88	244.261942	931.9	false
d3-MeFOSAA	573.0 / 419.0	3.57	17051.26	348.309728	231.1	false
d5-EtFOSAA	589.0 / 419.0	3.73	21239.15	382.225712	207.4	false
13C5-PFHxA	318.0 / 273.0	1.83	71343.57	326.170801	204.1	false
13C4-PFHpA	367.0 / 322.0	2.25	97700.78	392.611632	306.1	false
13C8-PFOA	421.0 / 376.0	2.67	84671.81	279.707461	397.6	false
13C9-PFNA	472.0 / 427.0	3.06	83848.43	242.579822	366.8	false
13C6-PFDA	519.0 / 474.0	3.41	101917.22	255.631300	719.5	false
13C7-PFUnA	570.0 / 525.0	3.73	109157.39	296.395743	810.9	false
13C2-PFTeDA	715.0 / 670.0	4.48	47208.61	147.757933	1134.8	false
13C3-PFBS	302.0 / 99.0	1.51	20589.49	230.867017	191.4	false
13C3-PFHxS	402.0 / 99.0	2.27	28291.03	350.076739	236.6	false
13C8-PFOS	507.0 / 99.0	3.06	24588.94	269.339865	156.4	false

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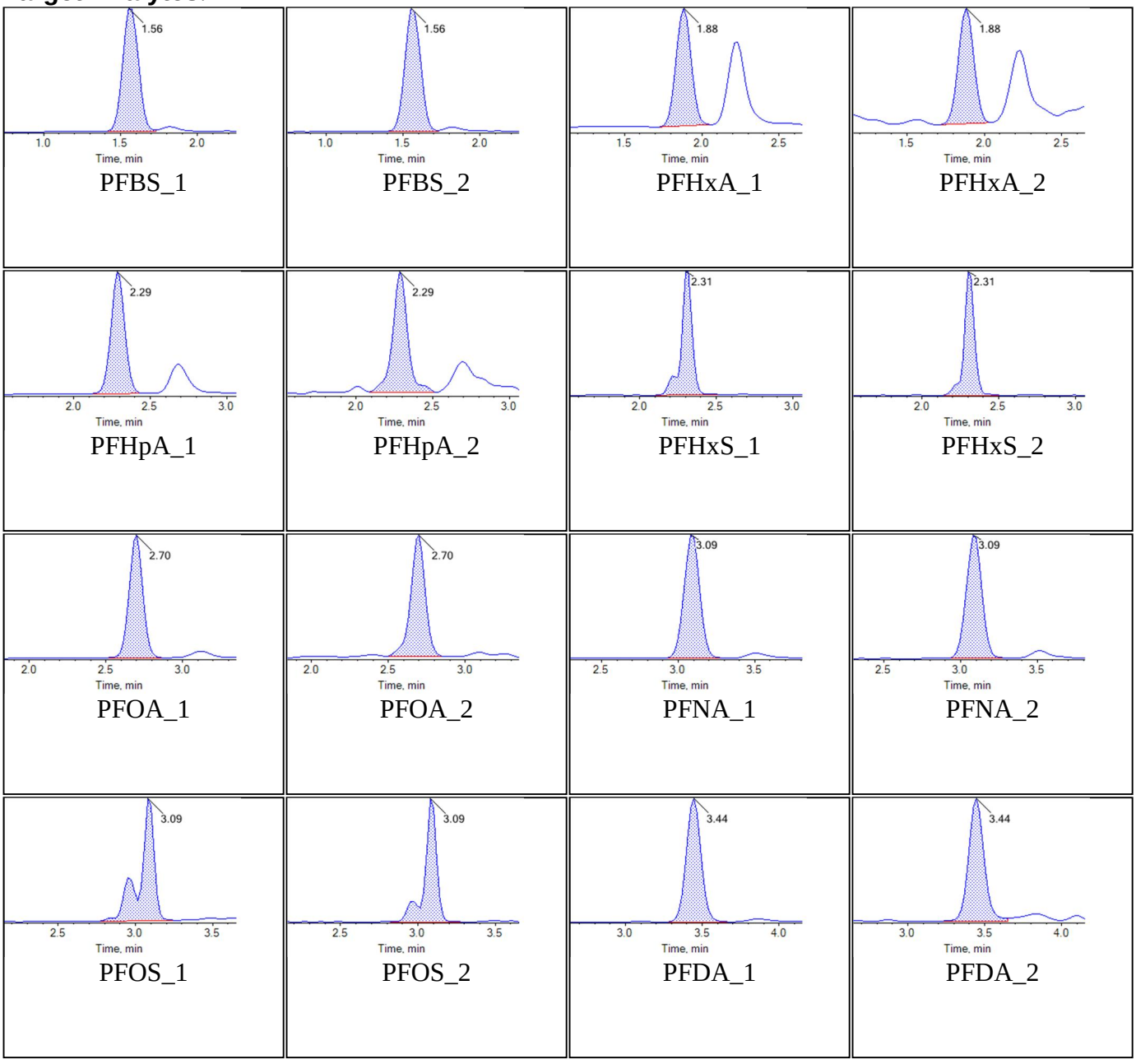
Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:43:05 AM

Sample Name	CR987LCS-FS(0)	**Injection Vial**	14
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:59:43	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

Target Analytes:



BATTELLE

Chromatogram Report

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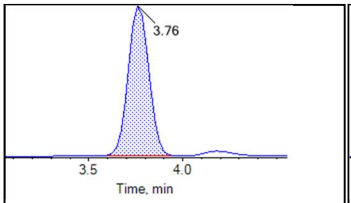

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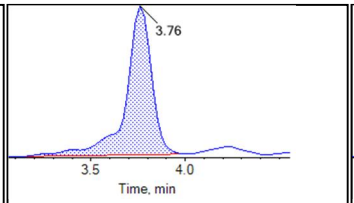

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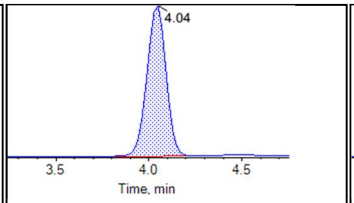

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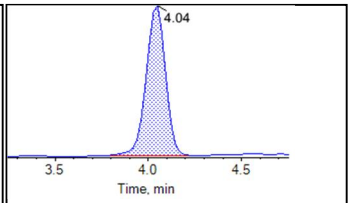
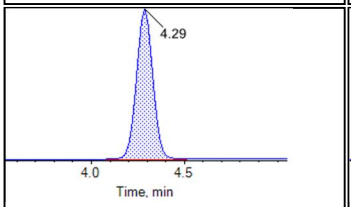


PFDoA_2



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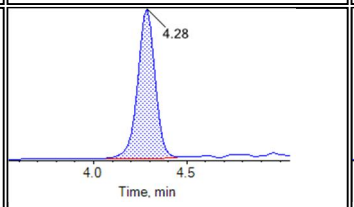

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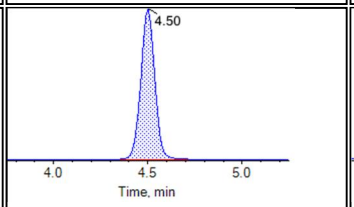

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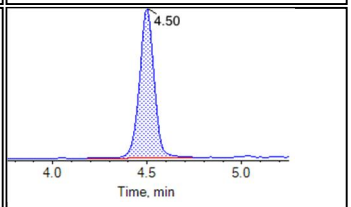

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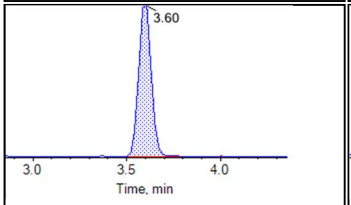
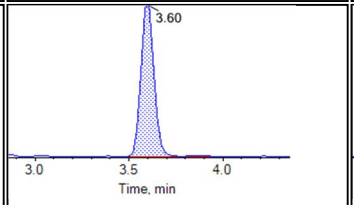


NMeFOSAA_1



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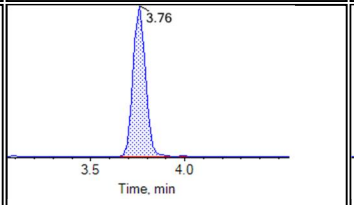

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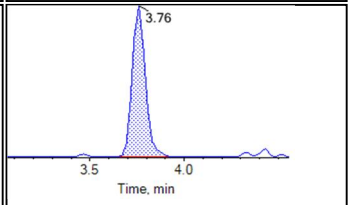

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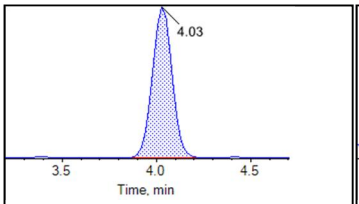
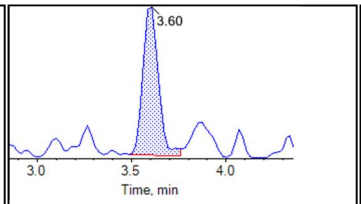
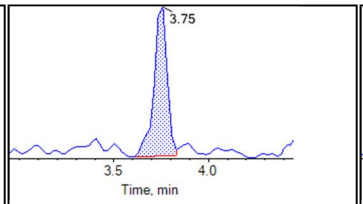


13C2-PFDoA



d3-MeFOSAA



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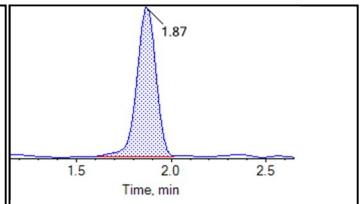

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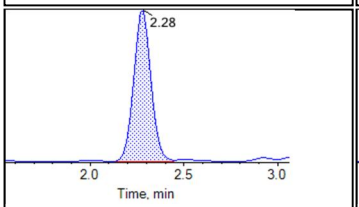

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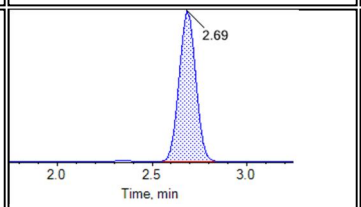

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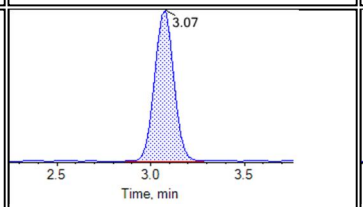

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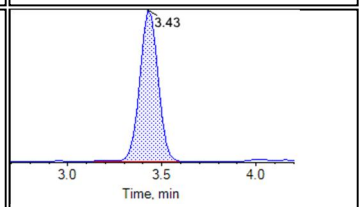

13C6-PFDA

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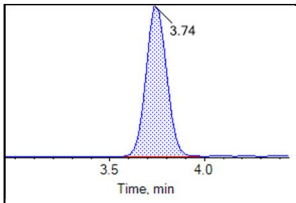
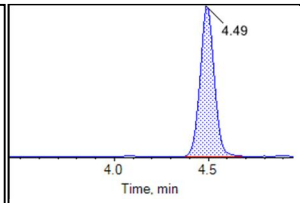
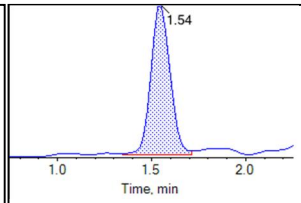


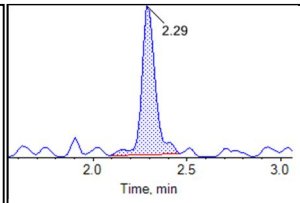
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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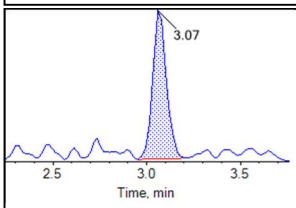

13C8-PFOS

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Chromatogram Report

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Sample Name	J8667-FS-D(3)	**Injection Vial**	16
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:21:29	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609
Sample Comment			

Chromatograms

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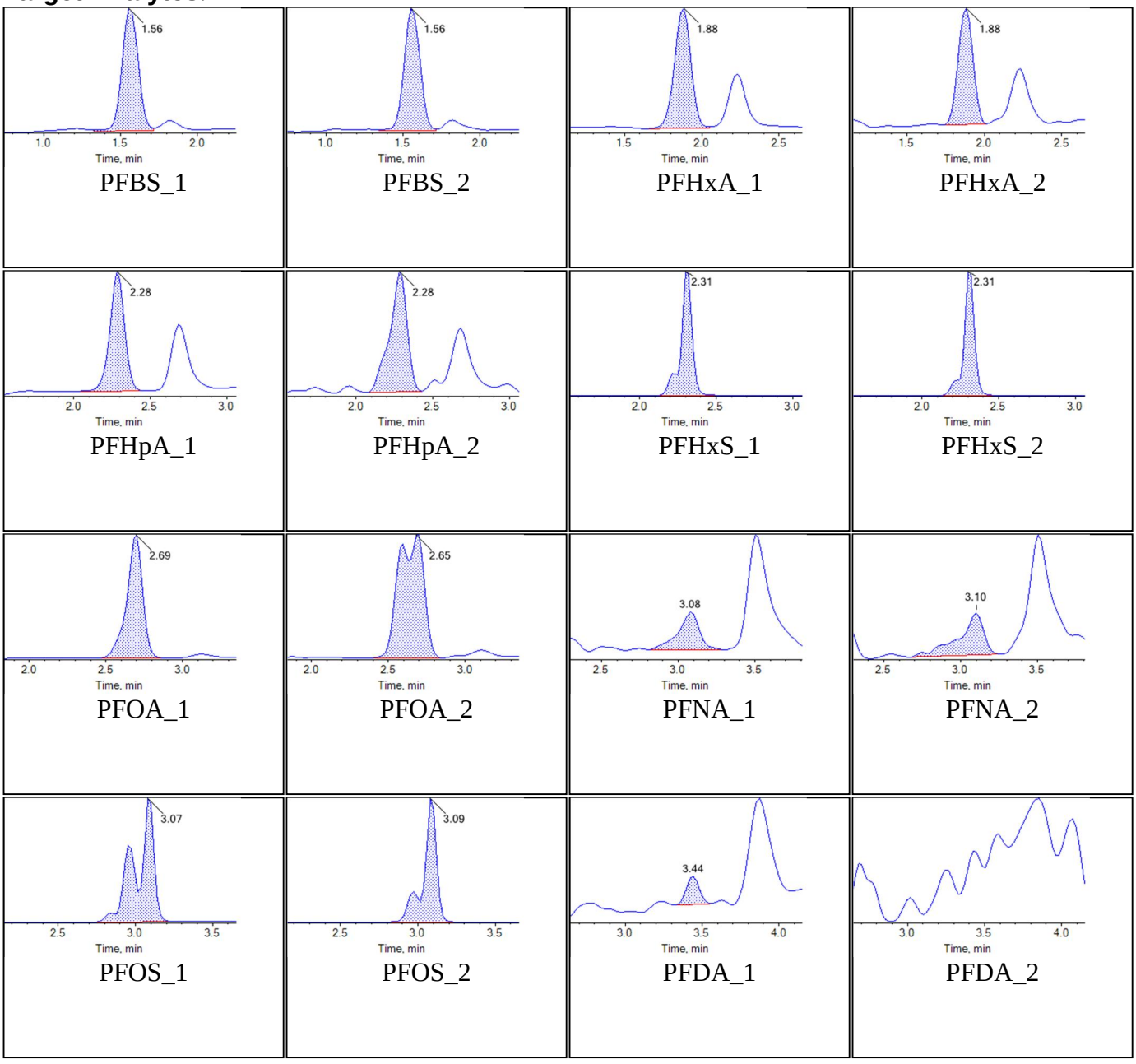

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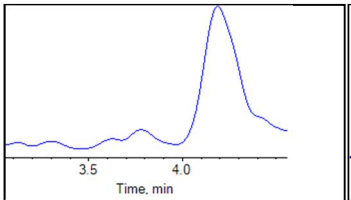

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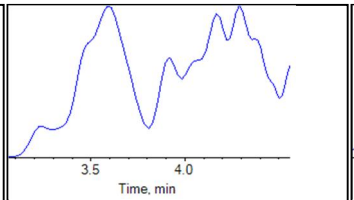

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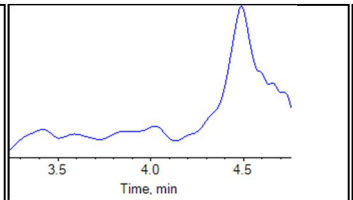

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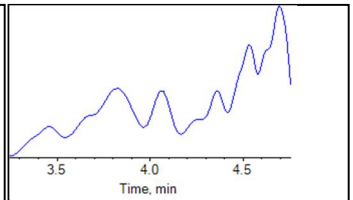

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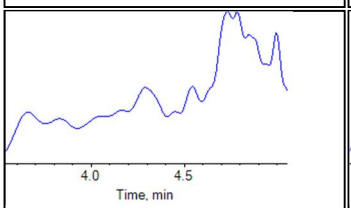

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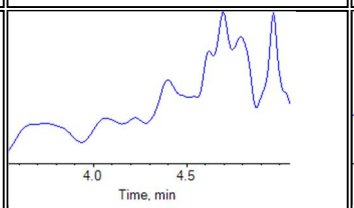

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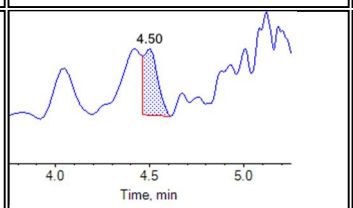

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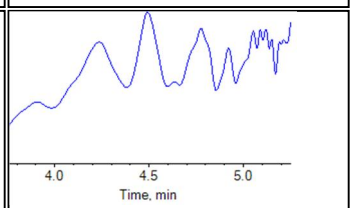

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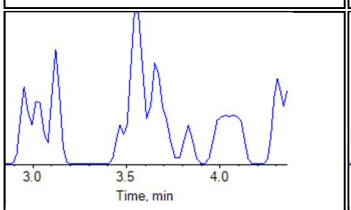

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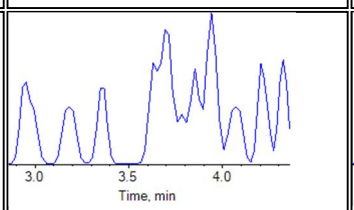

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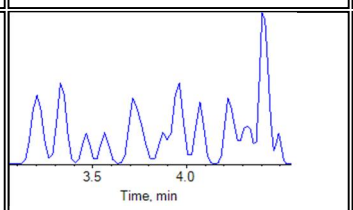

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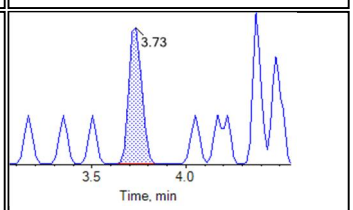

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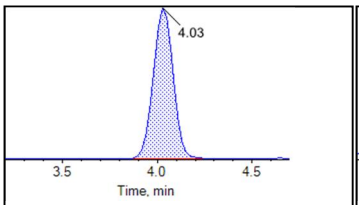

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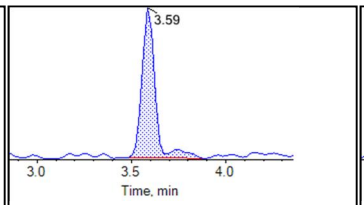
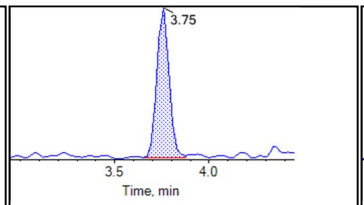
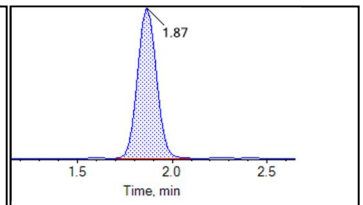


d3-MeFOSAA



d5-EtFOSAA



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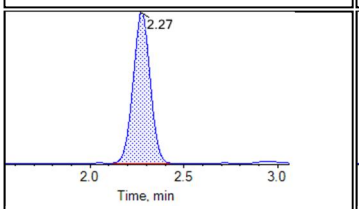

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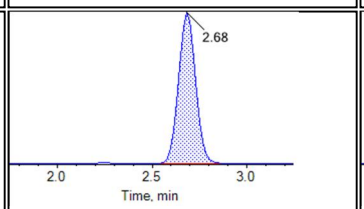

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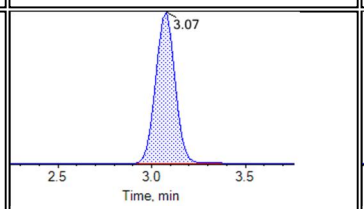

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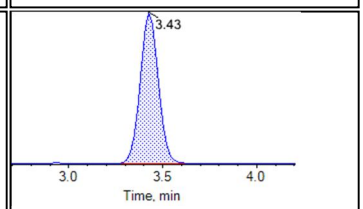

13C6-PFDA

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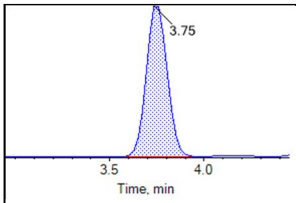
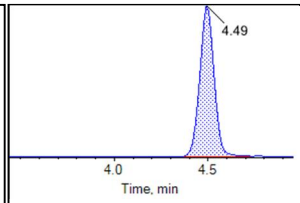


13C7-PFUnA



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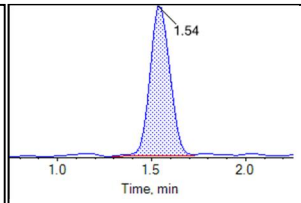

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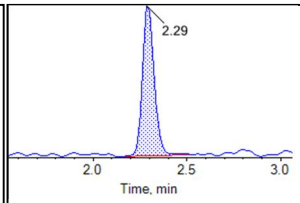

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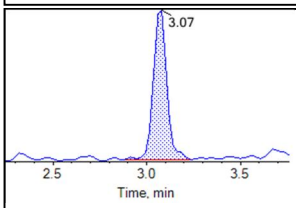

13C8-PFOS

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Chromatogram Report

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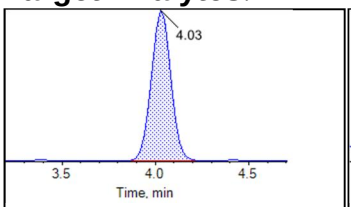
Printed: 01/11/2018 8:37:53 AM

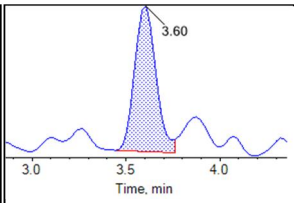
Sample Name	CR987LCS-FS(0)	**Injection Vial**	14
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T18:59:43	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

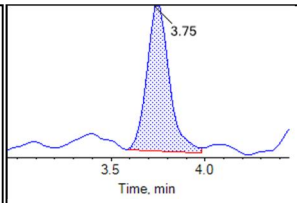
Target Analytes:



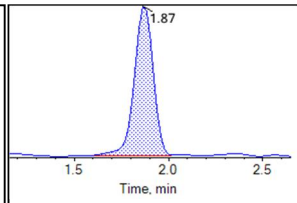
13C2-PFDoA



d3-MeFOSAA



d5-EtFOSAA



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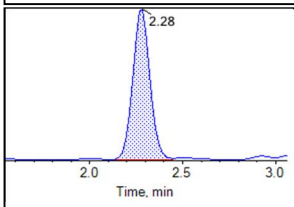
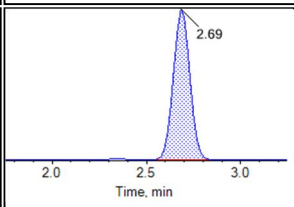
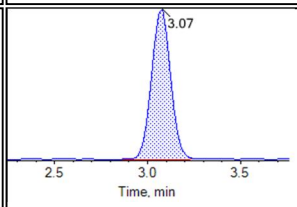


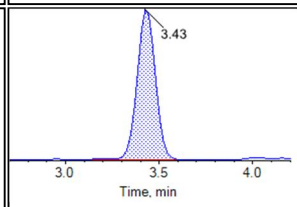
13C4-PFHpA



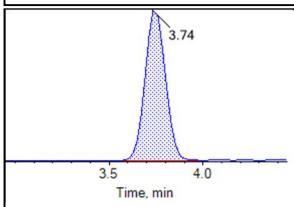
13C8-PFOA



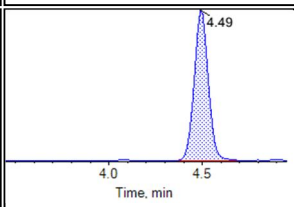
13C9-PFNA



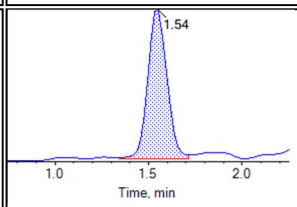
13C6-PFDA



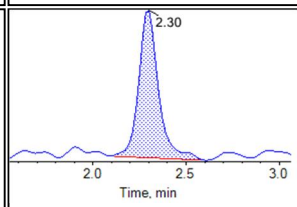
13C7-PFUnA



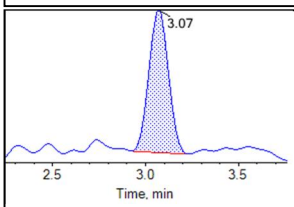
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

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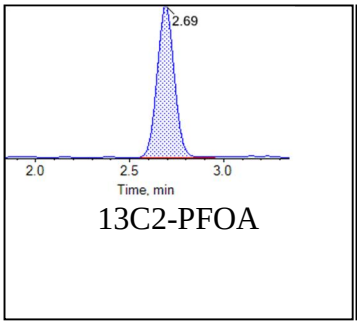
Internal Standards:



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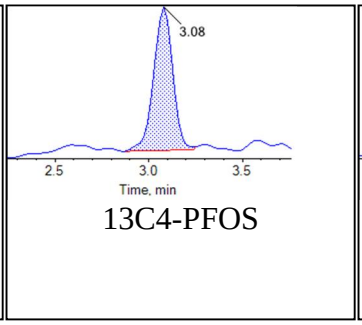

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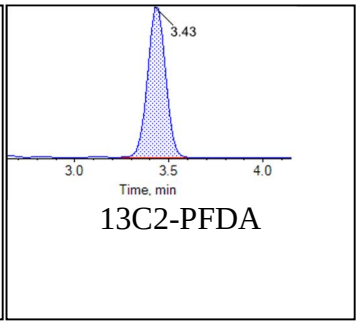

13C2-PFDA

BATTELLE

Chromatogram Report

Created with Analyst Reporter
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Sample Name	J8667-FS-D(3)	**Injection Vial**	16
Sample ID	VC-CS12-DW01-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-25T19:21:29	**Data File**	AC_10252018_05-0369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609_SIS
Sample Comment			

Chromatograms

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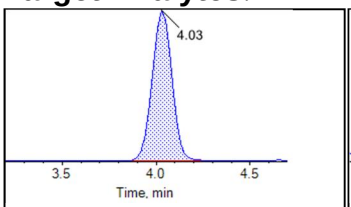
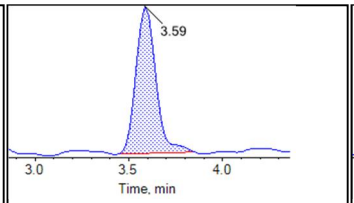
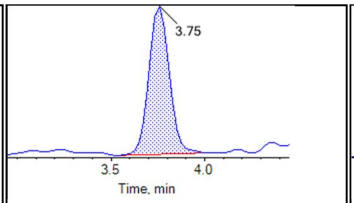


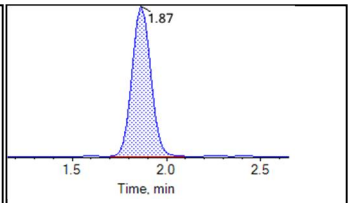
13C2-PFDoA



d3-MeFOSAA



d5-EtFOSAA



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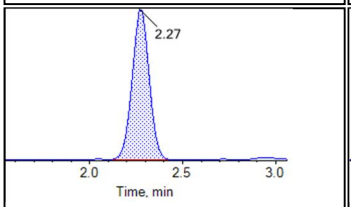

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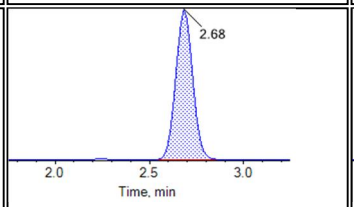
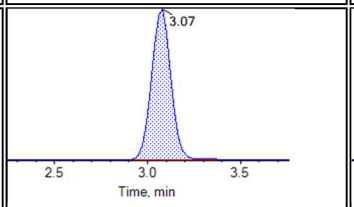


13C8-PFOA



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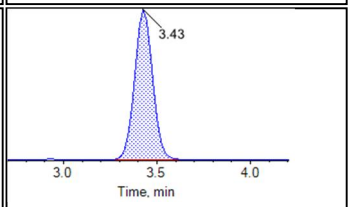

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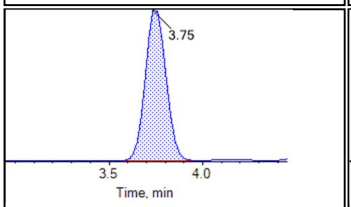
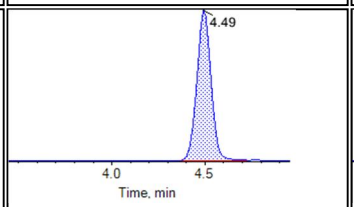


13C7-PFUnA



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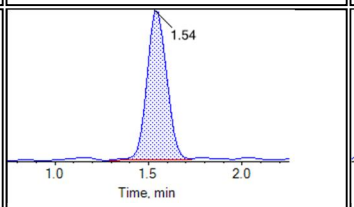

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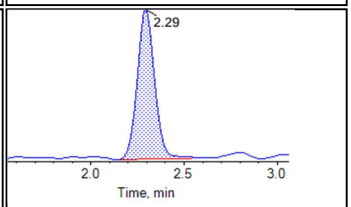
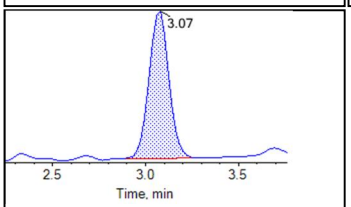


13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

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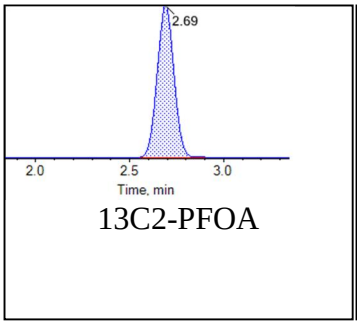

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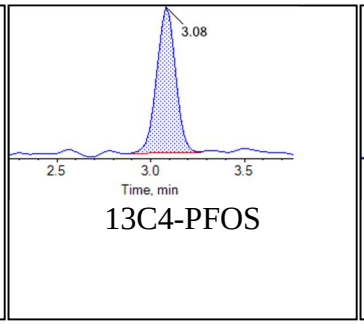

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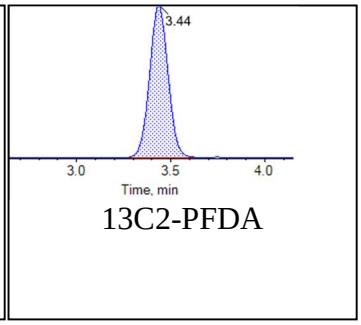

13C2-PFDA

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:53:32 AM

Sample Name	J8717-FS(0)	**Injection Vial**	16
Sample ID	VC-CS00-DW02-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:13:28	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Chromatograms

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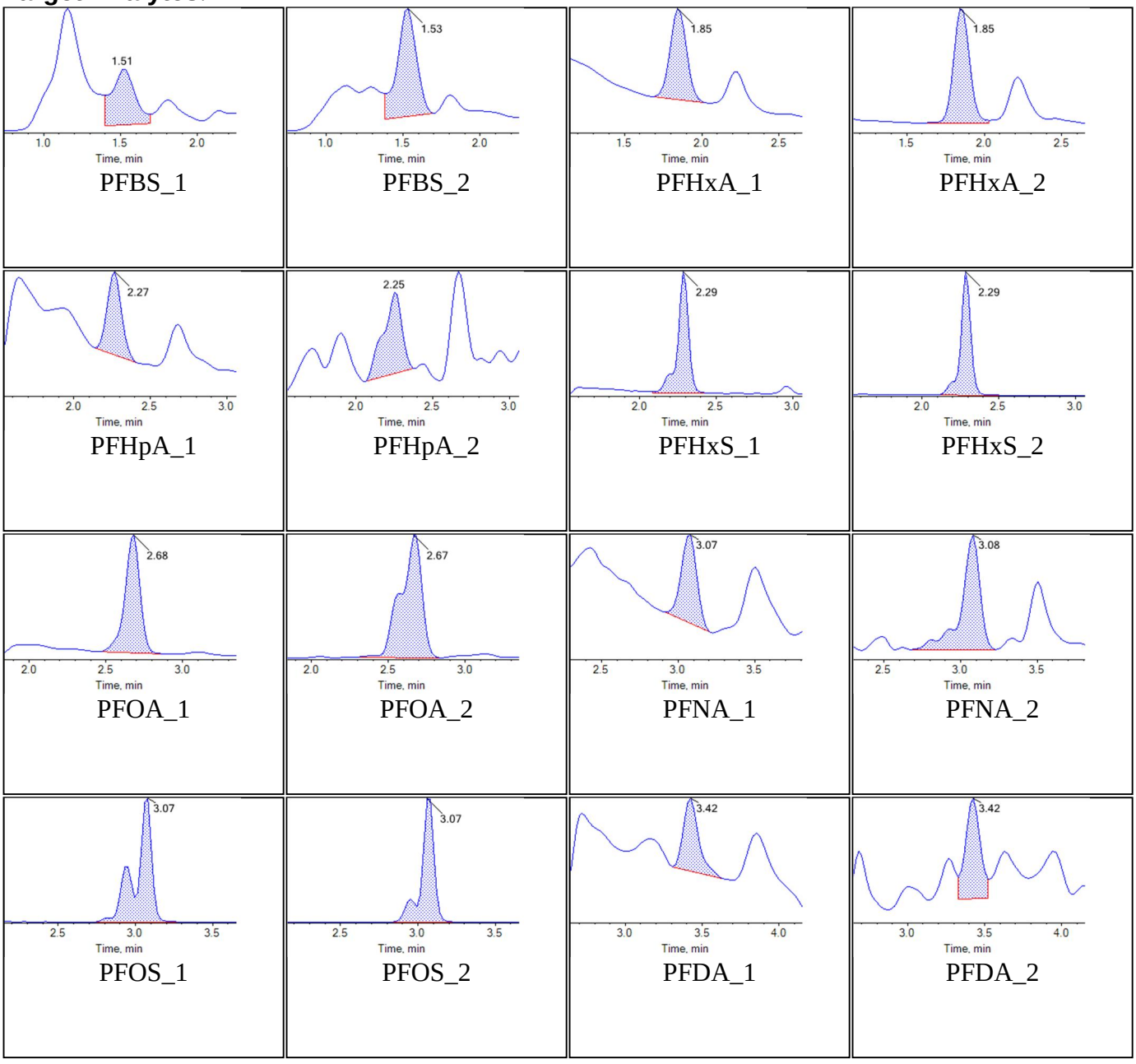

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Chromatogram Report

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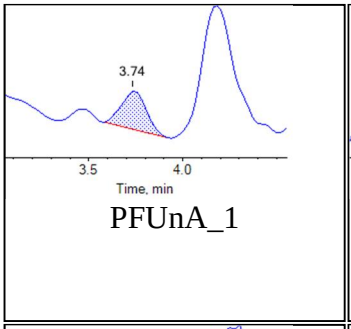

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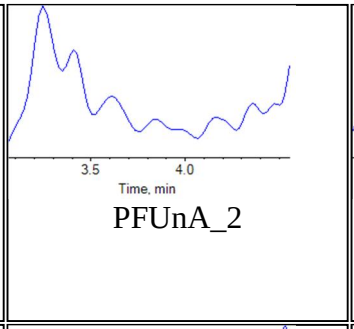
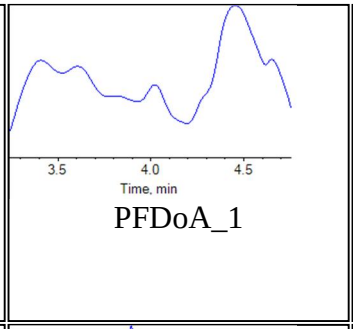


PFUnA_2



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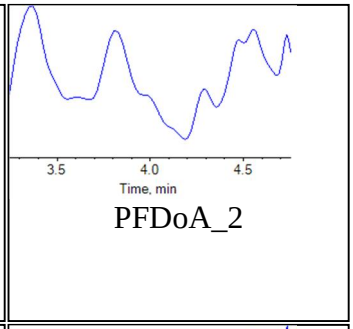
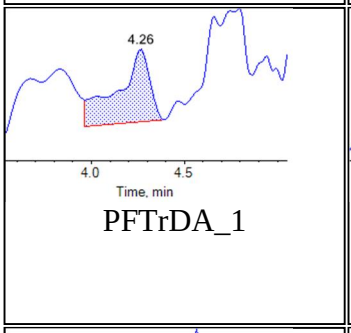


PFDoA_2



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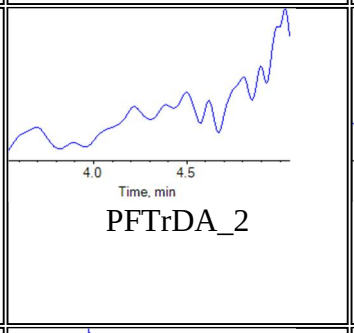

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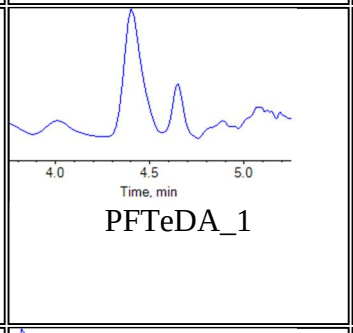

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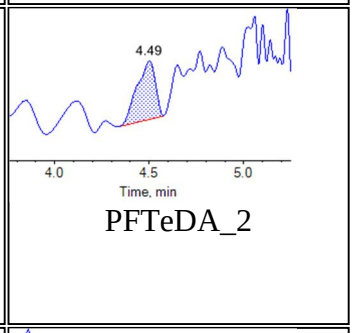
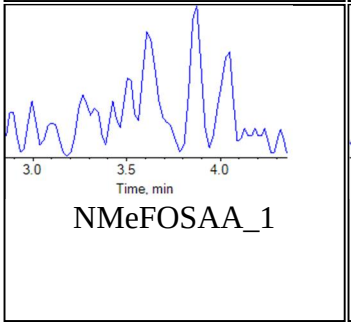


PFTeDA_2



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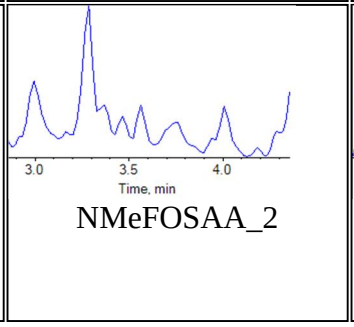

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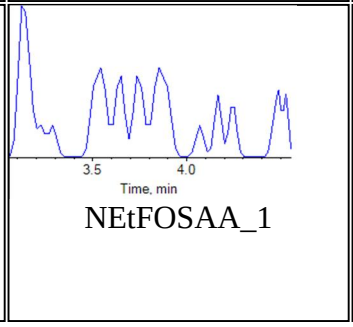

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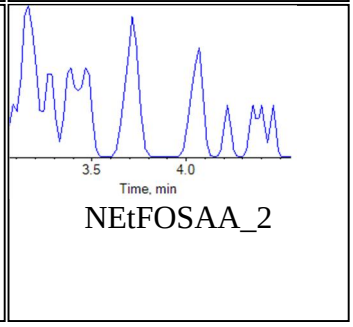

NEtFOSAA_2

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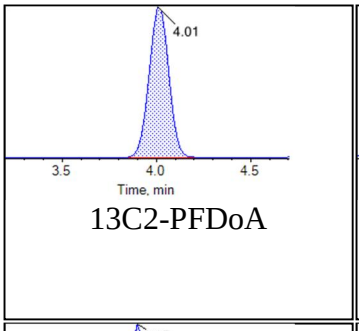

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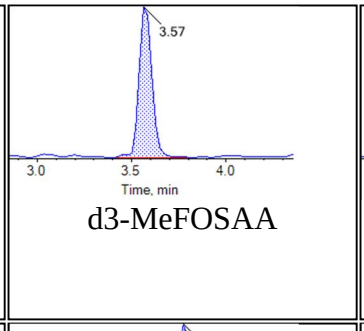
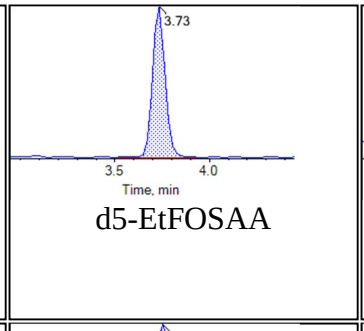
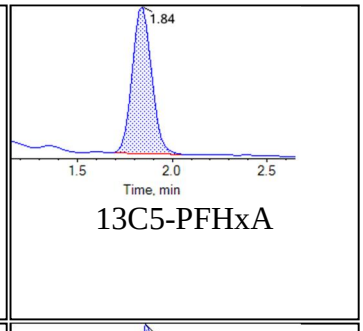


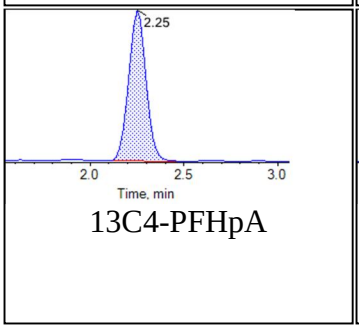
d3-MeFOSAA



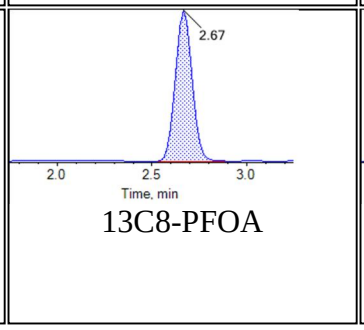
d5-EtFOSAA



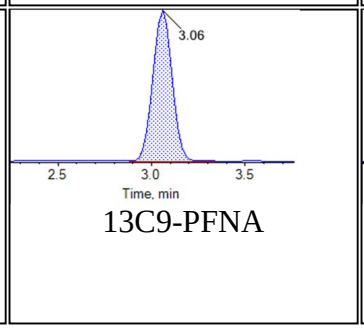
13C5-PFHxA



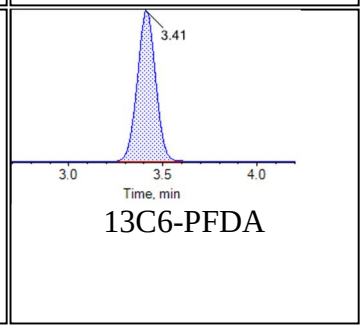
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

BATTELLE

Chromatogram Report

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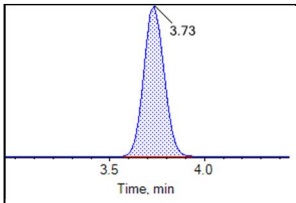
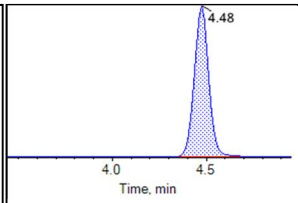
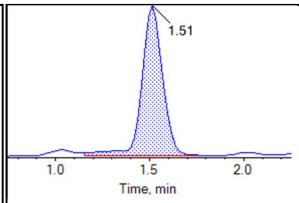


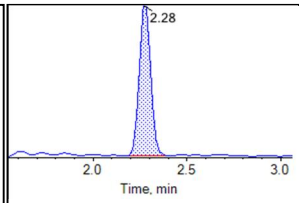
13C7-PFUnA



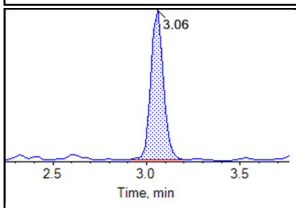
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

Chromatogram Report

Created with Analyst Reporter
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Sample Name	J8718-FS(0)	**Injection Vial**	17
Sample ID	VC-CS00-DW02P-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:24:20	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Chromatograms

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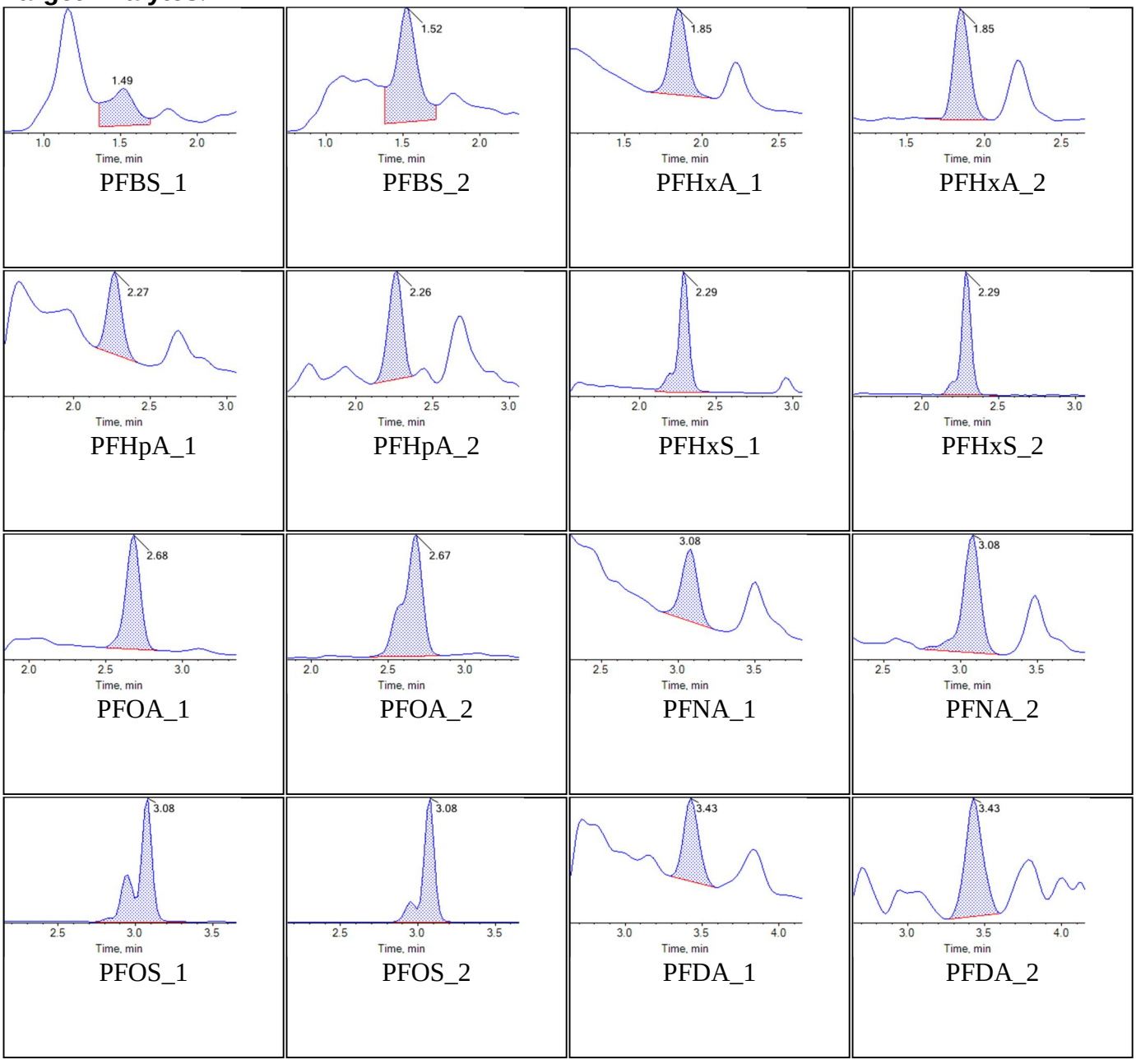

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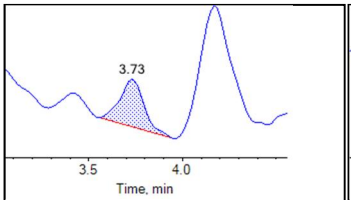

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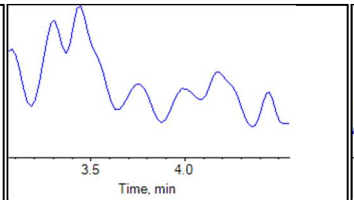
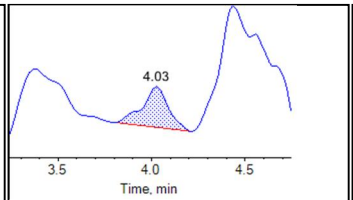


PFUnA_2



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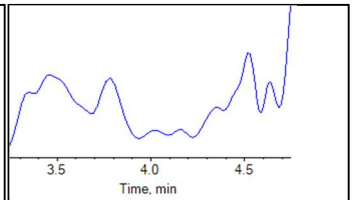
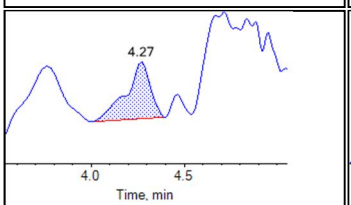
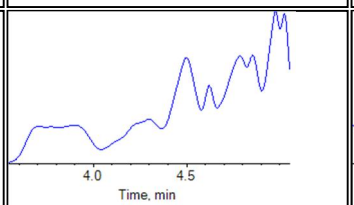


PFDoA_2



PFTrDA_1



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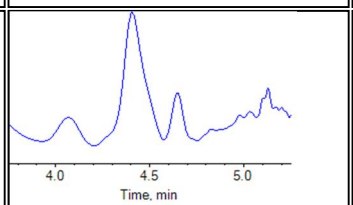

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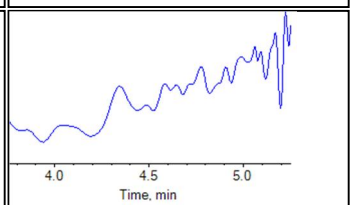

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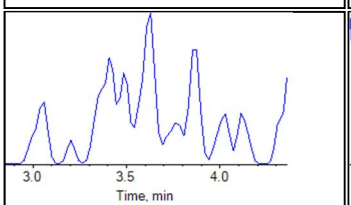
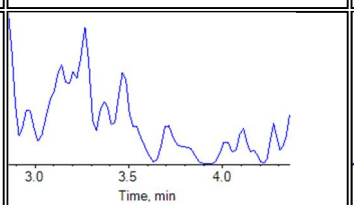
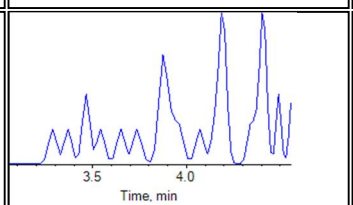


NMeFOSAA_1



NMeFOSAA_2



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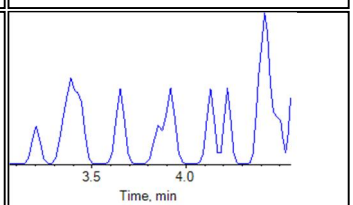
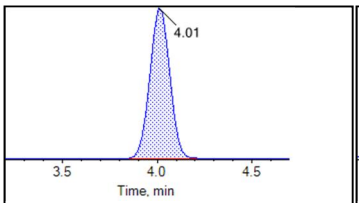
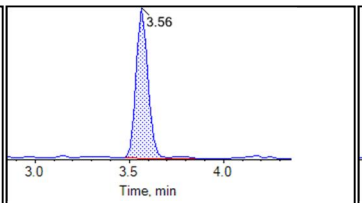


NEtFOSAA_2

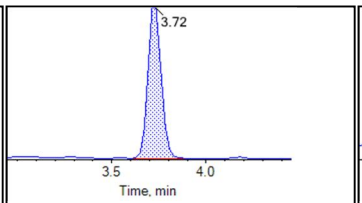
Internal Standards:



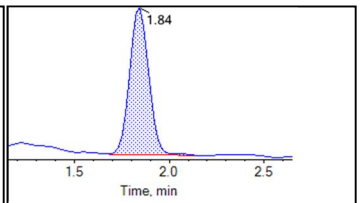
13C2-PFDoA



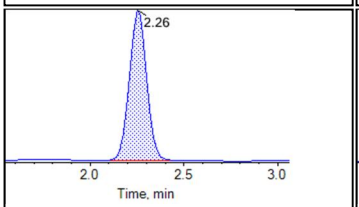
d3-MeFOSAA



d5-EtFOSAA



13C5-PFHxA



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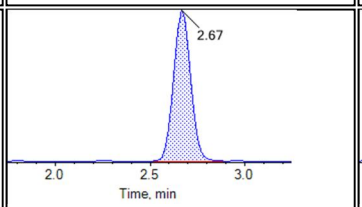
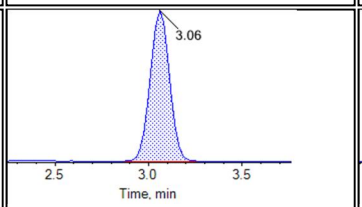
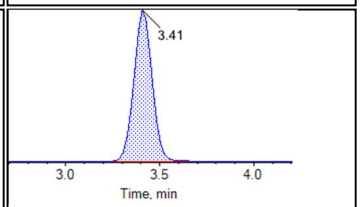


13C8-PFOA



13C9-PFNA



13C6-PFDA

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Chromatogram Report

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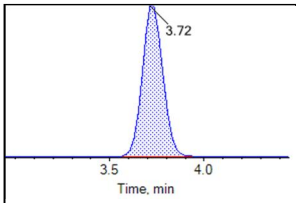
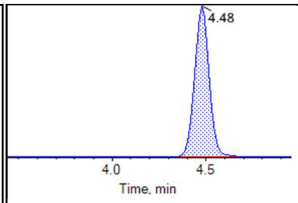
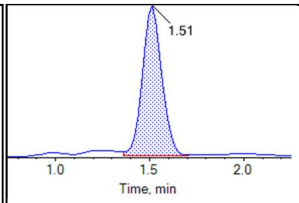


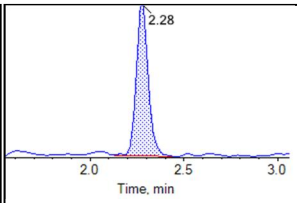
13C7-PFUnA



13C2-PFTeDA



13C3-PFBS



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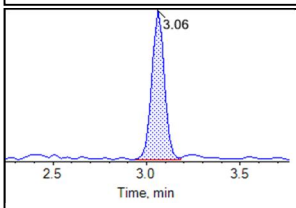

13C8-PFOS

BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 01/11/2018 8:53:43 AM

Sample Name	J8719-FS(0)	**Injection Vial**	18
Sample ID	VC-CS00-DW03-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:35:12	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Chromatograms

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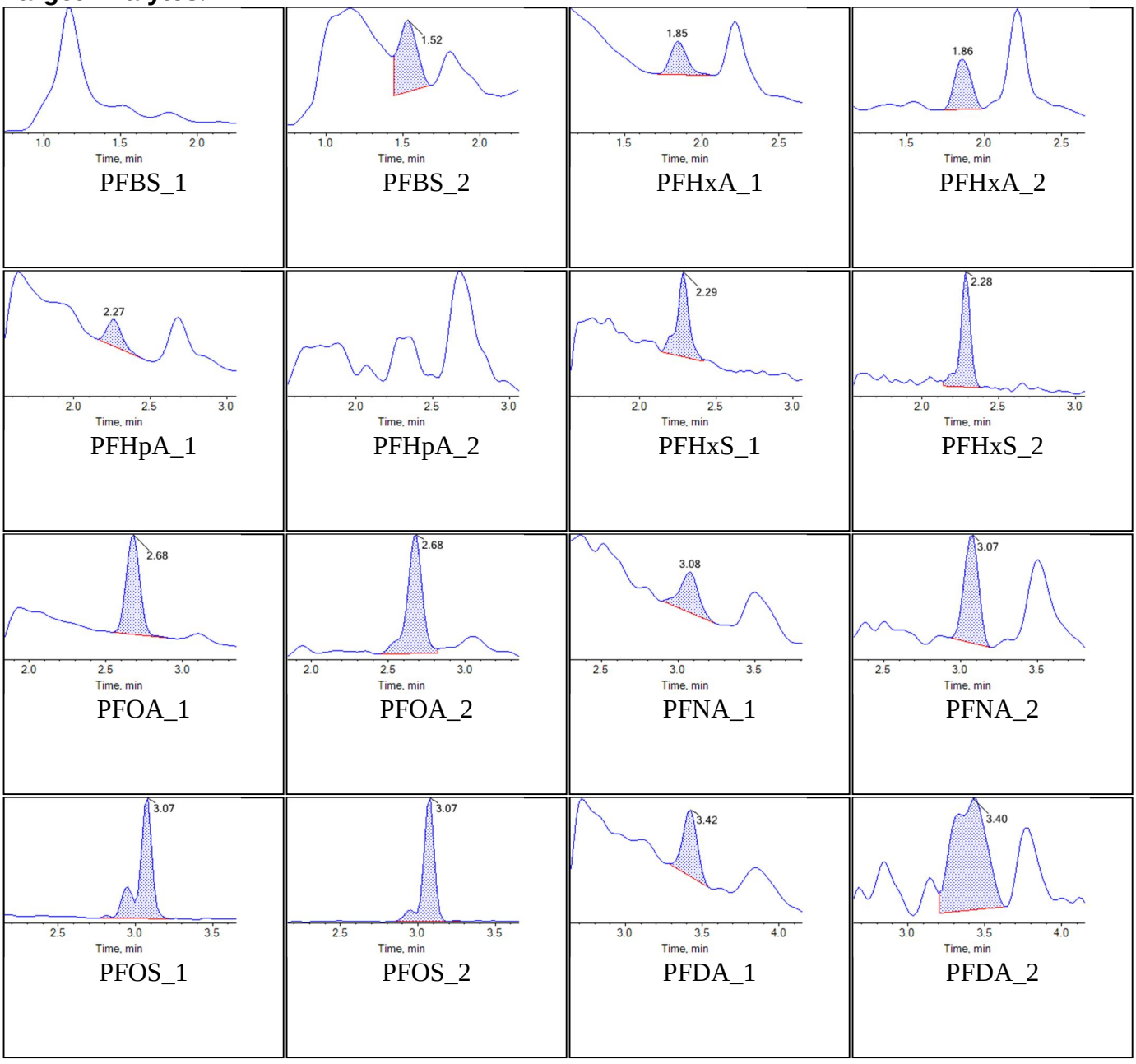

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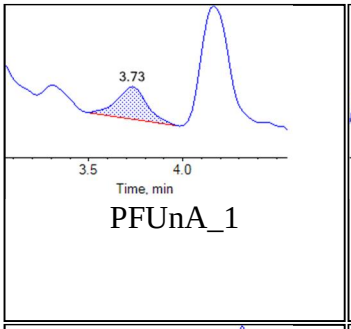

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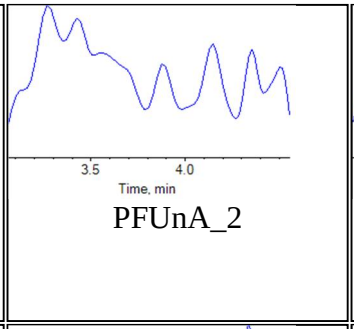
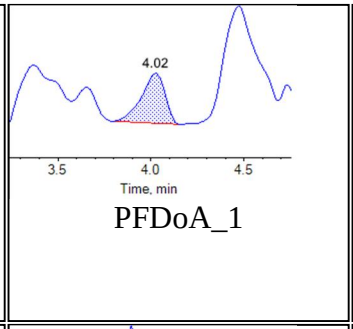


PFUnA_2



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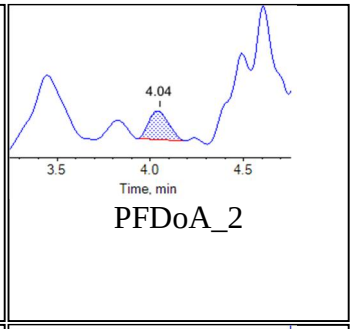
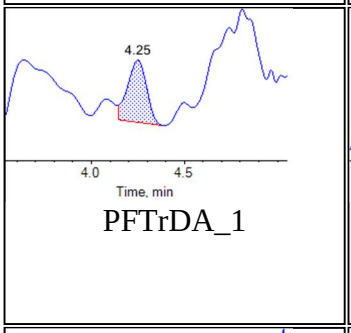
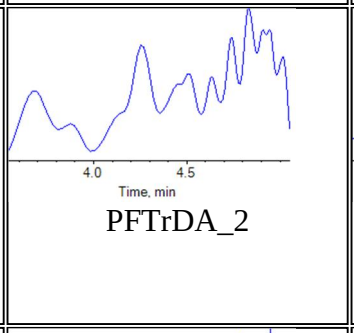


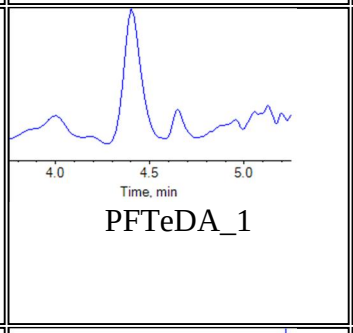
PFDoA_2



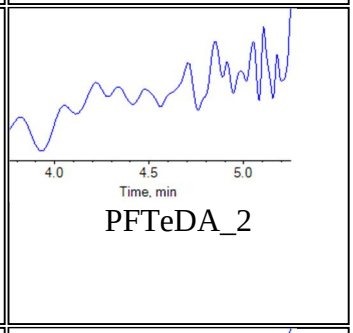
PFTrDA_1



PFTrDA_2



PFTeDA_1



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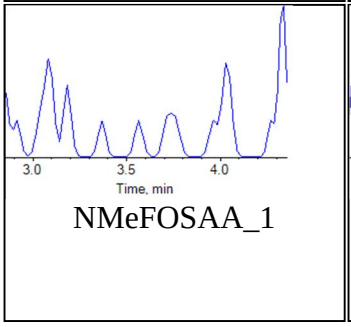
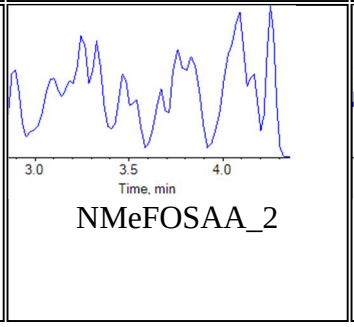


NMeFOSAA_1



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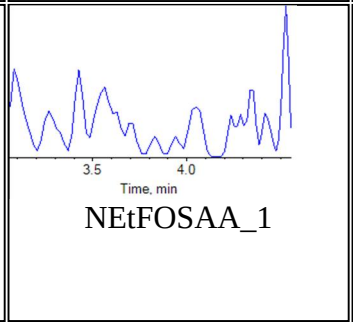
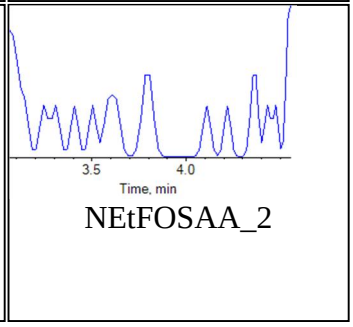
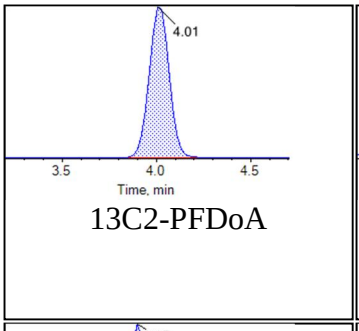


NEtFOSAA_1

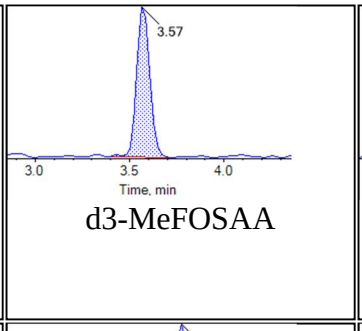


NEtFOSAA_2

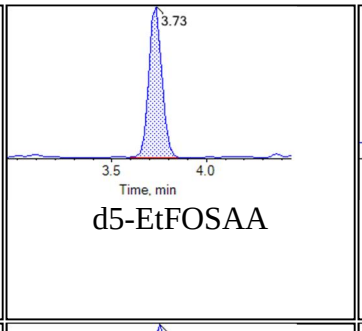
Internal Standards:



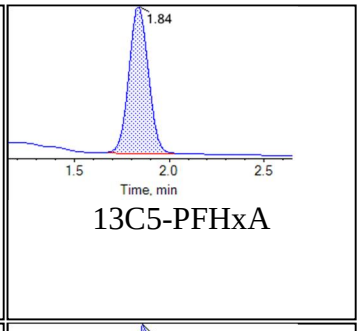
13C2-PFDoA



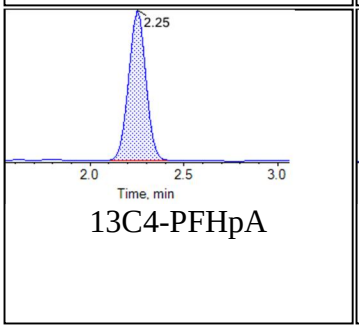
d3-MeFOSAA



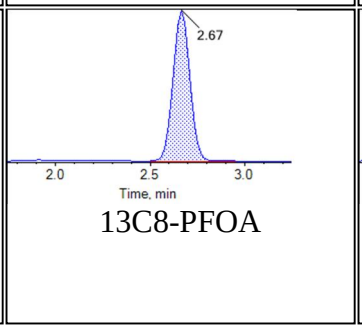
d5-EtFOSAA



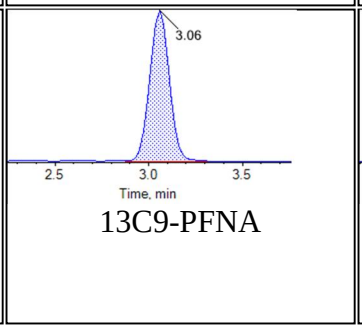
13C5-PFHxA



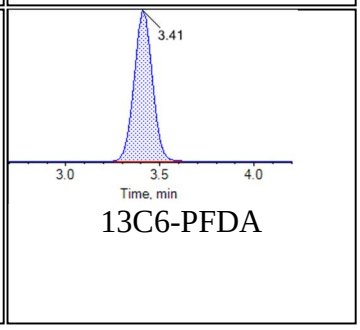
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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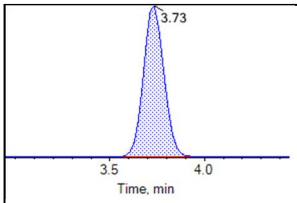
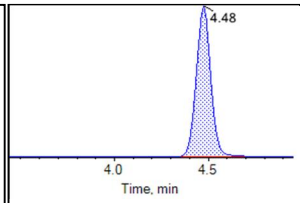
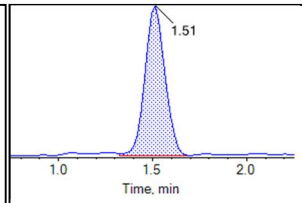


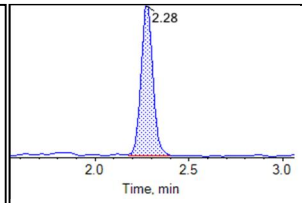
13C7-PFUnA



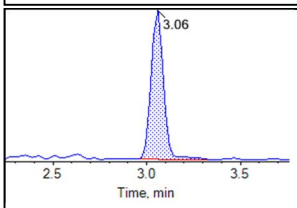
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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Sample Name	J8721-FS(0)	**Injection Vial**	19
Sample ID	VC-CS00-DW05-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:46:02	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Chromatograms

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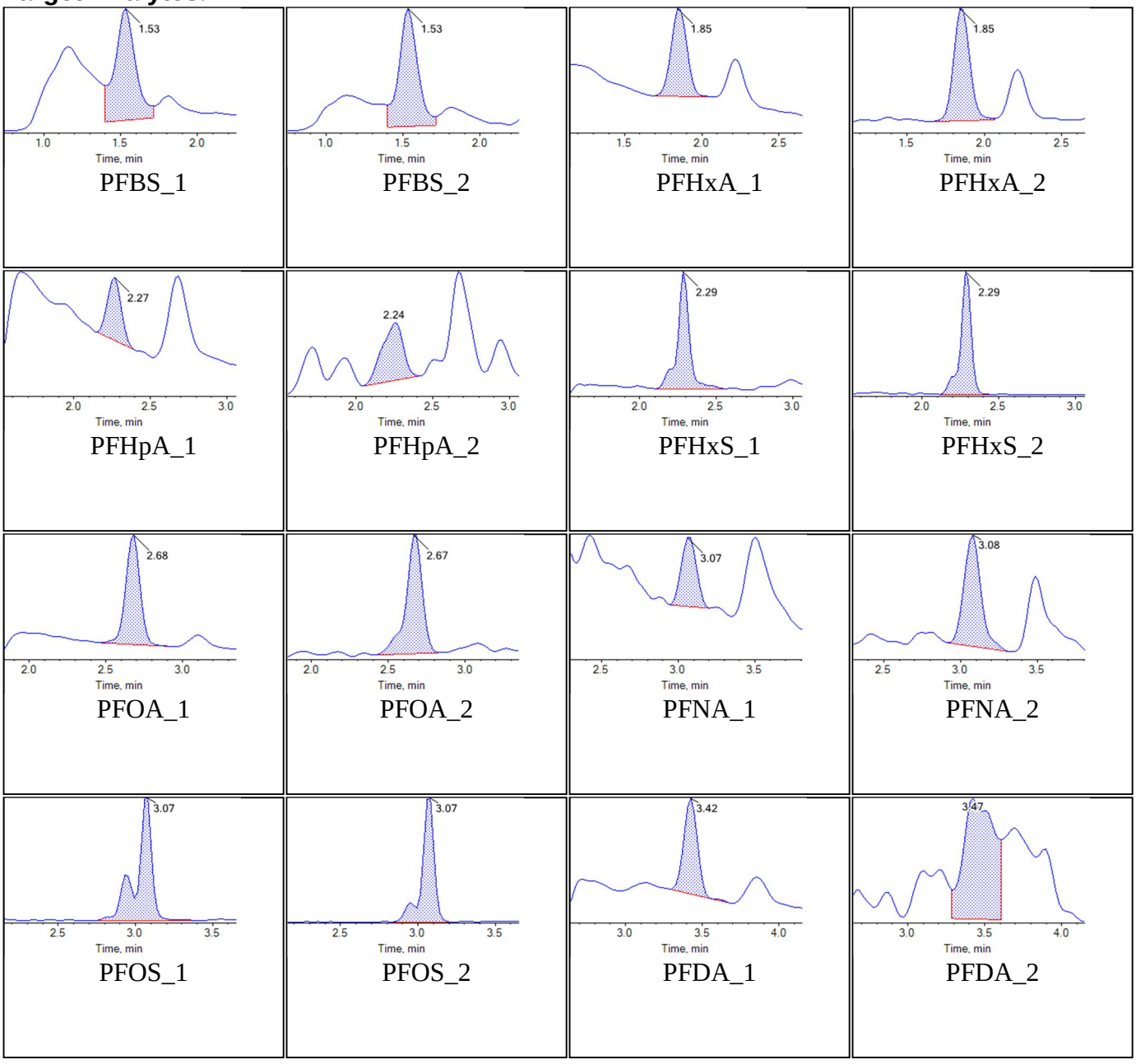

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Chromatogram Report

Created with Analyst Reporter
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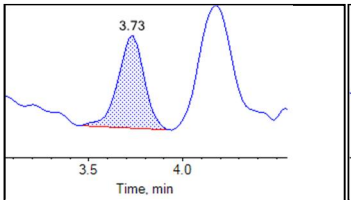
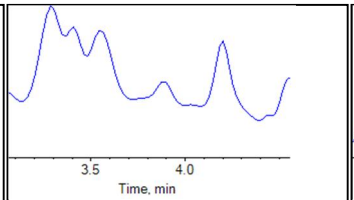
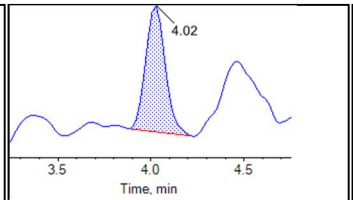


PFUnA_1



PFUnA_2



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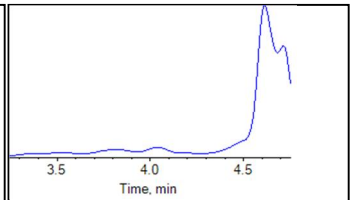
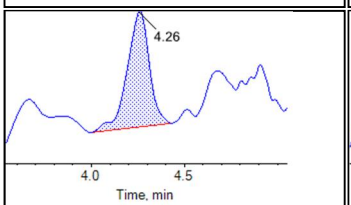
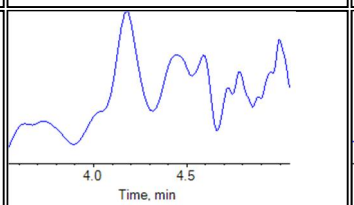


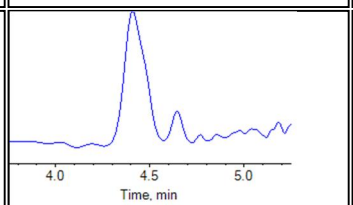
PFDoA_2



PFTrDA_1



PFTrDA_2



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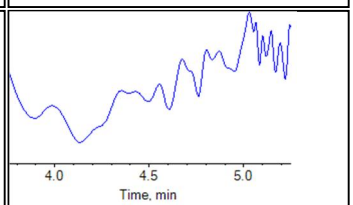
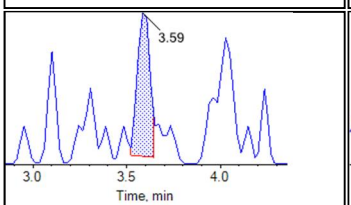
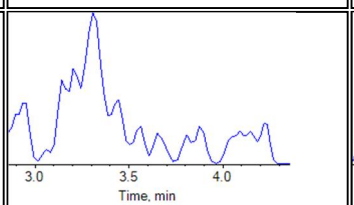


PFTeDA_2



NMeFOSAA_1



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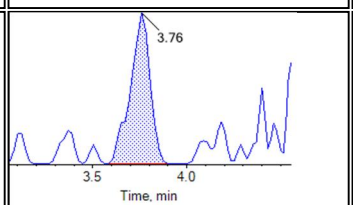

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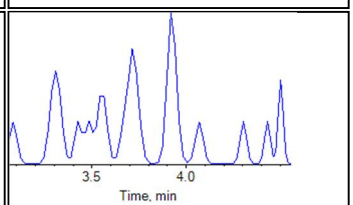
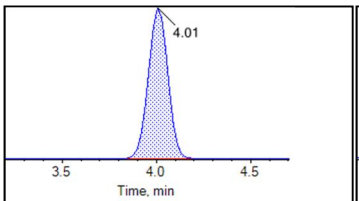
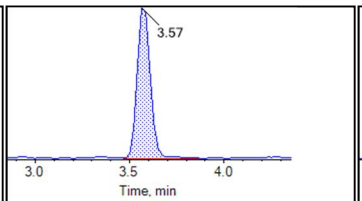


NEtFOSAA_2

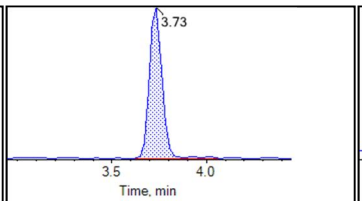
Internal Standards:



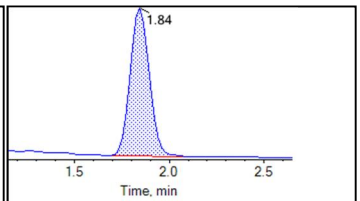
13C2-PFDoA



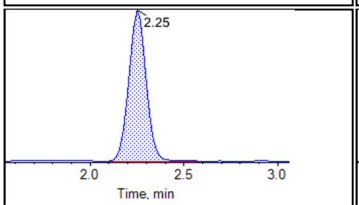
d3-MeFOSAA



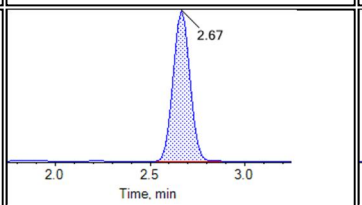
d5-EtFOSAA



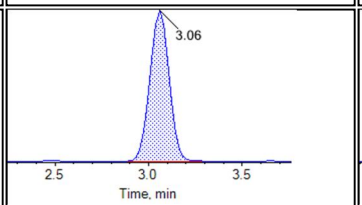
13C5-PFHxA



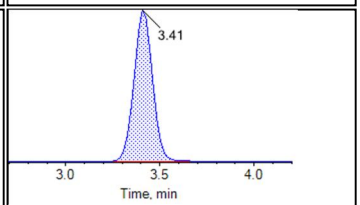
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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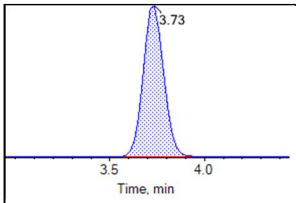
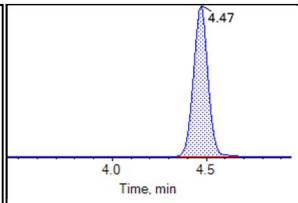
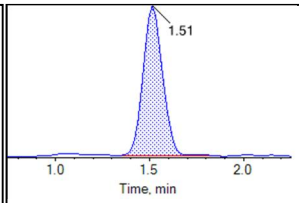


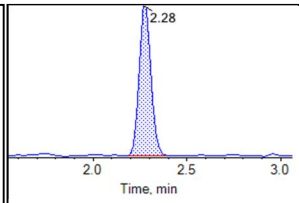
13C7-PFUnA



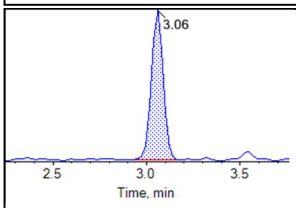
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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Sample Name	J8722-FS(0)	**Injection Vial**	20
Sample ID	VC-CS00-DW06-1018	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:56:55	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A
Sample Comment			

Chromatograms

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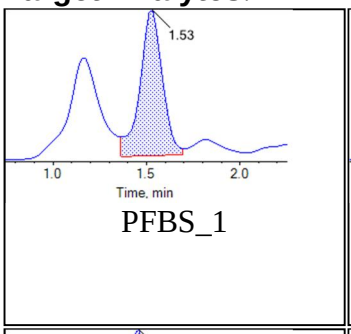

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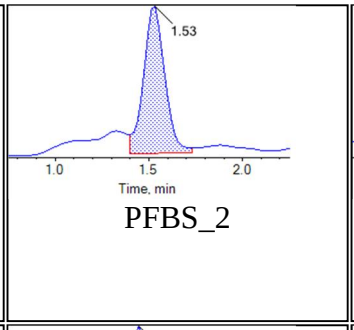
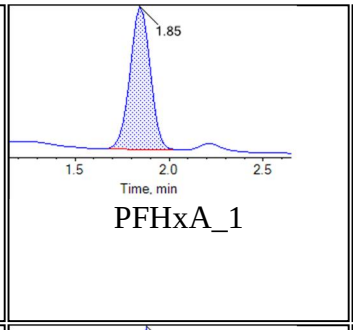


PFBS_2



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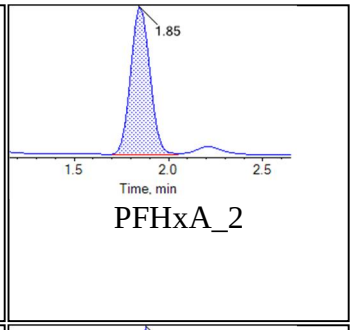
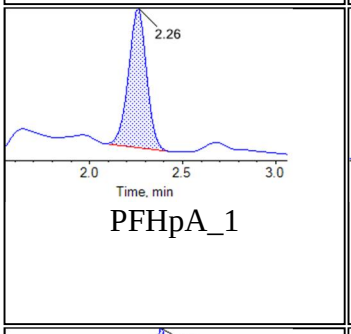
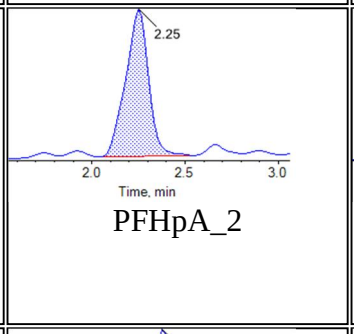


PFHxA_2



PFHpA_1



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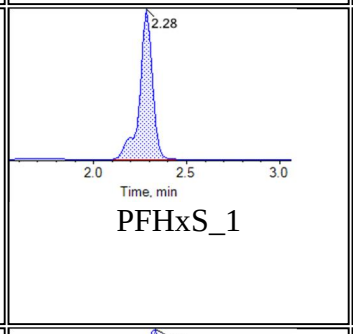
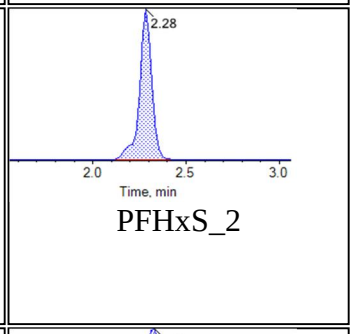
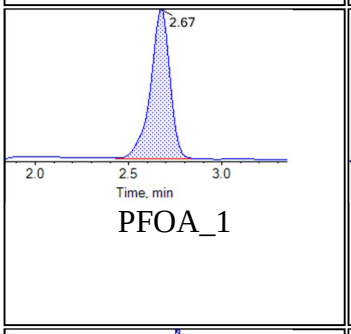


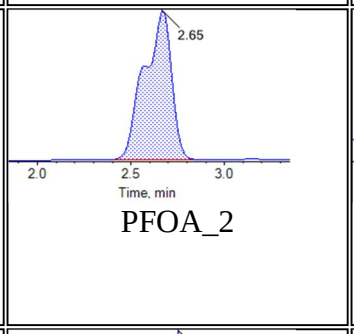
PFHxS_1



PFHxS_2



PFOA_1



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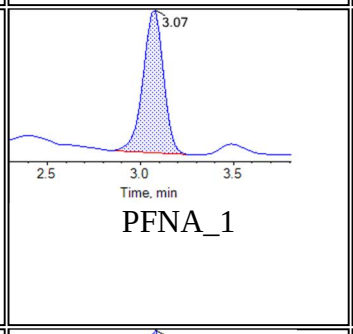
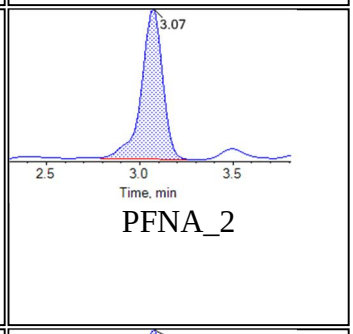
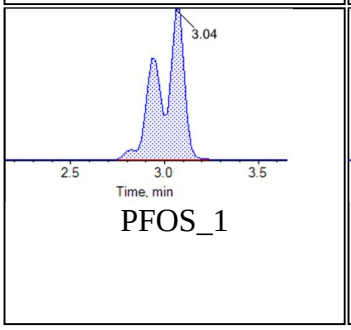


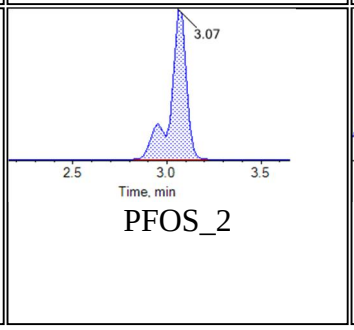
PFNA_1



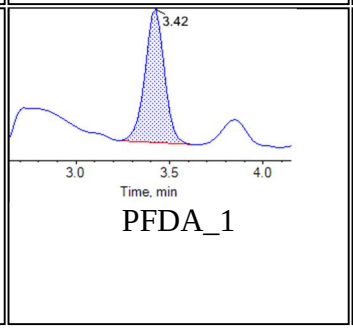
PFNA_2



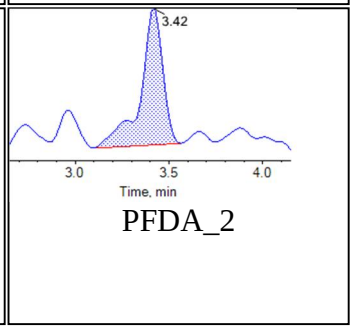
PFOS_1



PFOS_2



PFDA_1



PFDA_2

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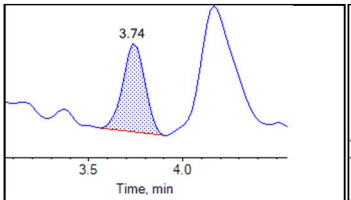
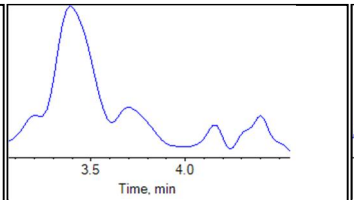
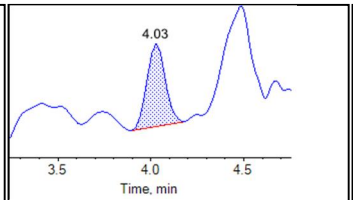


PFUnA_1



PFUnA_2



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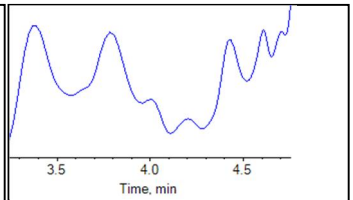

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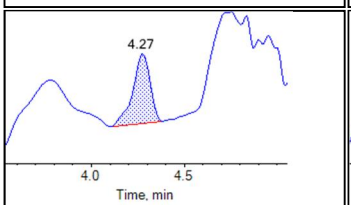

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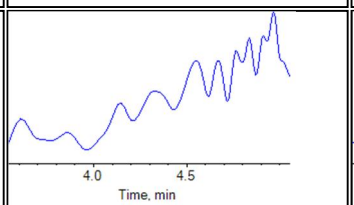

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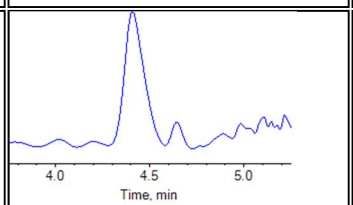

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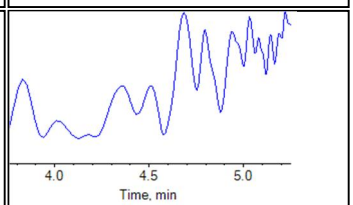

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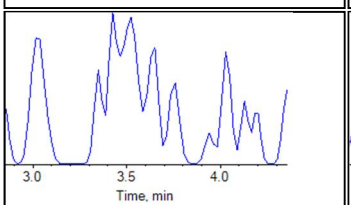

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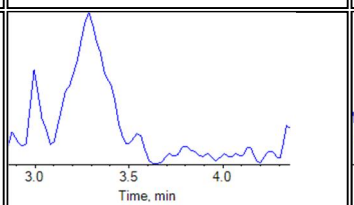

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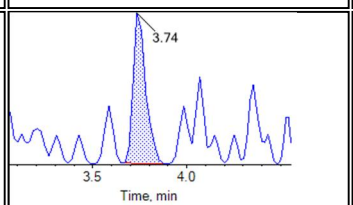

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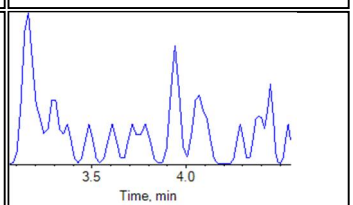

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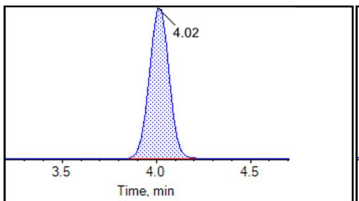
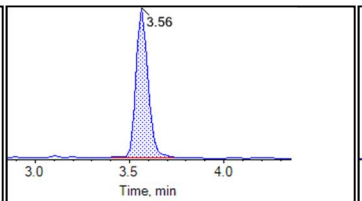
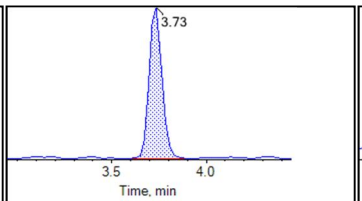


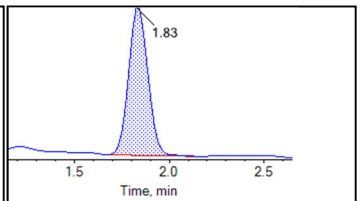
13C2-PFDoA



d3-MeFOSAA



d5-EtFOSAA



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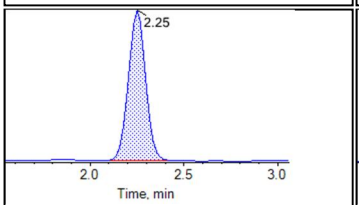
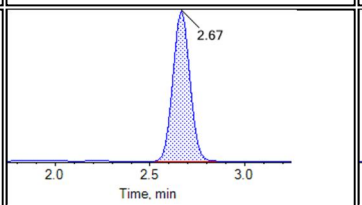
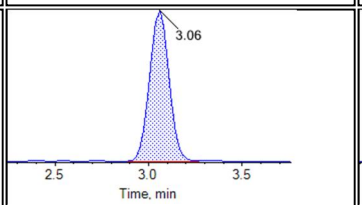


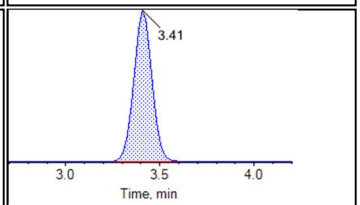
13C4-PFHpA



13C8-PFOA



13C9-PFNA



13C6-PFDA

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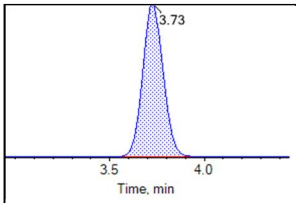
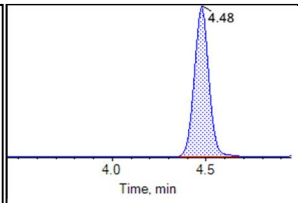
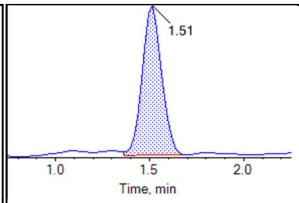


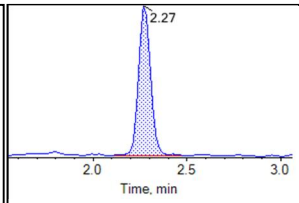
13C7-PFUnA



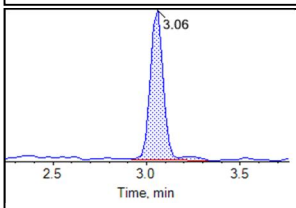
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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Sample Name	J8717-FS(0)	**Injection Vial**	16
Sample ID	VC-CS00-DW02-1018	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:13:28	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Chromatograms

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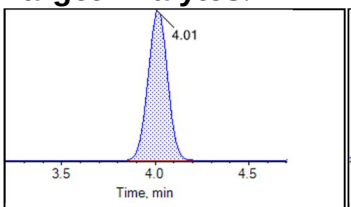
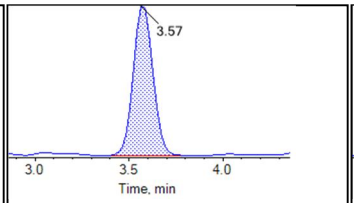


13C2-PFDoA



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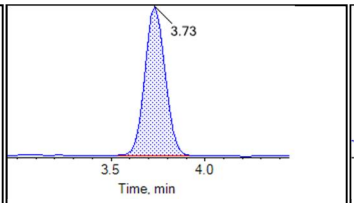

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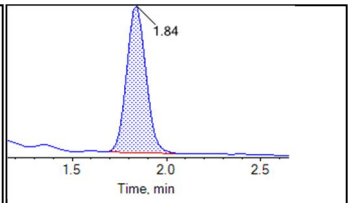

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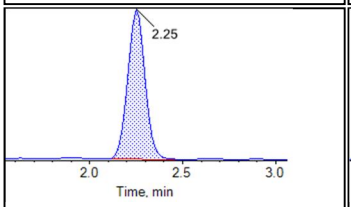

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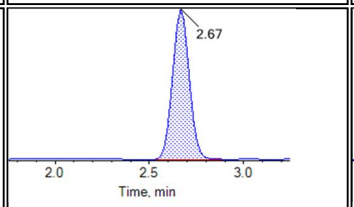

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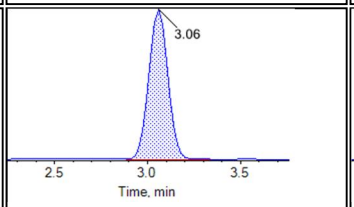
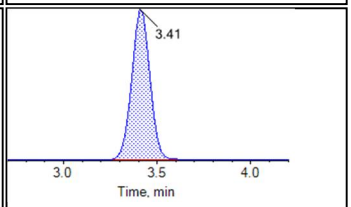
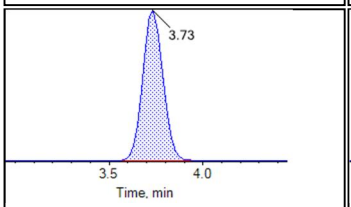


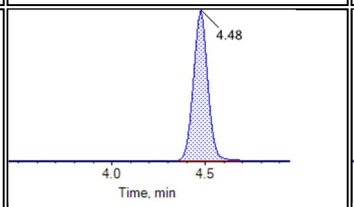
13C9-PFNA



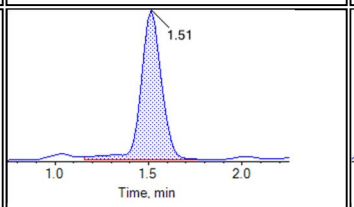
13C6-PFDA



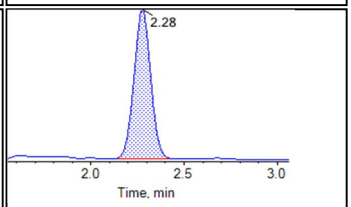
13C7-PFUnA



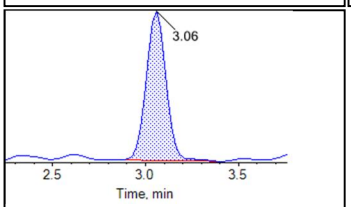
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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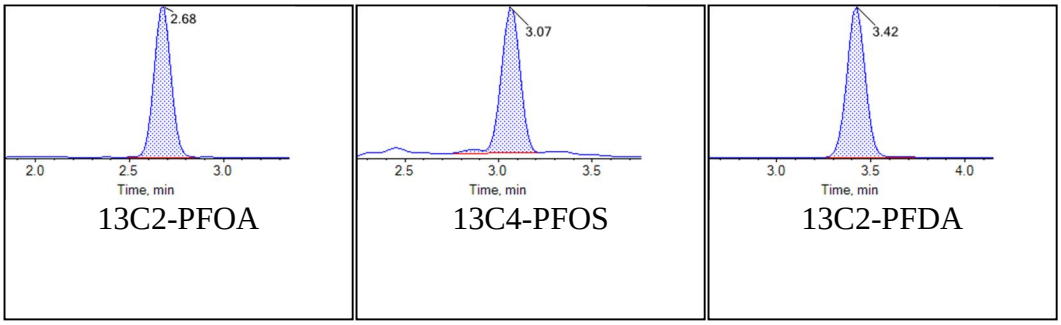

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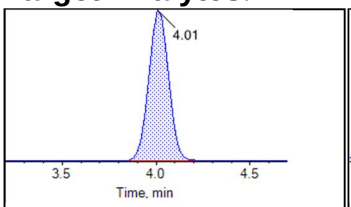
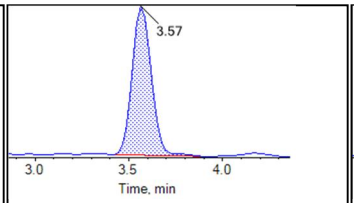
Sample Name	J8718-FS(0)	**Injection Vial**	17
Sample ID	VC-CS00-DW02P-1018	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:24:20	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Chromatograms

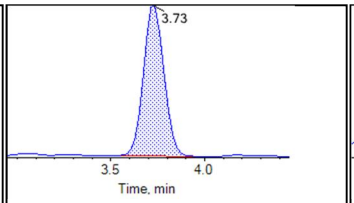
Target Analytes:



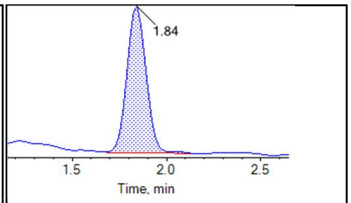
13C2-PFDoA



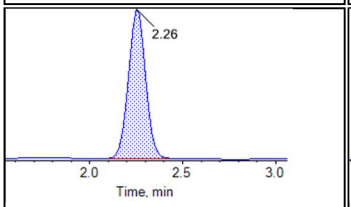
d3-MeFOSAA



d5-EtFOSAA



13C5-PFHxA



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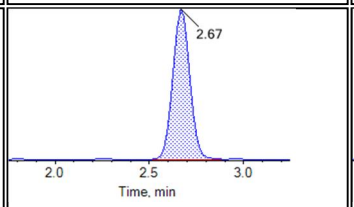

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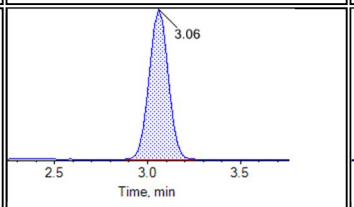

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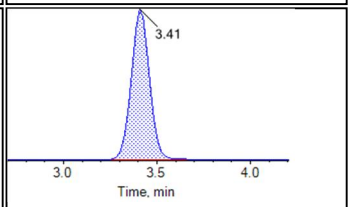
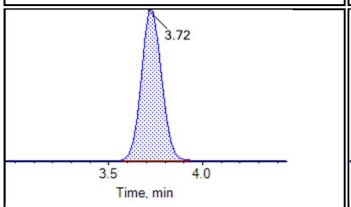
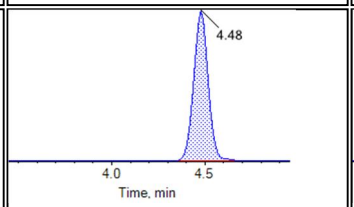


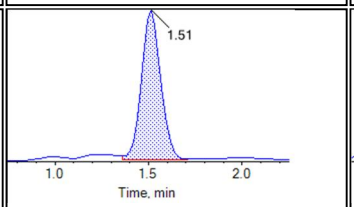
13C6-PFDA



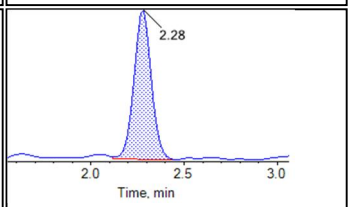
13C7-PFUnA



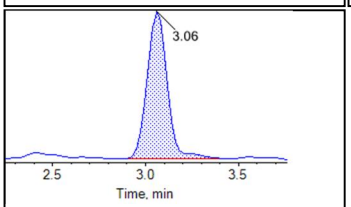
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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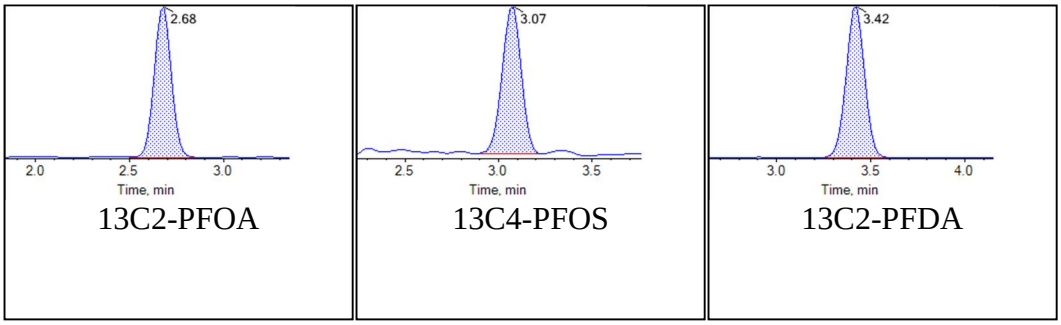

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Chromatogram Report

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Sample Name	J8719-FS(0)	**Injection Vial**	18
Sample ID	VC-CS00-DW03-1018	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:35:12	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Chromatograms

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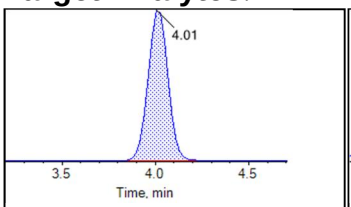
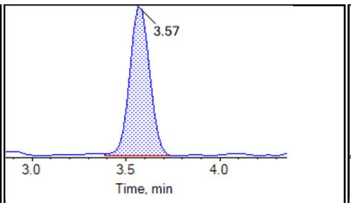
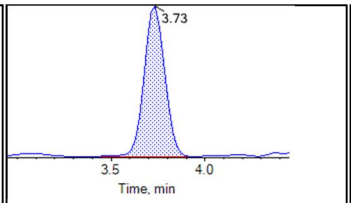


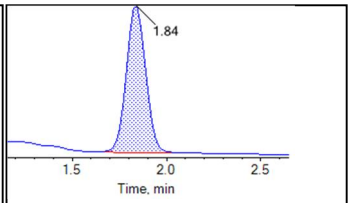
13C2-PFDoA



d3-MeFOSAA



d5-EtFOSAA



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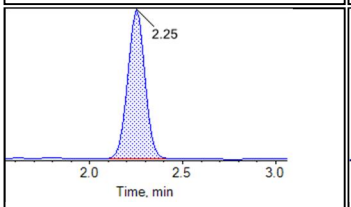
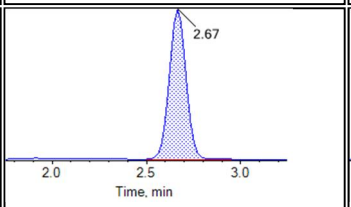
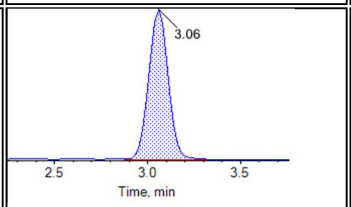


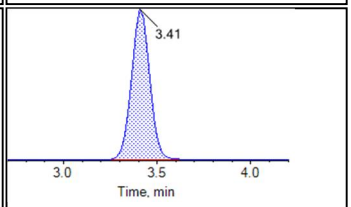
13C4-PFHpA



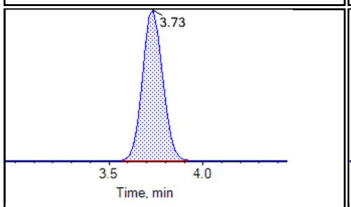
13C8-PFOA



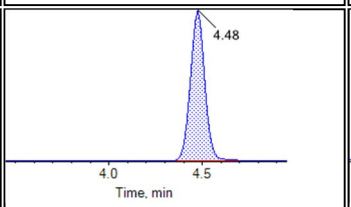
13C9-PFNA



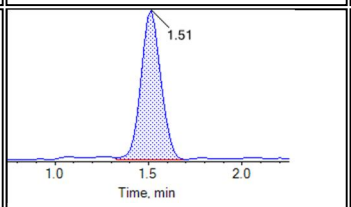
13C6-PFDA



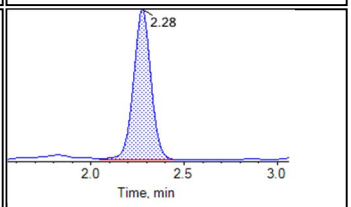
13C7-PFUnA



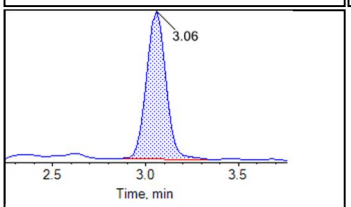
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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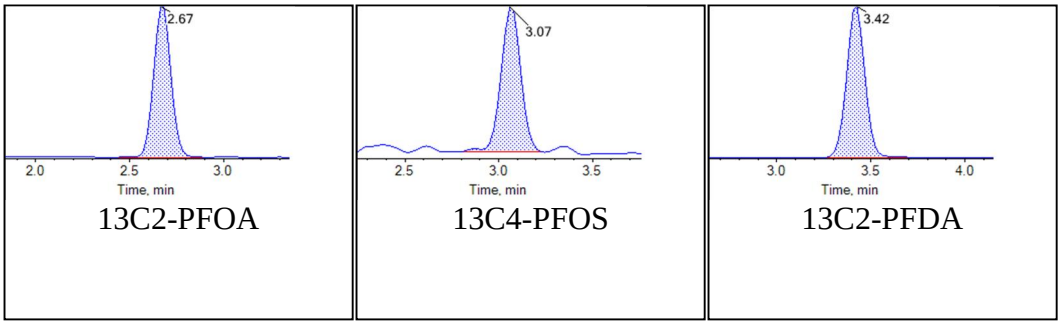
Internal Standards:



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Chromatogram Report

Created with Analyst Reporter
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Sample Name	J8721-FS(0)	**Injection Vial**	19
Sample ID	VC-CS00-DW05-1018	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:46:02	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Chromatograms

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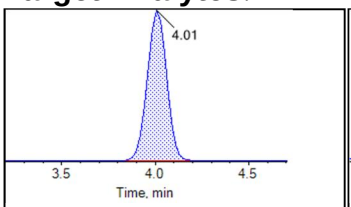
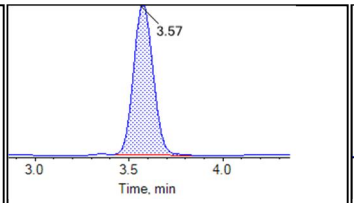
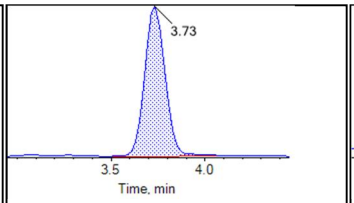


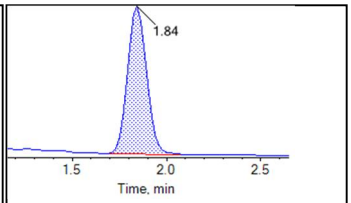
13C2-PFDoA



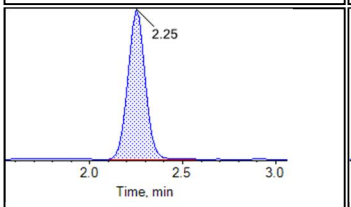
d3-MeFOSAA



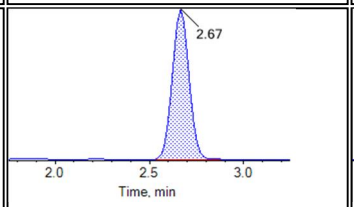
d5-EtFOSAA



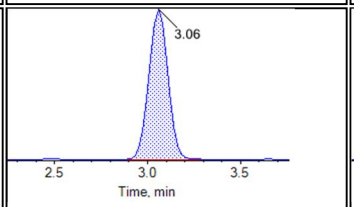
13C5-PFHxA



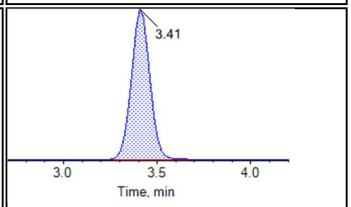
13C4-PFHpA



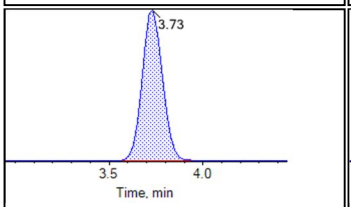
13C8-PFOA



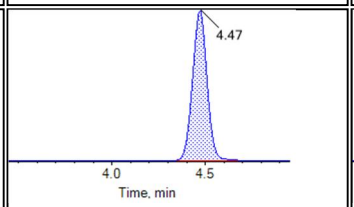
13C9-PFNA



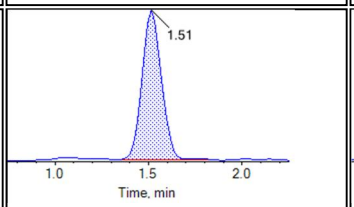
13C6-PFDA



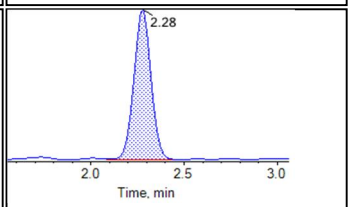
13C7-PFUnA



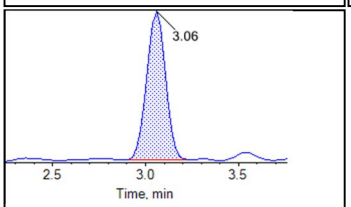
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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Chromatogram Report

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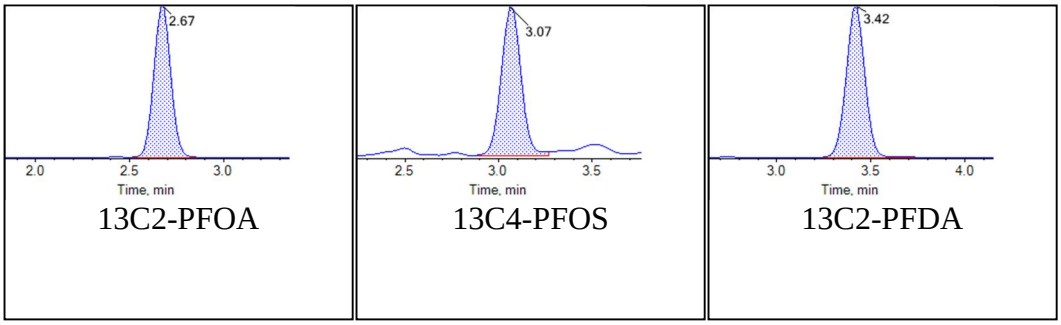

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Chromatogram Report

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Sample Name	J8722-FS(0)	**Injection Vial**	20
Sample ID	VC-CS00-DW06-1018	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-26T14:56:55	**Data File**	AC_10262018_369.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0609A_SIS
Sample Comment			

Chromatograms

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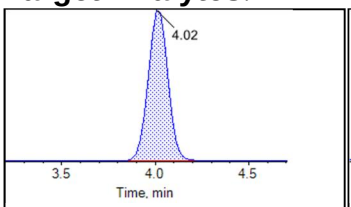
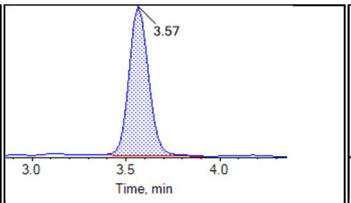
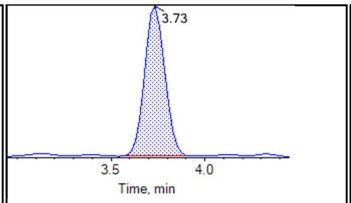


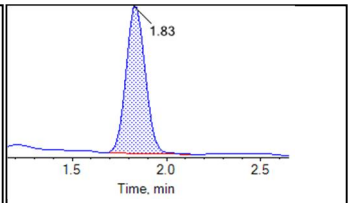
13C2-PFDoA



d3-MeFOSAA



d5-EtFOSAA



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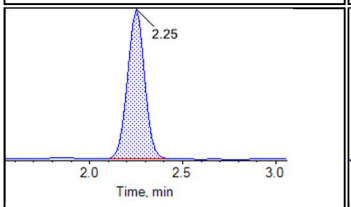

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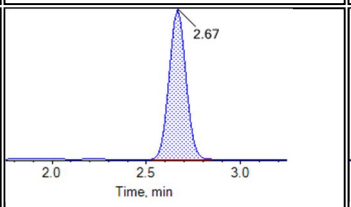

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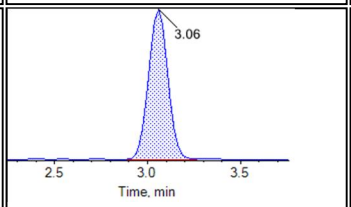
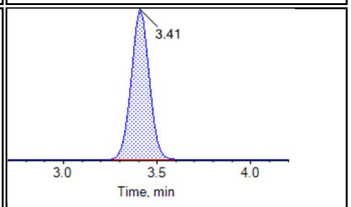
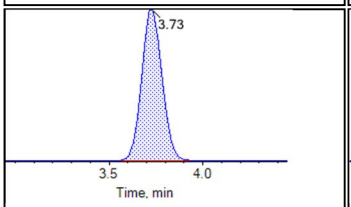


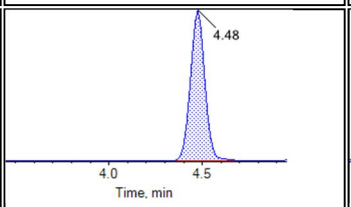
13C9-PFNA



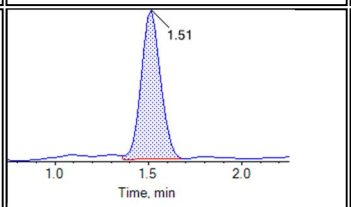
13C6-PFDA



13C7-PFUnA



13C2-PFTeDA



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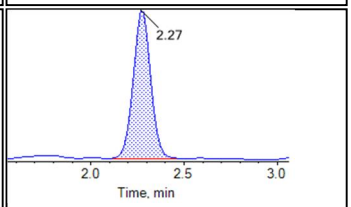

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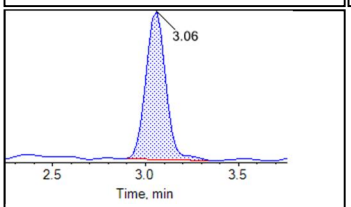

13C8-PFOS

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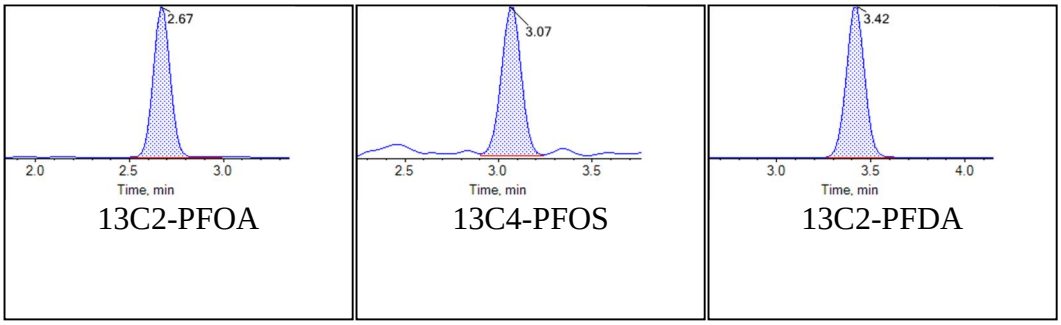

EDD

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N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			Perfluorohexanoic Acid (PFHxA)	307-24-4		0.5	NG_L	U		TRG						20171116		0.19	0.19	5.1	0.19	0.5		5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			Perfluoroheptanoic acid (PFHpA)	375-85-9		0.5	NG_L	U		TRG						20171116		0.16	0.16	5.1	0.16	0.5		5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		1.09	NG_L	J		TRG						20171116		0.18	0.18	5.1	0.18	0.5		5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			Perfluorononanoic acid (PFNA)	375-95-1		1	NG_L	U		TRG						20171116		0.26	0.26	5.1	0.26	1		5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			Perfluorodecanoic Acid (PFDA)	335-76-2		0.5	NG_L	U		TRG						20171116		0.16	0.16	5.1	0.16	0.5		5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			Perfluoroundecanoic Acid (PFUnA)	2058-94-8		1	NG_L	U		TRG						20171116		0.29	0.29	5.1	0.29	1		5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			Perfluorododecanoic Acid (PFDoA)	307-55-1		0.5	NG_L	U		TRG						20171116		0.18	0.18	5.1	0.18	0.5		5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			Perfluorotridecanoic Acid (PFTrDA)	72629-94-8		1	NG_L	U		TRG						20171116		0.15	0.15	5.1	0.15	0.5		5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			Perfluorotetradecanoic Acid (PFTeDA)	376-06-7		0.93	NG_L	U		TRG						20171116		0.23	0.23	5.1	0.23	0.93		5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	2355-31-9		2	NG_L	U		TRG						20171116		0.56	0.56	5.1	0.56	2		5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			N-Ethyl Perfluorooctanesulfonamidoacetic Acid (EtFOSAA)	2991-50-6		1	NG_L	U		TRG						20171116		0.49	0.49	5.1	0.49	1		5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.5	NG_L	U		TRG						20171116		0.13	0.13	5.1	0.13	0.5		5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			Perfluorohexanesulfonic acid (PFHxS)	355-46-4		0.4	NG_L	U		TRG						20171116		0.11	0.11	5.1	0.11	0.4		5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			Perfluorooctanesulfonic Sulfonate (PFOS)	1763-23-1		0.5	NG_L	U		TRG						20171116		0.19	0.19	5.1	0.19	0.5		5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			13C5-PFHxA	800-2217		114	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			13C4-PFHpA	800-2218		114	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			13C8-PFOA	800-2219		124	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			13C9-PFNA	800-2221		101	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			13C6-PDoA	800-2222		101	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			13C7-PFUnA	800-2223		98	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			13C2-PFDoA	800-2112		104	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			13C2-PFTeDA	800-2224		103	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			d3-NMeFOSAA	800-1838		125	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			d5-EtFOSAA	800-1839		130	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			13C3-PFBS	800-2226		121	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			13C3-PFHxS	800-2227		117	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98BPB-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BLK	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181025	18:48:52	CR98BPB-FS	1	1			13C8-PFOS	800-2228		104	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			Perfluorohexanoic Acid (PFHxA)	307-24-4		462.97	NG_L	D		TRG						20171116		1.98	1.98	5.1	1.98	5.21		52.08	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			Perfluoroheptanoic Acid (PFHpA)	375-85-9		150.85	NG_L	D		TRG						20171116		1.67	1.67	5.1	1.67	5.21		52.08	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			Perfluorooctanoic Acid (PFOA)	335-67-1		1313.87	NG_L			TRG						20171116		4.69	4.69	5.1	4.69	13.02		130.21	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			Perfluorononanoic Acid (PFNA)	375-95-1		1.31	NG_L	J		TRG						20171116		0.27	0.27	5.1	0.27	1.04		5.21	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			Perfluorodecanoic Acid (PFDA)	335-76-2		0.52	NG_L	U		TRG						20171116		0.17	0.17	5.1	0.17	0.52		5.21	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			Perfluoroundecanoic Acid (PFUnA)	2058-94-8		1.04	NG_L	U		TRG						20171116		0.3	0.3	5.1	0.3	1.04		5.21	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			Perfluorododecanoic Acid (PFDoA)	307-55-1		0.52	NG_L	U		TRG						20171116		0.19	0.19	5.1	0.19	0.52		5.21	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			Perfluorotridecanoic Acid (PFTrDA)	72629-94-8		107	PCT_REC			TRG						20171116		0.15	0.15	5.1	0.15	0.5		5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			Perfluorotetradecanoic Acid (PFTeDA)	376-06-7		103	PCT_REC			TRG						20171116		0.25	0.25	5.1	0.25	0.93		5.21	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	2355-31-9		107	PCT_REC			TRG						20171116		0.56	0.56	5.1	0.56	2		5.21	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			N-Ethyl Perfluorooctanesulfonamidoacetic Acid (EtFOSAA)	2991-50-6		111	PCT_REC			TRG						20171116		0.49	0.49	5.1	0.49	1		5.21	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		96	PCT_REC			TRG						20171116		0.13	0.13	5.1	0.13	0.5		5.21	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			Perfluorohexanesulfonic acid (PFHxS)	355-46-4		101	PCT_REC			TRG						20171116		0.11	0.11	5.1	0.11	0.4		5.21	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			Perfluorooctanesulfonic Sulfonate (PFOS)	1763-23-1		101	PCT_REC			TRG						20171116		0.19	0.19	5.1	0.19	0.5		5.21	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			13C5-PFHxA	800-2217		98	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			13C4-PFHpA	800-2218		115	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			13C8-PFOA	800-2219		107	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			13C9-PFNA	800-2221		100	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			13C6-PDoA	800-2222		107	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			13C7-PFUnA	800-2223		117	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			13C2-PFDoA	800-2112		107	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			13C2-PFTeDA	800-2224		125	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			d3-NMeFOSAA	800-1838		149	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			d5-EtFOSAA	800-1839		133	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			13C3-PFBS	800-2226		142	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			13C3-PFHxS	800-2227		122	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5	18-0609	DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	CR98CLFS-FS		NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	BS	W	4	10/17/2018 10:41	10/17/2018			10/22/2018	10:41:00	20181026	13:51:45	CR98CLFS-FS	1	1			13C8-PFOS	800-2228		110	PCT_REC			SURR	SLSP				150	50	20171116				5.1				5

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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	GC_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
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:30	10/09/2018			20181017	10:41:00	20181025	22:37:05	J8684F5	1	1			N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	2355-31-9	1.85	1.85	NG_L	U		TRG					20171116		0.52	1.85	5.1	0.52	1.85	4.63	18-0609 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:30	10/09/2018			20181017	10:41:00	20181025	22:37:05	J8684F5	1	1			N-Ethyl Perfluorooctanesulfonamidoacetic Acid (EtFOSAA)	2991-50-6	0.93	0.93	NG_L	U		TRG					20171116		0.45	0.45	5.1	0.45	0.93	4.63	18-0609 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:30	10/09/2018			20181017	10:41:00	20181025	22:37:05	J8684F5	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	5.68	NG_L				TRG					20171116		0.12	0.12	5.1	0.12	0.46	4.63	18-0609 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:30	10/09/2018			20181017	10:41:00	20181025	22:37:05	J8684F5	1	1			Perfluorohexanesulfonic acid (PFHS)	355-46-4	20.52	NG_L				TRG					20171116		0.1	0.1	5.1	0.1	0.37	4.63	18-0609 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:30	10/09/2018			20181017	10:41:00	20181025	22:37:05	J8684F5	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	33.6	NG_L				TRG					20171116		0.18	0.18	5.1	0.18	0.46	4.63	18-0609 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:30	10/09/2018			20181017	10:41:00	20181025	22:37:05	J8684F5	1	1			13C5-PFHxA	800-2217		126	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-0609 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:30	10/09/2018			20181017	10:41:00	20181025	22:37:05	J8684F5	1	1			13C4-PFHpA	800-2218		142	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-0609 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:30	10/09/2018			20181017	10:41:00	20181025	22:37:05	J8684F5	1	1			13C8-PFOA	800-2219		93	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-0609 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:30	10/09/2018			20181017	10:41:00	20181025	22:37:05	J8684F5	1	1			13C9-PFNA	800-2222		95	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-0609 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:30	10/09/2018			20181017	10:41:00	20181025	22:37:05	J8684F5	1	1			13C6-PFDA	800-2222		100	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-0609 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:30	10/09/2018			20181017	10:41:00	20181025	22:37:05	J8684F5	1	1			13C7-PFUnA	800-2223		108	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-0609 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:30	10/09/2018			20181017	10:41:00	20181025	22:37:05	J8684F5	1	1			13C2-PFDoA	800-2224		94	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-0609 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	DL1	REG	W	4	10/06/2018 10:30	10/09/2018			20181017	10:41:00	20181025	22:47:57	J8684F5	5	1			d3-NaHFOSAA	800-3838		131	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-0609 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	DL1	REG	W	4	10/06/2018 10:30	10/09/2018			20181017	10:41:00	20181025	22:47:57	J8684F5	5	1			d5-EtFOSAA	800-1839		118	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-0609 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	DL1	REG	W	4	10/06/2018 10:30	10/09/2018			20181017	10:41:00	20181025	22:47:57	J8684F5	5	1			13C3-PFBS	800-2226		146	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-0609 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:30	10/09/2018			20181017	10:41:00	20181025	22:37:05	J8684F5	1	1			13C3-PFHxS	800-2227		143	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-0609 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:30	10/09/2018			20181017	10:41:00	20181025	22:37:05	J8684F5	1	1			13C4-PFOS	800-2228		117	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-0609 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			Perfluorohexanoic Acid (PFHxA)	307-24-4	5.6	NG_L				TRG					20171116		0.17	0.17	5.1	0.17	0.45	4.55	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			Perfluoroheptanoic acid (PFHpA)	375-85-9	1.77	NG_L		J		TRG					20171116		0.15	0.15	5.1	0.15	0.45	4.55	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			Perfluorooctanoic acid (PFOA)	335-67-1	29.52	NG_L				TRG					20171116		0.16	0.16	5.1	0.16	0.45	4.55	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			Perfluorononanoic acid (PFNA)	375-95-1	0.91	NG_L		U		TRG					20171116		0.24	0.24	5.1	0.24	0.91	4.55	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			Perfluorodecanoic Acid (PFDA)	335-76-2	0.45	NG_L		U		TRG					20171116		0.15	0.15	5.1	0.15	0.45	4.55	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			Perfluorooctanesulfonamide (PFOSA)	2058-64-8	0.91	NG_L		U		TRG					20171116		0.26	0.26	5.1	0.26	0.91	4.55	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			Perfluorododecanoic Acid (PFDoA)	307-55-1	0.45	NG_L		U		TRG					20171116		0.16	0.16	5.1	0.16	0.45	4.55	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			Perfluorotridecanoic Acid (PFTrDA)	72629-94-8	0.45	NG_L		U		TRG					20171116		0.14	0.14	5.1	0.14	0.45	4.55	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			Perfluorotetradecanoic Acid (PFTeDA)	376-06-7	0.91	NG_L		U		TRG					20171116		0.23	0.23	5.1	0.23	0.91	4.55	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	2355-31-9	1.82	NG_L		U		TRG					20171116		0.51	0.51	5.1	0.51	1.82	4.55	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			N-Ethyl Perfluorooctanesulfonamidoacetic Acid (EtFOSAA)	2991-50-6	0.91	NG_L		U		TRG					20171116		0.45	0.45	5.1	0.45	0.91	4.55	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	4.45	NG_L		J		TRG					20171116		0.12	0.12	5.1	0.12	0.45	4.55	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			Perfluorohexanesulfonic acid (PFHS)	355-46-4	13.98	NG_L				TRG					20171116		0.1	0.1	5.1	0.1	0.36	4.55	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1	6.54	NG_L				TRG					20171116		0.17	0.17	5.1	0.17	0.45	4.55	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			13C5-PFHxA	800-2217		136	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			13C4-PFHpA	800-2218		143	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			13C8-PFOA	800-2219		105	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			13C9-PFNA	800-2221		99	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			13C6-PFDA	800-2222		100	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			13C7-PFUnA	800-2223		103	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			13C2-PFDoA	800-2224		104	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			d3-NaHFOSAA	800-3838		126	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			d5-EtFOSAA	800-1839		148	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			13C3-PFBS	800-2226		148	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			13C3-PFHxS	800-2227		141	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW02P-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 10:40	10/09/2018			20181017	10:41:00	20181025	22:58:48	J8685F5	1	1			13C4-PFOS	800-2228		112	PCT_REC				SURR		SLSP		150	50 20171116				5.1				18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 12:07	10/09/2018			20181017	10:41:00	20181025	23:09:39	J8686F5	1	1			Perfluorohexanoic Acid (PFHxA)	307-24-4	0.18	NG_L		J		TRG					20171116		0.18	0.18	5.1	0.18	0.47	4.72	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 12:07	10/09/2018			20181017	10:41:00	20181025	23:09:39	J8686F5	1	1			Perfluoroheptanoic Acid (PFHpA)	375-85-9	7.06	NG_L				TRG					20171116		0.15	0.15	5.1	0.15	0.47	4.72	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	DL1	REG	W	4	10/06/2018 12:07	10/09/2018			20181017	10:41:00	20181025	23:09:39	J8686F5	10	1			Perfluorooctanoic acid (PFOA)	335-67-1	310.23	NG_L		D		TRG					20171116		1.7	1.7	5.1	1.7	4.72	47.17	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	DL1	REG	W	4	10/06/2018 12:07	10/09/2018			20181017	10:41:00	20181025	23:09:39	J8686F5	10	1			Perfluorononanoic Acid (PFNA)	375-95-1	0.38	NG_L		J		TRG					20171116		0.25	0.25	5.1	0.25	0.94	4.72	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 12:07	10/09/2018			20181017	10:41:00	20181025	23:09:39	J8686F5	1	1			Perfluorodecanoic Acid (PFDA)	335-76-2	0.17	NG_L		J		TRG					20171116		0.15	0.15	5.1	0.15	0.47	4.72	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 12:07	10/09/2018			20181017	10:41:00	20181025	23:09:39	J8686F5	1	1			Perfluorooctanesulfonamide (PFOSA)	2058-64-8	0.47	NG_L		U		TRG					20171116		0.27	0.27	5.1	0.27	0.94	4.72	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 12:07	10/09/2018			20181017	10:41:00	20181025	23:09:39	J8686F5	1	1			Perfluorododecanoic Acid (PFDoA)	307-55-1	0.47	NG_L		U		TRG					20171116		0.17	0.17	5.1	0.17	0.47	4.72	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 12:07	10/09/2018			20181017	10:41:00	20181025	23:09:39	J8686F5	1	1			Perfluorotridecanoic Acid (PFTrDA)	72629-94-8	0.94	NG_L		U		TRG					20171116		0.24	0.24	5.1	0.24	0.94	4.72	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 12:07	10/09/2018			20181017	10:41:00	20181025	23:09:39	J8686F5	1	1			Perfluorotetradecanoic Acid (PFTeDA)	376-06-7	0.94	NG_L		U		TRG					20171116		0.53	0.53	5.1	0.53	1.89	4.72	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 12:07	10/09/2018			20181017	10:41:00	20181025	23:09:39	J8686F5	1	1			N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	2355-31-9	1.89	NG_L		U		TRG					20171116		0.46	0.46	5.1	0.46	1.89	4.72	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 12:07	10/09/2018			20181017	10:41:00	20181025	23:09:39	J8686F5	1	1			N-Ethyl Perfluorooctanesulfonamidoacetic Acid (EtFOSAA)	2991-50-6	0.94	NG_L		U		TRG					20171116		0.46	0.46	5.1	0.46	0.94	4.72	18-06109 DP-18-0305		
N62470160900 4164			POINT_MUGU_NBVC	VC-CS10-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 12:07	10/09/2018			20181017	10:41:00	20181025	23:09:39	J8686F5	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5	8.46	NG_L				TRG					20171116		0.12	0.12	5.1	0.12	0.47	4.72

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	GC_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
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW04-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 14:32	10/09/2018			10/09/2018	10:41:00	20181026	00:58:16	JB716-F5	1	1			13C4-PFOA	BOO-2222		95 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW01-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 14:32	10/09/2018			10/09/2018	10:41:00	20181026	00:58:16	JB716-F5	1	1			13C7-PFUnA	BOO-2223		112 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW01-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 14:32	10/09/2018			10/09/2018	10:41:00	20181026	00:58:16	JB716-F5	1	1			13C2-PFDoA	BOO-2212		112 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW01-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 14:32	10/09/2018			10/09/2018	10:41:00	20181026	00:58:16	JB716-F5	1	1			13C2-PFTeDA	BOO-2224		120 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW01-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	DL1	REG	W	4	10/06/2018 14:32	10/09/2018			10/09/2018	10:41:00	20181026	12:57:28	JB716-F5	50	1			d3-NMeFOSAA	BOO-1838		126 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW01-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	DL1	REG	W	4	10/06/2018 14:32	10/09/2018			10/09/2018	10:41:00	20181026	12:57:28	JB716-F5	50	1			d5-EtFOSAA	BOO-1839		110 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW01-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	DL1	REG	W	4	10/06/2018 14:32	10/09/2018			10/09/2018	10:41:00	20181026	12:57:28	JB716-F5	50	1			13C3-PFBS	BOO-2226		106 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW01-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	DL1	REG	W	4	10/06/2018 14:32	10/09/2018			10/09/2018	10:41:00	20181026	12:57:28	JB716-F5	50	1			13C3-PFHxS	BOO-2227		124 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW01-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	DL1	REG	W	4	10/06/2018 14:32	10/09/2018			10/09/2018	10:41:00	20181026	12:57:28	JB716-F5	50	1			18O2-PFDS	BOO-2237		106 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			Perfluorohexanoic Acid (PFHxA)	BOO-2217	307-24-4	4.57 NG_L	J		TRG				20171116				5.1	0.18	0.47	4.72	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			Perfluoroheptanoic acid (PFHpA)	375-85-9		1.03 NG_L	J		TRG				20171116				5.1	0.15	0.15	5.1	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		6.98 NG_L	B		TRG				20171116				5.1	0.17	0.47	4.72	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			Perfluorononanoic acid (PFNA)	375-95-1		0.94 NG_L	U		TRG				20171116				5.1	0.25	0.25	5.1	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			Perfluorodecanoic Acid (PFDA)	335-76-2		0.47 NG_L	U		TRG				20171116				5.1	0.15	0.15	5.1	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			Perfluoroundecanoic Acid (PFUnA)	2058-94-8		0.94 NG_L	U		TRG				20171116				5.1	0.27	0.27	5.1	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			Perfluorododecanoic Acid (PFDoA)	307-55-1		0.47 NG_L	U		TRG				20171116				5.1	0.17	0.47	4.72	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			Perfluorotridecanoic Acid (PFTrDA)	72629-94-8		0.47 NG_L	U		TRG				20171116				5.1	0.14	0.14	5.1	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			Perfluorotetradecanoic Acid (PFTeDA)	376-06-7		0.94 NG_L	U		TRG				20171116				5.1	0.24	0.24	5.1	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			N-Ethyl Perfluorooctanesulfonamidoacetic Acid (EtFOSAA)	2991-50-6		0.94 NG_L	U		TRG				20171116				5.1	0.46	0.46	5.1	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		1.29 NG_L	J		TRG				20171116				5.1	0.12	0.12	5.1	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			Perfluorohexanesulfonic acid (PFHxS)	355-46-4		9.65 NG_L			TRG				20171116				5.1	0.1	0.1	5.1	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		67.95 NG_L			TRG				20171116				5.1	0.18	0.18	5.1	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			13C3-PFHxA	BOO-2217		127 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			13C4-PFHpA	BOO-2218		143 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			13C8-PFOA	BOO-2219		114 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			13C9-PFNA	BOO-2221		100 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			13C6-PFDA	BOO-2222		108 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			13C7-PFUnA	BOO-2223		129 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			13C2-PFDoA	BOO-2212		116 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			13C2-PFTeDA	BOO-2224		100 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	DL1	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	50	1			d3-NMeFOSAA	BOO-1838		166 PCT_REC	N		SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	DL1	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	50	1			d5-EtFOSAA	BOO-1839		187 PCT_REC	N		SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			13C3-PFBS	BOO-2226		96 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			13C3-PFHxS	BOO-2227		140 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW02-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 16:25	10/09/2018			10/09/2018	10:41:00	20181026	01:20:02	JB717-F5	1	1			13C8-PFOS	BOO-2228		105 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			Perfluorohexanoic Acid (PFHxA)	307-24-4		307.24 NG_L			TRG				20171116				5.1	0.16	0.16	5.1	4.63	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			Perfluoroheptanoic acid (PFHpA)	375-85-9		4.09 NG_L	J		TRG				20171116				5.1	0.16	0.16	5.1	4.63	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			Perfluorooctanoic acid (PFOA)	335-67-1		1.67 NG_L	J		TRG				20171116				5.1	0.17	0.17	5.1	4.63	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			Perfluorononanoic acid (PFNA)	375-95-1		0.59 NG_L	J		TRG				20171116				5.1	0.24	0.24	5.1	4.63	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			Perfluorodecanoic Acid (PFDA)	335-76-2		0.46 NG_L	U		TRG				20171116				5.1	0.15	0.15	5.1	4.63	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			Perfluoroundecanoic Acid (PFUnA)	2058-94-8		0.93 NG_L	U		TRG				20171116				5.1	0.27	0.27	5.1	4.63	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			Perfluorododecanoic Acid (PFDoA)	307-55-1		0.46 NG_L	U		TRG				20171116				5.1	0.17	0.17	5.1	4.63	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			Perfluorotridecanoic Acid (PFTrDA)	72629-94-8		0.46 NG_L	U		TRG				20171116				5.1	0.14	0.14	5.1	4.63	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			Perfluorotetradecanoic Acid (PFTeDA)	376-06-7		0.93 NG_L	U		TRG				20171116				5.1	0.23	0.23	5.1	4.63	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			N-Methyl Perfluorooctanesulfonamidoacetic Acid (MeFOSAA)	2355-31-9		1.85 NG_L	U		TRG				20171116				5.1	0.37	0.37	5.1	4.63	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			N-Ethyl Perfluorooctanesulfonamidoacetic Acid (EtFOSAA)	2991-50-6		0.93 NG_L	U		TRG				20171116				5.1	0.45	0.45	5.1	4.63	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			Perfluorobutanesulfonic acid (PFBS)	375-73-5		0.46 NG_L	U		TRG				20171116				5.1	0.12	0.12	5.1	4.63	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			Perfluorohexanesulfonic acid (PFHxS)	355-46-4		0.5 NG_L	J		TRG				20171116				5.1	0.1	0.1	5.1	4.63	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			Perfluorooctane Sulfonate (PFOS)	1763-23-1		3.38 NG_L			TRG				20171116				5.1	0.18	0.18	5.1	4.63	18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			13C5-PFHxA	BOO-2217		131 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			13C4-PFHpA	BOO-2218		152 PCT_REC	N		SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			13C8-PFOA	BOO-2219		118 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			13C9-PFNA	BOO-2221		111 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			13C6-PFDA	BOO-2222		99 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00	20181026	02:14:19	JB720-F5	1	1			13C7-PFUnA	BOO-2223		114 PCT_REC			SURR	SLSP	150	50	20171116							5.1			18-0609 DP-18-0305
N624701609000	4164		POINT_MUGU_NBVC	VC-CSDO-DW03-1018	NONS	SVOA	537_MOD	ORG	BMSL_NOR	BATTELLE, NORWELL, MA		N	METHOD	000	REG	W	4	10/06/2018 17:00	10/09/2018			10/09/2018	10:41:00

ENVIRONMENTAL
Data Services, Inc.

DATA VALIDATION SUMMARY REPORT
NAVAL BASE VENTURA COUNTY, CALIFORNIA

Client: CH2M HILL, Inc., Corvallis, Oregon
SDG: 18-0609
Laboratory: Battelle Norwell Operations, Norwell, Massachusetts
Site: Naval Base Ventura County, CTO-4164, California
Date: December 28, 2018

PFCs			
EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	VC-CS12-DW01-1018	J8667-FS	Water
2	VC-CS12-DW01P-1018	J8668-FS	Water
3	VC-CS12-DW02-1018	J8669-FS	Water
4	VC-CS12-DW03-1018	J8670-FS	Water
5	VC-CS10-DW01-1018	J8683-FS	Water
6	VC-CS10-DW02-1018	J8684-FS	Water
7	VC-CS10-DW02P-1018	J8685-FS	Water
8	VC-CS10-DW03-1018	J8686-FS	Water
9	VC-CS10-DW04-1018	J8687-FS	Water
10	VC-CS18-DW01-1018	J8688-FS	Water
11	VC-SO-FB11-10062018	J8714-FS	Water
12	VC-SO-EB11-10062018	J8715-FS	Water
13	VC-CS00-DW01-1018	J8716-FS	Water
14	VC-CS00-DW02-1018	J8717-FS	Water
15	VC-CS00-DW02P-1018	J8718-FS	Water
16	VC-CS00-DW03-1018	J8719-FS	Water
17	VC-CS00-DW04-1018	J8720-FS	Water
18	VC-CS00-DW05-1018	J8721-FS	Water
19	VC-CS00-DW06-1018	J8722-FS	Water

A full data validation was performed on the analytical data for seventeen water samples, one aqueous field blank sample, and one aqueous equipment blank sample collected on October 6, 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
CR986PB-FS	PFOA	1.09	U	11-12, 14-16, 18

Field QC Blank

- Field QC samples are summarized below.

Blank ID	Compound	Conc. ng/L	Qualifier	Affected Samples
VC-SO-EB11-10062018	PFHxA	0.23	U	16
VC-SO-FB11-10062018	PFHxS	0.33	U	16, 18

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values except for the following.

EDS Sample ID	Surrogate	%R	Qualifier
14	d3-MeFOSAA	166%	None - Sample ND
	d5-EtFOSAA	187%	
15	d3-MeFOSAA	163%	None - Sample ND
	d5-EtFOSAA	173%	
16	13C4-PFHpA	152%	J - Associated Compound
18	13C4-PFHpA	162%	J - Associated Compound
	d3-MeFOSAA	184%	None - Sample ND

EDS Sample ID	Surrogate	%R	Qualifier
18	d5-EtFOSAA	188%	None - Sample ND
	13C3-PFHxS	153%	
19	d3-MeFOSAA	159%	None - Sample ND

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 several compounds. These results were qualified estimated (J).

Compound	VC-CS12-DW01-1018 ng/L	VC-CS12-DW01P-1018 ng/L	RPD	Qualifier
PFHxA	1207.13	1332.07	10%	None
PFHpA	355.01	325.87	9%	
PFOA	1297.19	1237.97	5%	
PFNA	8.79	7.60	15%	
PFDA	1.38	4.03U	NC	
PFBS	248.43	234.26	6%	
PFHxS	2909.86	3125.32	7%	
PFOS	4058.91	4955.55	20%	

Compound	VC-CS10-DW02-1018 ng/L	VC-CS10-DW02P-1018 ng/L	RPD	Qualifier
PFHxA	9.25	5.60	49%	J
PFHpA	2.22	1.77	23%	None
PFOA	30.04	29.52	2%	
PFNA	0.52	0.91U	NC	
PFDA	0.35	0.45U	NC	
PFBS	5.68	4.45	24%	
PFHxS	20.52	13.98	38%	J
PFOS	33.60	6.54	135%	

Compound	VC-CS00-DW02-1018 ng/L	VC-CS00-DW02P-1018 ng/L	RPD	Qualifier
PFHxA	4.57	4.09	11%	None
PFHpA	1.03	0.96	7%	
PFBS	1.29	0.95	30%	None - <5X LOQ
PFHxS	9.65	6.21	43%	J
PFOS	67.95	40.40	51%	J

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed: Nancy Weaver Dated: 12/31/18

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.

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

Client ID		VC-CS12-DW01-1018			
Battelle ID		J8667-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/25/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		GW			
Sample Size		0.030			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	1207.13 D	15.83	41.67	416.67
PFHpA	375-85-9	355.01	1.33	4.17	41.67
PFOA	335-67-1	1297.19 D	15.00	41.67	416.67
PFNA	375-95-1	8.79 J	2.17	8.33	41.67
PFDA	335-76-2	1.38 J	1.33	4.17	41.67
PFUnA	2058-94-8	8.33 U	2.42	8.33	41.67
PFDoA	307-55-1	4.17 U	1.50	4.17	41.67
PFTrDA	72629-94-8	4.17 U	1.25	4.17	41.67
PFTeDA	376-06-7	8.33 U	2.08	8.33	41.67
NMeFOSAA	2355-31-9	16.67 U	4.67	16.67	41.67
NEtFOSAA	2991-50-6	8.33 U	4.08	8.33	41.67
PFBS	375-73-5	248.43	1.08	4.17	41.67
PFHxS	355-46-4	2909.86 D	45.83	166.67	2083.33
PFOS	1763-23-1	4058.91 D	79.17	208.33	2083.33
Surrogate Recoveries (%)					
13C5-PFHxA		109 D			
13C4-PFHpA		116			
13C8-PFOA		103 D			
13C9-PFNA		73			
13C6-PFDA		97			
13C7-PFUnA		101			
13C2-PFDoA		107			
13C2-PFTeDA		115			
d3-MeFOSAA		123			
d5-EtFOSAA		119			
13C3-PFBS		109 D			
13C3-PFHxS		102 D			
13C8-PFOS		99 D			

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

Client ID		VC-CS12-DW01P-1018			
Battelle ID		J8668-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/25/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		GW			
Sample Size		0.031			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	1332.07 D	15.32	40.32	403.23
PFHpA	375-85-9	325.87	1.29	4.03	40.32
PFOA	335-67-1	1237.97 D	14.52	40.32	403.23
PFNA	375-95-1	7.60 J	2.10	8.06	40.32
PFDA	335-76-2	4.03 U	1.29	4.03	40.32
PFUnA	2058-94-8	8.06 U	2.34	8.06	40.32
PFDoA	307-55-1	4.03 U	1.45	4.03	40.32
PFTrDA	72629-94-8	4.03 U	1.21	4.03	40.32
PFTeDA	376-06-7	8.06 U	2.02	8.06	40.32
NMeFOSAA	2355-31-9	16.13 U	4.52	16.13	40.32
NEtFOSAA	2991-50-6	8.06 U	3.95	8.06	40.32
PFBS	375-73-5	234.26	1.05	4.03	40.32
PFHxS	355-46-4	3125.32 D	8.87	32.26	403.23
PFOS	1763-23-1	4955.55 D	15.32	40.32	403.23
Surrogate Recoveries (%)					
13C5-PFHxA		118 D			
13C4-PFHpA		130			
13C8-PFOA		113 D			
13C9-PFNA		81			
13C6-PFDA		98			
13C7-PFUnA		105			
13C2-PFDoA		111			
13C2-PFTeDA		114			
d3-MeFOSAA		141			
d5-EtFOSAA		129			
13C3-PFBS		143 D			
13C3-PFHxS		113 D			
13C8-PFOS		113 D			

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

Client ID		VC-CS12-DW02-1018			
Battelle ID		J8669-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/25/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		GW			
Sample Size		0.031			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	626.41	15.32	40.32	403.23
PFHpA	375-85-9	185.73	1.29	4.03	40.32
PFOA	335-67-1	2039.45	14.52	40.32	403.23
PFNA	375-95-1	8.06 U	2.10	8.06	40.32
PFDA	335-76-2	4.03 U	1.29	4.03	40.32
PFUnA	2058-94-8	8.06 U	2.34	8.06	40.32
PFDoA	307-55-1	4.03 U	1.45	4.03	40.32
PFTrDA	72629-94-8	4.03 U	1.21	4.03	40.32
PFTeDA	376-06-7	8.06 U	2.02	8.06	40.32
NMeFOSAA	2355-31-9	16.13 U	4.52	16.13	40.32
NEtFOSAA	2991-50-6	8.06 U	3.95	8.06	40.32
PFBS	375-73-5	50.40	1.05	4.03	40.32
PFHxS	355-46-4	617.31	8.87	32.26	403.23
PFOS	1763-23-1	2923.23	15.32	40.32	403.23
Surrogate Recoveries (%)					
13C5-PFHxA		113			
13C4-PFHpA		120			
13C8-PFOA		116			
13C9-PFNA		77			
13C6-PFDA		103			
13C7-PFUnA		120			
13C2-PFDoA		119			
13C2-PFTeDA		119			
d3-MeFOSAA		146			
d5-EtFOSAA		120			
13C3-PFBS		113			
13C3-PFHxS		134			
13C8-PFOS		114			

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

Client ID		VC-CS12-DW03-1018			
Battelle ID		J8670-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/25/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		GW			
Sample Size		0.240			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	462.97 D	1.98	5.21	52.08
PFHpA	375-85-9	150.85 D	1.67	5.21	52.08
PFOA	335-67-1	1113.87 D	4.69	13.02	130.21
PFNA	375-95-1	1.31 J	0.27	1.04	5.21
PFDA	335-76-2	0.52 U	0.17	0.52	5.21
PFUnA	2058-94-8	1.04 U	0.30	1.04	5.21
PFDoA	307-55-1	0.52 U	0.19	0.52	5.21
PFTrDA	72629-94-8	0.52 U	0.16	0.52	5.21
PFTeDA	376-06-7	1.04 U	0.26	1.04	5.21
NMeFOSAA	2355-31-9	2.08 U	0.58	2.08	5.21
NEtFOSAA	2991-50-6	1.04 U	0.51	1.04	5.21
PFBS	375-73-5	78.18	0.14	0.52	5.21
PFHxS	355-46-4	827.76 D	2.86	10.42	130.21
PFOS	1763-23-1	233.85 D	1.98	5.21	52.08
Surrogate Recoveries (%)					
13C5-PFHxA		116 D			
13C4-PFHpA		122 D			
13C8-PFOA		93 D			
13C9-PFNA		86 D			
13C6-PFDA		102			
13C7-PFUnA		113			
13C2-PFDoA		102			
13C2-PFTeDA		83			
d3-MeFOSAA		110 D			
d5-EtFOSAA		110 D			
13C3-PFBS		127			
13C3-PFHxS		99 D			
13C8-PFOS		113 D			

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

Client ID		VC-CS10-DW01-1018			
Battelle ID		J8683-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/25/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		GW			
Sample Size		0.295			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	4.41	0.16	0.42	4.24
PFHpA	375-85-9	1.29 J	0.14	0.42	4.24
PFOA	335-67-1	75.01 D	0.76	2.12	21.19
PFNA	375-95-1	0.85 U	0.22	0.85	4.24
PFDA	335-76-2	0.42 U	0.14	0.42	4.24
PFUnA	2058-94-8	0.85 U	0.25	0.85	4.24
PFDoA	307-55-1	0.42 U	0.15	0.42	4.24
PFTrDA	72629-94-8	0.42 U	0.13	0.42	4.24
PFTeDA	376-06-7	0.85 U	0.21	0.85	4.24
NMeFOSAA	2355-31-9	1.69 U	0.47	1.69	4.24
NEtFOSAA	2991-50-6	0.85 U	0.42	0.85	4.24
PFBS	375-73-5	6.75	0.11	0.42	4.24
PFHxS	355-46-4	13.22	0.09	0.34	4.24
PFOS	1763-23-1	12.95	0.16	0.42	4.24
Surrogate Recoveries (%)					
13C5-PFHxA		129			
13C4-PFHpA		137			
13C8-PFOA		111 D			
13C9-PFNA		85			
13C6-PFDA		110			
13C7-PFUnA		120			
13C2-PFDoA		119			
13C2-PFTeDA		101			
d3-MeFOSAA		136 D			
d5-EtFOSAA		147			
13C3-PFBS		144			
13C3-PFHxS		127			
13C8-PFOS		96			

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

Client ID		VC-CS10-DW02-1018				
Battelle ID		J8684-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/25/2018				
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	9.25	J	0.18	0.46	4.63	FD
PFHpA	375-85-9	2.22	J	0.15	0.46	4.63	
PFOA	335-67-1	30.04		0.17	0.46	4.63	
PFNA	375-95-1	0.52	J	0.24	0.93	4.63	
PFDA	335-76-2	0.35	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	5.68		0.12	0.46	4.63	
PFHxS	355-46-4	20.52	J	0.10	0.37	4.63	FD
PFOS	1763-23-1	33.60	J	0.18	0.46	4.63	FD
Surrogate Recoveries (%)							
13C5-PFHxA		126					
13C4-PFHpA		142					
13C8-PFOA		93					
13C9-PFNA		79					
13C6-PFDA		96					
13C7-PFUnA		108					
13C2-PFDoA		98					
13C2-PFTeDA		94					
d3-MeFOSAA		121					
d5-EtFOSAA		118					
13C3-PFBS		140					
13C3-PFHxS		143					
13C8-PFOS		117					

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

Client ID		VC-CS10-DW02P-1018				
Battelle ID		J8685-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/25/2018				
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	5.60	J	0.17	0.45	4.55	FD
PFHpA	375-85-9	1.77	J	0.15	0.45	4.55	
PFOA	335-67-1	29.52		0.16	0.45	4.55	
PFNA	375-95-1	0.91	U	0.24	0.91	4.55	
PFDA	335-76-2	0.45	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	4.45	J	0.12	0.45	4.55	
PFHxS	355-46-4	13.98	J	0.10	0.36	4.55	FD
PFOS	1763-23-1	6.54	J	0.17	0.45	4.55	FD

Surrogate Recoveries (%)

13C5-PFHxA	136
13C4-PFHpA	143
13C8-PFOA	105
13C9-PFNA	84
13C6-PFDA	100
13C7-PFUnA	103
13C2-PFDoA	103
13C2-PFTeDA	104
d3-MeFOSAA	126
d5-EtFOSAA	140
13C3-PFBS	148
13C3-PFHxS	141
13C8-PFOS	112

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

Client ID		VC-CS10-DW03-1018			
Battelle ID		J8686-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/25/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		GW			
Sample Size		0.265			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	21.25	0.18	0.47	4.72
PFHpA	375-85-9	7.86	0.15	0.47	4.72
PFOA	335-67-1	316.23	1.70	4.72	47.17
PFNA	375-95-1	0.28 J	0.25	0.94	4.72
PFDA	335-76-2	0.17 J	0.15	0.47	4.72
PFUnA	2058-94-8	0.94 U	0.27	0.94	4.72
PFDoA	307-55-1	0.47 U	0.17	0.47	4.72
PFTrDA	72629-94-8	0.47 U	0.14	0.47	4.72
PFTeDA	376-06-7	0.94 U	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	8.46	0.12	0.47	4.72
PFHxS	355-46-4	33.00	0.10	0.38	4.72
PFOS	1763-23-1	17.45	0.18	0.47	4.72
Surrogate Recoveries (%)					
13C5-PFHxA		119			
13C4-PFHpA		120			
13C8-PFOA		105			
13C9-PFNA		73			
13C6-PFDA		103			
13C7-PFUnA		124			
13C2-PFDoA		115			
13C2-PFTeDA		90			
d3-MeFOSAA		125			
d5-EtFOSAA		123			
13C3-PFBS		148			
13C3-PFHxS		139			
13C8-PFOS		120			

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

Client ID		VC-CS10-DW04-1018			
Battelle ID		J8687-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/25/2018			
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	38.45	0.18	0.46	4.63
PFHpA	375-85-9	13.69	0.15	0.46	4.63
PFOA	335-67-1	1996.27 D	20.83	57.87	578.70
PFNA	375-95-1	1.57 J	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	0.46 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	3.84 J	0.12	0.46	4.63
PFHxS	355-46-4	15.07	0.10	0.37	4.63
PFOS	1763-23-1	4.88	0.18	0.46	4.63
Surrogate Recoveries (%)					
13C5-PFHxA		110 D			
13C4-PFHpA		109 D			
13C8-PFOA		105 D			
13C9-PFNA		91 D			
13C6-PFDA		104			
13C7-PFUnA		116			
13C2-PFDoA		107			
13C2-PFTeDA		63			
d3-MeFOSAA		115			
d5-EtFOSAA		117			
13C3-PFBS		124			
13C3-PFHxS		112			
13C8-PFOS		92			

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

Client ID		VC-CS18-DW01-1018			
Battelle ID		J8688-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/26/2018			
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	53.22	0.17	0.45	4.55
PFHpA	375-85-9	27.73	0.15	0.45	4.55
PFOA	335-67-1	106.43 P	0.82	2.27	22.73
PFNA	375-95-1	0.52 J	0.24	0.91	4.55
PFDA	335-76-2	0.45 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	8.12	0.12	0.45	4.55
PFHxS	355-46-4	138.81 P	0.50	1.82	22.73
PFOS	1763-23-1	32.25	0.17	0.45	4.55
Surrogate Recoveries (%)					
13C5-PFHxA		125 D			
13C4-PFHpA		132 D			
13C8-PFOA		100 D			
13C9-PFNA		127			
13C6-PFDA		103			
13C7-PFUnA		136 D			
13C2-PFDoA		137 D			
13C2-PFTeDA		149 D			
d3-MeFOSAA		130 D			
d5-EtFOSAA		141			
13C3-PFBS		144 D			
13C3-PFHxS		101 D			
13C8-PFOS		107			

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

Client ID	VC-SO-FB11-10062018			
Battelle ID	J8714-FS			
Sample Type	SA			
Collection Date	10/06/2018			
Extraction Date	10/17/2018			
Analysis Date	10/26/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	AQ			
Sample Size	0.295			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	0.42 U	0.16	0.42	4.24
PFHpA	375-85-9	0.42 U	0.14	0.42	4.24
PFOA	335-67-1	1.31 J 4	0.15	0.42	4.24
PFNA	375-95-1	0.85 U	0.22	0.85	4.24
PFDA	335-76-2	0.42 U	0.14	0.42	4.24
PFUnA	2058-94-8	0.85 U	0.25	0.85	4.24
PFDoA	307-55-1	0.42 U	0.15	0.42	4.24
PFTrDA	72629-94-8	0.42 U	0.13	0.42	4.24
PFTeDA	376-06-7	0.85 U	0.21	0.85	4.24
NMeFOSAA	2355-31-9	1.69 U	0.47	1.69	4.24
NEtFOSAA	2991-50-6	0.85 U	0.42	0.85	4.24
PFBS	375-73-5	0.42 U	0.11	0.42	4.24
PFHxS	355-46-4	0.33 J	0.09	0.34	4.24
PFOS	1763-23-1	0.42 U	0.16	0.42	4.24

MBL

Surrogate Recoveries (%)

13C5-PFHxA	129
13C4-PFHpA	125
13C8-PFOA	119
13C9-PFNA	108
13C6-PFDA	115
13C7-PFUnA	131
13C2-PFDoA	123
13C2-PFTeDA	130
d3-MeFOSAA	147
d5-EtFOSAA	146
13C3-PFBS	142
13C3-PFHxS	122
13C8-PFOS	129

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

Client ID		VC-SO-EB11-10062018			
Battelle ID		J8715-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/26/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		AQ			
Sample Size		0.275			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	0.23 J	0.17	0.45	4.55
PFHpA	375-85-9	0.45 U	0.15	0.45	4.55
PFOA	335-67-1	1.09 ~~J~~ U	0.16	0.45	4.55
PFNA	375-95-1	0.91 U	0.24	0.91	4.55
PFDA	335-76-2	0.45 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	0.45 U	0.12	0.45	4.55
PFHxS	355-46-4	0.36 U	0.10	0.36	4.55
PFOS	1763-23-1	0.45 U	0.17	0.45	4.55

MBL

Surrogate Recoveries (%)

13C5-PFHxA	109
13C4-PFHpA	103
13C8-PFOA	107
13C9-PFNA	95
13C6-PFDA	121
13C7-PFUnA	129
13C2-PFDoA	130
13C2-PFTeDA	135
d3-MeFOSAA	132
d5-EtFOSAA	129
13C3-PFBS	126
13C3-PFHxS	106
13C8-PFOS	110

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

Client ID		VC-CS00-DW01-1018			
Battelle ID		J8716-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/26/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		GW			
Sample Size		0.290			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	26.05	0.16	0.43	4.31
PFHpA	375-85-9	7.83	0.14	0.43	4.31
PFOA	335-67-1	21.89	0.16	0.43	4.31
PFNA	375-95-1	3.06 J	0.22	0.86	4.31
PFDA	335-76-2	1.23 J	0.14	0.43	4.31
PFUnA	2058-94-8	0.46 J	0.25	0.86	4.31
PFDoA	307-55-1	0.43 U	0.16	0.43	4.31
PFTrDA	72629-94-8	0.43 U	0.13	0.43	4.31
PFTeDA	376-06-7	0.86 U	0.22	0.86	4.31
NMeFOSAA	2355-31-9	1.72 U	0.48	1.72	4.31
NEtFOSAA	2991-50-6	0.86 U	0.42	0.86	4.31
PFBS	375-73-5	9.30	0.11	0.43	4.31
PFHxS	355-46-4	113.80 D	0.95	3.45	43.10
PFOS	1763-23-1	868.44 D	8.19	21.55	215.52
Surrogate Recoveries (%)					
13C5-PFHxA		92 D			
13C4-PFHpA		148			
13C8-PFOA		104			
13C9-PFNA		69			
13C6-PFDA		95			
13C7-PFUnA		112			
13C2-PFDoA		112			
13C2-PFTeDA		120			
d3-MeFOSAA		126 D			
d5-EtFOSAA		110 D			
13C3-PFBS		106 D			
13C3-PFHxS		124 D			
13C8-PFOS		102 D			

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

Client ID		VC-CS00-DW02-1018			
Battelle ID		J8717-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/26/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		GW			
Sample Size		0.265			
Size Unit-Basis		L			
Units		ng/L	MDL	LOD	LOQ
PFHxA	307-24-4	4.57 J	0.18	0.47	4.72
PFHpA	375-85-9	1.03 J	0.15	0.47	4.72
PFOA	335-67-1	6.98 B/U	0.17	0.47	4.72 MBL
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	0.47 U	0.17	0.47	4.72
PFTrDA	72629-94-8	0.47 U	0.14	0.47	4.72
PFTeDA	376-06-7	0.94 U	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	1.29 J	0.12	0.47	4.72
PFHxS	355-46-4	9.65 J	0.10	0.38	4.72 FD
PFOS	1763-23-1	67.95 J	0.18	0.47	4.72 FD
Surrogate Recoveries (%)					
13C5-PFHxA		127			
13C4-PFHpA		143			
13C8-PFOA		113			
13C9-PFNA		100			
13C6-PFDA		108			
13C7-PFUnA		129			
13C2-PFDoA		116			
13C2-PFTeDA		100			
d3-MeFOSAA		166 H			
d5-EtFOSAA		187 H			
13C3-PFBS		96			
13C3-PFHxS		140			
13C8-PFOS		105			

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

Client ID		VC-CS00-DW02P-1018				
Battelle ID		J8718-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		NA				
Matrix		GW				
Sample Size		0.290				
Size Unit-Basis		L				
Units		ng/L		MDL	LOD	LOQ	
PFHxA	307-24-4	4.09	J	0.16	0.43	4.31	
PFHpA	375-85-9	0.96	J	0.14	0.43	4.31	
PFOA	335-67-1	4.97	B U	0.16	0.43	4.31	MBC
PFNA	375-95-1	0.86	U	0.22	0.86	4.31	
PFDA	335-76-2	0.43	U	0.14	0.43	4.31	
PFUnA	2058-94-8	0.86	U	0.25	0.86	4.31	
PFDoA	307-55-1	0.43	U	0.16	0.43	4.31	
PFTrDA	72629-94-8	0.43	U	0.13	0.43	4.31	
PFTeDA	376-06-7	0.86	U	0.22	0.86	4.31	
NMeFOSAA	2355-31-9	1.72	U	0.48	1.72	4.31	
NEtFOSAA	2991-50-6	0.86	U	0.42	0.86	4.31	
PFBS	375-73-5	0.95	J	0.11	0.43	4.31	
PFHxS	355-46-4	6.21	J	0.09	0.34	4.31	FD
PFOS	1763-23-1	40.40	J	0.16	0.43	4.31	FD
Surrogate Recoveries (%)							
13C5-PFHxA		117					
13C4-PFHpA		146					
13C8-PFOA		100					
13C9-PFNA		95					
13C6-PFDA		113					
13C7-PFUnA		128					
13C2-PFDoA		110					
13C2-PFTeDA		93					
d3-MeFOSAA		163	N				
d5-EtFOSAA		173	N				
13C3-PFBS		102					
13C3-PFHxS		147					
13C8-PFOS		110					

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

Client ID		VC-CS00-DW03-1018				
Battelle ID		J8719-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
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	1.28	U	0.18	0.46	4.63	EBL
PFHpA	375-85-9	0.31	J	0.15	0.46	4.63	SSH
PFOA	335-67-1	1.67	U	0.17	0.46	4.63	MBL
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	0.46	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	0.46	U	0.12	0.46	4.63	
PFHxS	355-46-4	0.50	U	0.10	0.37	4.63	FBL
PFOS	1763-23-1	3.38	J	0.18	0.46	4.63	

Surrogate Recoveries (%)

13C5-PFHxA	131	
13C4-PFHpA	152	N
13C8-PFOA	118	
13C9-PFNA	111	
13C6-PFDA	99	
13C7-PFUnA	122	
13C2-PFDoA	99	
13C2-PFTeDA	102	
d3-MeFOSAA	150	
d5-EtFOSAA	133	
13C3-PFBS	86	
13C3-PFHxS	132	
13C8-PFOS	105	

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

Client ID		VC-CS00-DW04-1018				
Battelle ID		J8720-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
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	817.90	D	5.86	15.43	154.32
PFHpA	375-85-9	119.20	D	1.48	4.63	46.30
PFOA	335-67-1	212.96	D	1.67	4.63	46.30
PFNA	375-95-1	7.93		0.24	0.93	4.63
PFDA	335-76-2	0.81	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	508.92	D	1.20	4.63	46.30
PFHxS	355-46-4	3178.96	D	16.98	61.73	771.61
PFOS	1763-23-1	3576.80	D	29.32	77.16	771.61
Surrogate Recoveries (%)						
13C5-PFHxA		116	D			
13C4-PFHpA		122	D			
13C8-PFOA		91	D			
13C9-PFNA		55				
13C6-PFDA		97				
13C7-PFUnA		107				
13C2-PFDoA		115				
13C2-PFTeDA		110				
d3-MeFOSAA		141	D			
d5-EtFOSAA		150	D			
13C3-PFBS		135	D			
13C3-PFHxS		111	D			
13C8-PFOS		111	D			

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

Client ID		VC-CS00-DW05-1018				
Battelle ID		J8721-FS				
Sample Type		SA				
Collection Date		10/06/2018				
Extraction Date		10/17/2018				
Analysis Date		10/26/2018				
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	3.78	J	0.18	0.46	4.63	
PFHpA	375-85-9	0.45	J	0.15	0.46	4.63	SSH
PFOA	335-67-1	1.61	U	0.17	0.46	4.63	MBL
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	0.46	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	0.99	J	0.12	0.46	4.63	
PFHxS	355-46-4	2.56	U	0.10	0.37	4.63	FBL
PFOS	1763-23-1	6.07		0.18	0.46	4.63	

Surrogate Recoveries (%)

13C5-PFHxA	146	
13C4-PFHpA	162	H
13C8-PFOA	118	
13C9-PFNA	102	
13C6-PFDA	104	
13C7-PFUnA	145	
13C2-PFDoA	138	
13C2-PFTeDA	118	
d3-MeFOSAA	184	H
d5-EtFOSAA	188	H
13C3-PFBS	136	
13C3-PFHxS	153	H
13C8-PFOS	114	

MW 12/29/18

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

Client ID		VC-CS00-DW06-1018			
Battelle ID		J8722-FS			
Sample Type		SA			
Collection Date		10/06/2018			
Extraction Date		10/17/2018			
Analysis Date		10/26/2018			
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	36.51	0.18	0.46	4.63
PFHpA	**375-85-9**	**8.11**	**0.15**	**0.46**	**4.63**
PFOA	335-67-1	29.21	0.17	0.46	4.63
PFNA	**375-95-1**	**1.80 J**	**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	0.46 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**	**4.91**	**0.12**	**0.46**	**4.63**
PFHxS	355-46-4	127.35 D	1.02	3.70	46.30
PFOS	**1763-23-1**	**548.32 D**	**1.76**	**4.63**	**46.30**
Surrogate Recoveries (%)					
13C5-PFHxA		120			
13C4-PFHpA		**139**			
13C8-PFOA		107			
13C9-PFNA		**92**			
13C6-PFDA		115			
13C7-PFUnA		**118**			
13C2-PFDoA		104			
13C2-PFTeDA		**63**			
d3-MeFOSAA		159 ~~ND~~			
d5-EtFOSAA		**145 D**			
13C3-PFBS		90			
13C3-PFHxS		**123 D**			
13C8-PFOS		120 D			

MW 2/29.8

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-CS00-SO06	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0609	6226814.6	1873207	Perfluoroalkyl Compounds	VC-CS00-DW06-1018	WG	Ground water	06-Oct-18
VC-CS10-SO01	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0609	6222669	1868586.7	Perfluoroalkyl Compounds	VC-CS10-DW01-1018	WG	Ground water	06-Oct-18
VC-CS10-SO02	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0609	6222993.2	1868317.8	Perfluoroalkyl Compounds	VC-CS10-DW02-1018	WG	Ground water	06-Oct-18
VC-CS10-SO02	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0609	6222993.2	1868317.8	Perfluoroalkyl Compounds	VC-CS10-DW02P-1018	WG	Ground water	06-Oct-18
VC-CS10-SO03	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0609	6222810.2	1868697.4	Perfluoroalkyl Compounds	VC-CS10-DW03-1018	WG	Ground water	06-Oct-18
VC-CS10-SO04	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0609	6223040.2	1868430.5	Perfluoroalkyl Compounds	VC-CS10-DW04-1018	WG	Ground water	06-Oct-18
VC-CS12-SO01	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0609	6221575.1	1866808.9	Perfluoroalkyl Compounds	VC-CS12-DW01-1018	WG	Ground water	06-Oct-18
VC-CS12-SO01	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0609	6221575.1	1866808.9	Perfluoroalkyl Compounds	VC-CS12-DW01P-1018	WG	Ground water	06-Oct-18
VC-CS12-SO02	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0609	6221384.4	1866572.1	Perfluoroalkyl Compounds	VC-CS12-DW02-1018	WG	Ground water	06-Oct-18
VC-CS12-SO03	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0609	6221465.8	1866710	Perfluoroalkyl Compounds	VC-CS12-DW03-1018	WG	Ground water	06-Oct-18
VC-CS18-SO01	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0609	6195762.4	1881805.1	Perfluoroalkyl Compounds	VC-CS18-DW01-1018	WG	Ground water	06-Oct-18
		POINT_MUGU_NAS			18-0609			Perfluoroalkyl Compounds	VC-SO-EB11-10062018	WQ	Water for QC samples	06-Oct-18
		POINT_MUGU_NAS			18-0609			Perfluoroalkyl Compounds	VC-SO-FB11-10062018	WQ	Water for QC samples	06-Oct-18
VC-CS00-SO01	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0609	6226373.6	1873114.7	Perfluoroalkyl Compounds	VC-CS00-DW01-1018	WG	Ground water	06-Oct-18
VC-CS00-SO02	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0609	6227014.2	1873485.5	Perfluoroalkyl Compounds	VC-CS00-DW02-1018	WG	Ground water	06-Oct-18
VC-CS00-SO02	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0609	6227014.2	1873485.5	Perfluoroalkyl Compounds	VC-CS00-DW02P-1018	WG	Ground water	06-Oct-18
VC-CS00-SO03	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0609	6227006.3	1872740.3	Perfluoroalkyl Compounds	VC-CS00-DW03-1018	WG	Ground water	06-Oct-18
VC-CS00-SO04	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0609	6226346.7	1872522.5	Perfluoroalkyl Compounds	VC-CS00-DW04-1018	WG	Ground water	06-Oct-18
VC-CS00-SO05	BASEWIDE PFAS	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0609	6226640	1872863.6	Perfluoroalkyl Compounds	VC-CS00-DW05-1018	WG	Ground water	06-Oct-18