Navy_CLEAN_PFAS_FOIA_request_covers.indd

NAVFAC
Naval Facilities Engineering Command

Groundwater Sample Results, Level 2 Laboratory Report, Level 4 Laboratory Report, Electronic Data Deliverable, Data Validation Report, and the Sample Location Report, SDG 18-0589

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

SB, SS

Batch 18-0589

Package DP-18-0295

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

SB, SS

Batch 18-0589

Package DP-18-0295

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

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

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

Analyst Approval: schumitzd@battelle.org 2018.10.24 20:13:09 -04'00'

QC Chemist Approval: fitche@battelle.org 2018.10.26 12:58:22 -04'00'

Project Manager Approval: Digitally signed by Jonathan Thorn Date: 2018.10.26 19:38:20 -04'00'

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

SD

Batch 18-0589

Package DP-18-0295

1	***Miscellaneous Documentation*** Case Narrative, Laboratory Accreditations.	1
2	***Chain of Custody Records*** Sample Receipt Records	11
3	***Tables*** Analytical Data Tables, Qualifier Definitions.	25

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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: 18-0589
Project/Site: Naval Base Ventura County
CTO: 4164

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Receipt Date
CR902PB-FS	180507-02: Ottawa Sand	SEDIMENT	10/8/2018	10/8/2018
CR903LCS-FS	180507-02: Ottawa Sand	SEDIMENT	10/8/2018	10/8/2018
J8438-FS	VC-MS09-SS01-000H	SS	9/26/2018	9/28/2018
J8439-FS	VC-MS09-SB01-0102	SB	9/26/2018	9/28/2018
J8440-FS	VC-MS09-SB01-0506	SB	9/26/2018	9/28/2018
J8441-FS	VC-MS09-SS02-000H	SS	9/26/2018	9/28/2018
J8442-FS	VC-MS09-SB02-0102	SB	9/26/2018	9/28/2018
J8443-FS	VC-MS09-SB02-0506	SB	9/26/2018	9/28/2018
J8444-FS	VC-MS09-SS03-000H	SS	9/26/2018	9/28/2018
J8445-FS	VC-MS09-SB03-0102	SB	9/26/2018	9/28/2018
J8446-FS	VC-MS09-SB03-0506	SB	9/26/2018	9/28/2018
J8447-FS	VC-MS09-SS04-000H	SS	9/26/2018	9/28/2018
J8448-FS	VC-MS09-SB04-0102	SB	9/26/2018	9/28/2018
J8449-FS	VC-MS09-SB04-0506	SB	9/26/2018	9/28/2018
J8450-FS	VC-MS09-SS05-000H	SS	9/26/2018	9/28/2018
J8451-FS	VC-MS09-SB05-0102	SB	9/26/2018	9/28/2018
J8452-FS	VC-MS09-SB05-0506	SB	9/26/2018	9/28/2018
J8453MS-FS	VC-MS09-SB04-0102-MS	SB	9/26/2018	9/28/2018
J8454MSD-FS	VC-MS09-SB04-0102-MSD	SB	9/26/2018	9/28/2018

Miscellaneous Documentation

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QA/QC Summary
Batch 18-0589

Project:	CTO-4164 Naval Base Ventura County, California
Parameters:	PFAS
Laboratory:	Battelle, Norwell, MA
Matrix:	SS, SB
Data Set:	DP-18-0295
Analytical SOP:	5-369
Method Reference:	PFAS to QSM 5.1 Table B-15

Sample Custody		
Collection Date	Receipt Date	Temp (°C)
9/26-27/2018	9/28/2018	0.7 and 0.4
Corrective Actions	Minor discrepancies between the COC and the sample containers were corrected by the Project Chemist, email clarifying IDs is included with the sample custody records.	
Sample Storage	The samples were stored refrigerated until extraction.	
Related samples	NA	

	METHOD SUMMARIES
Sample Preparation	Solid samples were aliquoted into extraction tubes and spiked with surrogates prior to the addition of solvent. The sediment was serially extracted on the Geno/Grinder with 0.4% NH_3 in methanol. 1 mL of extract was refined using ENVI-carb SPE cartridges. Extracts were concentrated to dryness under nitrogen with a water bath set between 35 °C and 45 °C, reconstituted with 80:20 methanol/water (V/V) and fortified with internal standard. Extracts were transferred for LC-MS/MS analysis.
Prep comments	All samples were pre-screened prior to extraction to check potential levels of PFAS in the samples.
Analysis	PFAS were measured by liquid chromatography tandem mass spectrometry (LC-MS/MS) in the multiple reaction monitoring (MRM). An initial calibration consisting of representative target analytes, labelled analogs, and internal standards was analyzed prior to analysis to demonstrate the linear range of analysis. Calibration verification was performed at the beginning and end of 10 injections and at the end of each sequence. Target PFAS were quantified using the isotope dilution method. Samples are reported in ng/g concentrations.
Analysis Comments	Samples analyzed on Sciex 5500 LC-MS/MS. The ion ratio for the following samples were above the 50% RPD criteria: NMeFOSAA in sample J8445-FS(3), PFTrDA in sample J8450-FS(3) and PFUnA in sample J8451-FS(3). Where detected in samples, PFOS is a mixture of linear and branched isomers.

Holding Times	Extraction Date(s)	Analysis Date(s)
	10/8/2018	10/17-19/2018

QA/QC Summary
Batch 18-0589

Procedural Blank (PB)	A PB was prepared with this analytical batch to ensure the sample extraction and analysis methods are free of contamination.
≤ ½ the LOQ Samples >10x PB	No exceedances noted.
	No comments.

Laboratory Control Spike (LCS)	A LCS was prepared with this analytical batch. The percent recoveries of target analytes were calculated to measure accuracy.
Laboratory derived control limits for recovery	No exceedances noted.
	No comments.

Matrix Spike and Matrix Spike Duplicate (MS/MSD)	A MS/MSD was prepared with this analytical batch. The percent recoveries of target analytes were calculated to measure accuracy.
Laboratory derived control limits for recovery and <30% RPD	12 exceedences for recovery and 2 exceedances for RPD.
	In all cases, the concentration of PFAS compounds detected in the background sample exceeded the amount fortified into the MS and MSD samples.

Extracted Internal Standard Analytes	Labelled analog compounds were added prior to extraction. The recoveries are calculated to measure extraction efficiency.
50-150% of true value	No exceedances noted.
	No comments.

Internal Standard Analytes	Labelled analog compounds were added prior to analysis.
+/- 50% of the area of the L5 calibration point.	No exceedances noted.
	There are several 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.

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

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

QA/QC Summary
Batch 18-0589

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: 18-0589
Data Set: DP-18-0295
Test Code: Master_369

QC Parameter:	Exceed:	Justification:
Procedural Blank	0	None
PB Measurement Quality Objective	0	None
Laboratory Control Sample	0	None
Matrix Spike / Matrix Spike Duplicate Recovery	12	For all 12 exceedences, the background sample concentration of native analytes was much higher than the amount spiked into the MS and MSD. Analytes that did not have high concentrations in the backround sample had
Matrix Spike / Matrix Spike Duplicate Precision	2	There were two exceedences for MS/MSD precision. Both instances were for analytes whose concentration in the background sample was much higher than the amount spiked into the MS and MSD. DMS 10/25/2018
Extracted Internal Standard Analytes (Surrogates)	0	None
Instrument Calibration	0	None
Instrument Blank	0	None
Independent Calibration Check	0	None
Continuing Calibration Verification	0	None

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MISCELLANEOUS DOCUMENTATION FORM

Project Title:	CTO-4164 Naval Base Ventura County,	**Data Set Number:**	DP-18-0295
Project Number:	100110125-01	**Prep Batch Number:**	18-0589
Entered By:	Denise Schumitz	**Entered On:**	10/25/2018
Test Code (Matrix Type):	Master_369(S)		

Samples that were manually integrated are noted on the quant reports with the comment (TRUE). DMS 10/25/2018

The ion ratio for the following samples were above the 50% RPD criteria:

-NMeFOSAA in sample J8445-FS(3)

-PFTrDA in sample J8450-FS(3)

-PFUnA in sample J8451-FS(3)

DMS 10/26/2018

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.
DMS 10/25/2018

There are eighty one instances of extracted internal standards (surrogates) that would fall 50%-150% recovery criteria if reported from the non-diluted extract. This is due to the higher levels of native PFOA and PFOS found in the samples interfering with the 13C2-PFOA and 13C4-PFOS internal standards used to quantify the surrogates. In these cases, the surrogates are reported from dilutions, however, the native compounds are reported from the non-diluted extracts as the interferences are with the internal standards and not the surrogates used to quantify the native compounds.
DMS 10/25/2018

Task Leader Approval:

SupervisorApproval:

PM Approval:



Digitally signed by Jonathan Thorn
Date: 2018.10.25 13:11:58 -04'00'

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Project Client: CH2M
Project Name: CTO-4164 Naval Base Ventura County, California
Project No.: 100110125-01
Preparation Batch: 18-0589
Data Set: DP-18-0295

		CR902PB-FS (180507-02: Ottawa Sand)	CR903LCS-FS (180507-02: Ottawa Sand)	J8453MS-FS (VC-MS09-SB04-0102-MS)	J8454MSD-FS (VC-MS09-SB04-0102-MSD)	J8438-FS (VC-MS09-SS01-000H)	J8439-FS (VC-MS09-SB01-0102)	J8440-FS (VC-MS09-SB01-0506)	J8441-FS (VC-MS09-SS02-000H)
PFHxA	307-24-4	-	L	L	L	L	L	L	L
PFHpA	375-85-9	-	L	L	L	L	L	L	L
PFOA	335-67-1	-	L	L	L	L	L	L	L
PFNA	375-95-1	-	L	L	L	L	L	L	L
PFDA	335-76-2	-	L	L	L	L	L	-	L
PFUnA	2058-94-8	-	L	L	L	L	-	-	L
PFDoA	307-55-1	-	L	L	L	-	-	-	L
PFTrDA	72629-94-8	-	L	L	L	-	-	-	L
PFTeDA	376-06-7	-	L	L	L	-	-	-	-
NMeFOSAA	2355-31-9	-	L	L	L	-	-	-	L
NEtFOSAA	2991-50-6	-	L	L	L	-	-	-	-
PFBS	375-73-5	-	L	L	L	L	L	L	L
PFHxS	355-46-4	-	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br
PFOS	1763-23-1	-	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br

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

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

	J8442-FS (VC-MS09-SB02-0102)	J8443-FS (VC-MS09-SB02-0506)	J8444-FS (VC-MS09-SS03-000H)	J8445-FS (VC-MS09-SB03-0102)	J8446-FS (VC-MS09-SB03-0506)	J8447-FS (VC-MS09-SS04-000H)	J8448-FS (VC-MS09-SB04-0102)	J8449-FS (VC-MS09-SB04-0506)
PFHxA	L	L	L	L	L	L	L	L
PFHpA	L	L	L	L	L	L	L	L
PFOA	L	L	L	L	L	L	L	L
PFNA	L	L	L	L	L	L	L	L
PFDA	L	L	L	L	-	L	L	-
PFUnA	-	-	L	L	-	L	-	-
PFDoA	-	-	L	L	-	L	-	-
PFTrDA	-	-	L	-	-	-	-	-
PFTeDA	-	-	-	-	-	-	-	-
NMeFOSAA	-	-	L	L	-	-	-	-
NEtFOSAA	-	-	L	-	-	-	-	-
PFBS	L	L	L	L	L	L	L	L
PFHxS	L/Br	L/Br	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/Br	L/Br

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

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

	J8450-FS (VC-MS09-SS05-000H)	J8451-FS (VC-MS09-SB05-0102)	J8452-FS (VC-MS09-SB05-0506)
PFHxA	L	L	L
PFHpA	L	L	L
PFOA	L	L	L
PFNA	L	L	L
PFDA	L	L	-
PFUnA	L	L	-
PFDoA	L	L	-
PFTrDA	L	L	-
PFTeDA	-	-	-
NMeFOSAA	-	-	-
NEtFOSAA	-	-	-
PFBS	L	L	L
PFHxS	L/Br	L/Br	L/Br
PFOS	L/Br	L/Br	L/Br

"L" :Linear
"Br": branched
"L/Br": Linear/Br
"-": 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-180928-03

Battelle Project No: 0110125-01

Sample Receipt Form

Approved: ☐ **Authorized** ☐

Project Number: 695803 **Client:** CH2M

Received by: Schumitz, Matt **Date/Time Received:** Friday, September 28, 2018 11:00 AM

No. of Shipping Containers: 2

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 2	Cooler	7829 7942 9567	Custody Seals	Intact	Intact	Therm_1	0.7	20
2 of 2	Cooler	7829 7942 9578	Custody Seals	Intact	Intact	Therm_1	0.4	26

Samples

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

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

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

Temperature upon receipt (°C): 0.7 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:** J8438 - J8483

Samples logged in by: Schumitz, Matt **Date/Time:** 09/28/2018 11:00 AM

Approved By: **Approved On:**

Authorized By: **Authorized On:**

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ShpNo: SHP-180928-03

Battelle Project No: 0110125-01

Report Corrective Actions

Corrective Action No: 1 **of** 1

Authorized ☐ Approved: ☐

COC Client: CH2M
COC Project: NBVC Basewide SI
COC Date: 9/28/2018 1:26:0

	Description of Problem:	Explanation:
Client Id	Jars and C-O-C do not have matching Ids	It appears as though the blanks were mixed up when labeling them with the field ID. COC VC-SO-FB07-092618 (J8455) VC-SO-EB07-092618 (J8456) VC-AQ-EB08-092718 (J8483) Labels 1 bottle: VC-SO-FB07-092618, 1 bottle: VC-AQ-FB07-092618 (J8455) 1 bottle: VC-SO-EB07-092618, 1 bottle: VC-AQ-EB07-092618 (J8456) 1 bottle: VC-SO-EB08-092718, 1 bottle: VC-AQ-EB08-092618 (J8483)
	Jars and C-O-C do not have matching Ids	Sample VC-MS09-SB04-0102-MSD only lists VC-MS09-SB04-0102-SD on the sample label. Logged in per COC

Documentation of project manager notification

Sample Custodian Schumitz, Matt **Date:** 9/28/2018 5:18:00 PM

Laboratory Manager: Thorn, Jonathan **Date:** 10/24/2018 11:17:00 A

Project Manager: Thorn, Jonathan **Date:** 10/24/2018 11:18:00 A

Documentation of client notification (should be completed by project manager within 24 hrs):

On 28-Sep-18 **I contacted** Hill, Tiffany **at** CH2M

Results of communication with client (Describe any corrective action directed by the client):

email attached with clarification on sample IDs.

Date this form was received back to the custodian: _____

Reference Number: _____

Schumitz, Matthew

From: Thorn, Jonathan R
Sent: Monday, October 01, 2018 5:07 PM
To: Schumitz, Matthew
Subject: FW: 9.28.2018 shipment receipt

Here is the last one

From: Hill, Tiffany/CVO <Tiffany.Hill@jacobs.com>
Sent: Monday, October 1, 2018 5:07 PM
To: Thorn, Jonathan R <thorn@battelle.org>
Subject: RE: 9.28.2018 shipment receipt

Message received from outside the Battelle network. Carefully examine it before you open any links or attachments.

Thanks Jon, made my way through these. Please follow IDs per the CoC as done.

From: Thorn, Jonathan R [mailto:thorn@battelle.org]
Sent: Monday, October 01, 2018 9:09 AM
To: Hill, Tiffany/CVO <Tiffany.Hill@jacobs.com>
Subject: [EXTERNAL] 9.28.2018 shipment receipt

Hi Tiffany,
Here are the custody records from Friday's shipment. Cooler temperatures are all good. A few questions on some of the sample IDs are on page 2. (Matt still need update the cooler to sample link in our LIMS system o show which samples were in each cooler too).

These will be in Battelle SDGs 18-0588, 18-0589, 18-0590. I will get you the sample to SDG links once we have the IDs updated.
Best Regards,
Jon

Jonathan Thorn
Laboratory Director
Analytical Chemistry Services
Office: 781.681.5565 | Mobile: 781.710.9664 | Fax: 614.458.6917
thorn@battelle.org

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ShpNo SHP-180928-03

Battelle Project No: 0110125-01

Sample Receipt Form Details

Approved: ☐ **Authorized** ☐

Project Number: 695803 **Client:** CH2M

Received by: Schumitz, Matt **Date/Time Received:** Friday, September 28, 2018 11:00 AM

No. of Shipping Containers: 2

BDO Id:	Client Sample ID:	Collection Date:	Login Date:	Ctrs:	Matrix:	Temp:	pH:	TRC:	VOC:	Stored In:	Loc:	No:	Comments:
J8438	VC-MS09-SS01-000H	09/26/18 9:41	09/28/18 13:29	1	SS	0.7	NA	NA	NA	F0117 (NA)			
J8439	VC-MS09-SB01-0102	09/26/18 9:43	09/28/18 13:29	1	SB	0.7	NA	NA	NA	F0117 (NA)			
J8440	VC-MS09-SB01-0506	09/26/18 9:52	09/28/18 13:29	1	SB	0.7	NA	NA	NA	F0117 (NA)			
J8441	VC-MS09-SS02-000H	09/26/18 9:30	09/28/18 13:30	1	SS	0.7	NA	NA	NA	F0117 (NA)			
J8442	VC-MS09-SB02-0102	09/26/18 9:34	09/28/18 13:31	1	SB	0.7	NA	NA	NA	F0117 (NA)			
J8443	VC-MS09-SB02-0506	09/26/18 9:41	09/28/18 13:32	1	SB	0.7	NA	NA	NA	F0117 (NA)			
J8444	VC-MS09-SS03-000H	09/26/18 10:15	09/28/18 13:32	1	SS	0.7	NA	NA	NA	F0117 (NA)			
J8445	VC-MS09-SB03-0102	09/26/18 10:20	09/28/18 13:32	1	SB	0.7	NA	NA	NA	F0117 (NA)			
J8446	VC-MS09-SB03-0506	09/26/18 10:25	09/28/18 13:32	1	SB	0.7	NA	NA	NA	F0117 (NA)			
J8447	VC-MS09-SS04-000H	09/26/18 11:16	09/28/18 13:33	1	SS	0.7	NA	NA	NA	F0117 (NA)			
J8448	VC-MS09-SB04-0102	09/26/18 11:18	09/28/18 13:33	1	SB	0.7	NA	NA	NA	F0117 (NA)			
J8449	VC-MS09-SB04-0506	09/26/18 11:25	09/28/18 13:33	1	SB	0.7	NA	NA	NA	F0117 (NA)			
J8450	VC-MS09-SS05-000H	09/26/18 10:44	09/28/18 13:37	1	SS	0.4	NA	NA	NA	F0117 (NA)			
J8451	VC-MS09-SB05-0102	09/26/18 10:45	09/28/18 13:37	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8452	VC-MS09-SB05-0506	09/26/18 10:50	09/28/18 13:37	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8453	VC-MS09-SB04-0102-MS	09/26/18 11:18	09/28/18 13:38	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8454	VC-MS09-SB04-0102-MSD	09/26/18 11:18	09/28/18 13:38	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8455	VC-SO-FB07-09262018	09/26/18 11:43	09/28/18 13:39	2	AQ	0.4	NA	NA	NA	R0118 (NA)			
J8456	VC-SO-EB07-09262018	09/26/18 11:45	09/28/18 13:40	2	AQ	0.4	NA	NA	NA	R0118 (NA)			
J8457	VC-MS09-DW01-0918	09/26/18 10:16	09/28/18 13:43	2	GW	0.7	NA	NA	NA	R0118 (NA)			
J8458	VC-MS09-DW02-0918	09/26/18 10:05	09/28/18 13:43	2	GW	0.7	NA	NA	NA	R0118 (NA)			
J8459	VC-MS09-DW03-0918	09/26/18 11:10	09/28/18 13:44	2	GW	0.7	NA	NA	NA	R0118 (NA)			
J8460	VC-MS09-DW04-0918	09/26/18 12:22	09/28/18 13:44	2	GW	0.7	NA	NA	NA	R0118 (NA)			
J8461	VC-MS09-DW04P-0918	09/26/18 12:20	09/28/18 13:44	2	GW	0.7	NA	NA	NA	R0118 (NA)			
J8462	VC-MS09-DW05-0918	09/26/18 11:35	09/28/18 13:45	2	GW	0.7	NA	NA	NA	R0118 (NA)			
J8463	VC-MS09-DW05-0918-MS	09/26/18 11:15	09/28/18 13:46	2	AQ	0.7	NA	NA	NA	R0118 (NA)			
J8464	VC-MS09-DW05-0918-MSD	09/26/18 11:15	09/28/18 13:48	2	AQ	0.7	NA	NA	NA	R0118 (NA)			
J8465	VC-PM367-SS01-000H	09/27/18 10:12	09/28/18 13:49	1	SS	0.4	NA	NA	NA	F0117 (NA)			

BATTELLE
It can be done

ShpNo SHP-180928-03

Battelle Project No: 0110125-01

Sample Receipt Form Details

Approved: ☐ **Authorized** ☐

Project Number: 695803 **Client:** CH2M

Received by: Schumitz, Matt **Date/Time Received:** Friday, September 28, 2018 11:00 AM

No. of Shipping Containers: 2

BDO Id:	Client Sample ID:	Collection Date:	Login Date:	Ctrs:	Matrix:	Temp:	pH:	TRC:	VOC:	Stored In:	Loc:	No:	Comments:
J8466	VC-PM367-SB01-0102	09/27/18 10:15	09/28/18 13:51	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8467	VC-PM367-SB01-0506	09/27/18 10:26	09/28/18 13:51	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8468	VC-PM367-SS02-000H	09/27/18 9:25	09/28/18 13:52	1	SS	0.4	NA	NA	NA	F0117 (NA)			
J8469	VC-PM367-SB02-0102	09/27/18 9:31	09/28/18 13:52	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8470	VC-PM367-SB02-0506	09/27/18 9:37	09/28/18 13:52	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8471	VC-PM367-SS03-000H	09/27/18 10:19	09/28/18 13:53	1	SS	0.4	NA	NA	NA	F0117 (NA)			
J8472	VC-PM367-SB03-0102	09/27/18 10:20	09/28/18 13:54	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8473	VC-PM367-SB03-0506	09/27/18 10:26	09/28/18 13:55	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8474	VC-PM367-SS04-000H	09/27/18 9:30	09/28/18 13:55	1	SS	0.4	NA	NA	NA	F0117 (NA)			
J8475	VC-PM367-SB04-0102	09/27/18 9:31	09/28/18 13:56	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8476	VC-PM367-SB04-0506	09/27/18 9:38	09/28/18 13:56	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8477	VC-PM367-DW01-0918	09/27/18 10:36	09/28/18 13:58	2	GW	0.4	NA	NA	NA	R0119 (NA)			
J8478	VC-PM367-DW02-0918	09/27/18 9:50	09/28/18 14:00	2	GW	0.4	NA	NA	NA	R0119 (NA)			
J8479	VC-PM367-DW03-0918	09/27/18 10:43	09/28/18 14:00	2	GW	0.4	NA	NA	NA	R0119 (NA)			
J8480	VC-PM367-DW03P-0918	09/27/18 10:46	09/28/18 14:00	2	GW	0.4	NA	NA	NA	R0119 (NA)			
J8481	VC-PM367-DW04-0918	09/27/18 10:04	09/28/18 14:01	2	GW	0.4	NA	NA	NA	R0119 (NA)			
J8482	VC-AQ-FB08-09272018	09/27/18 10:00	09/28/18 14:01	2	AQ	0.4	NA	NA	NA	R0119 (NA)			
J8483	VC-AQ-EB08-09272018	09/27/18 12:00	09/28/18 14:02	2	AQ	0.4	NA	NA	NA	R0119 (NA)			

Total Samples: 46

BATTELLE It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: PT MUGU MS09	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 4
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 1 of 6

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	Analysis: PFAS by Method 537 Mod
VC-MS09-SS01-000H J8438	9/26/18	0941	Grab	SS	1	X
VC-MS09-SB01-0102 39	9/26/18	0943	Grab	SB	1	X
VC-MS09-SB01-0506 40	9/26/18	0952	Grab	SB	1	X
VC-MS09-SS02-000H 41	9/26/18	0930	Grab	SS	1	X
VC-MS09-SB02-0102 42	9/26/18	0934	Grab	SB	1	X
VC-MS09-SB02-0506 43	9/26/18	0941	Grab	SB	1	X
VC-MS09-SS03-000H 44	9/26/18	1015	Grab	SS	1	X
VC-MS09-SB03-0102 45	9/26/18	1020	Grab	SB	1	X
VC-MS09-SB03-0506 46	9/26/18	1025	Grab	SB	1	X
VC-MS09-SS04-000H 47	9/26/18	1116	Grab	SS	1	X
VC-MS09-SB04-0102 48	9/26/18	1119	Grab	SB	1	X
VC-MS09-SB04-0506 J8449	9/26/18	1125	Grab	SB	1	X

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

Relinquished by (Print/Sign):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
V. Kilbert	Jacobs	9/27/18 1300		Battelle	9-28-18 1100
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): Victoria Kilbert Phone: 724-977-3620 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	At MRGU MS09	COC # 4 Page# 2 of 6
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
J8450	VC-MS09-SS05-000H	9/26/18	1044	Grab	SS	1		X
J8451	VC-MS09-SB05-0102	9/26/18	1045	Grab	SB	1		X
J8452	VC-MS09-SB05-0506	9/26/18	1050	Grab	SB	1		X
J8453	VC-MS09-SB04-0102-MS	9/26/18	1118	Grab	SB	1		X
J8454	VC-MS09-SB04-0102-MSD	9/26/18	1118	Grab	SB	1		X
J8455 VC	FDT-SO-FB07-09262018	9/26/18	1143	Grab	AQ	2		X
J8456 VC	FDT-SO-EB27-09262018	9/26/18	1145	Grab	AQ	2		X

bowl

VC 1

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	9/27/18 1300		Battelle	9-28-18 1100
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: Pt Mugu MS09	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 724-977-3638 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 4
Project Name: NBVC Basewide SI	Normal X Priority ☐ RUSH ☐	Analysis: PFAS by Method 537 Mod	Page# 3 of 6
Project No.: 695803	Time Zone: PST		

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
VC-MS09-DW01-0918 J8457	9/26/18	1016	Grab	GW	2	X
VC-MS09-DW02-0918 J8458	9/26/18	1005	Grab	GW	2	X
VC-MS09-DW03-0918 J8459	9/26/18	1110	Grab	GW	2	X
VC-MS09-DW04-0918 J8460	9/26/18	1222	Grab	GW	2	X
VC-MS09-DW04P-0918 J8461	9/26/18	1220	Grab	GW	2	X
VC-MS09-DW05-0918 J8462	9/26/18	1135	Grab	GW	2	X
~~FDT-AQ-FB~~	9/26/18	1143	Grab	AQ	2	X
FDT-AQ-EB	9/26/18	1148	Grab	AQ	2	X

VB

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	9/27/18 1300		Battelle	9-28-18 1100
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: Pt Mugu PM367	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 424-977-3628 Email: Victoria.Kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 4
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 4 of 6

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
~~VC-PM367-S-MS~~				Grab			X
~~VC-PM367-S-SD~~				Grab			X
~~FDT-SO-FB~~				Grab	AQ		X
~~FDT-SO-EB~~				Grab	AQ		X
~~VC-MS09-Dw05-0918-MS~~							
J8463	VC-MS09-Dw05-0918-MS	9/26/18	1115	Grab	AQ	2	X
J8464	VC-MS09-Dw05-0918MSD	9/26/18	1121	Grab	AQ	2	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	9/27/18 1300		Battelle	9-28-18 1100
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: ft Mugu PM367	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 724-977-3628 Email: Victoria.Kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 4
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 5 of 6

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
VC-PM367-SS01-000H J8465	9/27/18	1012	Grab	SS	1	X
VC-PM367-SB01-0102 66	9/27/18	1015	Grab	SB	1	X
VC-PM367-SB01-0506 67	9/27/18	1026	Grab	SB	1	X
VC-PM367-SS02-000H 68	9/27/18	0925	Grab	SS	1	X
VC-PM367-SB02-0102 69	9/27/18	0931	Grab	SB	1	X
VC-PM367-SB02-0506 70	9/27/18	0937	Grab	SB	1	X
VC-PM367-SS03-000H 71	9/27/18	1019	Grab	SS	1	X
VC-PM367-SB03-0102 72	9/27/18	1020	Grab	SB	1	X
VC-PM367-SB03-0506 73	9/27/18	1024	Grab	SB	1	X
VC-PM367-SS04-000H 74	9/27/18	0930	Grab	SS	1	X
VC-PM367-SB04-0102 75	9/27/18	0931	Grab	SB	1	X
VC-PM367-SB04-0506 J8476	9/27/18	0938	Grab	SB	1	X

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

Relinquished by (Print/Sign):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
V. Kilbert	Jacobs	9/27/18 1300	MD	Battelle	9-28-18 1100
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): Victoria Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	pt Mugu PM367	
Project Name: NBVC Basewide SI Project No.: 6915803	Normal X Priority ☐ RUSH ☐ Time Zone: PST		COC # 4 Page# 6 of 6

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	Preservative: NA	Analysis: PFAS by Method 537 Mod
VC-PM367-DW01-0918 J8477	9/27/18	1036	Grab	GW	2		X
VC-PM367-DW02-0918 78	9/27/18	0950	Grab	GW	2		X
VC-PM367-DW03-0918 79	9/27/18	1043	Grab	GW	2		X
VC-PM367-DW03P-0918 80	9/27/18	1046	Grab	GW	2		X
VC-PM367-DW04-0918 81	9/27/18	1004	Grab	GW	2		X
VC-~~FDT-AQ~~FB08-09272018 82	9/27/18	1000	Grab	AQ	2		X
VC-~~FDT-~~AQ-EB08-09272018 J8483	9/27/18	1200	Grab	AQ	2		X

on gw screen

VW

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	9/27/18 1305		Battelle	9-28-18 1100
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:


2
6.4°
FRI - 28 SEP 10:30A
MPS# 0263 7829 7942 9578 PRIORITY OVERNIGHT
XE XPUA
02061
MA-US
BOS
5169367 28Sep 02:01 MEMH 547C1/F78C/A17C


0
0.7°
FRI - 28 SEP 10:30A
TRK# 0201 7829 7942 9567 PRIORITY OVERNIGHT
XE XPUA
02061
MA-US
BOS
985519 28Sep 02:02 MEMH 547

Data Tables

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

Client ID		VC-MS09-SS01-000H				
Battelle ID		J8438-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		11.93				
Matrix		SS				
Sample Size		1.82				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	8.44		0.36	1.10	5.49
PFHpA	375-85-9	1.77	J	0.48	1.10	5.49
PFOA	335-67-1	8.05		0.55	1.10	5.49
PFNA	375-95-1	16.73		0.47	1.10	5.49
PFDA	335-76-2	0.70	J	0.30	1.10	5.49
PFUnA	2058-94-8	1.15	J	0.45	1.10	5.49
PFDoA	307-55-1	0.55	U	0.26	0.55	5.49
PFTrDA	72629-94-8	1.10	U	0.31	1.10	5.49
PFTeDA	376-06-7	2.20	U	0.69	2.20	5.49
NMeFOSAA	2355-31-9	2.75	U	1.23	2.75	5.49
NEtFOSAA	2991-50-6	2.20	U	0.63	2.20	5.49
PFBS	375-73-5	3.43	J	0.40	1.10	5.49
PFHxS	355-46-4	25.77		0.24	0.55	5.49
PFOS	1763-23-1	474.84	D	1.48	5.49	27.47

Surrogate Recoveries (%)

13C5-PFHxA	105
13C4-PFHpA	107
13C8-PFOA	106
13C9-PFNA	89
13C6-PFDA	101
13C7-PFUnA	109
13C2-PFDoA	97
13C2-PFTeDA	101
d3-MeFOSAA	117
d5-EtFOSAA	135
13C3-PFBS	145
13C3-PFHxS	128
13C8-PFOS	108

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

Client ID		VC-MS09-SB01-0102			
Battelle ID		J8439-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		14.53			
Matrix		SB			
Sample Size		1.68			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	107.59	0.39	1.19	5.95
PFHpA	375-85-9	10.70	0.52	1.19	5.95
PFOA	335-67-1	9.51	0.60	1.19	5.95
PFNA	375-95-1	18.53	0.51	1.19	5.95
PFDA	335-76-2	0.36 J	0.32	1.19	5.95
PFUnA	2058-94-8	1.19 U	0.49	1.19	5.95
PFDoA	307-55-1	0.60 U	0.29	0.60	5.95
PFTrDA	72629-94-8	1.19 U	0.33	1.19	5.95
PFTeDA	376-06-7	2.38 U	0.75	2.38	5.95
NMeFOSAA	2355-31-9	2.98 U	1.33	2.98	5.95
NEtFOSAA	2991-50-6	2.38 U	0.68	2.38	5.95
PFBS	375-73-5	21.58	0.43	1.19	5.95
PFHxS	355-46-4	61.38	0.26	0.60	5.95
PFOS	1763-23-1	461.30 D	1.61	5.95	29.76

Surrogate Recoveries (%)

13C5-PFHxA	102
13C4-PFHpA	97
13C8-PFOA	116
13C9-PFNA	85
13C6-PFDA	107
13C7-PFUnA	112
13C2-PFDoA	105
13C2-PFTeDA	96
d3-MeFOSAA	114
d5-EtFOSAA	127
13C3-PFBS	130
13C3-PFHxS	120
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-MS09-SB01-0506				
Battelle ID		J8440-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		20.73				
Matrix		SB				
Sample Size		1.55				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	21.58		0.43	1.29	6.45
PFHpA	375-85-9	6.09	J	0.57	1.29	6.45
PFOA	335-67-1	12.90		0.65	1.29	6.45
PFNA	375-95-1	4.88	J	0.55	1.29	6.45
PFDA	335-76-2	1.29	U	0.35	1.29	6.45
PFUnA	2058-94-8	1.29	U	0.53	1.29	6.45
PFDoA	307-55-1	0.65	U	0.31	0.65	6.45
PFTrDA	72629-94-8	1.29	U	0.36	1.29	6.45
PFTeDA	376-06-7	2.58	U	0.81	2.58	6.45
NMeFOSAA	2355-31-9	3.23	U	1.45	3.23	6.45
NEtFOSAA	2991-50-6	2.58	U	0.74	2.58	6.45
PFBS	375-73-5	3.10	J	0.46	1.29	6.45
PFHxS	355-46-4	62.49		0.28	0.65	6.45
PFOS	1763-23-1	658.47	D	8.71	32.26	161.29

Surrogate Recoveries (%)

13C5-PFHxA	124	
13C4-PFHpA	123	
13C8-PFOA	123	
13C9-PFNA	104	
13C6-PFDA	125	
13C7-PFUnA	134	
13C2-PFDoA	117	
13C2-PFTeDA	116	
d3-MeFOSAA	109	D
d5-EtFOSAA	113	D
13C3-PFBS	123	D
13C3-PFHxS	102	D
13C8-PFOS	108	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-MS09-SS02-000H				
Battelle ID		J8441-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		19.10				
Matrix		SS				
Sample Size		1.63				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	944.17	D	4.05	12.27	61.35
PFHpA	375-85-9	368.32	D	5.40	12.27	61.35
PFOA	335-67-1	459.54	D	6.13	12.27	61.35
PFNA	375-95-1	39.50		0.53	1.23	6.13
PFDA	335-76-2	14.94		0.33	1.23	6.13
PFUnA	2058-94-8	3.04	J	0.50	1.23	6.13
PFDoA	307-55-1	3.15	J	0.29	0.61	6.13
PFTrDA	72629-94-8	0.58	J	0.34	1.23	6.13
PFTeDA	376-06-7	2.45	U	0.77	2.45	6.13
NMeFOSAA	2355-31-9	3.27	J	1.37	3.07	6.13
NEtFOSAA	2991-50-6	2.45	U	0.70	2.45	6.13
PFBS	375-73-5	350.25	D	4.42	12.27	61.35
PFHxS	355-46-4	4137.38	D	13.50	30.67	306.75
PFOS	1763-23-1	21060.99	D	82.82	306.75	1533.74
Surrogate Recoveries (%)						
13C5-PFHxA		102	D			
13C4-PFHpA		103	D			
13C8-PFOA		111	D			
13C9-PFNA		96	D			
13C6-PFDA		105				
13C7-PFUnA		147				
13C2-PFDoA		134				
13C2-PFTeDA		146				
d3-MeFOSAA		91	D			
d5-EtFOSAA		105	D			
13C3-PFBS		102	D			
13C3-PFHxS		104	D			
13C8-PFOS		90	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-MS09-SB02-0102				
Battelle ID		J8442-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		26.91				
Matrix		SB				
Sample Size		1.43				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	1843.14	D	23.08	69.93	349.65
PFHpA	375-85-9	641.48	D	6.15	13.99	69.93
PFOA	335-67-1	1125.70	D	34.97	69.93	349.65
PFNA	375-95-1	35.49		0.60	1.40	6.99
PFDA	335-76-2	2.18	J	0.38	1.40	6.99
PFUnA	2058-94-8	1.40	U	0.57	1.40	6.99
PFDoA	307-55-1	0.70	U	0.34	0.70	6.99
PFTrDA	72629-94-8	1.40	U	0.39	1.40	6.99
PFTeDA	376-06-7	2.80	U	0.88	2.80	6.99
NMeFOSAA	2355-31-9	3.50	U	1.57	3.50	6.99
NEtFOSAA	2991-50-6	2.80	U	0.80	2.80	6.99
PFBS	375-73-5	722.52	D	5.03	13.99	69.93
PFHxS	355-46-4	8517.97	D	76.92	174.83	1748.25
PFOS	1763-23-1	25041.58	D	94.41	349.65	1748.25

Surrogate Recoveries (%)

13C5-PFHxA	99	D
13C4-PFHpA	88	D
13C8-PFOA	100	D
13C9-PFNA	88	D
13C6-PFDA	103	
13C7-PFUnA	117	
13C2-PFDoA	111	
13C2-PFTeDA	110	
d3-MeFOSAA	109	D
d5-EtFOSAA	127	D
13C3-PFBS	119	D
13C3-PFHxS	106	D
13C8-PFOS	118	D

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

Client ID		VC-MS09-SB02-0506			
Battelle ID		J8443-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		24.42			
Matrix		SB			
Sample Size		1.56			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	301.34 D	2.12	6.41	32.05
PFHpA	375-85-9	66.29	0.56	1.28	6.41
PFOA	335-67-1	99.69	0.64	1.28	6.41
PFNA	375-95-1	1.10 J	0.55	1.28	6.41
PFDA	335-76-2	0.42 J	0.35	1.28	6.41
PFUnA	2058-94-8	1.28 U	0.53	1.28	6.41
PFDoA	307-55-1	0.64 U	0.31	0.64	6.41
PFTrDA	72629-94-8	1.28 U	0.36	1.28	6.41
PFTeDA	376-06-7	2.56 U	0.81	2.56	6.41
NMeFOSAA	2355-31-9	3.21 U	1.44	3.21	6.41
NEtFOSAA	2991-50-6	1.18 J	0.73	2.56	6.41
PFBS	375-73-5	103.23	0.46	1.28	6.41
PFHxS	355-46-4	587.52 D	7.05	16.03	160.26
PFOS	1763-23-1	7228.44 D	144.23	534.19	2670.94

Surrogate Recoveries (%)

13C5-PFHxA	110
13C4-PFHpA	108
13C8-PFOA	93
13C9-PFNA	52
13C6-PFDA	93
13C7-PFUnA	108
13C2-PFDoA	98
13C2-PFTeDA	106
d3-MeFOSAA	121 D
d5-EtFOSAA	123 D
13C3-PFBS	126 D
13C3-PFHxS	122 D
13C8-PFOS	109 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-MS09-SS03-000H				
Battelle ID		J8444-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		2.50				
Matrix		SS				
Sample Size		1.95				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	1253.05	D	11.28	34.19	170.94
PFHpA	375-85-9	257.25	D	2.26	5.13	25.64
PFOA	335-67-1	4992.08	D	56.98	113.96	569.80
PFNA	375-95-1	178.06		0.44	1.03	5.13
PFDA	335-76-2	14.53		0.28	1.03	5.13
PFUnA	2058-94-8	1.73	J	0.42	1.03	5.13
PFDoA	307-55-1	1.08	J	0.25	0.51	5.13
PFTrDA	72629-94-8	0.31	J	0.29	1.03	5.13
PFTeDA	376-06-7	2.05	U	0.65	2.05	5.13
NMeFOSAA	2355-31-9	4.14	J	1.15	2.56	5.13
NEtFOSAA	2991-50-6	0.97	J	0.58	2.05	5.13
PFBS	375-73-5	251.19	D	1.85	5.13	25.64
PFHxS	355-46-4	12981.91	D	250.71	569.80	5698.01
PFOS	1763-23-1	156714.58	D	3076.92	11396.01	56980.05
Surrogate Recoveries (%)						
13C5-PFHxA		95	D			
13C4-PFHpA		104	D			
13C8-PFOA		104	D			
13C9-PFNA		94	D			
13C6-PFDA		108				
13C7-PFUnA		137				
13C2-PFDoA		137				
13C2-PFTeDA		138				
d3-MeFOSAA		99	D			
d5-EtFOSAA		100	D			
13C3-PFBS		102	D			
13C3-PFHxS		112	D			
13C8-PFOS		105	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-MS09-SB03-0102				
Battelle ID		J8445-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		12.83				
Matrix		SB				
Sample Size		1.73				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	6920.12	D	47.69	144.51	722.54
PFHpA	375-85-9	1433.05	D	12.72	28.90	144.51
PFOA	335-67-1	7780.30	D	72.25	144.51	722.54
PFNA	375-95-1	33.59		0.50	1.16	5.78
PFDA	335-76-2	9.17		0.31	1.16	5.78
PFUnA	2058-94-8	1.01	J	0.47	1.16	5.78
PFDoA	307-55-1	0.97	J	0.28	0.58	5.78
PFTrDA	72629-94-8	1.16	U	0.32	1.16	5.78
PFTeDA	376-06-7	2.31	U	0.73	2.31	5.78
NMeFOSAA	2355-31-9	49.22		1.29	2.89	5.78
NEtFOSAA	2991-50-6	2.31	U	0.66	2.31	5.78
PFBS	375-73-5	2243.69	D	10.40	28.90	144.51
PFHxS	355-46-4	27553.49	D	63.58	144.51	1445.09
PFOS	1763-23-1	30191.96	D	780.35	2890.17	14450.87

Surrogate Recoveries (%)

13C5-PFHxA	100	D
13C4-PFHpA	92	D
13C8-PFOA	96	D
13C9-PFNA	85	D
13C6-PFDA	82	
13C7-PFUnA	103	
13C2-PFDoA	100	
13C2-PFTeDA	110	
d3-MeFOSAA	105	D
d5-EtFOSAA	112	D
13C3-PFBS	118	D
13C3-PFHxS	102	D
13C8-PFOS	98	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-MS09-SB03-0506				
Battelle ID		J8446-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		27.16				
Matrix		SB				
Sample Size		1.48				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	426.56	D	2.23	6.76	33.78
PFHpA	375-85-9	69.91		0.59	1.35	6.76
PFOA	335-67-1	262.24	D	3.38	6.76	33.78
PFNA	375-95-1	0.67	J	0.58	1.35	6.76
PFDA	335-76-2	1.35	U	0.36	1.35	6.76
PFUnA	2058-94-8	1.35	U	0.55	1.35	6.76
PFDoA	307-55-1	0.68	U	0.32	0.68	6.76
PFTrDA	72629-94-8	1.35	U	0.38	1.35	6.76
PFTeDA	376-06-7	2.70	U	0.85	2.70	6.76
NMeFOSAA	2355-31-9	3.38	U	1.51	3.38	6.76
NEtFOSAA	2991-50-6	2.70	U	0.77	2.70	6.76
PFBS	375-73-5	106.34		0.49	1.35	6.76
PFHxS	355-46-4	274.57	D	1.49	3.38	33.78
PFOS	1763-23-1	750.56	D	18.24	67.57	337.84

Surrogate Recoveries (%)

13C5-PFHxA	73	
13C4-PFHpA	77	
13C8-PFOA	77	
13C9-PFNA	65	
13C6-PFDA	95	
13C7-PFUnA	97	
13C2-PFDoA	92	
13C2-PFTeDA	94	
d3-MeFOSAA	87	D
d5-EtFOSAA	97	D
13C3-PFBS	106	D
13C3-PFHxS	94	D
13C8-PFOS	101	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-MS09-SS04-000H			
Battelle ID		J8447-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		1.41			
Matrix		SS			
Sample Size		2.01			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	3.39 J	0.33	1.00	4.98
PFHpA	375-85-9	0.52 J	0.44	1.00	4.98
PFOA	335-67-1	7.57	0.50	1.00	4.98
PFNA	375-95-1	1.03 J	0.43	1.00	4.98
PFDA	335-76-2	0.78 J	0.27	1.00	4.98
PFUnA	2058-94-8	1.26 J	0.41	1.00	4.98
PFDoA	307-55-1	0.98 J	0.24	0.50	4.98
PFTrDA	72629-94-8	1.00 U	0.28	1.00	4.98
PFTeDA	376-06-7	1.99 U	0.63	1.99	4.98
NMeFOSAA	2355-31-9	2.49 U	1.11	2.49	4.98
NEtFOSAA	2991-50-6	1.99 U	0.57	1.99	4.98
PFBS	375-73-5	1.88 J	0.36	1.00	4.98
PFHxS	355-46-4	8.18	0.22	0.50	4.98
PFOS	1763-23-1	89.60	0.27	1.00	4.98

Surrogate Recoveries (%)

13C5-PFHxA	105
13C4-PFHpA	99
13C8-PFOA	107
13C9-PFNA	90
13C6-PFDA	100
13C7-PFUnA	107
13C2-PFDoA	100
13C2-PFTeDA	105
d3-MeFOSAA	81
d5-EtFOSAA	100
13C3-PFBS	108
13C3-PFHxS	107
13C8-PFOS	101

BATTELLE
It can be done

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

Client ID		VC-MS09-SB04-0102				
Battelle ID		J8448-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		10.79				
Matrix		SB				
Sample Size		1.72				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	50.93		0.38	1.16	5.81
PFHpA	375-85-9	5.89		0.51	1.16	5.81
PFOA	335-67-1	14.70		0.58	1.16	5.81
PFNA	375-95-1	9.53		0.50	1.16	5.81
PFDA	335-76-2	1.36	J	0.31	1.16	5.81
PFUnA	2058-94-8	1.16	U	0.48	1.16	5.81
PFDoA	307-55-1	0.58	U	0.28	0.58	5.81
PFTrDA	72629-94-8	1.16	U	0.33	1.16	5.81
PFTeDA	376-06-7	2.33	U	0.73	2.33	5.81
NMeFOSAA	2355-31-9	2.91	U	1.30	2.91	5.81
NEtFOSAA	2991-50-6	2.33	U	0.66	2.33	5.81
PFBS	375-73-5	20.59		0.42	1.16	5.81
PFHxS	355-46-4	36.78		0.26	0.58	5.81
PFOS	1763-23-1	494.23	D	3.14	11.63	58.14

Surrogate Recoveries (%)

13C5-PFHxA	95	
13C4-PFHpA	101	
13C8-PFOA	105	
13C9-PFNA	76	
13C6-PFDA	104	
13C7-PFUnA	117	
13C2-PFDoA	111	
13C2-PFTeDA	104	
d3-MeFOSAA	81	D
d5-EtFOSAA	103	D
13C3-PFBS	94	D
13C3-PFHxS	101	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-MS09-SB04-0506			
Battelle ID		J8449-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		25.15			
Matrix		SB			
Sample Size		1.47			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	30.00	0.45	1.36	6.80
PFHpA	375-85-9	6.97	0.60	1.36	6.80
PFOA	335-67-1	124.66	0.68	1.36	6.80
PFNA	375-95-1	1.41 J	0.59	1.36	6.80
PFDA	335-76-2	1.36 U	0.37	1.36	6.80
PFUnA	2058-94-8	1.36 U	0.56	1.36	6.80
PFDoA	307-55-1	0.68 U	0.33	0.68	6.80
PFTrDA	72629-94-8	1.36 U	0.38	1.36	6.80
PFTeDA	376-06-7	2.72 U	0.86	2.72	6.80
NMeFOSAA	2355-31-9	3.40 U	1.52	3.40	6.80
NEtFOSAA	2991-50-6	2.72 U	0.78	2.72	6.80
PFBS	375-73-5	8.72	0.49	1.36	6.80
PFHxS	355-46-4	94.20	0.30	0.68	6.80
PFOS	1763-23-1	234.84 D	0.73	2.72	13.61

Surrogate Recoveries (%)

13C5-PFHxA	104
13C4-PFHpA	105
13C8-PFOA	98
13C9-PFNA	90
13C6-PFDA	104
13C7-PFUnA	109
13C2-PFDoA	97
13C2-PFTeDA	94
d3-MeFOSAA	101 D
d5-EtFOSAA	124 D
13C3-PFBS	108 D
13C3-PFHxS	111 D
13C8-PFOS	99 D

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

Client ID		VC-MS09-SS05-000H				
Battelle ID		J8450-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		7.68				
Matrix		SS				
Sample Size		1.81				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	9.43		0.36	1.10	5.52
PFHpA	375-85-9	3.87	J	0.49	1.10	5.52
PFOA	335-67-1	9.99		0.55	1.10	5.52
PFNA	375-95-1	17.82		0.48	1.10	5.52
PFDA	335-76-2	4.79	J	0.30	1.10	5.52
PFUnA	2058-94-8	10.22		0.45	1.10	5.52
PFDoA	307-55-1	2.41	J	0.27	0.55	5.52
PFTrDA	72629-94-8	7.05		0.31	1.10	5.52
PFTeDA	376-06-7	2.21	U	0.70	2.21	5.52
NMeFOSAA	2355-31-9	2.76	U	1.24	2.76	5.52
NEtFOSAA	2991-50-6	2.21	U	0.63	2.21	5.52
PFBS	375-73-5	0.63	J	0.40	1.10	5.52
PFHxS	355-46-4	32.94		0.24	0.55	5.52
PFOS	1763-23-1	2224.28	D	82.87	306.94	1534.68

Surrogate Recoveries (%)

13C5-PFHxA	114	
13C4-PFHpA	115	
13C8-PFOA	122	
13C9-PFNA	68	
13C6-PFDA	117	
13C7-PFUnA	132	
13C2-PFDoA	121	
13C2-PFTeDA	115	
d3-MeFOSAA	123	D
d5-EtFOSAA	127	D
13C3-PFBS	123	D
13C3-PFHxS	125	D
13C8-PFOS	123	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-MS09-SB05-0102				
Battelle ID		J8451-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		10.29				
Matrix		SB				
Sample Size		1.81				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	8.09		0.36	1.10	5.52
PFHpA	375-85-9	4.57	J	0.49	1.10	5.52
PFOA	335-67-1	6.23		0.55	1.10	5.52
PFNA	375-95-1	17.84		0.48	1.10	5.52
PFDA	335-76-2	3.31	J	0.30	1.10	5.52
PFUnA	2058-94-8	13.45		0.45	1.10	5.52
PFDoA	307-55-1	0.98	J	0.27	0.55	5.52
PFTrDA	72629-94-8	4.98	J	0.31	1.10	5.52
PFTeDA	376-06-7	2.21	U	0.70	2.21	5.52
NMeFOSAA	2355-31-9	2.76	U	1.24	2.76	5.52
NEtFOSAA	2991-50-6	2.21	U	0.63	2.21	5.52
PFBS	375-73-5	0.46	J	0.40	1.10	5.52
PFHxS	355-46-4	29.28		0.24	0.55	5.52
PFOS	1763-23-1	1552.75	D	7.46	27.62	138.12

Surrogate Recoveries (%)

13C5-PFHxA	100	
13C4-PFHpA	99	
13C8-PFOA	115	
13C9-PFNA	71	
13C6-PFDA	103	
13C7-PFUnA	117	
13C2-PFDoA	109	
13C2-PFTeDA	109	
d3-MeFOSAA	110	D
d5-EtFOSAA	126	D
13C3-PFBS	110	D
13C3-PFHxS	125	D
13C8-PFOS	121	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-MS09-SB05-0506				
Battelle ID		J8452-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		14.94				
Matrix		SB				
Sample Size		1.65				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	25.94		0.40	1.21	6.06
PFHpA	375-85-9	10.32		0.53	1.21	6.06
PFOA	335-67-1	19.76		0.61	1.21	6.06
PFNA	375-95-1	11.57		0.52	1.21	6.06
PFDA	335-76-2	1.21	U	0.33	1.21	6.06
PFUnA	2058-94-8	1.21	U	0.50	1.21	6.06
PFDoA	307-55-1	0.61	U	0.29	0.61	6.06
PFTrDA	72629-94-8	1.21	U	0.34	1.21	6.06
PFTeDA	376-06-7	2.42	U	0.76	2.42	6.06
NMeFOSAA	2355-31-9	3.03	U	1.36	3.03	6.06
NEtFOSAA	2991-50-6	2.42	U	0.69	2.42	6.06
PFBS	375-73-5	2.75	J	0.44	1.21	6.06
PFHxS	355-46-4	102.47		0.27	0.61	6.06
PFOS	1763-23-1	417.41	D	1.64	6.06	30.30

Surrogate Recoveries (%)

13C5-PFHxA	100
13C4-PFHpA	102
13C8-PFOA	100
13C9-PFNA	89
13C6-PFDA	106
13C7-PFUnA	106
13C2-PFDoA	96
13C2-PFTeDA	96
d3-MeFOSAA	110
d5-EtFOSAA	119
13C3-PFBS	128
13C3-PFHxS	121
13C8-PFOS	107

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		Solid				
Sample Size		2.00				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	1.00	U	0.33	1.00	5.00
PFHpA	375-85-9	1.00	U	0.44	1.00	5.00
PFOA	335-67-1	1.00	U	0.50	1.00	5.00
PFNA	375-95-1	1.00	U	0.43	1.00	5.00
PFDA	335-76-2	1.00	U	0.27	1.00	5.00
PFUnA	2058-94-8	1.00	U	0.41	1.00	5.00
PFDoA	307-55-1	0.50	U	0.24	0.50	5.00
PFTrDA	72629-94-8	1.00	U	0.28	1.00	5.00
PFTeDA	376-06-7	2.00	U	0.63	2.00	5.00
NMeFOSAA	2355-31-9	2.50	U	1.12	2.50	5.00
NEtFOSAA	2991-50-6	2.00	U	0.57	2.00	5.00
PFBS	375-73-5	1.00	U	0.36	1.00	5.00
PFHxS	355-46-4	0.50	U	0.22	0.50	5.00
PFOS	1763-23-1	1.00	U	0.27	1.00	5.00

Surrogate Recoveries (%)

13C5-PFHxA	98
13C4-PFHpA	98
13C8-PFOA	101
13C9-PFNA	100
13C6-PFDA	103
13C7-PFUnA	102
13C2-PFDoA	98
13C2-PFTeDA	93
d3-MeFOSAA	100
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_10/19/2018			
Sample Type		IB			
Collection Date		NA			
Extraction Date		NA			
Analysis Date		10/19/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		Solid			
Sample Size		2.00			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	1.00 U	0.33	1.00	5.00
PFHpA	375-85-9	1.00 U	0.44	1.00	5.00
PFOA	335-67-1	1.00 U	0.50	1.00	5.00
PFNA	375-95-1	1.00 U	0.43	1.00	5.00
PFDA	335-76-2	1.00 U	0.27	1.00	5.00
PFUnA	2058-94-8	1.00 U	0.41	1.00	5.00
PFDoA	307-55-1	0.50 U	0.24	0.50	5.00
PFTrDA	72629-94-8	1.00 U	0.28	1.00	5.00
PFTeDA	376-06-7	2.00 U	0.63	2.00	5.00
NMeFOSAA	2355-31-9	2.50 U	1.12	2.50	5.00
NEtFOSAA	2991-50-6	2.00 U	0.57	2.00	5.00
PFBS	375-73-5	1.00 U	0.36	1.00	5.00
PFHxS	355-46-4	0.50 U	0.22	0.50	5.00
PFOS	1763-23-1	1.00 U	0.27	1.00	5.00

Surrogate Recoveries (%)

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

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

Client ID		180507-02: Ottawa Sand				
Battelle ID		CR902PB-FS				
Sample Type		PB				
Collection Date		10/08/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		0.00				
Matrix		SEDIMENT				
Sample Size		2.02				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	0.99	U	0.33	0.99	4.95
PFHpA	375-85-9	0.99	U	0.44	0.99	4.95
PFOA	335-67-1	0.99	U	0.50	0.99	4.95
PFNA	375-95-1	0.99	U	0.43	0.99	4.95
PFDA	335-76-2	0.99	U	0.27	0.99	4.95
PFUnA	2058-94-8	0.99	U	0.41	0.99	4.95
PFDoA	307-55-1	0.50	U	0.24	0.50	4.95
PFTrDA	72629-94-8	0.99	U	0.28	0.99	4.95
PFTeDA	376-06-7	1.98	U	0.62	1.98	4.95
NMeFOSAA	2355-31-9	2.48	U	1.11	2.48	4.95
NEtFOSAA	2991-50-6	1.98	U	0.56	1.98	4.95
PFBS	375-73-5	0.99	U	0.36	0.99	4.95
PFHxS	355-46-4	0.50	U	0.22	0.50	4.95
PFOS	1763-23-1	0.99	U	0.27	0.99	4.95

Surrogate Recoveries (%)

13C5-PFHxA	104
13C4-PFHpA	103
13C8-PFOA	108
13C9-PFNA	98
13C6-PFDA	107
13C7-PFUnA	109
13C2-PFDoA	96
13C2-PFTeDA	103
d3-MeFOSAA	108
d5-EtFOSAA	130
13C3-PFBS	112
13C3-PFHxS	114
13C8-PFOS	105

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

Client ID		180507-02: Ottawa Sand					
Battelle ID		CR903LCS-FS					
Sample Type		LCS					
Collection Date		10/08/2018					
Extraction Date		10/08/2018					
Analysis Date		10/18/2018					
Analytical Instrument		Sciex 5500 LC/MS/MS					
% Moisture		0.00					
Matrix		SEDIMENT					
Sample Size		2.04					
Size Unit-Basis		g				Control Limits	
Units		ng/g_Dry	Target	Recovery	Qual	Lower	Upper
PFHxA	307-24-4	32.23	29.71	108		45	135
PFHpA	375-85-9	31.91	29.41	108		60	128
PFOA	335-67-1	34.72	29.41	118		56	136
PFNA	375-95-1	35.88	29.41	122		54	130
PFDA	335-76-2	31.08	29.41	106		55	141
PFUnA	2058-94-8	31.96	29.41	109		57	137
PFDoA	307-55-1	29.79	29.41	101		62	134
PFTrDA	72629-94-8	31.65	29.41	108		51	127
PFTeDA	376-06-7	32.30	29.41	110		34	162
NMeFOSAA	2355-31-9	33.92	29.41	115		52	146
NEtFOSAA	2991-50-6	36.56	29.41	124		54	124
PFBS	375-73-5	29.31	29.71	99		57	145
PFHxS	355-46-4	30.58	29.71	103		52	132
PFOS	1763-23-1	34.99	29.41	119		50	130

Surrogate Recoveries (%)

13C5-PFHxA	109
13C4-PFHpA	106
13C8-PFOA	103
13C9-PFNA	95
13C6-PFDA	103
13C7-PFUnA	111
13C2-PFDoA	112
13C2-PFTeDA	110
d3-MeFOSAA	116
d5-EtFOSAA	100
13C3-PFBS	133
13C3-PFHxS	119
13C8-PFOS	98

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

Client ID		VC-MS09-SB03-0506	VC-MS09-SB04-0102-MS					
Battelle ID		J8446-FS	J8453MS-FS					
Sample Type		SA	MS					
Collection Date		09/26/2018	09/26/2018					
Extraction Date		10/08/2018	10/08/2018					
Analysis Date		10/18/2018	10/18/2018					
Analytical Instrument		Sciex 5500 LC/MS/MS	Sciex 5500 LC/MS/MS					
% Moisture		27.16	11.53					
Matrix		SB	SB					
Sample Size		1.48	1.77					
Size Unit-Basis		g	g				Control Limits	
Units		ng/g_Dry	ng/g_Dry	Target	Recovery	Qual	Lower	Upper
PFHxA	307-24-4	426.56 D	138.40 D	91.30	0	N	45	135
PFHpA	375-85-9	69.91	102.76	90.40	36	N	60	128
PFOA	335-67-1	262.24 D	129.60	90.40	0	N	56	136
PFNA	375-95-1	0.67 J	105.83	90.40	116		54	130
PFDA	335-76-2	1.35 U	95.07	90.40	105		55	141
PFUnA	2058-94-8	1.35 U	91.91	90.40	102		57	137
PFDoA	307-55-1	0.68 U	94.33	90.40	104		62	134
PFTrDA	72629-94-8	1.35 U	97.32	90.40	108		51	127
PFTeDA	376-06-7	2.70 U	91.47	90.40	101		34	162
NMeFOSAA	2355-31-9	3.38 U	103.38	90.40	114		52	146
NEtFOSAA	2991-50-6	2.70 U	112.21	90.40	124		54	124
PFBS	375-73-5	106.34	109.25 D	91.30	3	N	57	145
PFHxS	355-46-4	274.57 D	135.76 D	91.30	0	N	52	132
PFOS	1763-23-1	750.56 D	767.81 D	90.40	19	N	50	130
Surrogate Recoveries (%)								
13C5-PFHxA		73	103					
13C4-PFHpA		77	104					
13C8-PFOA		77	89					
13C9-PFNA		65	83					
13C6-PFDA		95	85					
13C7-PFUnA		97	100					
13C2-PFDoA		92	97					
13C2-PFTeDA		94	99					
d3-MeFOSAA		87 D	94 D					
d5-EtFOSAA		97 D	106 D					
13C3-PFBS		106 D	112 D					
13C3-PFHxS		94 D	113 D					
13C8-PFOS		101 D	112 D					

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

Client ID		VC-MS09-SB04-0102-MSD									
Battelle ID		J8454MSD-FS									
Sample Type		MSD									
Collection Date		09/26/2018									
Extraction Date		10/08/2018									
Analysis Date		10/18/2018									
Analytical Instrument		Sciex 5500 LC/MS/MS									
% Moisture		10.19									
Matrix		SB									
Sample Size		1.72									
Size Unit-Basis		g					Control Limits				RPD
Units		ng/g_Dry		Target	Recovery	Qual	Lower	Upper	RPD	Qual	Limit
PFHxA	307-24-4	131.25	D	93.95	0	N	45	135	0.0		≤ 30
PFHpA	375-85-9	106.67		93.02	40	N	60	128	10.5		≤ 30
PFOA	335-67-1	127.95		93.02	0	N	56	136	0.0		≤ 30
PFNA	375-95-1	106.68		93.02	114		54	130	1.7		≤ 30
PFDA	335-76-2	93.44		93.02	100		55	141	4.9		≤ 30
PFUnA	2058-94-8	99.11		93.02	107		57	137	4.8		≤ 30
PFDoA	307-55-1	90.97		93.02	98		62	134	5.9		≤ 30
PFTrDA	72629-94-8	95.35		93.02	103		51	127	4.7		≤ 30
PFTeDA	376-06-7	91.07		93.02	98		34	162	3.0		≤ 30
NMeFOSAA	2355-31-9	91.94		93.02	99		52	146	14.1		≤ 30
NEtFOSAA	2991-50-6	103.20		93.02	111		54	124	11.1		≤ 30
PFBS	375-73-5	105.96	D	93.95	0	N	57	145	200.0	N	≤ 30
PFHxS	355-46-4	135.39	D	93.95	0	N	52	132	0.0		≤ 30
PFOS	1763-23-1	652.70	D	93.02	0	N	50	130	200.0	N	≤ 30

Surrogate Recoveries (%)

13C5-PFHxA	86	
13C4-PFHpA	85	
13C8-PFOA	80	
13C9-PFNA	71	
13C6-PFDA	87	
13C7-PFUnA	98	
13C2-PFDoA	103	
13C2-PFTeDA	105	
d3-MeFOSAA	100	D
d5-EtFOSAA	112	D
13C3-PFBS	109	D
13C3-PFHxS	96	D
13C8-PFOS	113	D

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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

SB, SS

Batch 18-0589

Package DP-18-0295

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

SB, SS

Batch 18-0589

Package DP-18-0295

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

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

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

Analyst Approval: schumitzd@battelle.org 2018.10.24 20:13:09 -04'00'

QC Chemist Approval: fitche@battelle.org 2018.10.26 12:58:22 -04'00'

Project Manager Approval: Digitally signed by Jonathan Thorn Date: 2018.10.26 19:38:20 -04'00'

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

SB, SS

Batch 18-0589

Package DP-18-0295

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.	31
3	***Miscellaneous Documentation*** Case Narrative, Miscellaneous Documentation Form, Quality Control Summary, Example Calculations, Internal Standard Recovery Report, Retention Time Window Report.	54
4	***Sample Preparation Records*** Sample Preparation Records, Dilution Worksheets, Standard Preparation Records, Certificates Of Analysis, GPC Check Report.	222
5	***Analytical Calibrations*** Analytical Sequence, Analytical Method, Tune Report, Initial Calibration, Pesticide Degradation Report, RF Summary, Calibration Verifications, Independent Calibration Verification Check.	257
6	***Analytical Data*** Raw Data Quantification Reports.	419
7	***Chromatograms*** Sample And Standard Chromatograms.	677
8	***Unused Data***	NA

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Signature Page

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

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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: 18-0589
Project/Site: Naval Base Ventura County
CTO: 4164

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Receipt Date
CR902PB-FS	180507-02: Ottawa Sand	SEDIMENT	10/8/2018	10/8/2018
CR903LCS-FS	180507-02: Ottawa Sand	SEDIMENT	10/8/2018	10/8/2018
J8438-FS	VC-MS09-SS01-000H	SS	9/26/2018	9/28/2018
J8439-FS	VC-MS09-SB01-0102	SB	9/26/2018	9/28/2018
J8440-FS	VC-MS09-SB01-0506	SB	9/26/2018	9/28/2018
J8441-FS	VC-MS09-SS02-000H	SS	9/26/2018	9/28/2018
J8442-FS	VC-MS09-SB02-0102	SB	9/26/2018	9/28/2018
J8443-FS	VC-MS09-SB02-0506	SB	9/26/2018	9/28/2018
J8444-FS	VC-MS09-SS03-000H	SS	9/26/2018	9/28/2018
J8445-FS	VC-MS09-SB03-0102	SB	9/26/2018	9/28/2018
J8446-FS	VC-MS09-SB03-0506	SB	9/26/2018	9/28/2018
J8447-FS	VC-MS09-SS04-000H	SS	9/26/2018	9/28/2018
J8448-FS	VC-MS09-SB04-0102	SB	9/26/2018	9/28/2018
J8449-FS	VC-MS09-SB04-0506	SB	9/26/2018	9/28/2018
J8450-FS	VC-MS09-SS05-000H	SS	9/26/2018	9/28/2018
J8451-FS	VC-MS09-SB05-0102	SB	9/26/2018	9/28/2018
J8452-FS	VC-MS09-SB05-0506	SB	9/26/2018	9/28/2018
J8453MS-FS	VC-MS09-SB04-0102-MS	SB	9/26/2018	9/28/2018
J8454MSD-FS	VC-MS09-SB04-0102-MSD	SB	9/26/2018	9/28/2018

Work Plan

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WORK/QUALITY ASSURANCE PROJECT PLAN

1.0 GENERAL PROJECT INFORMATION

Project Title:	CTO-4164: Analysis of Solids
Project Number:	100110125-01
Client:	CH2M 1100 NE Circle Blvd Suite 300 Corvallis, OR 97330 USA
Client Contact Information:	Tiffany Hill Project Chemist (541) 768-3109(V) NA tiffany.hill@jacobs.com
Effective Date of QAPP:	9/17/2018
Version Number:	100110125-01(S)-01
Project Manager:	Thorn, Jonathan
Laboratory Task Manager:	Thorn, Jonathan
Deliverable Due Date:	10/19/2018

2.0 SCOPE OF WORK

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

2.1 TECHNICAL APPROACH

2.1.1 Sample Receipt, Storage, and Handling

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

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

2.1.2 Sample Preparation

None

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

Batch quality control samples are defined in Table 1.

Target samples are presented in Attachment 1.

Table 1: Quality Control Samples

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

2.1.3 Extraction/Preparation

2.1.3.1 Extraction

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

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

Sample Size: 2 g

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

Deviations:
- no split post ENVI-Carb
- PIV changed to 1 mL

Comments:
- All solids will be prescreened prior to extraction and analysis.

Table 2: SIS and LCS/MS Spiking Level

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

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

2.1.3.2 Cleanup

None.

RIS spiking levels are presented in Table 3.

Extract PIV (uL): 1000

Table 3: RIS Spiking Level

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

2.1.4 Instrumental Analysis

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

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

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	09/20/2018	09/20/2018	0	Schedule will vary as samples arrive over time.
Sample Preparation	09/20/2018	09/25/2018	5	NA

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

6.0 BUDGET

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

Table 6. Labor Budget (Laboratory Analytical Task)

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

7.0 STAFF DEVELOPMENT

None anticipated.

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WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 1: Target Samples

Shipment: **SHP-180921-01**

Status: Pending

Description: NBVC Basewide SI

Range: J8201-J8271

Comment: NA

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

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Shipment: **SHP-180921-01**

Status: Pending

Description: NBVC Basewide SI

Range: J8201-J8271

Comment: NA

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

Shipment: **SHP-180925-02**

Status: Approved

Description: NBVC Basewide SI

Range: J8291-J8334

Comment: NA

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

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Shipment: **SHP-180925-02**

Status: Approved

Description: NBVC Basewide SI

Range: J8291-J8334

Comment: NA

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

Shipment: **SHP-180927-02**

Status: Approved

Description: NBVC Basewide SI

Range: J8352-J8411

Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
1	J8352	VC-PM323-SS01-000H	09/24/2018 9:52 am	SS	R0119 (NA)			
2	J8353	VC-PM323-SB01-0102	09/24/2018 9:53 am	SB	R0119 (NA)			
3	J8354	VC-PM323-SB01-0506	09/24/2018 10:01 am	SB	R0119 (NA)			
4	J8355	VC-PM323-SS03-000H	09/24/2018 9:20 am	SS	R0119 (NA)			
5	J8356	VC-PM323-SB03-0102	09/24/2018 9:23 am	SB	R0119 (NA)			
6	J8357	VC-PM323-SB03-0506	09/24/2018 10:30 am	SB	R0119 (NA)			
7	J8360	VC-PM324-SS01-000H	09/24/2018 1:08 pm	SS	R0119 (NA)			
8	J8361	VC-PM324-SB01-0102	09/24/2018 1:11 pm	SB	R0119 (NA)			
9	J8362	VC-PM324-SB01-0506	09/24/2018 1:30 pm	SB	R0119 (NA)			
10	J8363	VC-PM324-SS03-000H	09/24/2018 10:49 am	SS	R0119 (NA)			
11	J8364	VC-PM324-SB03-0102	09/24/2018 10:50 am	SB	R0119 (NA)			
12	J8365	VC-PM324-SB03-0506	09/24/2018 11:02 am	SB	R0119 (NA)			
13	J8373	VC-PM64B-SS01-000H	09/24/2018 2:34 pm	SS	R0119 (NA)			
14	J8374	VC-PM64B-SB01-0102	09/24/2018 2:38 pm	SB	R0119 (NA)			
15	J8375	VC-PM64B-SB01-0506	09/24/2018 2:50 pm	SB	R0119 (NA)			
16	J8376	VC-PM64B-SS02-000H	09/24/2018 3:02 pm	SS	R0119 (NA)			
17	J8377	VC-PM64B-SB02-0102	09/24/2018 3:03 pm	SB	R0119 (NA)			
18	J8378	VC-PM64B-SB02-0506	09/24/2018 3:16 pm	SB	R0119 (NA)			
19	J8379	VC-PM64B-SS03-000H	09/24/2018 1:52 pm	SS	R0119 (NA)			
20	J8380	VC-PM64B-SB03-0102	09/24/2018 1:53 pm	SB	R0119 (NA)			
21	J8381	VC-PM64B-SB03-0506	09/24/2018 2:13 pm	SB	R0119 (NA)			
22	J8386	VC-HS09-SB01-0102	09/25/2018 1:21 pm	SB	R0119 (NA)			
23	J8387	VC-HS09-SB01-0506	09/25/2018 2:04 pm	SB	R0119 (NA)			
24	J8388	VC-HS09-SB02-0102	09/25/2018 2:39 pm	SB	R0119 (NA)			

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Shipment: **SHP-180927-02**

Status: Approved

Description: NBVC Basewide SI

Range: J8352-J8411

Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
25	J8389	VC-HS09-SB02-0506	09/25/2018 2:47 pm	SB	R0119 (NA)			
26	J8390	VC-HS09-SS03-000H	09/25/2018 12:54 pm	SS	R0119 (NA)			
27	J8391	VC-HS09-SB03-0102	09/25/2018 12:55 pm	SB	R0119 (NA)			
28	J8392	VC-HS09-SB03-0506	09/25/2018 1:05 pm	SB	R0119 (NA)			
29	J8401	VC-HS09-SS01-000H	09/25/2018 1:20 pm	SS	R0119 (NA)			
30	J8402	VC-HS09-SS02-000H	09/25/2018 2:35 pm	SS	R0119 (NA)			
31	J8403	VC-AOC16-SS01-000H	09/25/2018 9:43 am	SS	R0119 (NA)			
32	J8404	VC-AOC16-SB01-0102	09/25/2018 9:43 am	SB	R0119 (NA)			
33	J8405	VC-AOC16-SB01-0506	09/25/2018 9:57 am	SB	R0119 (NA)			
34	J8406	VC-AOC16-SS02-000H	09/25/2018 10:05 am	SS	R0119 (NA)			
35	J8407	VC-AOC16-SB02-0102	09/25/2018 10:06 am	SB	R0119 (NA)			
36	J8408	VC-AOC16-SB02-0506	09/25/2018 10:10 am	SB	R0119 (NA)			
37	J8409	VC-AOC16-SS03-000H	09/25/2018 9:43 am	SS	R0119 (NA)			
38	J8410	VC-AOC16-SB03-0102	09/25/2018 9:44 am	SB	R0119 (NA)			
39	J8411	VC-AOC16-SB03-0506	09/25/2018 9:53 am	SB	R0119 (NA)			

Shipment: **SHP-180928-03**

Status: Pending

Description: NBVC Basewide SI

Range: J8438-J8476

Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
1	J8438	VC-MS09-SS01-000H	09/26/2018 9:41 am	SS	F0117 (NA)			
2	J8439	VC-MS09-SB01-0102	09/26/2018 9:43 am	SB	F0117 (NA)			
3	J8440	VC-MS09-SB01-0506	09/26/2018 9:52 am	SB	F0117 (NA)			
4	J8441	VC-MS09-SS02-000H	09/26/2018 9:30 am	SS	F0117 (NA)			
5	J8442	VC-MS09-SB02-0102	09/26/2018 9:34 am	SB	F0117 (NA)			
6	J8443	VC-MS09-SB02-0506	09/26/2018 9:41 am	SB	F0117 (NA)			
7	J8444	VC-MS09-SS03-000H	09/26/2018 10:15 am	SS	F0117 (NA)			
8	J8445	VC-MS09-SB03-0102	09/26/2018 10:20 am	SB	F0117 (NA)			
9	J8446	VC-MS09-SB03-0506	09/26/2018 10:25 am	SB	F0117 (NA)			
10	J8447	VC-MS09-SS04-000H	09/26/2018 11:16 am	SS	F0117 (NA)			
11	J8448	VC-MS09-SB04-0102	09/26/2018 11:18 am	SB	F0117 (NA)			
12	J8449	VC-MS09-SB04-0506	09/26/2018 11:25 am	SB	F0117 (NA)			
13	J8450	VC-MS09-SS05-000H	09/26/2018 10:44 am	SS	F0117 (NA)			
14	J8451	VC-MS09-SB05-0102	09/26/2018 10:45 am	SB	F0117 (NA)			
15	J8452	VC-MS09-SB05-0506	09/26/2018 10:50 am	SB	F0117 (NA)			
16	J8465	VC-PM367-SS01-000H	09/27/2018 10:12 am	SS	F0117 (NA)			
17	J8466	VC-PM367-SB01-0102	09/27/2018 10:15 am	SB	F0117 (NA)			
18	J8467	VC-PM367-SB01-0506	09/27/2018 10:26 am	SB	F0117 (NA)			
19	J8468	VC-PM367-SS02-000H	09/27/2018 9:25 am	SS	F0117 (NA)			

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Shipment: **SHP-180928-03**

Status: Pending

Description: NBVC Basewide SI

Range: J8438-J8476

Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
20	J8469	VC-PM367-SB02-0102	09/27/2018 9:31 am	SB	F0117 (NA)			
21	J8470	VC-PM367-SB02-0506	09/27/2018 9:37 am	SB	F0117 (NA)			
22	J8471	VC-PM367-SS03-000H	09/27/2018 10:19 am	SS	F0117 (NA)			
23	J8472	VC-PM367-SB03-0102	09/27/2018 10:20 am	SB	F0117 (NA)			
24	J8473	VC-PM367-SB03-0506	09/27/2018 10:26 am	SB	F0117 (NA)			
25	J8474	VC-PM367-SS04-000H	09/27/2018 9:30 am	SS	F0117 (NA)			
26	J8475	VC-PM367-SB04-0102	09/27/2018 9:31 am	SB	F0117 (NA)			
27	J8476	VC-PM367-SB04-0506	09/27/2018 9:38 am	SB	F0117 (NA)			

Shipment: **SHP-181009-01**

Status: Pending

Description: NBVC Basewide SI

Range: J8658-J8711

Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
1	J8658	VC-CS12-SS01-000H	10/06/2018 8:25 am	SS	R0119 (NA)			
2	J8659	VC-CS12-SB01-0102	10/06/2018 8:26 am	SB	R0119 (NA)			
3	J8660	VC-CS12-SB01-0506	10/06/2018 8:34 am	SB	R0119 (NA)			
4	J8661	VC-CS12-SS02-000H	10/06/2018 11:07 am	SS	R0119 (NA)			
5	J8662	VC-CS12-SB02-0102	10/06/2018 11:09 am	SB	R0119 (NA)			
6	J8663	VC-CS12-SB02-0506	10/06/2018 11:13 am	SB	R0119 (NA)			
7	J8664	VC-CS12-SS03-000H	10/06/2018 10:06 am	SS	R0119 (NA)			
8	J8665	VC-CS12-SB03-0102	10/06/2018 10:07 am	SB	R0119 (NA)			
9	J8666	VC-CS12-SB03-0506	10/06/2018 10:12 am	SB	R0119 (NA)			
10	J8671	VC-CS10-SS01-000H	10/06/2018 1:02 pm	SS	R0119 (NA)			
11	J8672	VC-CS10-SB01-0102	10/06/2018 1:04 pm	SB	R0119 (NA)			
12	J8673	VC-CS10-SB01-0506	10/06/2018 1:10 pm	SB	R0119 (NA)			
13	J8674	VC-CS10-SS02-000H	10/06/2018 9:55 am	SS	R0119 (NA)			
14	J8675	VC-CS10-SB02-0102	10/06/2018 9:58 am	SB	R0119 (NA)			
15	J8676	VC-CS10-SB02-0506	10/06/2018 10:06 am	SB	R0119 (NA)			
16	J8677	VC-CS10-SS03-000H	10/06/2018 11:31 am	SS	R0119 (NA)			
17	J8678	VC-CS10-SB03-0102	10/06/2018 11:33 am	SB	R0119 (NA)			
18	J8679	VC-CS10-SB03-0506	10/06/2018 11:37 am	SB	R0119 (NA)			
19	J8680	VC-CS10-SS04-000H	10/06/2018 10:35 am	SS	R0119 (NA)			
20	J8681	VC-CS10-SB04-0102	10/06/2018 10:38 am	SB	R0119 (NA)			
21	J8682	VC-CS10-SB04-0506	10/06/2018 10:41 am	SB	R0119 (NA)			
22	J8689	VC-CS10-SD01-000H	10/06/2018 1:28 pm	SD	R0119 (NA)			
23	J8690	VC-CS10-SD01-0102	10/06/2018 1:30 pm	SD	R0119 (NA)			
24	J8691	VC-CS18-SS01-000H	10/06/2018 1:52 pm	SS	R0119 (NA)			
25	J8692	VC-CS18-SB01-0102	10/06/2018 1:54 pm	SB	R0119 (NA)			
26	J8693	VC-CS18-SB01-0506	10/06/2018 2:00 pm	SB	R0119 (NA)			

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WORK/QUALITY ASSURANCE PROJECT PLAN

Shipment: **SHP-181009-01**

Status: Pending

Description: NBVC Basewide SI

Range: J8658-J8711

Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
27	J8694	VC-CS00-SS01-000H	10/06/2018 2:05 pm	SS	R0119 (NA)			
28	J8695	VC-CS00-SB01-0102	10/06/2018 2:07 pm	SB	R0119 (NA)			
29	J8696	VC-CS00-SB01-0506	10/06/2018 2:10 pm	SB	R0119 (NA)			
30	J8697	VC-CS00-SS02-000H	10/06/2018 3:22 pm	SS	R0119 (NA)			
31	J8698	VC-CS00-SB02-0102	10/06/2018 3:23 pm	SS	R0119 (NA)			
32	J8699	VC-CS00-SB02-0506	10/06/2018 3:27 pm	SB	R0119 (NA)			
33	J8700	VC-CS00-SS03-000H	10/06/2018 4:15 pm	SS	R0119 (NA)			
34	J8701	VC-CS00-SB03-0102	10/06/2018 4:18 pm	SB	R0119 (NA)			
35	J8702	VC-CS00-SB03-0506	10/06/2018 4:25 pm	SB	R0119 (NA)			
36	J8703	VC-CS00-SS04-000H	10/06/2018 1:13 pm	SS	R0119 (NA)			
37	J8704	VC-CS00-SB04-0102	10/06/2018 1:15 pm	SB	R0119 (NA)			
38	J8705	VC-CS00-SB04-0506	10/06/2018 1:20 pm	SB	R0119 (NA)			
39	J8706	VC-CS00-SS05-000H	10/06/2018 5:17 pm	SS	R0119 (NA)			
40	J8707	VC-CS00-SB05-0102	10/06/2018 5:19 pm	SB	R0119 (NA)			
41	J8708	VC-CS00-SB05-0506	10/06/2018 5:24 pm	SB	R0119 (NA)			
42	J8709	VC-CS00-SS06-000H	10/06/2018 5:05 pm	SS	R0119 (NA)			
43	J8710	VC-CS00-SB06-0102	10/06/2018 5:07 pm	SB	R0119 (NA)			
44	J8711	VC-CS00-SB06-0506	10/06/2018 5:10 pm	SB	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:	S - Solid Samples, like soil or sediment, prepared and anlyzed under the same class of detection limits.
Detection Limit Study:	5-369
Instrument:	LC-MS/MS
MQO Criteria	Universal_LC
Standard Report:	Standard Result Report

Method Specific Reporting

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

Holding Times (days)

Sample:	14
Frozen:	14
Extract:	28

Data Flags

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

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

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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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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-180928-03

Battelle Project No: 0110125-01

Sample Receipt Form

Approved: ☐ **Authorized** ☐

Project Number: 695803 **Client:** CH2M

Received by: Schumitz, Matt **Date/Time Received:** Friday, September 28, 2018 11:00 AM

No. of Shipping Containers: 2

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 2	Cooler	7829 7942 9567	Custody Seals	Intact	Intact	Therm_1	0.7	20
2 of 2	Cooler	7829 7942 9578	Custody Seals	Intact	Intact	Therm_1	0.4	26

Samples

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

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

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

Temperature upon receipt (°C): 0.7 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:** J8438 - J8483

Samples logged in by: Schumitz, Matt **Date/Time:** 09/28/2018 11:00 AM

Approved By: **Approved On:**

Authorized By: **Authorized On:**

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ShpNo: SHP-180928-03

Battelle Project No: 0110125-01

Report Corrective Actions

Corrective Action No: 1 **of** 1

Authorized ☐ Approved: ☐

COC Client: CH2M
COC Project: NBVC Basewide SI
COC Date: 9/28/2018 1:26:0

	Description of Problem:	Explanation:
Client Id	Jars and C-O-C do not have matching Ids	It appears as though the blanks were mixed up when labeling them with the field ID. COC VC-SO-FB07-092618 (J8455) VC-SO-EB07-092618 (J8456) VC-AQ-EB08-092718 (J8483) Labels 1 bottle: VC-SO-FB07-092618, 1 bottle: VC-AQ-FB07-092618 (J8455) 1 bottle: VC-SO-EB07-092618, 1 bottle: VC-AQ-EB07-092618 (J8456) 1 bottle: VC-SO-EB08-092718, 1 bottle: VC-AQ-EB08-092618 (J8483)
	Jars and C-O-C do not have matching Ids	Sample VC-MS09-SB04-0102-MSD only lists VC-MS09-SB04-0102-SD on the sample label. Logged in per COC

Documentation of project manager notification

Sample Custodian Schumitz, Matt **Date:** 9/28/2018 5:18:00 PM

Laboratory Manager: Thorn, Jonathan **Date:** 10/24/2018 11:17:00 A

Project Manager: Thorn, Jonathan **Date:** 10/24/2018 11:18:00 A

Documentation of client notification (should be completed by project manager within 24 hrs):

On 28-Sep-18 **I contacted** Hill, Tiffany **at** CH2M

Results of communication with client (Describe any corrective action directed by the client):

email attached with clarification on sample IDs.

Date this form was received back to the custodian: _____

Reference Number: _____

Schumitz, Matthew

From: Thorn, Jonathan R
Sent: Monday, October 01, 2018 5:07 PM
To: Schumitz, Matthew
Subject: FW: 9.28.2018 shipment receipt

Here is the last one

From: Hill, Tiffany/CVO <Tiffany.Hill@jacobs.com>
Sent: Monday, October 1, 2018 5:07 PM
To: Thorn, Jonathan R <thorn@battelle.org>
Subject: RE: 9.28.2018 shipment receipt

Message received from outside the Battelle network. Carefully examine it before you open any links or attachments.

Thanks Jon, made my way through these. Please follow IDs per the CoC as done.

From: Thorn, Jonathan R [mailto:thorn@battelle.org]
Sent: Monday, October 01, 2018 9:09 AM
To: Hill, Tiffany/CVO <Tiffany.Hill@jacobs.com>
Subject: [EXTERNAL] 9.28.2018 shipment receipt

Hi Tiffany,
Here are the custody records from Friday's shipment. Cooler temperatures are all good. A few questions on some of the sample IDs are on page 2. (Matt still need update the cooler to sample link in our LIMS system o show which samples were in each cooler too).

These will be in Battelle SDGs 18-0588, 18-0589, 18-0590. I will get you the sample to SDG links once we have the IDs updated.
Best Regards,
Jon

Jonathan Thorn
Laboratory Director
Analytical Chemistry Services
Office: 781.681.5565 | Mobile: 781.710.9664 | Fax: 614.458.6917
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ShpNo SHP-180928-03

Battelle Project No: 0110125-01

Sample Receipt Form Details

Approved: ☐ **Authorized** ☐

Project Number: 695803 **Client:** CH2M

Received by: Schumitz, Matt **Date/Time Received:** Friday, September 28, 2018 11:00 AM

No. of Shipping Containers: 2

BDO Id:	Client Sample ID:	Collection Date:	Login Date:	Ctrs:	Matrix:	Temp:	pH:	TRC:	VOC:	Stored In:	Loc:	No:	Comments:
J8438	VC-MS09-SS01-000H	09/26/18 9:41	09/28/18 13:29	1	SS	0.7	NA	NA	NA	F0117 (NA)			
J8439	VC-MS09-SB01-0102	09/26/18 9:43	09/28/18 13:29	1	SB	0.7	NA	NA	NA	F0117 (NA)			
J8440	VC-MS09-SB01-0506	09/26/18 9:52	09/28/18 13:29	1	SB	0.7	NA	NA	NA	F0117 (NA)			
J8441	VC-MS09-SS02-000H	09/26/18 9:30	09/28/18 13:30	1	SS	0.7	NA	NA	NA	F0117 (NA)			
J8442	VC-MS09-SB02-0102	09/26/18 9:34	09/28/18 13:31	1	SB	0.7	NA	NA	NA	F0117 (NA)			
J8443	VC-MS09-SB02-0506	09/26/18 9:41	09/28/18 13:32	1	SB	0.7	NA	NA	NA	F0117 (NA)			
J8444	VC-MS09-SS03-000H	09/26/18 10:15	09/28/18 13:32	1	SS	0.7	NA	NA	NA	F0117 (NA)			
J8445	VC-MS09-SB03-0102	09/26/18 10:20	09/28/18 13:32	1	SB	0.7	NA	NA	NA	F0117 (NA)			
J8446	VC-MS09-SB03-0506	09/26/18 10:25	09/28/18 13:32	1	SB	0.7	NA	NA	NA	F0117 (NA)			
J8447	VC-MS09-SS04-000H	09/26/18 11:16	09/28/18 13:33	1	SS	0.7	NA	NA	NA	F0117 (NA)			
J8448	VC-MS09-SB04-0102	09/26/18 11:18	09/28/18 13:33	1	SB	0.7	NA	NA	NA	F0117 (NA)			
J8449	VC-MS09-SB04-0506	09/26/18 11:25	09/28/18 13:33	1	SB	0.7	NA	NA	NA	F0117 (NA)			
J8450	VC-MS09-SS05-000H	09/26/18 10:44	09/28/18 13:37	1	SS	0.4	NA	NA	NA	F0117 (NA)			
J8451	VC-MS09-SB05-0102	09/26/18 10:45	09/28/18 13:37	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8452	VC-MS09-SB05-0506	09/26/18 10:50	09/28/18 13:37	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8453	VC-MS09-SB04-0102-MS	09/26/18 11:18	09/28/18 13:38	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8454	VC-MS09-SB04-0102-MSD	09/26/18 11:18	09/28/18 13:38	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8455	VC-SO-FB07-09262018	09/26/18 11:43	09/28/18 13:39	2	AQ	0.4	NA	NA	NA	R0118 (NA)			
J8456	VC-SO-EB07-09262018	09/26/18 11:45	09/28/18 13:40	2	AQ	0.4	NA	NA	NA	R0118 (NA)			
J8457	VC-MS09-DW01-0918	09/26/18 10:16	09/28/18 13:43	2	GW	0.7	NA	NA	NA	R0118 (NA)			
J8458	VC-MS09-DW02-0918	09/26/18 10:05	09/28/18 13:43	2	GW	0.7	NA	NA	NA	R0118 (NA)			
J8459	VC-MS09-DW03-0918	09/26/18 11:10	09/28/18 13:44	2	GW	0.7	NA	NA	NA	R0118 (NA)			
J8460	VC-MS09-DW04-0918	09/26/18 12:22	09/28/18 13:44	2	GW	0.7	NA	NA	NA	R0118 (NA)			
J8461	VC-MS09-DW04P-0918	09/26/18 12:20	09/28/18 13:44	2	GW	0.7	NA	NA	NA	R0118 (NA)			
J8462	VC-MS09-DW05-0918	09/26/18 11:35	09/28/18 13:45	2	GW	0.7	NA	NA	NA	R0118 (NA)			
J8463	VC-MS09-DW05-0918-MS	09/26/18 11:15	09/28/18 13:46	2	AQ	0.7	NA	NA	NA	R0118 (NA)			
J8464	VC-MS09-DW05-0918-MSD	09/26/18 11:15	09/28/18 13:48	2	AQ	0.7	NA	NA	NA	R0118 (NA)			
J8465	VC-PM367-SS01-000H	09/27/18 10:12	09/28/18 13:49	1	SS	0.4	NA	NA	NA	F0117 (NA)			

BATTELLE
It can be done

ShpNo SHP-180928-03

Battelle Project No: 0110125-01

Sample Receipt Form Details

Approved: ☐ **Authorized** ☐

Project Number: 695803 **Client:** CH2M

Received by: Schumitz, Matt **Date/Time Received:** Friday, September 28, 2018 11:00 AM

No. of Shipping Containers: 2

BDO Id:	Client Sample ID:	Collection Date:	Login Date:	Ctrs:	Matrix:	Temp:	pH:	TRC:	VOC:	Stored In:	Loc:	No:	Comments:
J8466	VC-PM367-SB01-0102	09/27/18 10:15	09/28/18 13:51	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8467	VC-PM367-SB01-0506	09/27/18 10:26	09/28/18 13:51	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8468	VC-PM367-SS02-000H	09/27/18 9:25	09/28/18 13:52	1	SS	0.4	NA	NA	NA	F0117 (NA)			
J8469	VC-PM367-SB02-0102	09/27/18 9:31	09/28/18 13:52	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8470	VC-PM367-SB02-0506	09/27/18 9:37	09/28/18 13:52	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8471	VC-PM367-SS03-000H	09/27/18 10:19	09/28/18 13:53	1	SS	0.4	NA	NA	NA	F0117 (NA)			
J8472	VC-PM367-SB03-0102	09/27/18 10:20	09/28/18 13:54	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8473	VC-PM367-SB03-0506	09/27/18 10:26	09/28/18 13:55	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8474	VC-PM367-SS04-000H	09/27/18 9:30	09/28/18 13:55	1	SS	0.4	NA	NA	NA	F0117 (NA)			
J8475	VC-PM367-SB04-0102	09/27/18 9:31	09/28/18 13:56	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8476	VC-PM367-SB04-0506	09/27/18 9:38	09/28/18 13:56	1	SB	0.4	NA	NA	NA	F0117 (NA)			
J8477	VC-PM367-DW01-0918	09/27/18 10:36	09/28/18 13:58	2	GW	0.4	NA	NA	NA	R0119 (NA)			
J8478	VC-PM367-DW02-0918	09/27/18 9:50	09/28/18 14:00	2	GW	0.4	NA	NA	NA	R0119 (NA)			
J8479	VC-PM367-DW03-0918	09/27/18 10:43	09/28/18 14:00	2	GW	0.4	NA	NA	NA	R0119 (NA)			
J8480	VC-PM367-DW03P-0918	09/27/18 10:46	09/28/18 14:00	2	GW	0.4	NA	NA	NA	R0119 (NA)			
J8481	VC-PM367-DW04-0918	09/27/18 10:04	09/28/18 14:01	2	GW	0.4	NA	NA	NA	R0119 (NA)			
J8482	VC-AQ-FB08-09272018	09/27/18 10:00	09/28/18 14:01	2	AQ	0.4	NA	NA	NA	R0119 (NA)			
J8483	VC-AQ-EB08-09272018	09/27/18 12:00	09/28/18 14:02	2	AQ	0.4	NA	NA	NA	R0119 (NA)			

Total Samples: 46

BATTELLE It can be done

Chain-of-Custody

Client Contact Information	Project Manager: Eric Davis	Sampling Site: PT MUGU MS09	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 4
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 1 of 6

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
VC-MS09-SS01-000H J8438	9/26/18	0941	Grab	SS	1	X
VC-MS09-SB01-0102 39	9/26/18	0943	Grab	SB	1	X
VC-MS09-SB01-0506 40	9/26/18	0952	Grab	SB	1	X
VC-MS09-SS02-000H 41	9/26/18	0930	Grab	SS	1	X
VC-MS09-SB02-0102 42	9/26/18	0934	Grab	SB	1	X
VC-MS09-SB02-0506 43	9/26/18	0941	Grab	SB	1	X
VC-MS09-SS03-000H 44	9/26/18	1015	Grab	SS	1	X
VC-MS09-SB03-0102 45	9/26/18	1020	Grab	SB	1	X
VC-MS09-SB03-0506 46	9/26/18	1025	Grab	SB	1	X
VC-MS09-SS04-000H 47	9/26/18	1116	Grab	SS	1	X
VC-MS09-SB04-0102 48	9/26/18	1119	Grab	SB	1	X
VC-MS09-SB04-0506 J8449	9/26/18	1125	Grab	SB	1	X

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

Relinquished by (Print/Sign):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
V. Kilbert	Jacobs	9/27/18 1300		Battelle	9-28-18 1100
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: At MRGU MS09	Site Information:
Tiffany Hill 1100 NE Circle Blvd. Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 724-977-3620 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 4
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 2 of 6

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod	
J8450	VC-MS09-SS05-000H	9/26/18	1044	Grab	SS	1	X	
J8451	VC-MS09-SB05-0102	9/26/18	1045	Grab	SB	1	X	
J8452	VC-MS09-SB05-0506	9/26/18	1050	Grab	SB	1	X	
J8453	VC-MS09-SB04-0102-MS	9/26/18	1118	Grab	SB	1	X	
J8454	VC-MS09-SB04-0102-MSD	9/26/18	1118	Grab	SB	1	X	
J8455 VC	FDT-SO-FB07-09262018	9/26/18	1143	Grab	AQ	2	X	
J8456 VC	FDT-SO-EB27-09262018	9/26/18	1145	Grab	AQ	2	X	bowl

VC 1

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	9/27/18 1300		Battelle	9-28-18 1100
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: Pt Mugu MS09	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 724-977-3638 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 4
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 3 of 6

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
VC-MS09-DW01-0918 J8457	9/26/18	1016	Grab	GW	2	X
VC-MS09-DW02-0918 J8458	9/26/18	1005	Grab	GW	2	X
VC-MS09-DW03-0918 J8459	9/26/18	1110	Grab	GW	2	X
VC-MS09-DW04-0918 J8460	9/26/18	1222	Grab	GW	2	X
VC-MS09-DW04P-0918 J8461	9/26/18	1220	Grab	GW	2	X
VC-MS09-DW05-0918 J8462	9/26/18	1135	Grab	GW	2	X
~~FDT-AQ-FB~~	9/26/18	1143	Grab	AQ	2	X
FDT-AQ-EB	9/26/18	1148	Grab	AQ	2	X

VD

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	9/27/18 1300		Battelle	9-28-18 1100
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: Pt Mugu PM367	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 724-977-3628 Email: Victoria.Kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 4
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 4 of 6

	Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
~~VC-PM367-S-MS~~				Grab			X
~~VC-PM367-S-SD~~				Grab			X
~~FDT-SO-FB~~				Grab	AQ		X
~~FDT-SO-EB~~				Grab	AQ		X
~~VC-MS09-Dw05-0918-MS~~							
J8463	VC-MS09-Dw05-0918-MS	9/26/18	1115	Grab	AQ	2	X
J8464	VC-MS09-Dw05-0918MSD	9/26/18	1121	Grab	AQ	2	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	9/27/18 1300		Battelle	9-28-18 1100
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: ft Mugu PM367	Site Information:
Tiffany Hill 1100 NE Circle Blvd, Suite 300 Corvallis, OR 97330	Sampler Information (print name): Victoria Kilbert Phone: 724-977-3628 Email: Victoria.Kilbert@jacobs.com Turnaround Time (TAT) Requested:	Preservative: NA	COC # 4
Project Name: NBVC Basewide SI Project No.: 695803	Normal X Priority ☐ RUSH ☐ Time Zone: PST	Analysis: PFAS by Method 537 Mod	Page# 5 of 6

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	PFAS by Method 537 Mod
VC-PM367-SS01-000H J8465	9/27/18	1012	Grab	SS	1	X
VC-PM367-SB01-0102 66	9/27/18	1015	Grab	SB	1	X
VC-PM367-SB01-0506 67	9/27/18	1026	Grab	SB	1	X
VC-PM367-SS02-000H 68	9/27/18	0925	Grab	SS	1	X
VC-PM367-SB02-0102 69	9/27/18	0931	Grab	SB	1	X
VC-PM367-SB02-0506 70	9/27/18	0937	Grab	SB	1	X
VC-PM367-SS03-000H 71	9/27/18	1019	Grab	SS	1	X
VC-PM367-SB03-0102 72	9/27/18	1020	Grab	SB	1	X
VC-PM367-SB03-0506 73	9/27/18	1026	Grab	SB	1	X
VC-PM367-SS04-000H 74	9/27/18	0930	Grab	SS	1	X
VC-PM367-SB04-0102 75	9/27/18	0931	Grab	SB	1	X
VC-PM367-SB04-0506 J8476	9/27/18	0938	Grab	SB	1	X

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

Relinquished by (Print/Sign):	Company:	Date/Time:	Received by (Print/Sign):	Company:	Date/Time:
V. Kilbert	Jacobs	9/27/18 1300	MD	Battelle	9-28-18 1100
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): Victoria Kilbert Phone: 724-977-3628 Email: victoria.kilbert@jacobs.com Turnaround Time (TAT) Requested:	pt Mugu PM367	
Project Name: NBVC Basewide SI Project No.: 6915803	Normal X Priority ☐ RUSH ☐ Time Zone: PST		COC # 4 Page# 6 of 6

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	Total # of Cont.	Preservative: NA	Analysis: PFAS by Method 537 Mod
VC-PM367-DW01-0918 J8477	9/27/18	1036	Grab	GW	2		X
VC-PM367-DW02-0918 78	9/27/18	0950	Grab	GW	2		X
VC-PM367-DW03-0918 79	9/27/18	1043	Grab	GW	2		X
VC-PM367-DW03P-0918 80	9/27/18	1046	Grab	GW	2		X
VC-PM367-DW04-0918 81	9/27/18	1004	Grab	GW	2		X
VC-~~FDT-AQ~~FB08-09272018 82	9/27/18	1000	Grab	AQ	2		X
VC-~~FDT-~~AQ-EB08-09272018 J8483	9/27/18	1200	Grab	AQ	2		X

on gw screen

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	9/27/18 1305		Battelle	9-28-18 1100
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:


2
6.4°
FRI - 28 SEP 10:30A
MPS# 0263 7829 7942 9578 PRIORITY OVERNIGHT
XE XPUA
02061
MA-US
BOS
5169367 28Sep 02:01 MEMH 547C1/F78C/A17C


0
0.7°
FRI - 28 SEP 10:30A
TRK# 0201 7829 7942 9567 PRIORITY OVERNIGHT
XE XPUA
02061
MA-US
BOS
985519 28Sep 02:02 MEMH 547

Data Tables

BATTELLE
It can be done

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

Client ID		VC-MS09-SS01-000H				
Battelle ID		J8438-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		11.93				
Matrix		SS				
Sample Size		1.82				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	8.44		0.36	1.10	5.49
PFHpA	375-85-9	1.77	J	0.48	1.10	5.49
PFOA	335-67-1	8.05		0.55	1.10	5.49
PFNA	375-95-1	16.73		0.47	1.10	5.49
PFDA	335-76-2	0.70	J	0.30	1.10	5.49
PFUnA	2058-94-8	1.15	J	0.45	1.10	5.49
PFDoA	307-55-1	0.55	U	0.26	0.55	5.49
PFTrDA	72629-94-8	1.10	U	0.31	1.10	5.49
PFTeDA	376-06-7	2.20	U	0.69	2.20	5.49
NMeFOSAA	2355-31-9	2.75	U	1.23	2.75	5.49
NEtFOSAA	2991-50-6	2.20	U	0.63	2.20	5.49
PFBS	375-73-5	3.43	J	0.40	1.10	5.49
PFHxS	355-46-4	25.77		0.24	0.55	5.49
PFOS	1763-23-1	474.84	D	1.48	5.49	27.47

Surrogate Recoveries (%)

13C5-PFHxA	105
13C4-PFHpA	107
13C8-PFOA	106
13C9-PFNA	89
13C6-PFDA	101
13C7-PFUnA	109
13C2-PFDoA	97
13C2-PFTeDA	101
d3-MeFOSAA	117
d5-EtFOSAA	135
13C3-PFBS	145
13C3-PFHxS	128
13C8-PFOS	108

BATTELLE
It can be done

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

Client ID		VC-MS09-SB01-0102			
Battelle ID		J8439-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		14.53			
Matrix		SB			
Sample Size		1.68			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	107.59	0.39	1.19	5.95
PFHpA	375-85-9	10.70	0.52	1.19	5.95
PFOA	335-67-1	9.51	0.60	1.19	5.95
PFNA	375-95-1	18.53	0.51	1.19	5.95
PFDA	335-76-2	0.36 J	0.32	1.19	5.95
PFUnA	2058-94-8	1.19 U	0.49	1.19	5.95
PFDoA	307-55-1	0.60 U	0.29	0.60	5.95
PFTrDA	72629-94-8	1.19 U	0.33	1.19	5.95
PFTeDA	376-06-7	2.38 U	0.75	2.38	5.95
NMeFOSAA	2355-31-9	2.98 U	1.33	2.98	5.95
NEtFOSAA	2991-50-6	2.38 U	0.68	2.38	5.95
PFBS	375-73-5	21.58	0.43	1.19	5.95
PFHxS	355-46-4	61.38	0.26	0.60	5.95
PFOS	1763-23-1	461.30 D	1.61	5.95	29.76

Surrogate Recoveries (%)

13C5-PFHxA	102
13C4-PFHpA	97
13C8-PFOA	116
13C9-PFNA	85
13C6-PFDA	107
13C7-PFUnA	112
13C2-PFDoA	105
13C2-PFTeDA	96
d3-MeFOSAA	114
d5-EtFOSAA	127
13C3-PFBS	130
13C3-PFHxS	120
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-MS09-SB01-0506				
Battelle ID		J8440-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		20.73				
Matrix		SB				
Sample Size		1.55				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	21.58		0.43	1.29	6.45
PFHpA	375-85-9	6.09	J	0.57	1.29	6.45
PFOA	335-67-1	12.90		0.65	1.29	6.45
PFNA	375-95-1	4.88	J	0.55	1.29	6.45
PFDA	335-76-2	1.29	U	0.35	1.29	6.45
PFUnA	2058-94-8	1.29	U	0.53	1.29	6.45
PFDoA	307-55-1	0.65	U	0.31	0.65	6.45
PFTrDA	72629-94-8	1.29	U	0.36	1.29	6.45
PFTeDA	376-06-7	2.58	U	0.81	2.58	6.45
NMeFOSAA	2355-31-9	3.23	U	1.45	3.23	6.45
NEtFOSAA	2991-50-6	2.58	U	0.74	2.58	6.45
PFBS	375-73-5	3.10	J	0.46	1.29	6.45
PFHxS	355-46-4	62.49		0.28	0.65	6.45
PFOS	1763-23-1	658.47	D	8.71	32.26	161.29

Surrogate Recoveries (%)

13C5-PFHxA	124	
13C4-PFHpA	123	
13C8-PFOA	123	
13C9-PFNA	104	
13C6-PFDA	125	
13C7-PFUnA	134	
13C2-PFDoA	117	
13C2-PFTeDA	116	
d3-MeFOSAA	109	D
d5-EtFOSAA	113	D
13C3-PFBS	123	D
13C3-PFHxS	102	D
13C8-PFOS	108	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-MS09-SS02-000H				
Battelle ID		J8441-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		19.10				
Matrix		SS				
Sample Size		1.63				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	944.17	D	4.05	12.27	61.35
PFHpA	375-85-9	368.32	D	5.40	12.27	61.35
PFOA	335-67-1	459.54	D	6.13	12.27	61.35
PFNA	375-95-1	39.50		0.53	1.23	6.13
PFDA	335-76-2	14.94		0.33	1.23	6.13
PFUnA	2058-94-8	3.04	J	0.50	1.23	6.13
PFDoA	307-55-1	3.15	J	0.29	0.61	6.13
PFTrDA	72629-94-8	0.58	J	0.34	1.23	6.13
PFTeDA	376-06-7	2.45	U	0.77	2.45	6.13
NMeFOSAA	2355-31-9	3.27	J	1.37	3.07	6.13
NEtFOSAA	2991-50-6	2.45	U	0.70	2.45	6.13
PFBS	375-73-5	350.25	D	4.42	12.27	61.35
PFHxS	355-46-4	4137.38	D	13.50	30.67	306.75
PFOS	1763-23-1	21060.99	D	82.82	306.75	1533.74
Surrogate Recoveries (%)						
13C5-PFHxA		102	D			
13C4-PFHpA		103	D			
13C8-PFOA		111	D			
13C9-PFNA		96	D			
13C6-PFDA		105				
13C7-PFUnA		147				
13C2-PFDoA		134				
13C2-PFTeDA		146				
d3-MeFOSAA		91	D			
d5-EtFOSAA		105	D			
13C3-PFBS		102	D			
13C3-PFHxS		104	D			
13C8-PFOS		90	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-MS09-SB02-0102				
Battelle ID		J8442-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		26.91				
Matrix		SB				
Sample Size		1.43				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	1843.14	D	23.08	69.93	349.65
PFHpA	375-85-9	641.48	D	6.15	13.99	69.93
PFOA	335-67-1	1125.70	D	34.97	69.93	349.65
PFNA	375-95-1	35.49		0.60	1.40	6.99
PFDA	335-76-2	2.18	J	0.38	1.40	6.99
PFUnA	2058-94-8	1.40	U	0.57	1.40	6.99
PFDoA	307-55-1	0.70	U	0.34	0.70	6.99
PFTrDA	72629-94-8	1.40	U	0.39	1.40	6.99
PFTeDA	376-06-7	2.80	U	0.88	2.80	6.99
NMeFOSAA	2355-31-9	3.50	U	1.57	3.50	6.99
NEtFOSAA	2991-50-6	2.80	U	0.80	2.80	6.99
PFBS	375-73-5	722.52	D	5.03	13.99	69.93
PFHxS	355-46-4	8517.97	D	76.92	174.83	1748.25
PFOS	1763-23-1	25041.58	D	94.41	349.65	1748.25

Surrogate Recoveries (%)

13C5-PFHxA	99	D
13C4-PFHpA	88	D
13C8-PFOA	100	D
13C9-PFNA	88	D
13C6-PFDA	103	
13C7-PFUnA	117	
13C2-PFDoA	111	
13C2-PFTeDA	110	
d3-MeFOSAA	109	D
d5-EtFOSAA	127	D
13C3-PFBS	119	D
13C3-PFHxS	106	D
13C8-PFOS	118	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-MS09-SB02-0506			
Battelle ID		J8443-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		24.42			
Matrix		SB			
Sample Size		1.56			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	301.34 D	2.12	6.41	32.05
PFHpA	375-85-9	66.29	0.56	1.28	6.41
PFOA	335-67-1	99.69	0.64	1.28	6.41
PFNA	375-95-1	1.10 J	0.55	1.28	6.41
PFDA	335-76-2	0.42 J	0.35	1.28	6.41
PFUnA	2058-94-8	1.28 U	0.53	1.28	6.41
PFDoA	307-55-1	0.64 U	0.31	0.64	6.41
PFTrDA	72629-94-8	1.28 U	0.36	1.28	6.41
PFTeDA	376-06-7	2.56 U	0.81	2.56	6.41
NMeFOSAA	2355-31-9	3.21 U	1.44	3.21	6.41
NEtFOSAA	2991-50-6	1.18 J	0.73	2.56	6.41
PFBS	375-73-5	103.23	0.46	1.28	6.41
PFHxS	355-46-4	587.52 D	7.05	16.03	160.26
PFOS	1763-23-1	7228.44 D	144.23	534.19	2670.94

Surrogate Recoveries (%)

13C5-PFHxA	110
13C4-PFHpA	108
13C8-PFOA	93
13C9-PFNA	52
13C6-PFDA	93
13C7-PFUnA	108
13C2-PFDoA	98
13C2-PFTeDA	106
d3-MeFOSAA	121 D
d5-EtFOSAA	123 D
13C3-PFBS	126 D
13C3-PFHxS	122 D
13C8-PFOS	109 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-MS09-SS03-000H				
Battelle ID		J8444-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		2.50				
Matrix		SS				
Sample Size		1.95				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	1253.05	D	11.28	34.19	170.94
PFHpA	375-85-9	257.25	D	2.26	5.13	25.64
PFOA	335-67-1	4992.08	D	56.98	113.96	569.80
PFNA	375-95-1	178.06		0.44	1.03	5.13
PFDA	335-76-2	14.53		0.28	1.03	5.13
PFUnA	2058-94-8	1.73	J	0.42	1.03	5.13
PFDoA	307-55-1	1.08	J	0.25	0.51	5.13
PFTrDA	72629-94-8	0.31	J	0.29	1.03	5.13
PFTeDA	376-06-7	2.05	U	0.65	2.05	5.13
NMeFOSAA	2355-31-9	4.14	J	1.15	2.56	5.13
NEtFOSAA	2991-50-6	0.97	J	0.58	2.05	5.13
PFBS	375-73-5	251.19	D	1.85	5.13	25.64
PFHxS	355-46-4	12981.91	D	250.71	569.80	5698.01
PFOS	1763-23-1	156714.58	D	3076.92	11396.01	56980.05
Surrogate Recoveries (%)						
13C5-PFHxA		95	D			
13C4-PFHpA		104	D			
13C8-PFOA		104	D			
13C9-PFNA		94	D			
13C6-PFDA		108				
13C7-PFUnA		137				
13C2-PFDoA		137				
13C2-PFTeDA		138				
d3-MeFOSAA		99	D			
d5-EtFOSAA		100	D			
13C3-PFBS		102	D			
13C3-PFHxS		112	D			
13C8-PFOS		105	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-MS09-SB03-0102				
Battelle ID		J8445-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		12.83				
Matrix		SB				
Sample Size		1.73				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	6920.12	D	47.69	144.51	722.54
PFHpA	375-85-9	1433.05	D	12.72	28.90	144.51
PFOA	335-67-1	7780.30	D	72.25	144.51	722.54
PFNA	375-95-1	33.59		0.50	1.16	5.78
PFDA	335-76-2	9.17		0.31	1.16	5.78
PFUnA	2058-94-8	1.01	J	0.47	1.16	5.78
PFDoA	307-55-1	0.97	J	0.28	0.58	5.78
PFTrDA	72629-94-8	1.16	U	0.32	1.16	5.78
PFTeDA	376-06-7	2.31	U	0.73	2.31	5.78
NMeFOSAA	2355-31-9	49.22		1.29	2.89	5.78
NEtFOSAA	2991-50-6	2.31	U	0.66	2.31	5.78
PFBS	375-73-5	2243.69	D	10.40	28.90	144.51
PFHxS	355-46-4	27553.49	D	63.58	144.51	1445.09
PFOS	1763-23-1	30191.96	D	780.35	2890.17	14450.87

Surrogate Recoveries (%)

13C5-PFHxA	100	D
13C4-PFHpA	92	D
13C8-PFOA	96	D
13C9-PFNA	85	D
13C6-PFDA	82	
13C7-PFUnA	103	
13C2-PFDoA	100	
13C2-PFTeDA	110	
d3-MeFOSAA	105	D
d5-EtFOSAA	112	D
13C3-PFBS	118	D
13C3-PFHxS	102	D
13C8-PFOS	98	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-MS09-SB03-0506				
Battelle ID		J8446-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		27.16				
Matrix		SB				
Sample Size		1.48				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	426.56	D	2.23	6.76	33.78
PFHpA	375-85-9	69.91		0.59	1.35	6.76
PFOA	335-67-1	262.24	D	3.38	6.76	33.78
PFNA	375-95-1	0.67	J	0.58	1.35	6.76
PFDA	335-76-2	1.35	U	0.36	1.35	6.76
PFUnA	2058-94-8	1.35	U	0.55	1.35	6.76
PFDoA	307-55-1	0.68	U	0.32	0.68	6.76
PFTrDA	72629-94-8	1.35	U	0.38	1.35	6.76
PFTeDA	376-06-7	2.70	U	0.85	2.70	6.76
NMeFOSAA	2355-31-9	3.38	U	1.51	3.38	6.76
NEtFOSAA	2991-50-6	2.70	U	0.77	2.70	6.76
PFBS	375-73-5	106.34		0.49	1.35	6.76
PFHxS	355-46-4	274.57	D	1.49	3.38	33.78
PFOS	1763-23-1	750.56	D	18.24	67.57	337.84

Surrogate Recoveries (%)

13C5-PFHxA	73	
13C4-PFHpA	77	
13C8-PFOA	77	
13C9-PFNA	65	
13C6-PFDA	95	
13C7-PFUnA	97	
13C2-PFDoA	92	
13C2-PFTeDA	94	
d3-MeFOSAA	87	D
d5-EtFOSAA	97	D
13C3-PFBS	106	D
13C3-PFHxS	94	D
13C8-PFOS	101	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-MS09-SS04-000H			
Battelle ID		J8447-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		1.41			
Matrix		SS			
Sample Size		2.01			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	3.39 J	0.33	1.00	4.98
PFHpA	375-85-9	0.52 J	0.44	1.00	4.98
PFOA	335-67-1	7.57	0.50	1.00	4.98
PFNA	375-95-1	1.03 J	0.43	1.00	4.98
PFDA	335-76-2	0.78 J	0.27	1.00	4.98
PFUnA	2058-94-8	1.26 J	0.41	1.00	4.98
PFDoA	307-55-1	0.98 J	0.24	0.50	4.98
PFTrDA	72629-94-8	1.00 U	0.28	1.00	4.98
PFTeDA	376-06-7	1.99 U	0.63	1.99	4.98
NMeFOSAA	2355-31-9	2.49 U	1.11	2.49	4.98
NEtFOSAA	2991-50-6	1.99 U	0.57	1.99	4.98
PFBS	375-73-5	1.88 J	0.36	1.00	4.98
PFHxS	355-46-4	8.18	0.22	0.50	4.98
PFOS	1763-23-1	89.60	0.27	1.00	4.98

Surrogate Recoveries (%)

13C5-PFHxA	105
13C4-PFHpA	99
13C8-PFOA	107
13C9-PFNA	90
13C6-PFDA	100
13C7-PFUnA	107
13C2-PFDoA	100
13C2-PFTeDA	105
d3-MeFOSAA	81
d5-EtFOSAA	100
13C3-PFBS	108
13C3-PFHxS	107
13C8-PFOS	101

BATTELLE
It can be done

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

Client ID		VC-MS09-SB04-0102				
Battelle ID		J8448-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		10.79				
Matrix		SB				
Sample Size		1.72				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	50.93		0.38	1.16	5.81
PFHpA	375-85-9	5.89		0.51	1.16	5.81
PFOA	335-67-1	14.70		0.58	1.16	5.81
PFNA	375-95-1	9.53		0.50	1.16	5.81
PFDA	335-76-2	1.36	J	0.31	1.16	5.81
PFUnA	2058-94-8	1.16	U	0.48	1.16	5.81
PFDoA	307-55-1	0.58	U	0.28	0.58	5.81
PFTrDA	72629-94-8	1.16	U	0.33	1.16	5.81
PFTeDA	376-06-7	2.33	U	0.73	2.33	5.81
NMeFOSAA	2355-31-9	2.91	U	1.30	2.91	5.81
NEtFOSAA	2991-50-6	2.33	U	0.66	2.33	5.81
PFBS	375-73-5	20.59		0.42	1.16	5.81
PFHxS	355-46-4	36.78		0.26	0.58	5.81
PFOS	1763-23-1	494.23	D	3.14	11.63	58.14

Surrogate Recoveries (%)

13C5-PFHxA	95	
13C4-PFHpA	101	
13C8-PFOA	105	
13C9-PFNA	76	
13C6-PFDA	104	
13C7-PFUnA	117	
13C2-PFDoA	111	
13C2-PFTeDA	104	
d3-MeFOSAA	81	D
d5-EtFOSAA	103	D
13C3-PFBS	94	D
13C3-PFHxS	101	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-MS09-SB04-0506			
Battelle ID		J8449-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		25.15			
Matrix		SB			
Sample Size		1.47			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	30.00	0.45	1.36	6.80
PFHpA	375-85-9	6.97	0.60	1.36	6.80
PFOA	335-67-1	124.66	0.68	1.36	6.80
PFNA	375-95-1	1.41 J	0.59	1.36	6.80
PFDA	335-76-2	1.36 U	0.37	1.36	6.80
PFUnA	2058-94-8	1.36 U	0.56	1.36	6.80
PFDoA	307-55-1	0.68 U	0.33	0.68	6.80
PFTrDA	72629-94-8	1.36 U	0.38	1.36	6.80
PFTeDA	376-06-7	2.72 U	0.86	2.72	6.80
NMeFOSAA	2355-31-9	3.40 U	1.52	3.40	6.80
NEtFOSAA	2991-50-6	2.72 U	0.78	2.72	6.80
PFBS	375-73-5	8.72	0.49	1.36	6.80
PFHxS	355-46-4	94.20	0.30	0.68	6.80
PFOS	1763-23-1	234.84 D	0.73	2.72	13.61

Surrogate Recoveries (%)

13C5-PFHxA	104
13C4-PFHpA	105
13C8-PFOA	98
13C9-PFNA	90
13C6-PFDA	104
13C7-PFUnA	109
13C2-PFDoA	97
13C2-PFTeDA	94
d3-MeFOSAA	101 D
d5-EtFOSAA	124 D
13C3-PFBS	108 D
13C3-PFHxS	111 D
13C8-PFOS	99 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-MS09-SS05-000H				
Battelle ID		J8450-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		7.68				
Matrix		SS				
Sample Size		1.81				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	9.43		0.36	1.10	5.52
PFHpA	375-85-9	3.87	J	0.49	1.10	5.52
PFOA	335-67-1	9.99		0.55	1.10	5.52
PFNA	375-95-1	17.82		0.48	1.10	5.52
PFDA	335-76-2	4.79	J	0.30	1.10	5.52
PFUnA	2058-94-8	10.22		0.45	1.10	5.52
PFDoA	307-55-1	2.41	J	0.27	0.55	5.52
PFTrDA	72629-94-8	7.05		0.31	1.10	5.52
PFTeDA	376-06-7	2.21	U	0.70	2.21	5.52
NMeFOSAA	2355-31-9	2.76	U	1.24	2.76	5.52
NEtFOSAA	2991-50-6	2.21	U	0.63	2.21	5.52
PFBS	375-73-5	0.63	J	0.40	1.10	5.52
PFHxS	355-46-4	32.94		0.24	0.55	5.52
PFOS	1763-23-1	2224.28	D	82.87	306.94	1534.68

Surrogate Recoveries (%)

13C5-PFHxA	114	
13C4-PFHpA	115	
13C8-PFOA	122	
13C9-PFNA	68	
13C6-PFDA	117	
13C7-PFUnA	132	
13C2-PFDoA	121	
13C2-PFTeDA	115	
d3-MeFOSAA	123	D
d5-EtFOSAA	127	D
13C3-PFBS	123	D
13C3-PFHxS	125	D
13C8-PFOS	123	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-MS09-SB05-0102				
Battelle ID		J8451-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		10.29				
Matrix		SB				
Sample Size		1.81				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	8.09		0.36	1.10	5.52
PFHpA	375-85-9	4.57	J	0.49	1.10	5.52
PFOA	335-67-1	6.23		0.55	1.10	5.52
PFNA	375-95-1	17.84		0.48	1.10	5.52
PFDA	335-76-2	3.31	J	0.30	1.10	5.52
PFUnA	2058-94-8	13.45		0.45	1.10	5.52
PFDoA	307-55-1	0.98	J	0.27	0.55	5.52
PFTrDA	72629-94-8	4.98	J	0.31	1.10	5.52
PFTeDA	376-06-7	2.21	U	0.70	2.21	5.52
NMeFOSAA	2355-31-9	2.76	U	1.24	2.76	5.52
NEtFOSAA	2991-50-6	2.21	U	0.63	2.21	5.52
PFBS	375-73-5	0.46	J	0.40	1.10	5.52
PFHxS	355-46-4	29.28		0.24	0.55	5.52
PFOS	1763-23-1	1552.75	D	7.46	27.62	138.12

Surrogate Recoveries (%)

13C5-PFHxA	100	
13C4-PFHpA	99	
13C8-PFOA	115	
13C9-PFNA	71	
13C6-PFDA	103	
13C7-PFUnA	117	
13C2-PFDoA	109	
13C2-PFTeDA	109	
d3-MeFOSAA	110	D
d5-EtFOSAA	126	D
13C3-PFBS	110	D
13C3-PFHxS	125	D
13C8-PFOS	121	D

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It can be done

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

Client ID		VC-MS09-SB05-0506			
Battelle ID		J8452-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		14.94			
Matrix		SB			
Sample Size		1.65			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	25.94	0.40	1.21	6.06
PFHpA	375-85-9	10.32	0.53	1.21	6.06
PFOA	335-67-1	19.76	0.61	1.21	6.06
PFNA	375-95-1	11.57	0.52	1.21	6.06
PFDA	335-76-2	1.21 U	0.33	1.21	6.06
PFUnA	2058-94-8	1.21 U	0.50	1.21	6.06
PFDoA	307-55-1	0.61 U	0.29	0.61	6.06
PFTrDA	72629-94-8	1.21 U	0.34	1.21	6.06
PFTeDA	376-06-7	2.42 U	0.76	2.42	6.06
NMeFOSAA	2355-31-9	3.03 U	1.36	3.03	6.06
NEtFOSAA	2991-50-6	2.42 U	0.69	2.42	6.06
PFBS	375-73-5	2.75 J	0.44	1.21	6.06
PFHxS	355-46-4	102.47	0.27	0.61	6.06
PFOS	1763-23-1	417.41 D	1.64	6.06	30.30

Surrogate Recoveries (%)

13C5-PFHxA	100
13C4-PFHpA	102
13C8-PFOA	100
13C9-PFNA	89
13C6-PFDA	106
13C7-PFUnA	106
13C2-PFDoA	96
13C2-PFTeDA	96
d3-MeFOSAA	110
d5-EtFOSAA	119
13C3-PFBS	128
13C3-PFHxS	121
13C8-PFOS	107

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		Solid			
Sample Size		2.00			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	1.00 U	0.33	1.00	5.00
PFHpA	375-85-9	1.00 U	0.44	1.00	5.00
PFOA	335-67-1	1.00 U	0.50	1.00	5.00
PFNA	375-95-1	1.00 U	0.43	1.00	5.00
PFDA	335-76-2	1.00 U	0.27	1.00	5.00
PFUnA	2058-94-8	1.00 U	0.41	1.00	5.00
PFDoA	307-55-1	0.50 U	0.24	0.50	5.00
PFTrDA	72629-94-8	1.00 U	0.28	1.00	5.00
PFTeDA	376-06-7	2.00 U	0.63	2.00	5.00
NMeFOSAA	2355-31-9	2.50 U	1.12	2.50	5.00
NEtFOSAA	2991-50-6	2.00 U	0.57	2.00	5.00
PFBS	375-73-5	1.00 U	0.36	1.00	5.00
PFHxS	355-46-4	0.50 U	0.22	0.50	5.00
PFOS	1763-23-1	1.00 U	0.27	1.00	5.00

Surrogate Recoveries (%)

13C5-PFHxA	98
13C4-PFHpA	98
13C8-PFOA	101
13C9-PFNA	100
13C6-PFDA	103
13C7-PFUnA	102
13C2-PFDoA	98
13C2-PFTeDA	93
d3-MeFOSAA	100
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_10/19/2018			
Sample Type		IB			
Collection Date		NA			
Extraction Date		NA			
Analysis Date		10/19/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		NA			
Matrix		Solid			
Sample Size		2.00			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	1.00 U	0.33	1.00	5.00
PFHpA	375-85-9	1.00 U	0.44	1.00	5.00
PFOA	335-67-1	1.00 U	0.50	1.00	5.00
PFNA	375-95-1	1.00 U	0.43	1.00	5.00
PFDA	335-76-2	1.00 U	0.27	1.00	5.00
PFUnA	2058-94-8	1.00 U	0.41	1.00	5.00
PFDoA	307-55-1	0.50 U	0.24	0.50	5.00
PFTrDA	72629-94-8	1.00 U	0.28	1.00	5.00
PFTeDA	376-06-7	2.00 U	0.63	2.00	5.00
NMeFOSAA	2355-31-9	2.50 U	1.12	2.50	5.00
NEtFOSAA	2991-50-6	2.00 U	0.57	2.00	5.00
PFBS	375-73-5	1.00 U	0.36	1.00	5.00
PFHxS	355-46-4	0.50 U	0.22	0.50	5.00
PFOS	1763-23-1	1.00 U	0.27	1.00	5.00

Surrogate Recoveries (%)

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

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

Client ID		180507-02: Ottawa Sand				
Battelle ID		CR902PB-FS				
Sample Type		PB				
Collection Date		10/08/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		0.00				
Matrix		SEDIMENT				
Sample Size		2.02				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	0.99	U	0.33	0.99	4.95
PFHpA	375-85-9	0.99	U	0.44	0.99	4.95
PFOA	335-67-1	0.99	U	0.50	0.99	4.95
PFNA	375-95-1	0.99	U	0.43	0.99	4.95
PFDA	335-76-2	0.99	U	0.27	0.99	4.95
PFUnA	2058-94-8	0.99	U	0.41	0.99	4.95
PFDoA	307-55-1	0.50	U	0.24	0.50	4.95
PFTrDA	72629-94-8	0.99	U	0.28	0.99	4.95
PFTeDA	376-06-7	1.98	U	0.62	1.98	4.95
NMeFOSAA	2355-31-9	2.48	U	1.11	2.48	4.95
NEtFOSAA	2991-50-6	1.98	U	0.56	1.98	4.95
PFBS	375-73-5	0.99	U	0.36	0.99	4.95
PFHxS	355-46-4	0.50	U	0.22	0.50	4.95
PFOS	1763-23-1	0.99	U	0.27	0.99	4.95

Surrogate Recoveries (%)

13C5-PFHxA	104
13C4-PFHpA	103
13C8-PFOA	108
13C9-PFNA	98
13C6-PFDA	107
13C7-PFUnA	109
13C2-PFDoA	96
13C2-PFTeDA	103
d3-MeFOSAA	108
d5-EtFOSAA	130
13C3-PFBS	112
13C3-PFHxS	114
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		180507-02: Ottawa Sand					
Battelle ID		CR903LCS-FS					
Sample Type		LCS					
Collection Date		10/08/2018					
Extraction Date		10/08/2018					
Analysis Date		10/18/2018					
Analytical Instrument		Sciex 5500 LC/MS/MS					
% Moisture		0.00					
Matrix		SEDIMENT					
Sample Size		2.04					
Size Unit-Basis		g				Control Limits	
Units		ng/g_Dry	Target	Recovery	Qual	Lower	Upper
PFHxA	307-24-4	32.23	29.71	108		45	135
PFHpA	375-85-9	31.91	29.41	108		60	128
PFOA	335-67-1	34.72	29.41	118		56	136
PFNA	375-95-1	35.88	29.41	122		54	130
PFDA	335-76-2	31.08	29.41	106		55	141
PFUnA	2058-94-8	31.96	29.41	109		57	137
PFDoA	307-55-1	29.79	29.41	101		62	134
PFTrDA	72629-94-8	31.65	29.41	108		51	127
PFTeDA	376-06-7	32.30	29.41	110		34	162
NMeFOSAA	2355-31-9	33.92	29.41	115		52	146
NEtFOSAA	2991-50-6	36.56	29.41	124		54	124
PFBS	375-73-5	29.31	29.71	99		57	145
PFHxS	355-46-4	30.58	29.71	103		52	132
PFOS	1763-23-1	34.99	29.41	119		50	130

Surrogate Recoveries (%)

13C5-PFHxA	109
13C4-PFHpA	106
13C8-PFOA	103
13C9-PFNA	95
13C6-PFDA	103
13C7-PFUnA	111
13C2-PFDoA	112
13C2-PFTeDA	110
d3-MeFOSAA	116
d5-EtFOSAA	100
13C3-PFBS	133
13C3-PFHxS	119
13C8-PFOS	98

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

Client ID		VC-MS09-SB03-0506	VC-MS09-SB04-0102-MS					
Battelle ID		J8446-FS	J8453MS-FS					
Sample Type		SA	MS					
Collection Date		09/26/2018	09/26/2018					
Extraction Date		10/08/2018	10/08/2018					
Analysis Date		10/18/2018	10/18/2018					
Analytical Instrument		Sciex 5500 LC/MS/MS	Sciex 5500 LC/MS/MS					
% Moisture		27.16	11.53					
Matrix		SB	SB					
Sample Size		1.48	1.77					
Size Unit-Basis		g	g				Control Limits	
Units		ng/g_Dry	ng/g_Dry	Target	Recovery	Qual	Lower	Upper
PFHxA	307-24-4	426.56 D	138.40 D	91.30	0	N	45	135
PFHpA	375-85-9	69.91	102.76	90.40	36	N	60	128
PFOA	335-67-1	262.24 D	129.60	90.40	0	N	56	136
PFNA	375-95-1	0.67 J	105.83	90.40	116		54	130
PFDA	335-76-2	1.35 U	95.07	90.40	105		55	141
PFUnA	2058-94-8	1.35 U	91.91	90.40	102		57	137
PFDoA	307-55-1	0.68 U	94.33	90.40	104		62	134
PFTrDA	72629-94-8	1.35 U	97.32	90.40	108		51	127
PFTeDA	376-06-7	2.70 U	91.47	90.40	101		34	162
NMeFOSAA	2355-31-9	3.38 U	103.38	90.40	114		52	146
NEtFOSAA	2991-50-6	2.70 U	112.21	90.40	124		54	124
PFBS	375-73-5	106.34	109.25 D	91.30	3	N	57	145
PFHxS	355-46-4	274.57 D	135.76 D	91.30	0	N	52	132
PFOS	1763-23-1	750.56 D	767.81 D	90.40	19	N	50	130
Surrogate Recoveries (%)								
13C5-PFHxA		73	103					
13C4-PFHpA		77	104					
13C8-PFOA		77	89					
13C9-PFNA		65	83					
13C6-PFDA		95	85					
13C7-PFUnA		97	100					
13C2-PFDoA		92	97					
13C2-PFTeDA		94	99					
d3-MeFOSAA		87 D	94 D					
d5-EtFOSAA		97 D	106 D					
13C3-PFBS		106 D	112 D					
13C3-PFHxS		94 D	113 D					
13C8-PFOS		101 D	112 D					

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

Client ID		VC-MS09-SB04-0102-MSD								
Battelle ID		J8454MSD-FS								
Sample Type		MSD								
Collection Date		09/26/2018								
Extraction Date		10/08/2018								
Analysis Date		10/18/2018								
Analytical Instrument		Sciex 5500 LC/MS/MS								
% Moisture		10.19								
Matrix		SB								
Sample Size		1.72								
Size Unit-Basis		g				Control Limits				RPD
Units		ng/g_Dry	Target	Recovery	Qual	Lower	Upper	RPD	Qual	Limit
PFHxA	307-24-4	131.25 D	93.95	0	N	45	135	0.0		≤ 30
PFHpA	375-85-9	106.67	93.02	40	N	60	128	10.5		≤ 30
PFOA	335-67-1	127.95	93.02	0	N	56	136	0.0		≤ 30
PFNA	375-95-1	106.68	93.02	114		54	130	1.7		≤ 30
PFDA	335-76-2	93.44	93.02	100		55	141	4.9		≤ 30
PFUnA	2058-94-8	99.11	93.02	107		57	137	4.8		≤ 30
PFDoA	307-55-1	90.97	93.02	98		62	134	5.9		≤ 30
PFTrDA	72629-94-8	95.35	93.02	103		51	127	4.7		≤ 30
PFTeDA	376-06-7	91.07	93.02	98		34	162	3.0		≤ 30
NMeFOSAA	2355-31-9	91.94	93.02	99		52	146	14.1		≤ 30
NEtFOSAA	2991-50-6	103.20	93.02	111		54	124	11.1		≤ 30
PFBS	375-73-5	105.96 D	93.95	0	N	57	145	200.0	N	≤ 30
PFHxS	355-46-4	135.39 D	93.95	0	N	52	132	0.0		≤ 30
PFOS	1763-23-1	652.70 D	93.02	0	N	50	130	200.0	N	≤ 30

Surrogate Recoveries (%)

13C5-PFHxA	86
13C4-PFHpA	85
13C8-PFOA	80
13C9-PFNA	71
13C6-PFDA	87
13C7-PFUnA	98
13C2-PFDoA	103
13C2-PFTeDA	105
d3-MeFOSAA	100 D
d5-EtFOSAA	112 D
13C3-PFBS	109 D
13C3-PFHxS	96 D
13C8-PFOS	113 D

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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 18-0589

Project:	CTO-4164 Naval Base Ventura County, California
Parameters:	PFAS
Laboratory:	Battelle, Norwell, MA
Matrix:	SS, SB
Data Set:	DP-18-0295
Analytical SOP:	5-369
Method Reference:	PFAS to QSM 5.1 Table B-15

Sample Custody		
Collection Date	Receipt Date	Temp (°C)
9/26-27/2018	9/28/2018	0.7 and 0.4
Corrective Actions	Minor discrepancies between the COC and the sample containers were corrected by the Project Chemist, email clarifying IDs is included with the sample custody records.	
Sample Storage	The samples were stored refrigerated until extraction.	
Related samples	NA	

	METHOD SUMMARIES
Sample Preparation	Solid samples were aliquoted into extraction tubes and spiked with surrogates prior to the addition of solvent. The sediment was serially extracted on the Geno/Grinder with 0.4% NH_3 in methanol. 1 mL of extract was refined using ENVI-carb SPE cartridges. Extracts were concentrated to dryness under nitrogen with a water bath set between 35 °C and 45 °C, reconstituted with 80:20 methanol/water (V/V) and fortified with internal standard. Extracts were transferred for LC-MS/MS analysis.
Prep comments	All samples were pre-screened prior to extraction to check potential levels of PFAS in the samples.
Analysis	PFAS were measured by liquid chromatography tandem mass spectrometry (LC-MS/MS) in the multiple reaction monitoring (MRM). An initial calibration consisting of representative target analytes, labelled analogs, and internal standards was analyzed prior to analysis to demonstrate the linear range of analysis. Calibration verification was performed at the beginning and end of 10 injections and at the end of each sequence. Target PFAS were quantified using the isotope dilution method. Samples are reported in ng/g concentrations.
Analysis Comments	Samples analyzed on Sciex 5500 LC-MS/MS. The ion ratio for the following samples were above the 50% RPD criteria: NMeFOSAA in sample J8445-FS(3), PFTrDA in sample J8450-FS(3) and PFUnA in sample J8451-FS(3). Where detected in samples, PFOS is a mixture of linear and branched isomers.

Holding Times	Extraction Date(s)	Analysis Date(s)
	10/8/2018	10/17-19/2018

QA/QC Summary
Batch 18-0589

Procedural Blank (PB)	A PB was prepared with this analytical batch to ensure the sample extraction and analysis methods are free of contamination.
≤ ½ the LOQ Samples >10x PB	No exceedances noted.
	No comments.

Laboratory Control Spike (LCS)	A LCS was prepared with this analytical batch. The percent recoveries of target analytes were calculated to measure accuracy.
Laboratory derived control limits for recovery	No exceedances noted.
	No comments.

Matrix Spike and Matrix Spike Duplicate (MS/MSD)	A MS/MSD was prepared with this analytical batch. The percent recoveries of target analytes were calculated to measure accuracy.
Laboratory derived control limits for recovery and <30% RPD	12 exceedences for recovery and 2 exceedances for RPD.
	In all cases, the concentration of PFAS compounds detected in the background sample exceeded the amount fortified into the MS and MSD samples.

Extracted Internal Standard Analytes	Labelled analog compounds were added prior to extraction. The recoveries are calculated to measure extraction efficiency.
50-150% of true value	No exceedances noted.
	No comments.

Internal Standard Analytes	Labelled analog compounds were added prior to analysis.
+/- 50% of the area of the L5 calibration point.	No exceedances noted.
	There are several 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.

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

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

QA/QC Summary
Batch 18-0589

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: 18-0589
Data Set: DP-18-0295
Test Code: Master_369

QC Parameter:	Exceed:	Justification:
Procedural Blank	0	None
PB Measurement Quality Objective	0	None
Laboratory Control Sample	0	None
Matrix Spike / Matrix Spike Duplicate Recovery	12	For all 12 exceedences, the background sample concentration of native analytes was much higher than the amount spiked into the MS and MSD. Analytes that did not have high concentrations in the backround sample had
Matrix Spike / Matrix Spike Duplicate Precision	2	There were two exceedences for MS/MSD precision. Both instances were for analytes whose concentration in the background sample was much higher than the amount spiked into the MS and MSD. DMS 10/25/2018
Extracted Internal Standard Analytes (Surrogates)	0	None
Instrument Calibration	0	None
Instrument Blank	0	None
Independent Calibration Check	0	None
Continuing Calibration Verification	0	None

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BATTELLE - NORWELL OPERATIONS
MISCELLANEOUS DOCUMENTATION FORM

Project Title:	CTO-4164 Naval Base Ventura County,	**Data Set Number:**	DP-18-0295
Project Number:	100110125-01	**Prep Batch Number:**	18-0589
Entered By:	Denise Schumitz	**Entered On:**	10/25/2018
Test Code (Matrix Type):	Master_369(S)		

Samples that were manually integrated are noted on the quant reports with the comment (TRUE). DMS 10/25/2018

The ion ratio for the following samples were above the 50% RPD criteria:

-NMeFOSAA in sample J8445-FS(3)

-PFTrDA in sample J8450-FS(3)

-PFUnA in sample J8451-FS(3)

DMS 10/26/2018

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.
DMS 10/25/2018

There are eighty one instances of extracted internal standards (surrogates) that would fall 50%-150% recovery criteria if reported from the non-diluted extract. This is due to the higher levels of native PFOA and PFOS found in the samples interfering with the 13C2-PFOA and 13C4-PFOS internal standards used to quantify the surrogates. In these cases, the surrogates are reported from dilutions, however, the native compounds are reported from the non-diluted extracts as the interferences are with the internal standards and not the surrogates used to quantify the native compounds.
DMS 10/25/2018

Task Leader Approval:

SupervisorApproval:

PM Approval:



Digitally signed by Jonathan Thorn
Date: 2018.10.25 13:11:58 -04'00'

Example Calculation for PFAS

Calculation of final concentration from area:

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

Where:

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

Sample ID:	J8441-FS(3)
Client Sample ID:	VC-MS09-SS02-000H
Sample Size:	1.63
Units:	g
Dilution Factor:	10.000
PIV (L):	0.001
Target Analyte:	PFNA
MRM Transition:	463.0 / 419.0
Data file:	Data18-0590_18-01588_18-0589.wiff
Result table:	18-0590_18-0588_18-0589_BASE
Area:	648,682.76
IS Name:	13C9-PFNA
IS Area:	30,250.68
IS Amount (ng/L):	250
y-intercept:	0.10849
slope:	0.82839

$$\text{Concentration} = \frac{[(648682.76/30250.68) - 0.10849]}{0.82839} * 250 * 0.001 * 10 / 1.63$$

ng/g = 39.50

*Final concentration may vary based on rounding.

BATTELLE
It can be done

Project Client: CH2M
Project Name: CTO-4164 Naval Base Ventura County, California
Project No.: 100110125-01
Preparation Batch: 18-0589
Data Set: DP-18-0295

		CR902PB-FS (180507-02: Ottawa Sand)	CR903LCS-FS (180507-02: Ottawa Sand)	J8453MS-FS (VC-MS09-SB04-0102-MS)	J8454MSD-FS (VC-MS09-SB04-0102-MSD)	J8438-FS (VC-MS09-SS01-000H)	J8439-FS (VC-MS09-SB01-0102)	J8440-FS (VC-MS09-SB01-0506)	J8441-FS (VC-MS09-SS02-000H)
PFHxA	307-24-4	-	L	L	L	L	L	L	L
PFHpA	375-85-9	-	L	L	L	L	L	L	L
PFOA	335-67-1	-	L	L	L	L	L	L	L
PFNA	375-95-1	-	L	L	L	L	L	L	L
PFDA	335-76-2	-	L	L	L	L	L	-	L
PFUnA	2058-94-8	-	L	L	L	L	-	-	L
PFDoA	307-55-1	-	L	L	L	-	-	-	L
PFTrDA	72629-94-8	-	L	L	L	-	-	-	L
PFTeDA	376-06-7	-	L	L	L	-	-	-	-
NMeFOSAA	2355-31-9	-	L	L	L	-	-	-	L
NEtFOSAA	2991-50-6	-	L	L	L	-	-	-	-
PFBS	375-73-5	-	L	L	L	L	L	L	L
PFHxS	355-46-4	-	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br
PFOS	1763-23-1	-	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br

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

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

	J8442-FS (VC-MS09-SB02-0102)	J8443-FS (VC-MS09-SB02-0506)	J8444-FS (VC-MS09-SS03-000H)	J8445-FS (VC-MS09-SB03-0102)	J8446-FS (VC-MS09-SB03-0506)	J8447-FS (VC-MS09-SS04-000H)	J8448-FS (VC-MS09-SB04-0102)	J8449-FS (VC-MS09-SB04-0506)
PFHxA	L	L	L	L	L	L	L	L
PFHpA	L	L	L	L	L	L	L	L
PFOA	L	L	L	L	L	L	L	L
PFNA	L	L	L	L	L	L	L	L
PFDA	L	L	L	L	-	L	L	-
PFUnA	-	-	L	L	-	L	-	-
PFDoA	-	-	L	L	-	L	-	-
PFTrDA	-	-	L	-	-	-	-	-
PFTeDA	-	-	-	-	-	-	-	-
NMeFOSAA	-	-	L	L	-	-	-	-
NEtFOSAA	-	-	L	-	-	-	-	-
PFBS	L	L	L	L	L	L	L	L
PFHxS	L/Br	L/Br	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/Br	L/Br

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

BATTELLE
It can

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

	J8450-FS (VC-MS09-SS05-000H)	J8451-FS (VC-MS09-SB05-0102)	J8452-FS (VC-MS09-SB05-0506)
PFHxA	L	L	L
PFHpA	L	L	L
PFOA	L	L	L
PFNA	L	L	L
PFDA	L	L	-
PFUnA	L	L	-
PFDoA	L	L	-
PFTrDA	L	L	-
PFTeDA	-	-	-
NMeFOSAA	-	-	-
NEtFOSAA	-	-	-
PFBS	L	L	L
PFHxS	L/Br	L/Br	L/Br
PFOS	L/Br	L/Br	L/Br

"L" :Linear
"Br": branched
"L/Br": Linear/Br
"-": 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	Instrument Blank	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	
KB76 CCV	CCV	10/18/18 11:22	13C2-PFOA	50,610.87	40,184.56	120,553.68	
CR902PB-FS(3)	Procedural Blank	10/18/18 11:43	13C2-PFOA	88,790.58	40,184.56	120,553.68	
CR903LCS-FS(3)	Laboratory Control Sample	10/18/18 11:54	13C2-PFOA	80,577.71	40,184.56	120,553.68	
J8438-FS(3)	VC-MS09-SS01-000H	10/18/18 12:05	13C2-PFOA	87,068.55	40,184.56	120,553.68	
J8438-FS-D(5)	VC-MS09-SS01-000H	10/18/18 12:16	13C2-PFOA	94,993.16	40,184.56	120,553.68	
J8439-FS(3)	VC-MS09-SB01-0102	10/18/18 12:27	13C2-PFOA	86,600.82	40,184.56	120,553.68	
J8439-FS-D(5)	VC-MS09-SB01-0102	10/18/18 12:38	13C2-PFOA	95,719.09	40,184.56	120,553.68	
J8440-FS(3)	VC-MS09-SB01-0506	10/18/18 12:49	13C2-PFOA	77,337.02	40,184.56	120,553.68	
J8440-FS-D(5)	VC-MS09-SB01-0506	10/18/18 12:59	13C2-PFOA	89,772.92	40,184.56	120,553.68	
KB77 CCV	CCV	10/18/18 13:10	13C2-PFOA	83,815.50	40,184.56	120,553.68	
J8441-FS(3)	VC-MS09-SS02-000H	10/18/18 13:32	13C2-PFOA	83,286.12	40,184.56	120,553.68	
J8441-FS-D(5)	VC-MS09-SS02-000H	10/18/18 13:43	13C2-PFOA	90,050.81	40,184.56	120,553.68	
J8441-FS-D(7)	VC-MS09-SS02-000H	10/18/18 13:54	13C2-PFOA	102,982.92	40,184.56	120,553.68	
J8441-FS-D(9)	VC-MS09-SS02-000H	10/18/18 14:05	13C2-PFOA	86,254.85	40,184.56	120,553.68	
J8442-FS(3)	VC-MS09-SB02-0102	10/18/18 14:48	13C2-PFOA	93,300.23	40,184.56	120,553.68	
J8442-FS-D(5)	VC-MS09-SB02-0102	10/18/18 14:59	13C2-PFOA	91,099.06	40,184.56	120,553.68	
J8442-FS-D(7)	VC-MS09-SB02-0102	10/18/18 15:10	13C2-PFOA	88,745.84	40,184.56	120,553.68	
J8442-FS-D(9)	VC-MS09-SB02-0102	10/18/18 15:21	13C2-PFOA	90,818.16	40,184.56	120,553.68	
KB76 CCV	CCV	10/18/18 15:32	13C2-PFOA	78,548.39	40,184.56	120,553.68	
J8443-FS(3)	VC-MS09-SB02-0506	10/18/18 15:54	13C2-PFOA	69,898.66	40,184.56	120,553.68	
J8443-FS-D(5)	VC-MS09-SB02-0506	10/18/18 16:04	13C2-PFOA	94,283.10	40,184.56	120,553.68	
J8443-FS-D(7)	VC-MS09-SB02-0506	10/18/18 16:15	13C2-PFOA	83,824.20	40,184.56	120,553.68	
J8444-FS-D(7)	VC-MS09-SS03-000H	10/18/18 16:26	13C2-PFOA	89,884.36	40,184.56	120,553.68	
~~J8444-FS-D(9)~~	~~VC-MS09-SS03-000H~~	~~10/18/18 16:37~~	~~13C2-PFOA~~	~~81,256.38~~	~~40,184.56~~	~~120,553.68~~	
J8444-FS-D(11)	VC-MS09-SS03-000H	10/18/18 16:48	13C2-PFOA	86,253.41	40,184.56	120,553.68	
J8444-FS-D(13)	VC-MS09-SS03-000H	10/18/18 16:59	13C2-PFOA	81,022.41	40,184.56	120,553.68	
J8444-FS-D(15)	VC-MS09-SS03-000H	10/18/18 17:10	13C2-PFOA	85,609.65	40,184.56	120,553.68	
KB77 CCV	CCV	10/18/18 17:20	13C2-PFOA	80,243.20	40,184.56	120,553.68	
~~J8445-FS(3)~~	~~VC-MS09-SB03-0102~~	~~10/18/18 17:42~~	~~13C2-PFOA~~	~~245,202.63~~	~~40,184.56~~	~~120,553.68~~	~~N~~
J8445-FS-D(5)	VC-MS09-SB03-0102	10/18/18 17:53	13C2-PFOA	92,925.22	40,184.56	120,553.68	
J8445-FS-D(7)	VC-MS09-SB03-0102	10/18/18 18:04	13C2-PFOA	96,057.40	40,184.56	120,553.68	
J8445-FS-D(9)	VC-MS09-SB03-0102	10/18/18 18:15	13C2-PFOA	87,716.47	40,184.56	120,553.68	
J8446-FS(3)	VC-MS09-SB03-0506	10/18/18 18:26	13C2-PFOA	84,423.70	40,184.56	120,553.68	
J8446-FS-D(5)	VC-MS09-SB03-0506	10/18/18 18:37	13C2-PFOA	86,081.16	40,184.56	120,553.68	
J8447-FS(3)	VC-MS09-SS04-000H	10/18/18 18:47	13C2-PFOA	82,762.04	40,184.56	120,553.68	
J8448-FS(3)	VC-MS09-SB04-0102	10/18/18 18:58	13C2-PFOA	95,711.30	40,184.56	120,553.68	
J8448-FS-D(5)	VC-MS09-SB04-0102	10/18/18 19:09	13C2-PFOA	86,693.78	40,184.56	120,553.68	
KB76 CCV	CCV	10/18/18 19:20	13C2-PFOA	92,560.39	40,184.56	120,553.68	
J8449-FS(3)	VC-MS09-SB04-0506	10/18/18 19:42	13C2-PFOA	80,583.71	40,184.56	120,553.68	
J8449-FS-D(5)	VC-MS09-SB04-0506	10/18/18 19:53	13C2-PFOA	74,798.95	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
J8450-FS(3)	VC-MS09-SS05-000H	10/18/18 20:03	13C2-PFOA	80,057.67	40,184.56	120,553.68	
J8450-FS-D(5)	VC-MS09-SS05-000H	10/18/18 20:14	13C2-PFOA	98,501.09	40,184.56	120,553.68	
J8451-FS(3)	VC-MS09-SB05-0102	10/18/18 20:25	13C2-PFOA	74,557.81	40,184.56	120,553.68	
J8451-FS-D(5)	VC-MS09-SB05-0102	10/18/18 20:36	13C2-PFOA	86,981.64	40,184.56	120,553.68	
J5452-FS(3)	VC-MS09-SB05-0506	10/18/18 20:47	13C2-PFOA	82,783.71	40,184.56	120,553.68	
J8452-FS-D(5)	VC-MS09-SB05-0506	10/18/18 20:58	13C2-PFOA	85,744.59	40,184.56	120,553.68	
KB77 CCV	CCV	10/18/18 21:09	13C2-PFOA	89,011.06	40,184.56	120,553.68	
J8453MS-FS(3)	VC-MS09-SB04-0102-MS	10/18/18 21:30	13C2-PFOA	71,096.11	40,184.56	120,553.68	
J8453MS-FS-D(5)	VC-MS09-SB04-0102-MS	10/18/18 21:41	13C2-PFOA	81,540.18	40,184.56	120,553.68	
J8454MSD-FS(3)	VC-MS09-SB04-0102-MSD	10/18/18 21:52	13C2-PFOA	81,064.13	40,184.56	120,553.68	
J8454MSD-FS-D(5)	VC-MS09-SB04-0102-MSD	10/18/18 22:03	13C2-PFOA	82,987.47	40,184.56	120,553.68	
KB76 CCV	CCV	10/18/18 22:14	13C2-PFOA	87,920.60	40,184.56	120,553.68	
~~J8444-FS(5)~~	~~VC-MS09-SS03-000H~~	~~10/18/18 22:35~~	~~13C2-PFOA~~	~~154,780.82~~	~~40,184.56~~	~~120,553.68~~	~~N~~
KB76 CCV	CCV	10/19/18 1:29	13C2-PFOA	75,749.56	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-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	Instrument Blank	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	
KB76 CCV	CCV	10/18/18 11:22	13C2-PFDA	65,473.33	45,064.85	135,194.55	
CR902PB-FS(3)	Procedural Blank	10/18/18 11:43	13C2-PFDA	108,926.71	45,064.85	135,194.55	
CR903LCS-FS(3)	Laboratory Control Sample	10/18/18 11:54	13C2-PFDA	98,803.95	45,064.85	135,194.55	
J8438-FS(3)	VC-MS09-SS01-000H	10/18/18 12:05	13C2-PFDA	105,056.15	45,064.85	135,194.55	
J8438-FS-D(5)	VC-MS09-SS01-000H	10/18/18 12:16	13C2-PFDA	107,003.45	45,064.85	135,194.55	
J8439-FS(3)	VC-MS09-SB01-0102	10/18/18 12:27	13C2-PFDA	104,322.07	45,064.85	135,194.55	
J8439-FS-D(5)	VC-MS09-SB01-0102	10/18/18 12:38	13C2-PFDA	111,049.20	45,064.85	135,194.55	
J8440-FS(3)	VC-MS09-SB01-0506	10/18/18 12:49	13C2-PFDA	94,552.26	45,064.85	135,194.55	
J8440-FS-D(5)	VC-MS09-SB01-0506	10/18/18 12:59	13C2-PFDA	106,618.40	45,064.85	135,194.55	
KB77 CCV	CCV	10/18/18 13:10	13C2-PFDA	102,156.68	45,064.85	135,194.55	
J8441-FS(3)	VC-MS09-SS02-000H	10/18/18 13:32	13C2-PFDA	82,313.44	45,064.85	135,194.55	
J8441-FS-D(5)	VC-MS09-SS02-000H	10/18/18 13:43	13C2-PFDA	110,486.67	45,064.85	135,194.55	
J8441-FS-D(7)	VC-MS09-SS02-000H	10/18/18 13:54	13C2-PFDA	113,406.85	45,064.85	135,194.55	
J8441-FS-D(9)	VC-MS09-SS02-000H	10/18/18 14:05	13C2-PFDA	104,892.17	45,064.85	135,194.55	
J8442-FS(3)	VC-MS09-SB02-0102	10/18/18 14:48	13C2-PFDA	98,647.05	45,064.85	135,194.55	
J8442-FS-D(5)	VC-MS09-SB02-0102	10/18/18 14:59	13C2-PFDA	108,519.92	45,064.85	135,194.55	
J8442-FS-D(7)	VC-MS09-SB02-0102	10/18/18 15:10	13C2-PFDA	102,910.01	45,064.85	135,194.55	
J8442-FS-D(9)	VC-MS09-SB02-0102	10/18/18 15:21	13C2-PFDA	104,425.50	45,064.85	135,194.55	
KB76 CCV	CCV	10/18/18 15:32	13C2-PFDA	102,258.43	45,064.85	135,194.55	
J8443-FS(3)	VC-MS09-SB02-0506	10/18/18 15:54	13C2-PFDA	93,593.55	45,064.85	135,194.55	
J8443-FS-D(5)	VC-MS09-SB02-0506	10/18/18 16:04	13C2-PFDA	112,260.10	45,064.85	135,194.55	
J8443-FS-D(7)	VC-MS09-SB02-0506	10/18/18 16:15	13C2-PFDA	104,803.66	45,064.85	135,194.55	
J8444-FS-D(7)	VC-MS09-SS03-000H	10/18/18 16:26	13C2-PFDA	98,339.40	45,064.85	135,194.55	
~~J8444-FS-D(9)~~	~~VC-MS09-SS03-000H~~	~~10/18/18 16:37~~	~~13C2-PFDA~~	~~101,271.57~~	~~45,064.85~~	~~135,194.55~~	
J8444-FS-D(11)	VC-MS09-SS03-000H	10/18/18 16:48	13C2-PFDA	110,863.97	45,064.85	135,194.55	
J8444-FS-D(13)	VC-MS09-SS03-000H	10/18/18 16:59	13C2-PFDA	97,897.50	45,064.85	135,194.55	
J8444-FS-D(15)	VC-MS09-SS03-000H	10/18/18 17:10	13C2-PFDA	104,131.81	45,064.85	135,194.55	
KB77 CCV	CCV	10/18/18 17:20	13C2-PFDA	96,775.95	45,064.85	135,194.55	
J8445-FS(3)	VC-MS09-SB03-0102	10/18/18 17:42	13C2-PFDA	94,583.17	45,064.85	135,194.55	
J8445-FS-D(5)	VC-MS09-SB03-0102	10/18/18 17:53	13C2-PFDA	113,937.49	45,064.85	135,194.55	
J8445-FS-D(7)	VC-MS09-SB03-0102	10/18/18 18:04	13C2-PFDA	118,162.53	45,064.85	135,194.55	
J8445-FS-D(9)	VC-MS09-SB03-0102	10/18/18 18:15	13C2-PFDA	101,314.11	45,064.85	135,194.55	
J8446-FS(3)	VC-MS09-SB03-0506	10/18/18 18:26	13C2-PFDA	95,277.17	45,064.85	135,194.55	
J8446-FS-D(5)	VC-MS09-SB03-0506	10/18/18 18:37	13C2-PFDA	111,871.90	45,064.85	135,194.55	
J8447-FS(3)	VC-MS09-SS04-000H	10/18/18 18:47	13C2-PFDA	101,064.19	45,064.85	135,194.55	
J8448-FS(3)	VC-MS09-SB04-0102	10/18/18 18:58	13C2-PFDA	106,094.89	45,064.85	135,194.55	
J8448-FS-D(5)	VC-MS09-SB04-0102	10/18/18 19:09	13C2-PFDA	106,675.59	45,064.85	135,194.55	
KB76 CCV	CCV	10/18/18 19:20	13C2-PFDA	107,079.17	45,064.85	135,194.55	
J8449-FS(3)	VC-MS09-SB04-0506	10/18/18 19:42	13C2-PFDA	103,202.17	45,064.85	135,194.55	
J8449-FS-D(5)	VC-MS09-SB04-0506	10/18/18 19:53	13C2-PFDA	89,057.37	45,064.85	135,194.55	

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

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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
J8450-FS(3)	VC-MS09-SS05-000H	10/18/18 20:03	13C2-PFDA	92,759.22	45,064.85	135,194.55	
J8450-FS-D(5)	VC-MS09-SS05-000H	10/18/18 20:14	13C2-PFDA	116,103.71	45,064.85	135,194.55	
J8451-FS(3)	VC-MS09-SB05-0102	10/18/18 20:25	13C2-PFDA	92,003.24	45,064.85	135,194.55	
J8451-FS-D(5)	VC-MS09-SB05-0102	10/18/18 20:36	13C2-PFDA	102,039.85	45,064.85	135,194.55	
J5452-FS(3)	VC-MS09-SB05-0506	10/18/18 20:47	13C2-PFDA	102,645.07	45,064.85	135,194.55	
J8452-FS-D(5)	VC-MS09-SB05-0506	10/18/18 20:58	13C2-PFDA	101,647.99	45,064.85	135,194.55	
KB77 CCV	CCV	10/18/18 21:09	13C2-PFDA	112,816.22	45,064.85	135,194.55	
J8453MS-FS(3)	VC-MS09-SB04-0102-MS	10/18/18 21:30	13C2-PFDA	94,290.45	45,064.85	135,194.55	
J8453MS-FS-D(5)	VC-MS09-SB04-0102-MS	10/18/18 21:41	13C2-PFDA	100,087.27	45,064.85	135,194.55	
J8454MSD-FS(3)	VC-MS09-SB04-0102-MSD	10/18/18 21:52	13C2-PFDA	93,651.27	45,064.85	135,194.55	
J8454MSD-FS-D(5)	VC-MS09-SB04-0102-MSD	10/18/18 22:03	13C2-PFDA	99,146.57	45,064.85	135,194.55	
KB76 CCV	CCV	10/18/18 22:14	13C2-PFDA	97,797.45	45,064.85	135,194.55	
J8444-FS(5)	VC-MS09-SS03-000H	10/18/18 22:35	13C2-PFDA	80,890.70	45,064.85	135,194.55	
KB76 CCV	CCV	10/19/18 1:29	13C2-PFDA	92,280.41	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	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	Instrument Blank	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	
KB76 CCV	CCV	10/18/18 11:22	13C4-PFOS	19,659.10	15,759.13	47,277.39	
CR902PB-FS(3)	Procedural Blank	10/18/18 11:43	13C4-PFOS	29,573.64	15,759.13	47,277.39	
CR903LCS-FS(3)	Laboratory Control Sample	10/18/18 11:54	13C4-PFOS	28,134.25	15,759.13	47,277.39	
J8438-FS(3)	VC-MS09-SS01-000H	10/18/18 12:05	13C4-PFOS	24,133.88	15,759.13	47,277.39	
J8438-FS-D(5)	VC-MS09-SS01-000H	10/18/18 12:16	13C4-PFOS	30,810.96	15,759.13	47,277.39	
J8439-FS(3)	VC-MS09-SB01-0102	10/18/18 12:27	13C4-PFOS	26,030.03	15,759.13	47,277.39	
J8439-FS-D(5)	VC-MS09-SB01-0102	10/18/18 12:38	13C4-PFOS	29,342.04	15,759.13	47,277.39	
J8440-FS(3)	VC-MS09-SB01-0506	10/18/18 12:49	13C4-PFOS	20,316.83	15,759.13	47,277.39	
J8440-FS-D(5)	VC-MS09-SB01-0506	10/18/18 12:59	13C4-PFOS	29,892.83	15,759.13	47,277.39	
KB77 CCV	CCV	10/18/18 13:10	13C4-PFOS	28,692.79	15,759.13	47,277.39	
~~J8441-FS(3)~~	~~VC-MS09-SS02-000H~~	~~10/18/18 13:32~~	~~13C4-PFOS~~	~~10,147.07~~	~~15,759.13~~	~~47,277.39~~	~~N~~
J8441-FS-D(5)	VC-MS09-SS02-000H	10/18/18 13:43	13C4-PFOS	20,495.87	15,759.13	47,277.39	
J8441-FS-D(7)	VC-MS09-SS02-000H	10/18/18 13:54	13C4-PFOS	25,892.47	15,759.13	47,277.39	
J8441-FS-D(9)	VC-MS09-SS02-000H	10/18/18 14:05	13C4-PFOS	32,268.14	15,759.13	47,277.39	
~~J8442-FS(3)~~	~~VC-MS09-SB02-0102~~	~~10/18/18 14:48~~	~~13C4-PFOS~~	~~8,440.10~~	~~15,759.13~~	~~47,277.39~~	~~N~~
J8442-FS-D(5)	VC-MS09-SB02-0102	10/18/18 14:59	13C4-PFOS	18,958.37	15,759.13	47,277.39	
J8442-FS-D(7)	VC-MS09-SB02-0102	10/18/18 15:10	13C4-PFOS	24,563.12	15,759.13	47,277.39	
J8442-FS-D(9)	VC-MS09-SB02-0102	10/18/18 15:21	13C4-PFOS	27,765.25	15,759.13	47,277.39	
KB76 CCV	CCV	10/18/18 15:32	13C4-PFOS	30,615.80	15,759.13	47,277.39	
~~J8443-FS(3)~~	~~VC-MS09-SB02-0506~~	~~10/18/18 15:54~~	~~13C4-PFOS~~	~~13,458.72~~	~~15,759.13~~	~~47,277.39~~	~~N~~
J8443-FS-D(5)	VC-MS09-SB02-0506	10/18/18 16:04	13C4-PFOS	22,286.31	15,759.13	47,277.39	
J8443-FS-D(7)	VC-MS09-SB02-0506	10/18/18 16:15	13C4-PFOS	24,836.20	15,759.13	47,277.39	
~~J8444-FS-D(7)~~	~~VC-MS09-SS03-000H~~	~~10/18/18 16:26~~	~~13C4-PFOS~~	~~8,306.00~~	~~15,759.13~~	~~47,277.39~~	~~N~~
~~J8444-FS-D(9)~~	~~VC-MS09-SS03-000H~~	~~10/18/18 16:37~~	~~13C4-PFOS~~	~~10,207.08~~	~~15,759.13~~	~~47,277.39~~	~~N~~
J8444-FS-D(11)	VC-MS09-SS03-000H	10/18/18 16:48	13C4-PFOS	16,510.84	15,759.13	47,277.39	
J8444-FS-D(13)	VC-MS09-SS03-000H	10/18/18 16:59	13C4-PFOS	21,860.41	15,759.13	47,277.39	
J8444-FS-D(15)	VC-MS09-SS03-000H	10/18/18 17:10	13C4-PFOS	28,439.05	15,759.13	47,277.39	
KB77 CCV	CCV	10/18/18 17:20	13C4-PFOS	29,215.01	15,759.13	47,277.39	
~~J8445-FS(3)~~	~~VC-MS09-SB03-0102~~	~~10/18/18 17:42~~	~~13C4-PFOS~~	~~8,580.03~~	~~15,759.13~~	~~47,277.39~~	~~N~~
J8445-FS-D(5)	VC-MS09-SB03-0102	10/18/18 17:53	13C4-PFOS	23,688.65	15,759.13	47,277.39	
J8445-FS-D(7)	VC-MS09-SB03-0102	10/18/18 18:04	13C4-PFOS	32,185.74	15,759.13	47,277.39	
J8445-FS-D(9)	VC-MS09-SB03-0102	10/18/18 18:15	13C4-PFOS	28,450.87	15,759.13	47,277.39	
J8446-FS(3)	VC-MS09-SB03-0506	10/18/18 18:26	13C4-PFOS	19,923.09	15,759.13	47,277.39	
J8446-FS-D(5)	VC-MS09-SB03-0506	10/18/18 18:37	13C4-PFOS	29,930.36	15,759.13	47,277.39	
J8447-FS(3)	VC-MS09-SS04-000H	10/18/18 18:47	13C4-PFOS	28,460.58	15,759.13	47,277.39	
J8448-FS(3)	VC-MS09-SB04-0102	10/18/18 18:58	13C4-PFOS	24,046.15	15,759.13	47,277.39	
J8448-FS-D(5)	VC-MS09-SB04-0102	10/18/18 19:09	13C4-PFOS	30,917.95	15,759.13	47,277.39	
KB76 CCV	CCV	10/18/18 19:20	13C4-PFOS	30,750.59	15,759.13	47,277.39	
J8449-FS(3)	VC-MS09-SB04-0506	10/18/18 19:42	13C4-PFOS	24,265.23	15,759.13	47,277.39	
J8449-FS-D(5)	VC-MS09-SB04-0506	10/18/18 19:53	13C4-PFOS	26,210.61	15,759.13	47,277.39	

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	13C4-PFOS	31,518.26	15,759.13	47,277.39

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
J8450-FS(3)	VC-MS09-SS05-000H	10/18/18 20:03	13C4-PFOS	18,395.46	15,759.13	47,277.39	
J8450-FS-D(5)	VC-MS09-SS05-000H	10/18/18 20:14	13C4-PFOS	27,348.25	15,759.13	47,277.39	
J8451-FS(3)	VC-MS09-SB05-0102	10/18/18 20:25	13C4-PFOS	18,046.58	15,759.13	47,277.39	
J8451-FS-D(5)	VC-MS09-SB05-0102	10/18/18 20:36	13C4-PFOS	25,585.81	15,759.13	47,277.39	
J5452-FS(3)	VC-MS09-SB05-0506	10/18/18 20:47	13C4-PFOS	23,716.83	15,759.13	47,277.39	
J8452-FS-D(5)	VC-MS09-SB05-0506	10/18/18 20:58	13C4-PFOS	30,621.96	15,759.13	47,277.39	
KB77 CCV	CCV	10/18/18 21:09	13C4-PFOS	32,921.50	15,759.13	47,277.39	
J8453MS-FS(3)	VC-MS09-SB04-0102-MS	10/18/18 21:30	13C4-PFOS	18,116.34	15,759.13	47,277.39	
J8453MS-FS-D(5)	VC-MS09-SB04-0102-MS	10/18/18 21:41	13C4-PFOS	27,235.27	15,759.13	47,277.39	
J8454MSD-FS(3)	VC-MS09-SB04-0102-MSD	10/18/18 21:52	13C4-PFOS	22,114.89	15,759.13	47,277.39	
J8454MSD-FS-D(5)	VC-MS09-SB04-0102-MSD	10/18/18 22:03	13C4-PFOS	27,521.90	15,759.13	47,277.39	
KB76 CCV	CCV	10/18/18 22:14	13C4-PFOS	30,615.59	15,759.13	47,277.39	
~~J8444-FS(5)~~	~~VC-MS09-SS03-000H~~	~~10/18/18 22:35~~	~~13C4-PFOS~~	~~4,474.72~~	~~15,759.13~~	~~47,277.39~~	~~N~~
KB76 CCV	CCV	10/19/18 1:29	13C4-PFOS	26,912.55	15,759.13	47,277.39	

BATTELLE

Mass Spectral Acquisition Rate Report

Created with Analyst Reporter
Printed: 25/10/2018 11:24:42 AM

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**	18-0590_18-0588_18-0589_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

BATTELLE

Mass Spectral Acquisition Rate Report

Created with Analyst Reporter
Printed: 25/10/2018 10:45:41 AM

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**	18-0590_18-0588_18-0589_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

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Precision and Bias at the LOQ for PFAS in Solids

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

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

Analytical SOP 5-369
Extraction SOP 5-370

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

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

Analytes on NELAP and ELAP QSM 5.1 Scope of accreditation

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ID 595 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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Solids Calibration to Sample Equivalents

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

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

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

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

QTRAP 5500
Preventive Maintenance Checklist

Preventive Maintenance Date:	12-June-2018

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

☑ **PASS** ☐ **FAIL**

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

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

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

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

Performed By: 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:

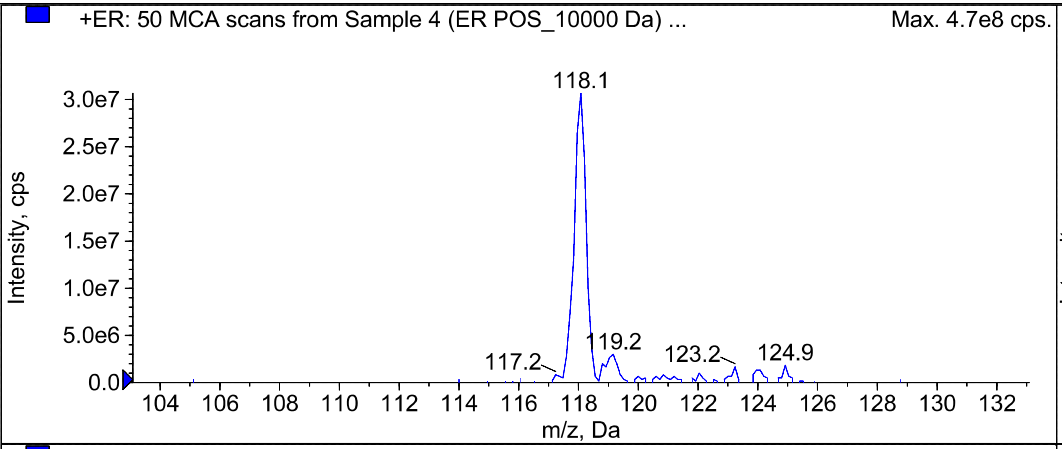
☑ Attach all spectrums printouts to this procedure.
☑ If any parameter setting access modes were changed during the PM, ensure they are returned to their normal access mode and that their offsets are adjusted to match optimized values from the post-PM acquisition files.
☐ Empty tuning cache folder, if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

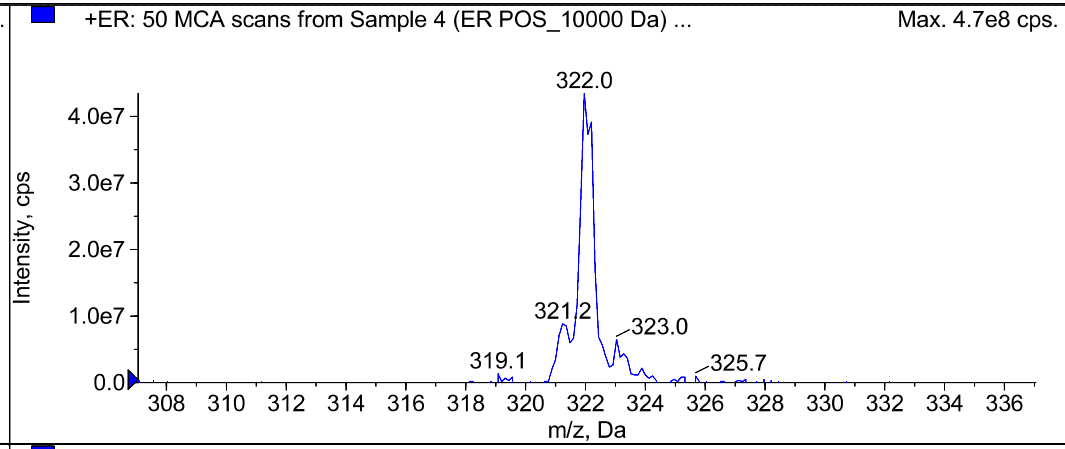
END OF PREVENTIVE MAINTENANCE CHECKLIST

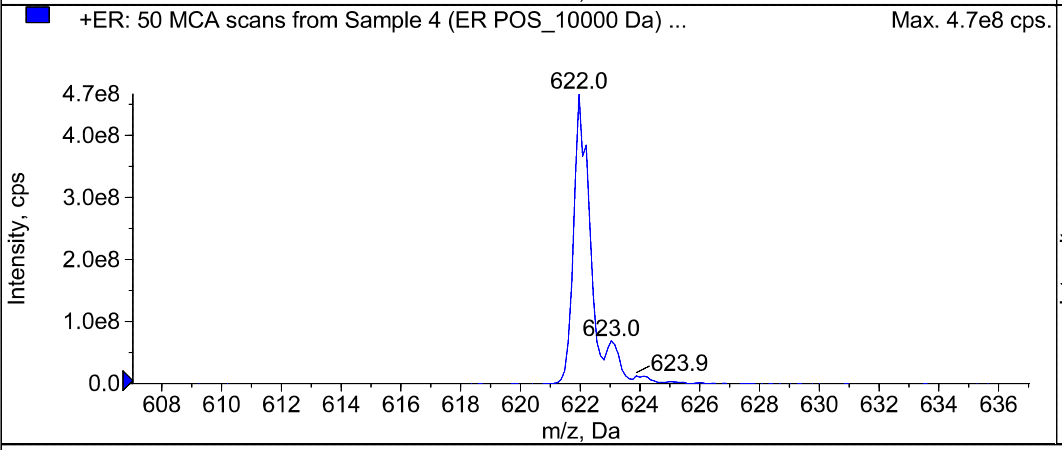
Document history:

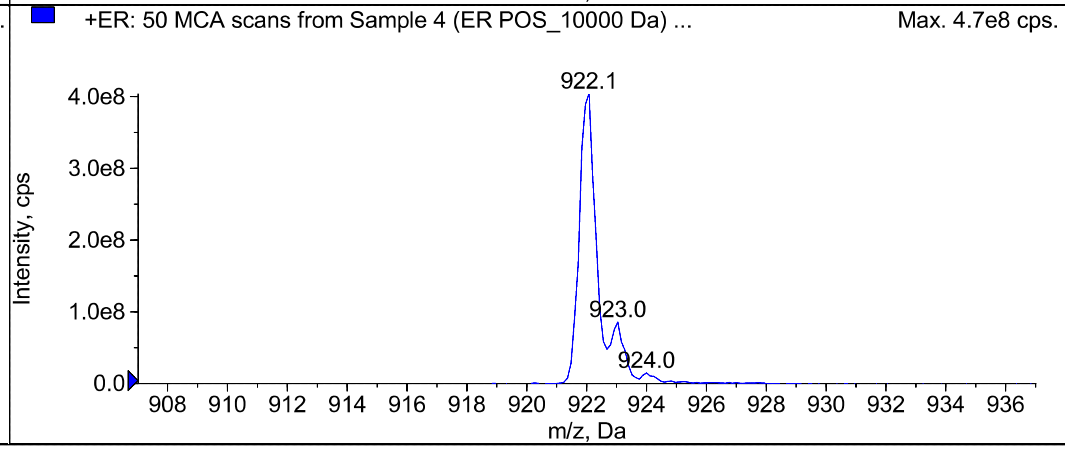
06 OCT 2016: Appendix ZEFPM003-2L: Removed requirements to fit Manufacturer's testing criteria.

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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)
KB33	PFAS - DoD Low Level Labelled Extracted Internal Standards (SIS)	JY27	180726-05
KC19	PFAS - DoD Low Level Labelled Extracted Internal Standard (SIS)	KB71	180726-05
KB71	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	-	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
KB83	PFAS - DoD High Level Second Source LCS/MS Solution	-	181001-01
KC02	PFAS - DoD High Level Second Source LCS/MS Solution	-	181001-01
KC03	PFAS - DoD Internal Standard Spiking Solution	JY25	180726-04
KC52	PFAS - DoD Internal Standard Spiking Solution	JY25	180726-04
KB73	PFAS - DoD Calibration L1	KB71	180726-05
KB73	PFAS - DoD Calibration L1	JY23	180705-02
KB73	PFAS - DoD Calibration L1	JY25	180726-04
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	KB70	180705-02
KB75	PFAS - DoD Calibration L3	KB71	180726-05
KB75	PFAS - DoD Calibration L3	JY25	180726-04
KB76	PFAS - DoD Calibration L4	JY25	180726-04
KB76	PFAS - DoD Calibration L4	KB71	180726-05
KB76	PFAS - DoD Calibration L4	KB70	180705-02
KB77	PFAS - DoD Calibration L5	KB70	180705-02
KB77	PFAS - DoD Calibration L5	KB71	180726-05
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

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It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JX28

Description: PFAS Branched Standard Stock

Stock Id: 180618-02

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

Stock Id: 180618-03

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

Stock Id: 180618-04

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

Stock Id: 180618-06

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

Stock Id: 180618-07

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

Final Concentrations:

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

Syringes/Pipettes:

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

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

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

Comment:

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

BATTELLE

It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: JY23

Description: PFAS - DoD Low ICAL Stock

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

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

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

Balance ID:

Comment: 96/4 Methanol/milli-q water

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

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY23

Description: PFAS - DoD Low ICAL Stock

Stock Id: 180705-02

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

Final Concentrations:

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

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

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

Comment: 96/4 Methanol/milli-q water

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

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY23

Description: PFAS - DoD Low ICAL Stock

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

Syringes/Pipettes:

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

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

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

Comment: 96/4 Methanol/milli-q water

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

BATTELLE

It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: JY25

Description: PFAS - DoD Internal Standard Stock Solution

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

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

Balance ID:

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

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

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY25

Description: PFAS - DoD Internal Standard Stock Solution

Stock Id: 180726-04

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

Final Concentrations:

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

Syringes/Pipettes:

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

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

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

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

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

BATTELLE

It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: JY27

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

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

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

Balance ID: _____

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

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

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY27

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

Stock Id: 180726-05

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

Final Concentrations:

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

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

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

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

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

BATTELLE

It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JY27

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

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

Syringes/Pipettes:

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

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

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

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

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

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **JZ88**

Description: PFAS - DoD Second Source LCS/MS Solution

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
170724-01	PFOA- 2nd Source	Neat	~1.000000	03/22/22	---	---	1000 uL	1	20	~0.0500

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

Balance ID:

Comment: 80/20 Methanol/Milli-q water

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

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JZ88

Description: PFAS - DoD Second Source LCS/MS Solution

Stock Id: 170724-01

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

Final Concentrations:

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

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

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

Comment: 80/20 Methanol/Milli-q water

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

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: JZ88

Description: PFAS - DoD Second Source LCS/MS Solution

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

Syringes/Pipettes:

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

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

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

Comment: 80/20 Methanol/Milli-q water

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

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: KB33

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

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

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

Balance ID:

Comment: 96/4 Methanol/Milli-q water

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

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KB33

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

Stock Id: JY27

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

Final Concentrations:

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

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

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

Comment: 96/4 Methanol/Milli-q water

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

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KB33

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

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY27	Pipette	OU16914

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

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

Comment: 96/4 Methanol/Milli-q water

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

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **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: KB83

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

Stock Id: 181001-01

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

Final Concentrations:

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

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: _____ **Date:** _____

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☐

Standard Laboratory ID Number: KB83

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

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
181001-01	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: _____ **Date:** _____

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☐

Standard Laboratory ID Number: **KB83**

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

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
181001-01	PFOA - 2nd source	Neat	~1.000000	09/20/23	---	---	1000 uL	1	5	~0.2000

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: _____ **Date:** _____

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: **KC02**

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

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
181001-01	PFOA - 2nd source	Neat	~1.000000	09/20/23	---	---	1000 uL	1	5	~0.2000

Solution Prepared By: Schumitz, Denise	**Date Prepared:** 10/8/2018	**Expiration Date:**	10/8/2019
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:** 10/8/2018 11:44:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KC02

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

Stock Id: 181001-01

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

Final Concentrations:

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

Solution Prepared By: Schumitz, Denise **Date Prepared:** 10/8/2018 **Expiration Date:** 10/8/2019

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:** 10/8/2018 11:44:00 AM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KC02

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

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
181001-01	Pipette	B820865811

Solution Prepared By: Schumitz, Denise **Date Prepared:** 10/8/2018 **Expiration Date:** 10/8/2019

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:** 10/8/2018 11:44:00 AM

BATTELLE
It can be done

Standard Solution Prep Form II

Approved: ☑

Standard Laboratory ID Number: **KC03**

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:**	10/9/2018	**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:** 10/9/2018 4:15:00 PM

BATTELLE
It can be done

Standard Solution Concentrations

Approved: ☑

Standard Laboratory ID Number: KC03

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:** 10/9/2018 **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:** 10/9/2018 4:15:00 PM

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

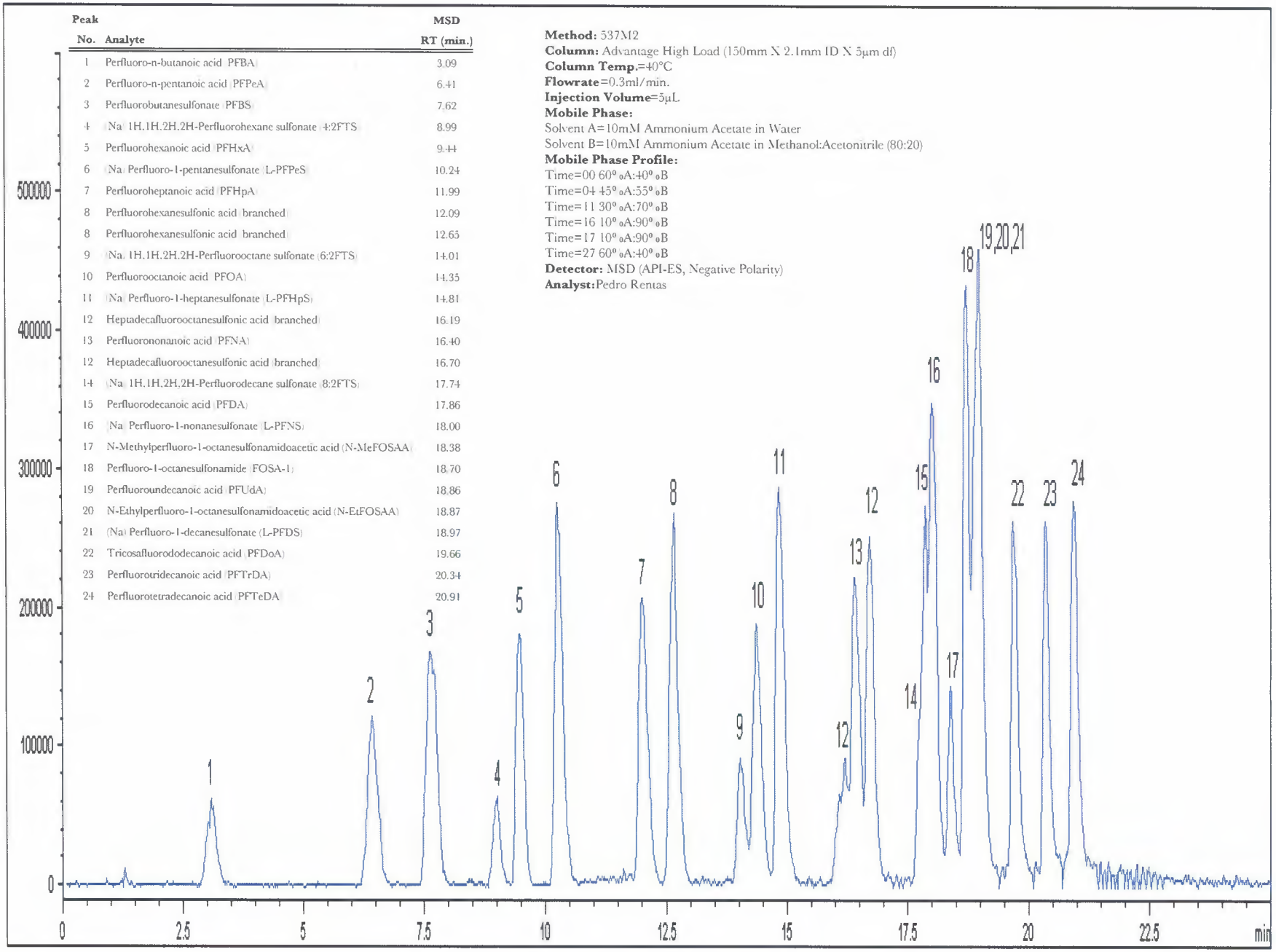
Note: All assigned values are anion concentrations.

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)***

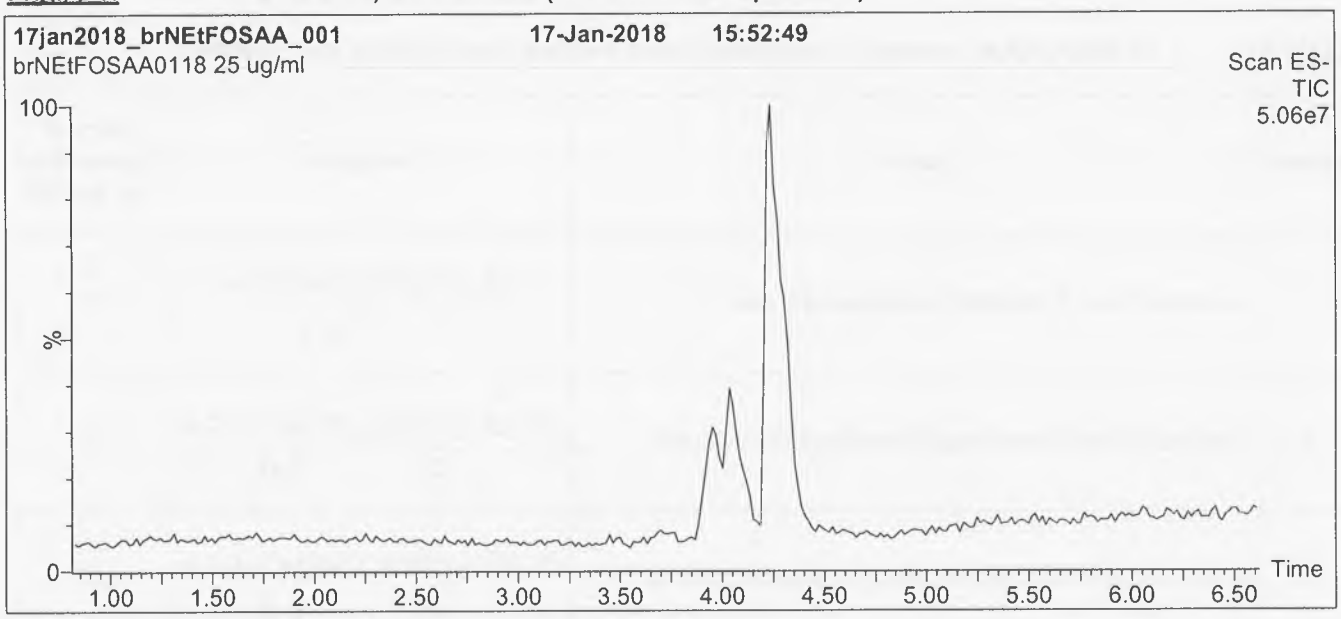
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	N-ethylperfluoro-1-octanesulfonamidoacetic acid	$CF_3(CF_2)_7SO_2N(C_2H_5)CH_2CO_2H$	77.5
2	N-ethylperfluoro-3-methylheptanesulfonamidoacetic acid	$CF_3(CF_2)_3CF(CF_3)(CF_2)_2SO_2N(C_2H_5)CH_2CO_2H$	2.3
3	N-ethylperfluoro-4-methylheptanesulfonamidoacetic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

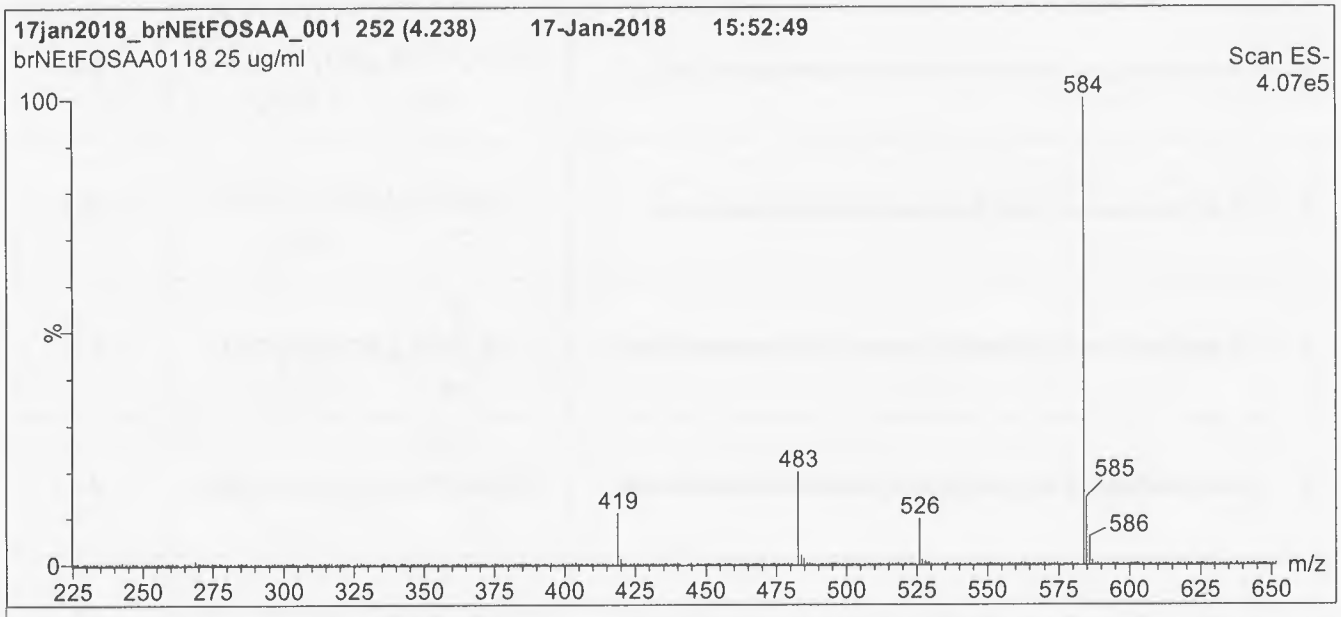
* Percent of total N-ethylperfluorooctanesulfonamidoacetic acid isomers only.

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

B.G. Chittim, General Manager

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





Conditions for Figure 1:

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

Chromatographic Conditions

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

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

Time: 10 min

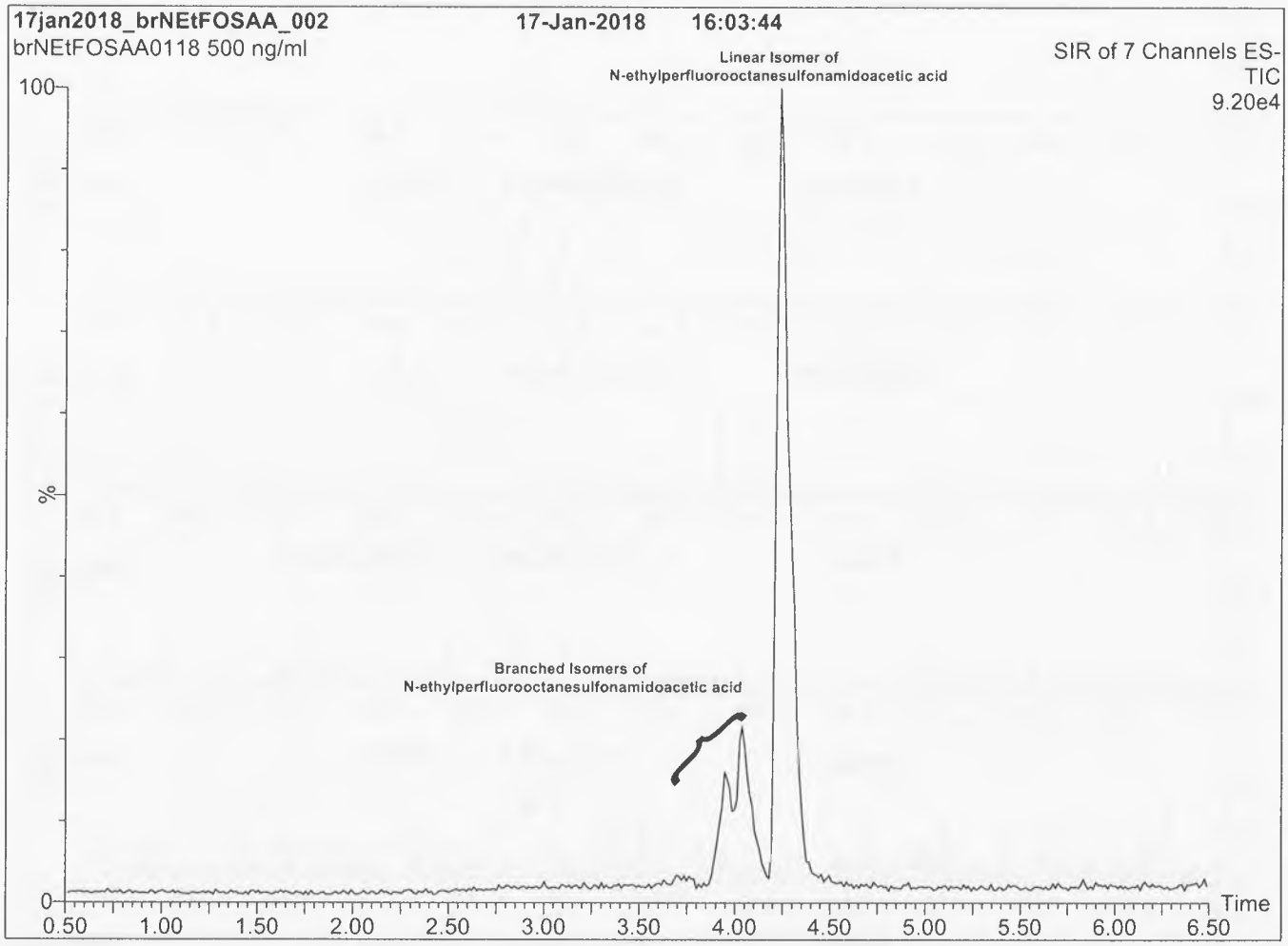
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

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

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



Conditions for Figure 2:

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

Chromatographic Conditions

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

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

Time: 10 min

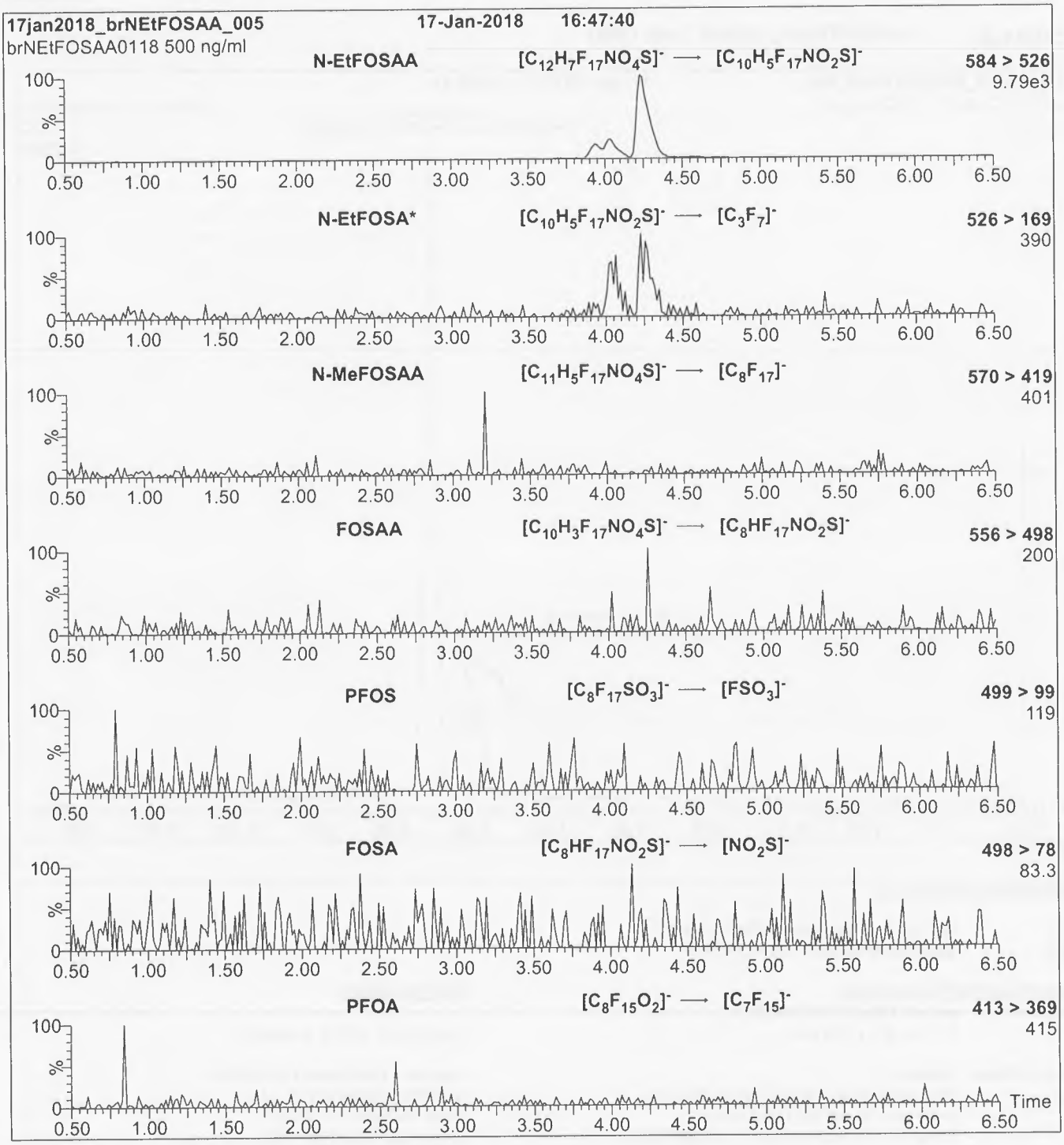
Flow: 300 µl/min

MS Parameters

Experiment: SIR (7 channels)

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

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



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

Conditions for Figure 3:

Injection: On-column

Mobile phase: Same as Figure 2

Flow: 300 µl/min

MS Parameters

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

BATTELLE

It can be done

BDO Id: 180618-03

Reagent Receipt Report

Approved: ☐ Authorized ☐

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

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

Notes:

Approved by: _____ Approved on: _____

Authorized by: _____ Authorized on: _____

180618-03

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

br-NMeFOSAA

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

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

DESCRIPTION:

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

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HANDLING:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

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

UNCERTAINTY:

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

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

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

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

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

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

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

CALA Testing Accreditation No. A1226

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER

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

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

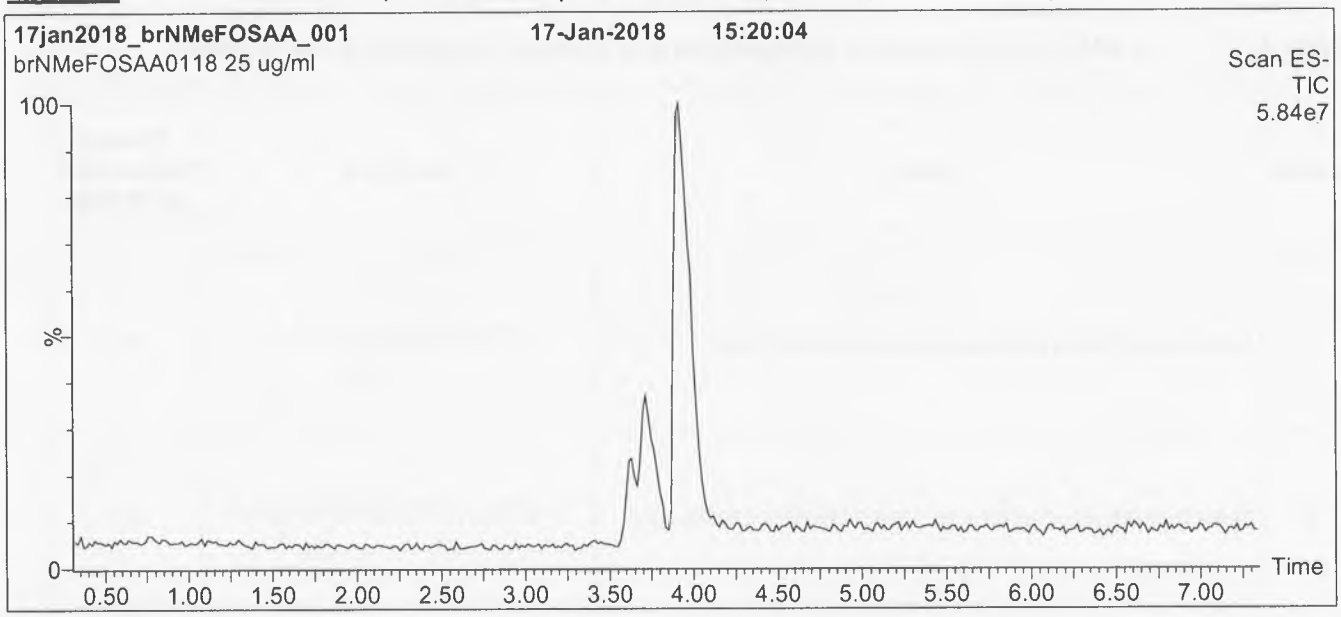
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	N-methylperfluoro-1-octanesulfonamidoacetic acid	$CF_3(CF_2)_7SO_2N(CH_3)CH_2CO_2H$	76.0
2	N-methylperfluoro-3-methylheptanesulfonamidoacetic acid	$CF_3(CF_2)_3CF(CF_3)(CF_2)_2SO_2N(CH_3)CH_2CO_2H$	0.7
3	N-methylperfluoro-4-methylheptanesulfonamidoacetic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

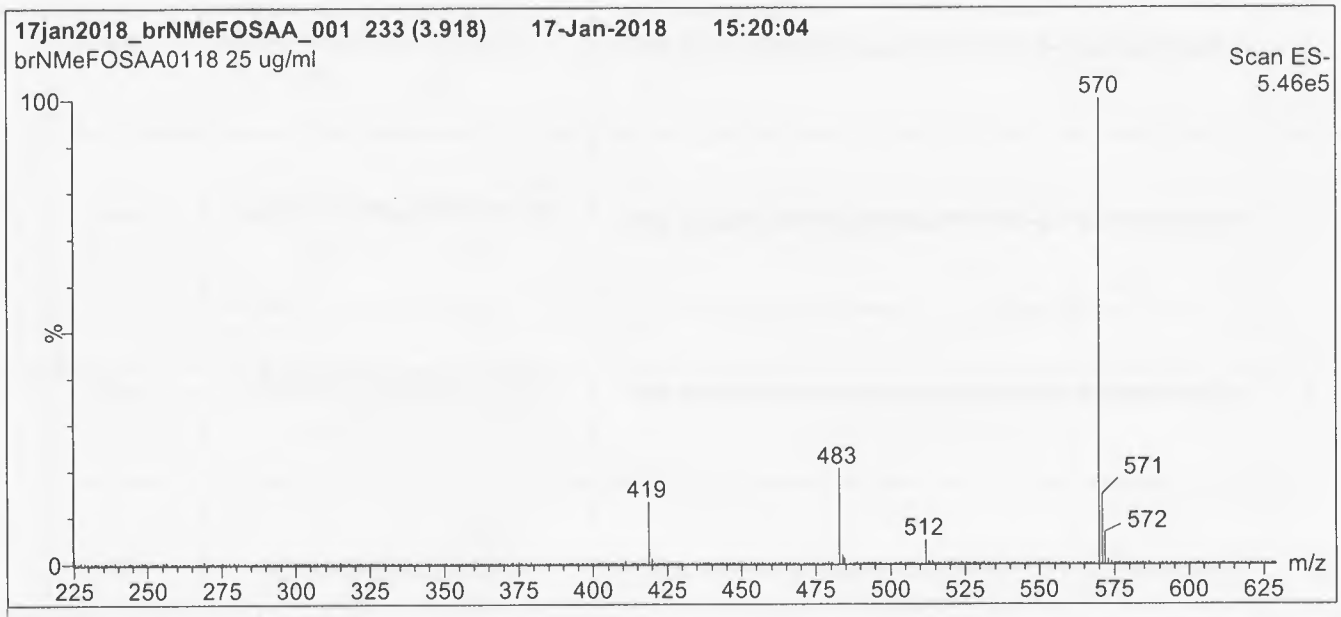
* Percent of total N-methylperfluorooctanesulfonamidoacetic acid isomers only.

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

B.G. Chittim, General Manager

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





Conditions for Figure 1:

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

Chromatographic Conditions

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

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

Time: 10 min

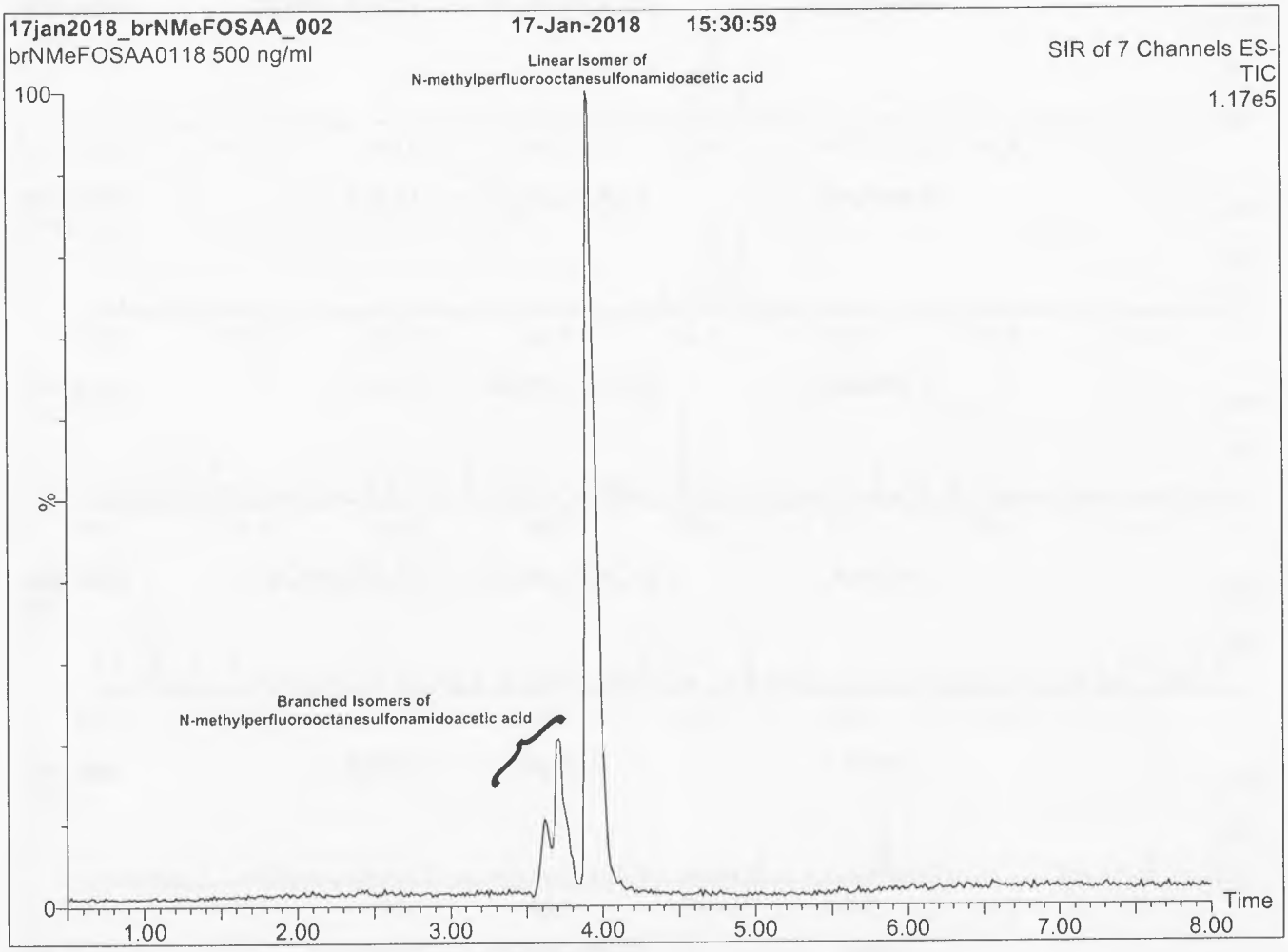
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

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

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



Conditions for Figure 2:

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

Chromatographic Conditions

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

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

Time: 10 min

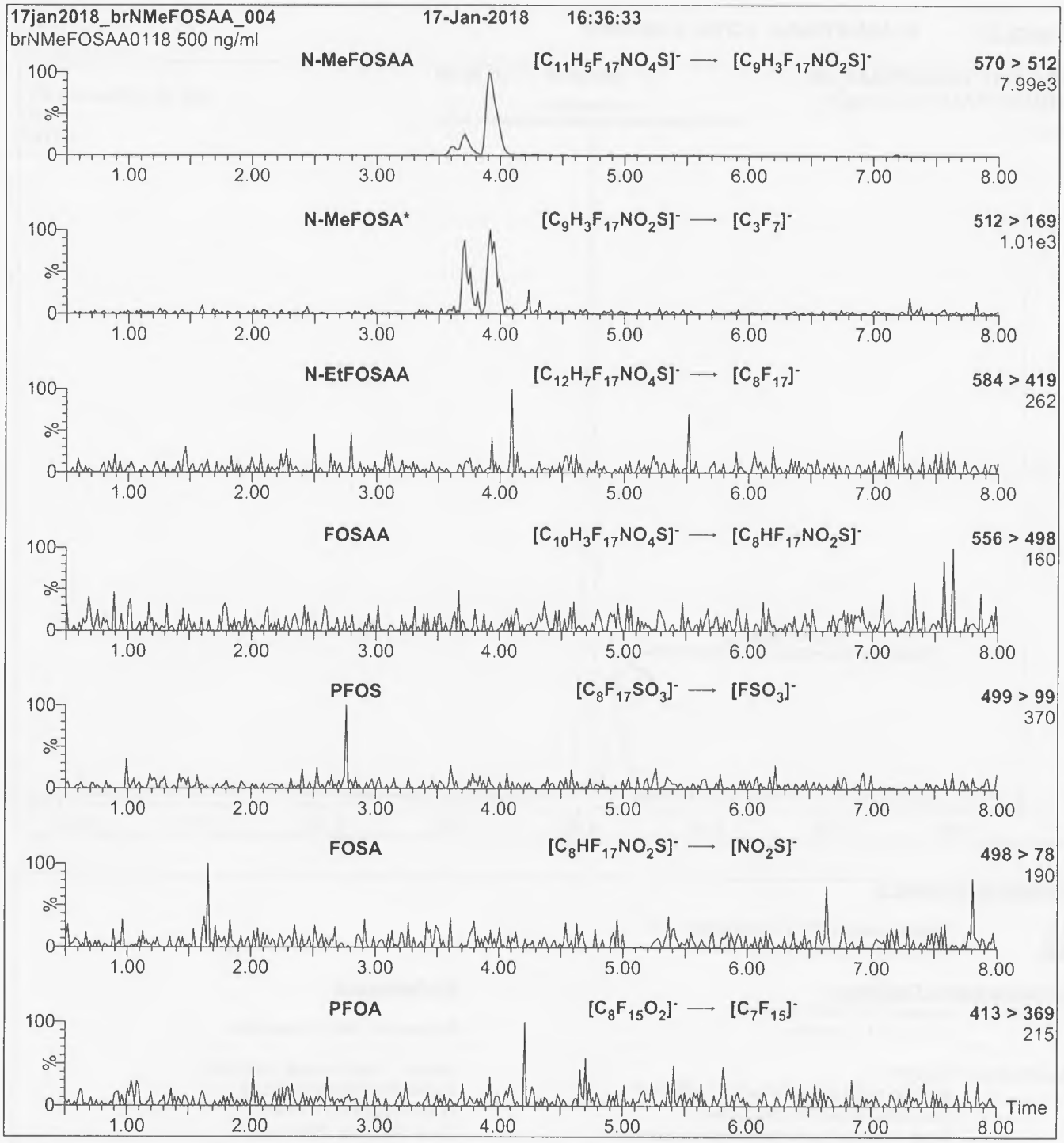
Flow: 300 µl/min

MS Parameters

Experiment: SIR (7 channels)

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

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



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

Conditions for Figure 3:

Injection: On-column

Mobile phase: Same as Figure 2

Flow: 300 µl/min

MS Parameters

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

BATTELLE

It can be done

BDO Id: 180618-04

Reagent Receipt Report

Approved: ☐ Authorized ☐

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

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

Notes:

Approved by: _____ Approved on: _____

Authorized by: _____ Authorized on: _____

180618-04

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

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

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

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

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

INTENDED USE:

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

HAZARDS:

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

CHARACTERIZATION / HOMOGENEITY:

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

UNCERTAINTY:

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

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

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

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

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

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

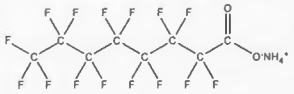
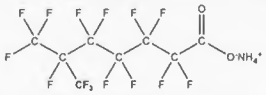
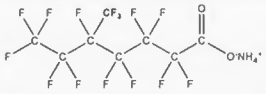
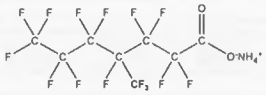
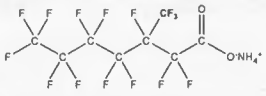
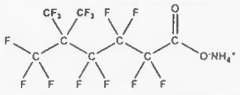
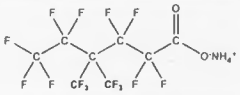
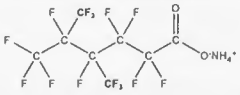
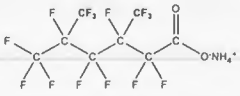
This product was produced using a Quality Management System registered to the latest versions of ISO 9001 by SAI Global, ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA; A 1226), and ISO GUIDE 34 by ANSI-ASQ National Accreditation Board (ANAB; AR-1523).

CALA Testing Accreditation No. A 1226

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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

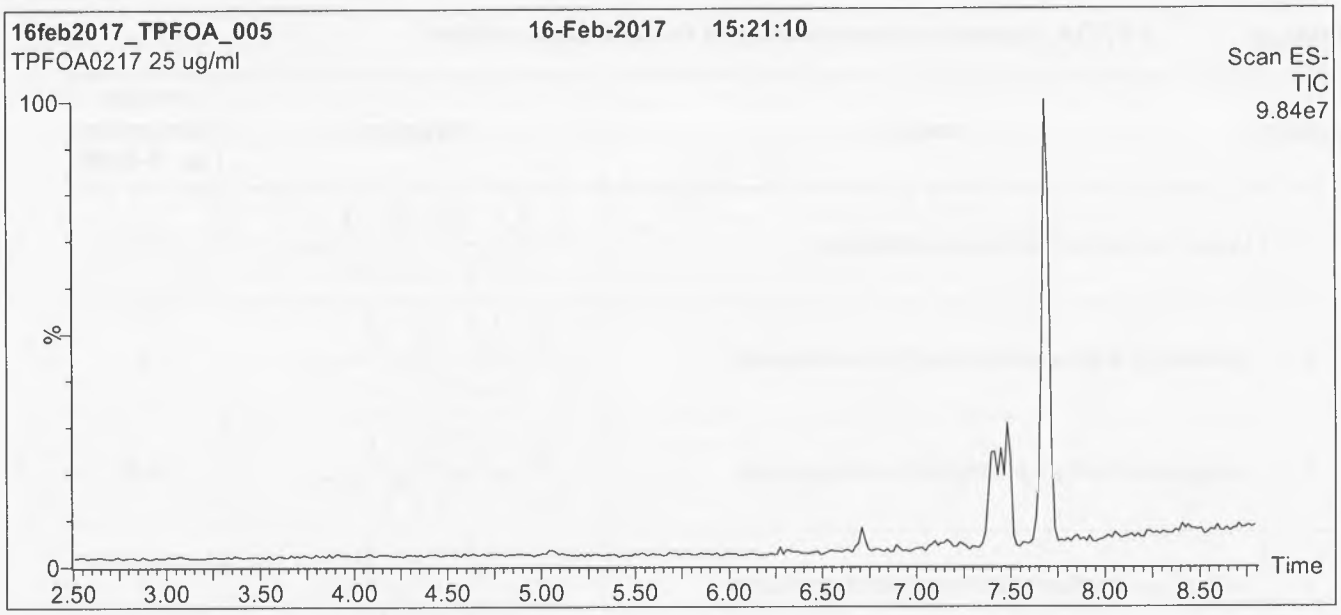
Table A: **T-PFOA; Isomeric Components and Percent Composition***

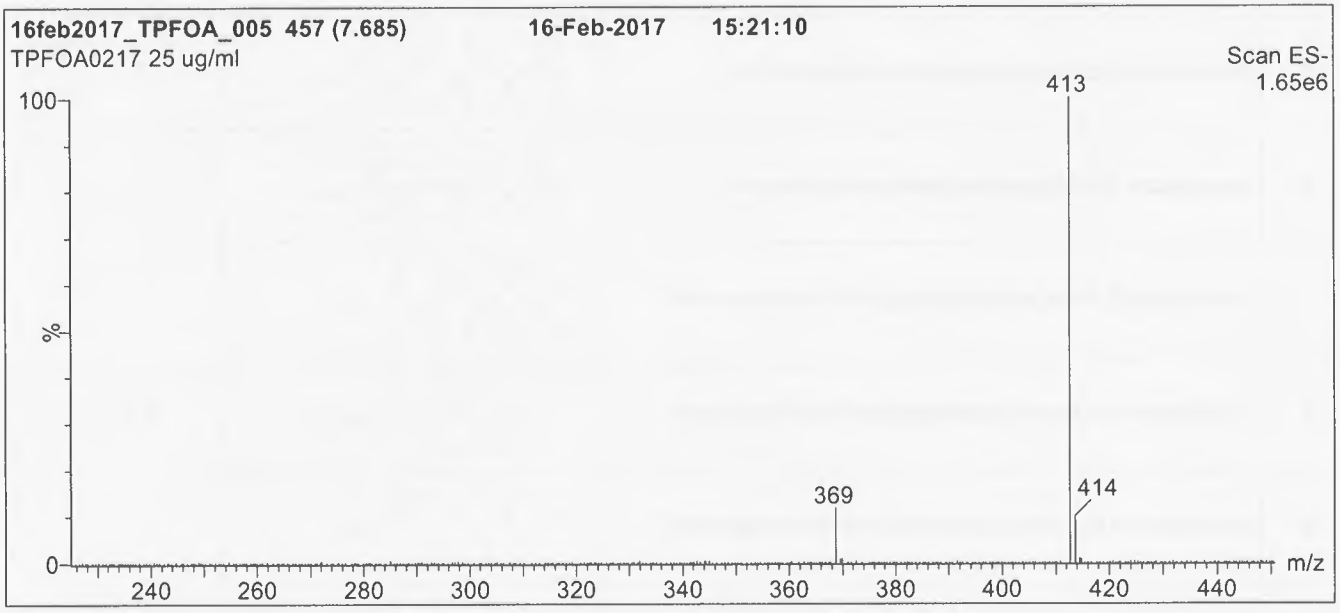
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	Linear ammonium perfluoro-n-octanoate		79
2	Ammonium 6-trifluoromethylperfluoroheptanoate		9
3	Ammonium 5-trifluoromethylperfluoroheptanoate		4.5
4	Ammonium 4-trifluoromethylperfluoroheptanoate		4
5	Ammonium 3-trifluoromethylperfluoroheptanoate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

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

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

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





Conditions for Figure 1:

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

Chromatographic Conditions:

Column: Kinetex PFP
2.6 µm, 4.6 x 100 mm

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

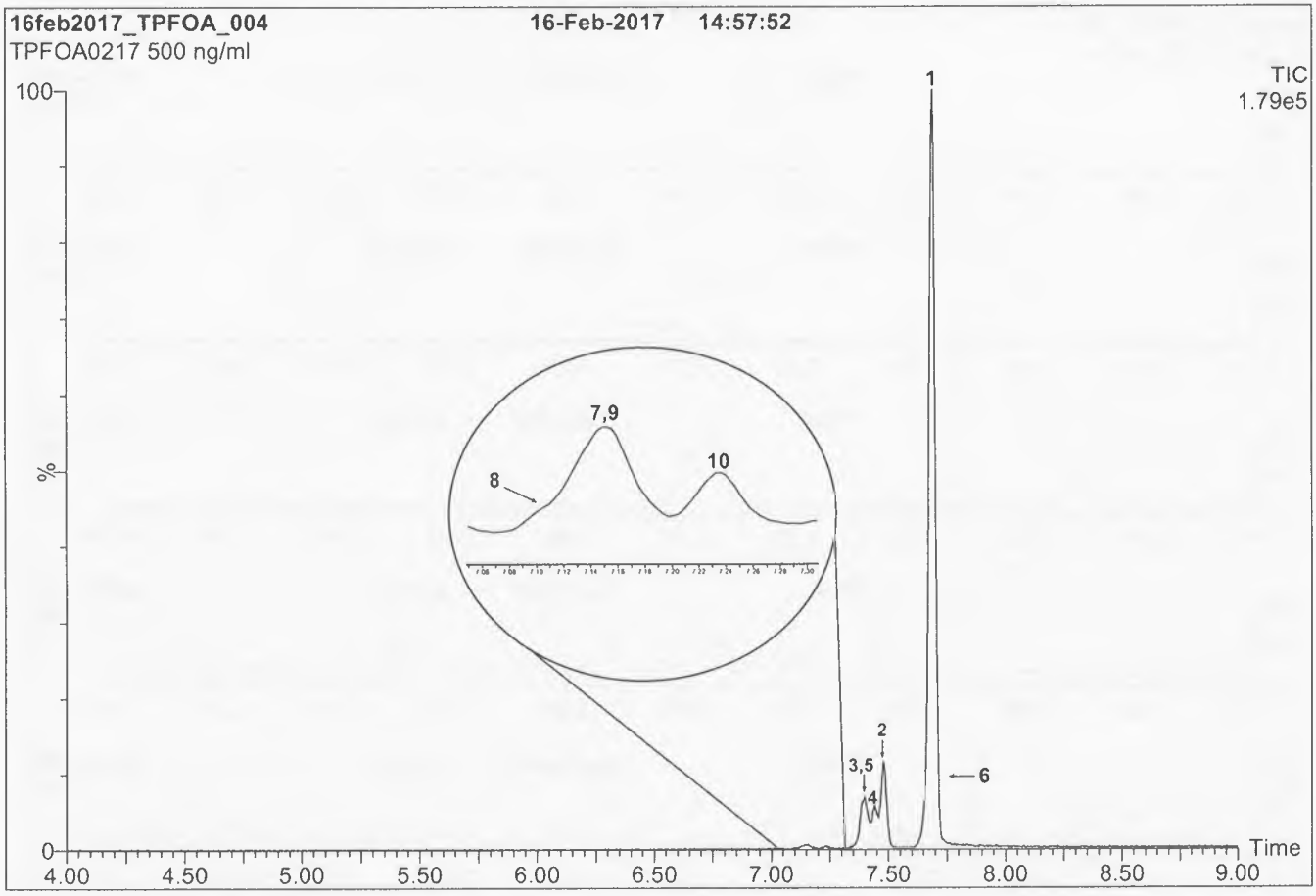
Flow: 1.0 ml/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

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

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



Conditions for Figure 2:

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

Chromatographic Conditions:

Column: Kinetex PFP
2.6 µm, 4.6 x 100 mm

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

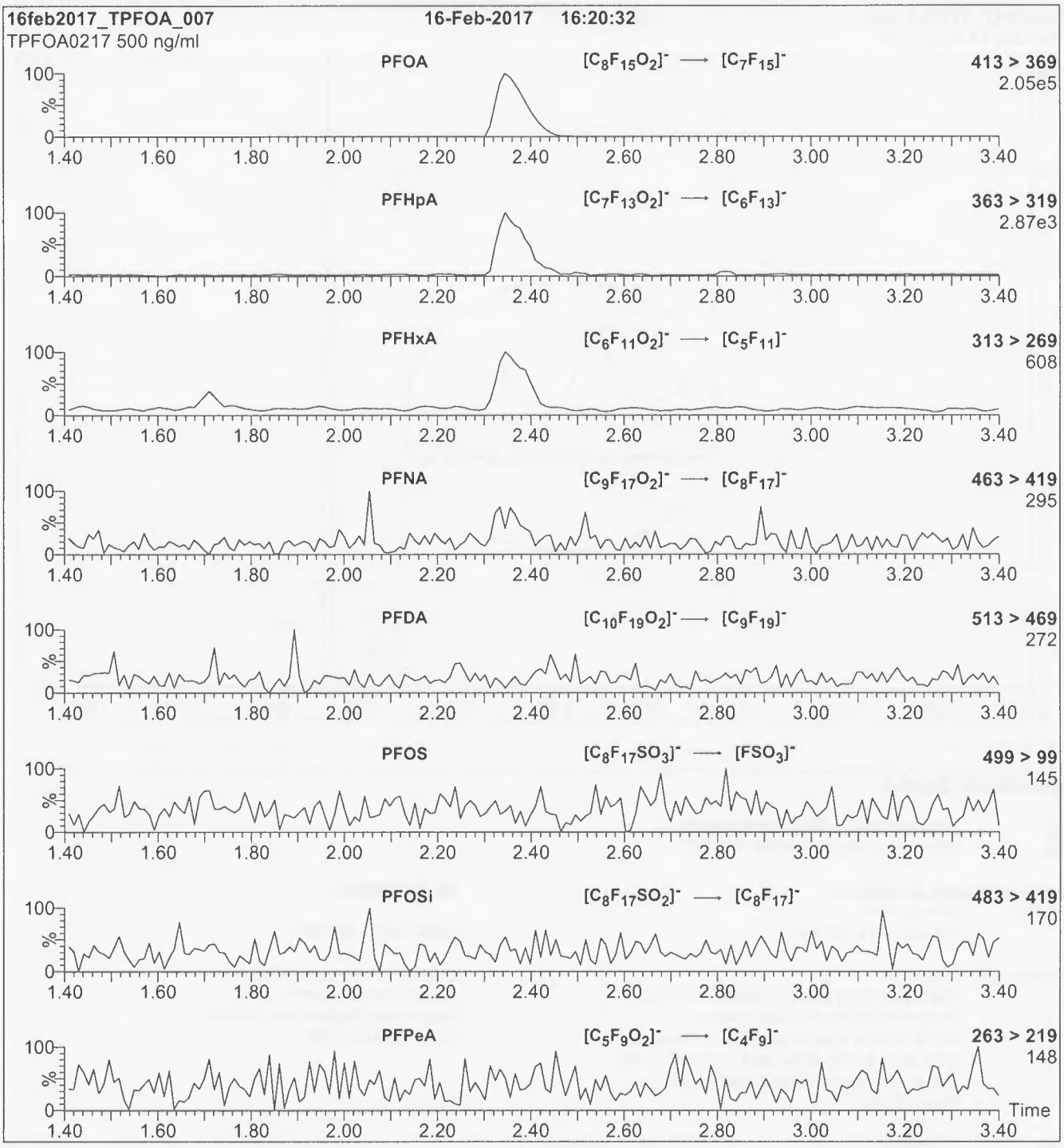
Flow: 1.0 ml/min

MS Parameters:

Experiment: SIR (ES^-)

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

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



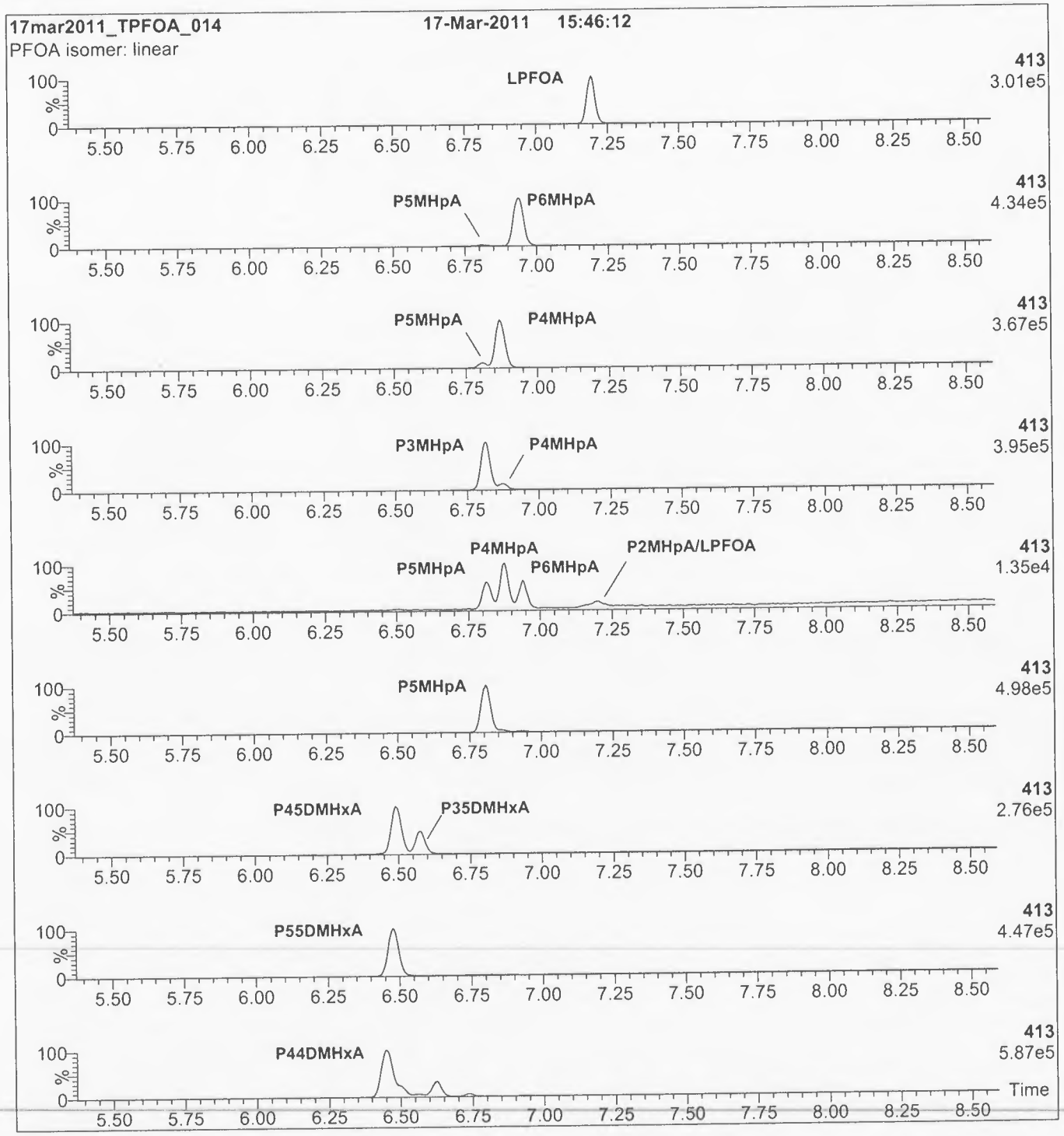
Conditions for Figure 3:

Injection:	Direct loop injection 10 µl (500 ng/ml T-PFOA)
Mobile phase:	Isocratic 80% (80:20 MeOH:ACN) / 20% H_2O (both with 10 mM NH_4OAc buffer)
Flow:	300 µl/min

MS Parameters

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

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



Conditions for Figure 4:

Same as Figure 2.

BATTELLE

It can be done

BDO Id: 180618-06

Reagent Receipt Report

Approved: ☐ Authorized ☐

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

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

Notes:

Approved by: _____ Approved on: _____

Authorized by: _____ Authorized on: _____

180618-06

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

br-PFHxSK

Potassium Perfluorohexanesulfonate Solution/Mixture of Linear and Branched Isomers

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

DESCRIPTION:

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

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HAZARDS:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

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

UNCERTAINTY:

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

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

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

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

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

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

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

CALA Testing Accreditation No. A1226

ANAB ACCREDITED ISO 17025 ISO 17034 REFERENCE MATERIAL PRODUCER

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

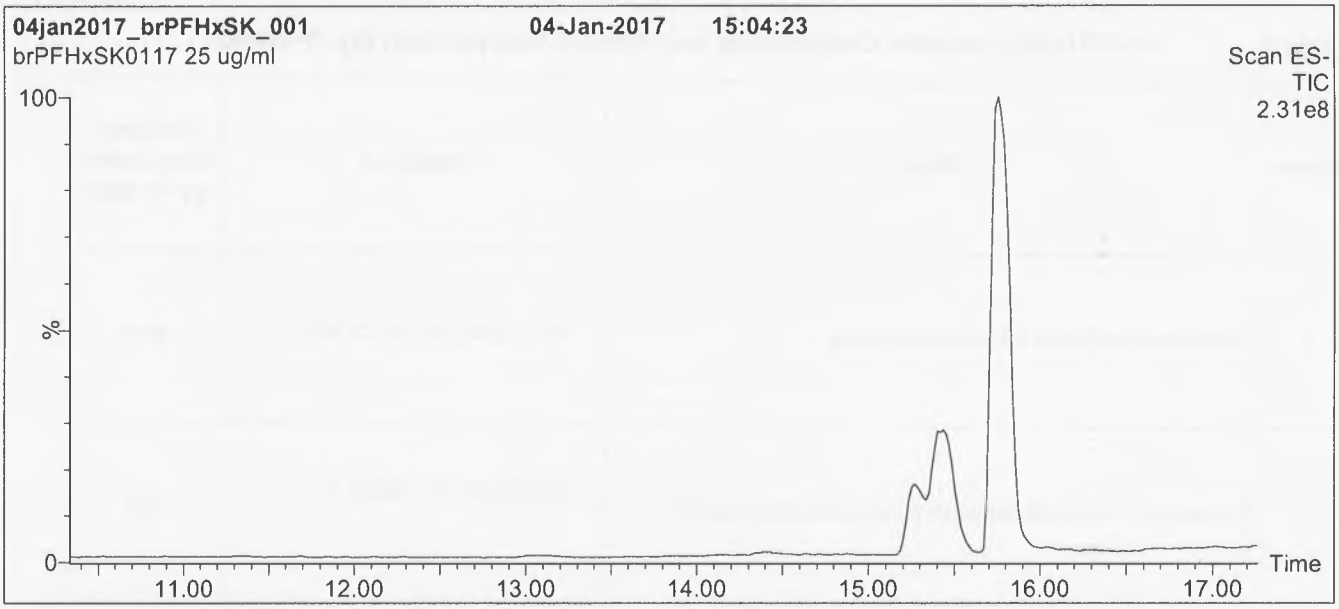
Table A: **br-PFHxSK; Isomeric Components and Percent Composition (by ^{19}F-NMR)***

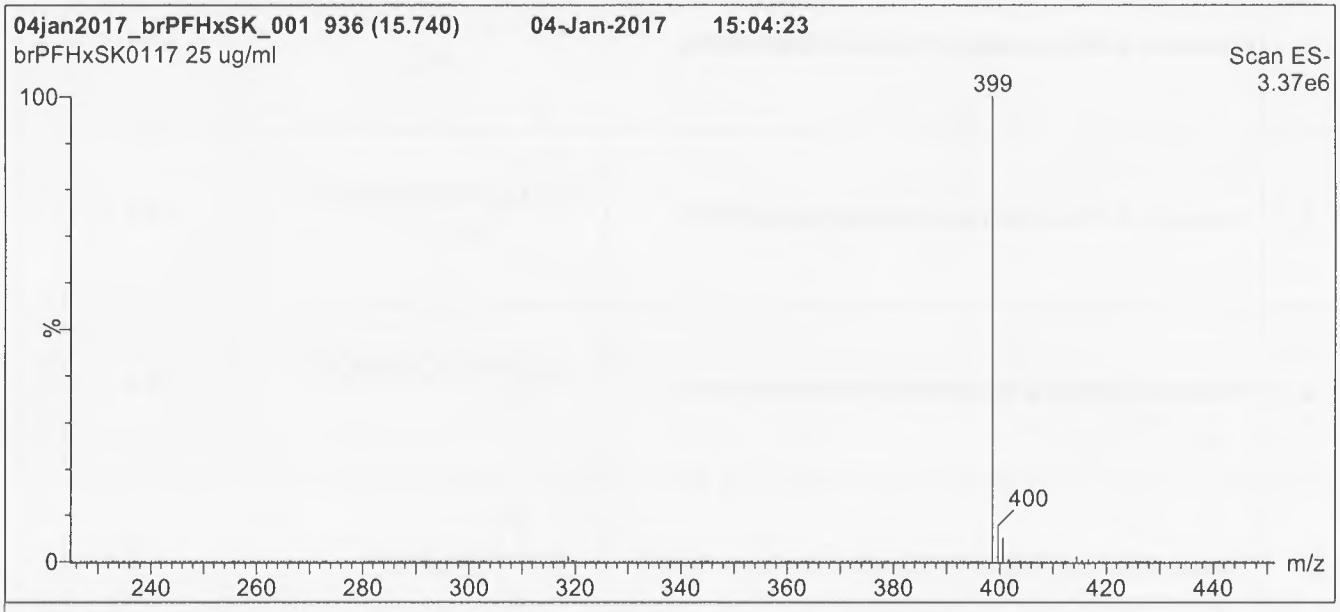
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	Potassium perfluoro-1-hexanesulfonate	$CF_3CF_2CF_2CF_2CF_2CF_2SO_3^-K^+$	81.1
2	Potassium 1-trifluoromethylperfluoropentanesulfonate**	$CF_3CF_2CF_2CF_2CF(CF_3)SO_3^-K^+$	2.9
3	Potassium 2-trifluoromethylperfluoropentanesulfonate	$CF_3CF_2CF_2CF(CF_3)CF_2SO_3^-K^+$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

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

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

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





Conditions for Figure 1:

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

Chromatographic Conditions

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

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

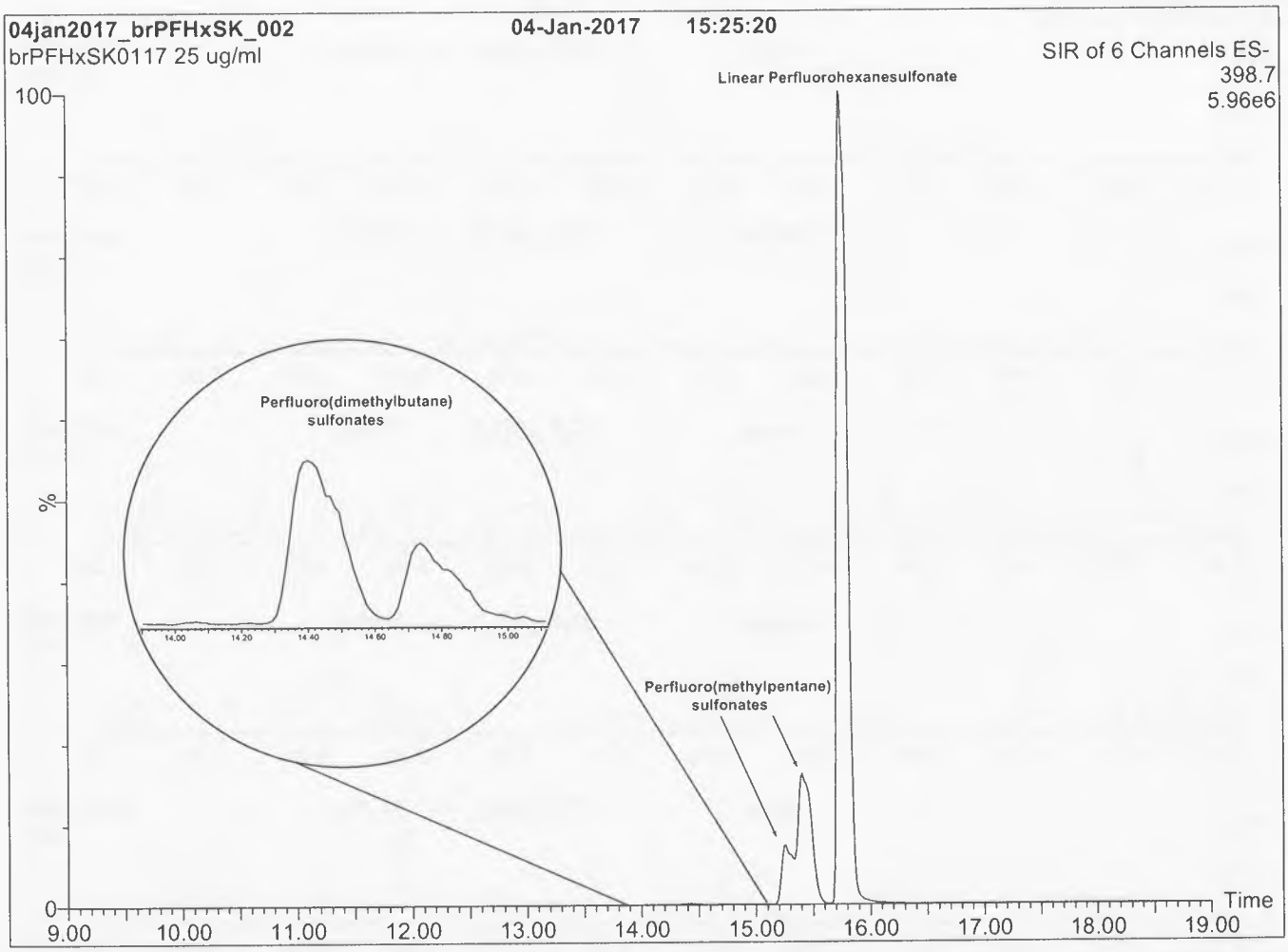
Flow: 300 µl/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

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

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



Conditions for Figure 2:

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

Chromatographic Conditions

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

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

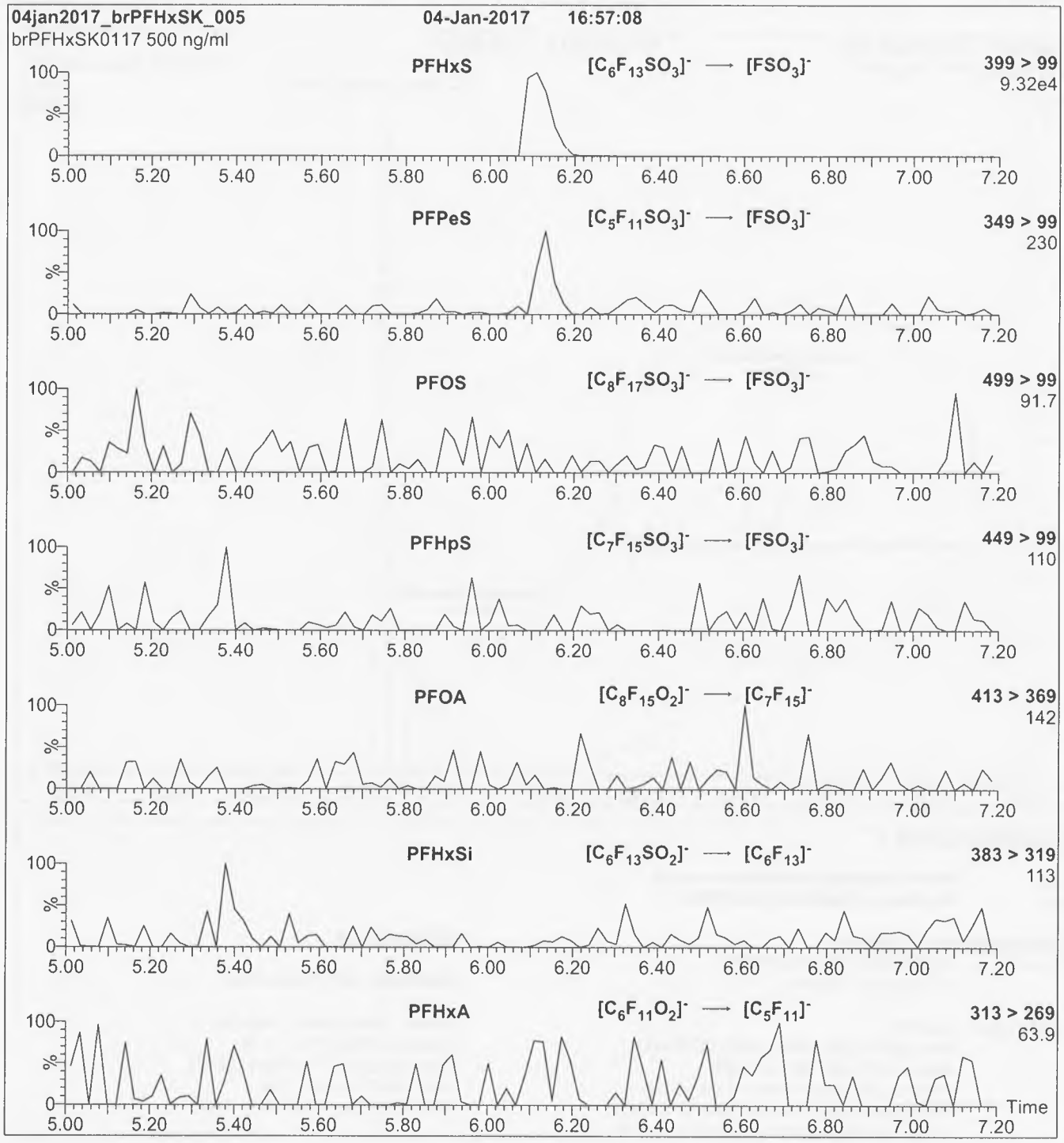
Flow: 300 µl/min

MS Parameters

Experiment: SIR (6 channels)

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

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



Conditions for Figure 3:

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

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

Flow: 300 µl/min

MS Parameters

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

BATTELLE

It can be done

BDO Id: 180618-07

Reagent Receipt Report

Approved: ☐ Authorized ☐

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

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

Notes:

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

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

180618-07

WELLINGTON LABORATORIES

CERTIFICATE OF ANALYSIS DOCUMENTATION

br-PFOSK

Potassium Perfluorooctanesulfonate Solution/Mixture of Linear and Branched Isomers

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

DESCRIPTION:

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

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HAZARDS:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

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

UNCERTAINTY:

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

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

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

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

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

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

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

CALA Testing Accreditation No. A1226

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER

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

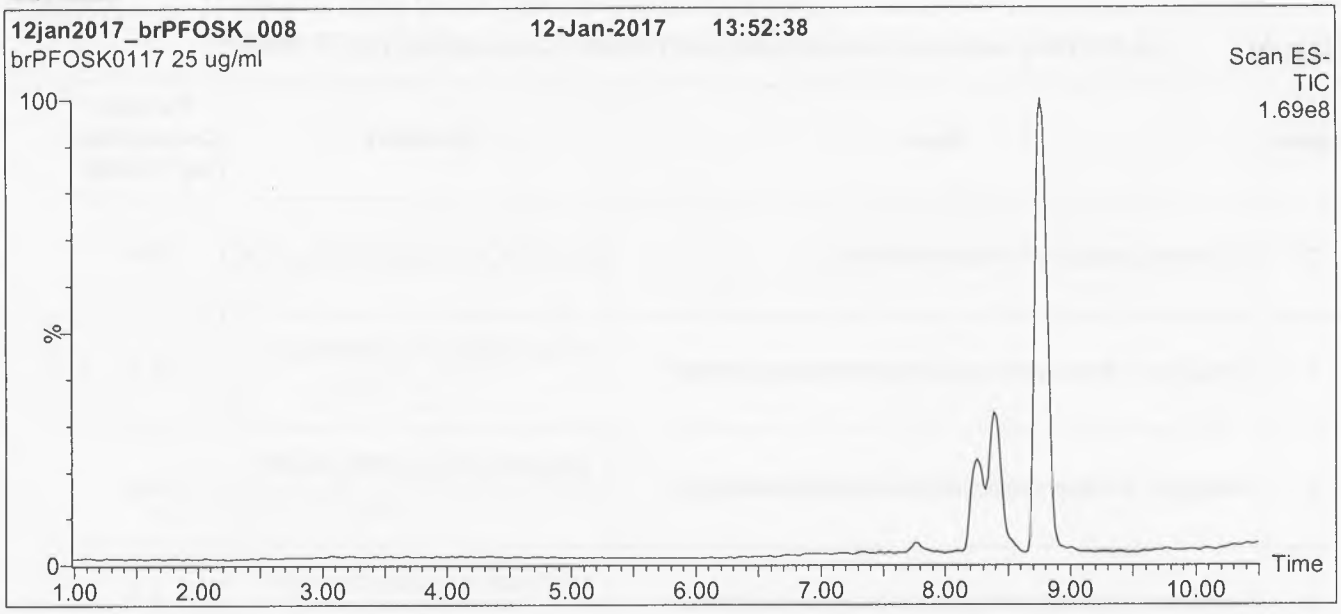
Table A: **br-PFOSK; Isomeric Components and Percent Composition (by ^{19}F-NMR)***

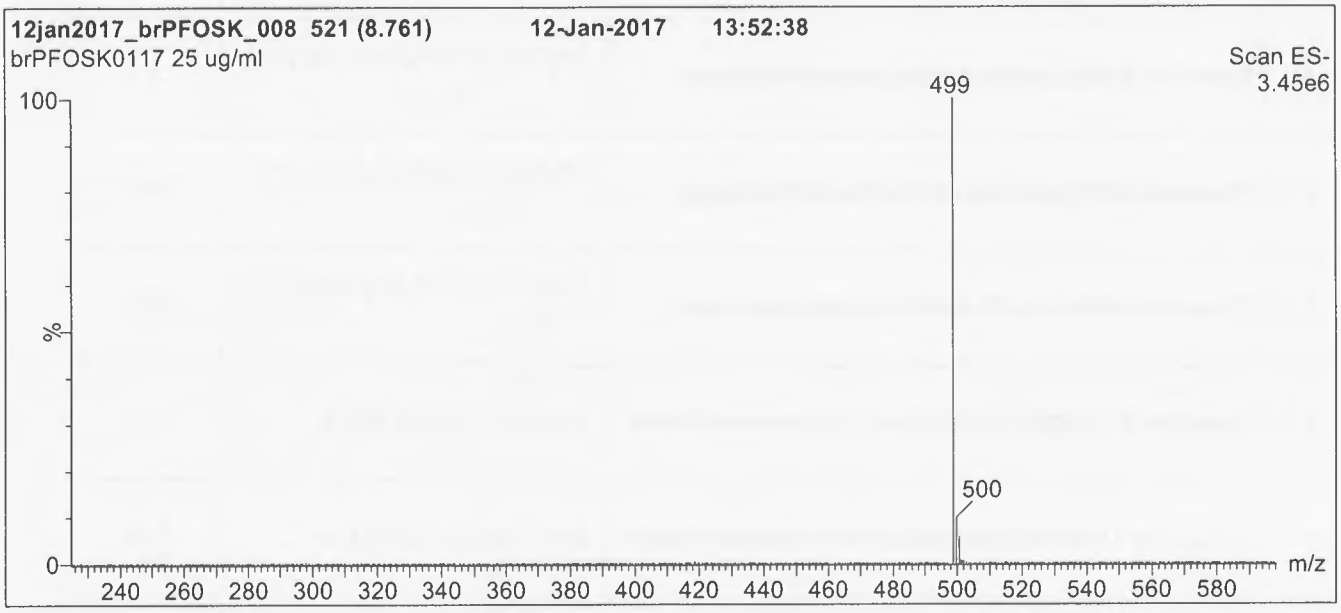
Isomer	Name	Structure	Percent Composition by ^{19}F-NMR
1	Potassium perfluoro-1-octanesulfonate	$CF_3CF_2CF_2CF_2CF_2CF_2CF_2CF_2SO_3^-K^+$	78.8
2	Potassium 1-trifluoromethylperfluoroheptanesulfonate**	$CF_3CF_2CF_2CF_2CF_2CF_2CF(CF_3)SO_3^-K^+$	1.2
3	Potassium 2-trifluoromethylperfluoroheptanesulfonate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

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

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

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





Conditions for Figure 1:

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

Chromatographic Conditions

Column: Acquity UPLC BEH Shield 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

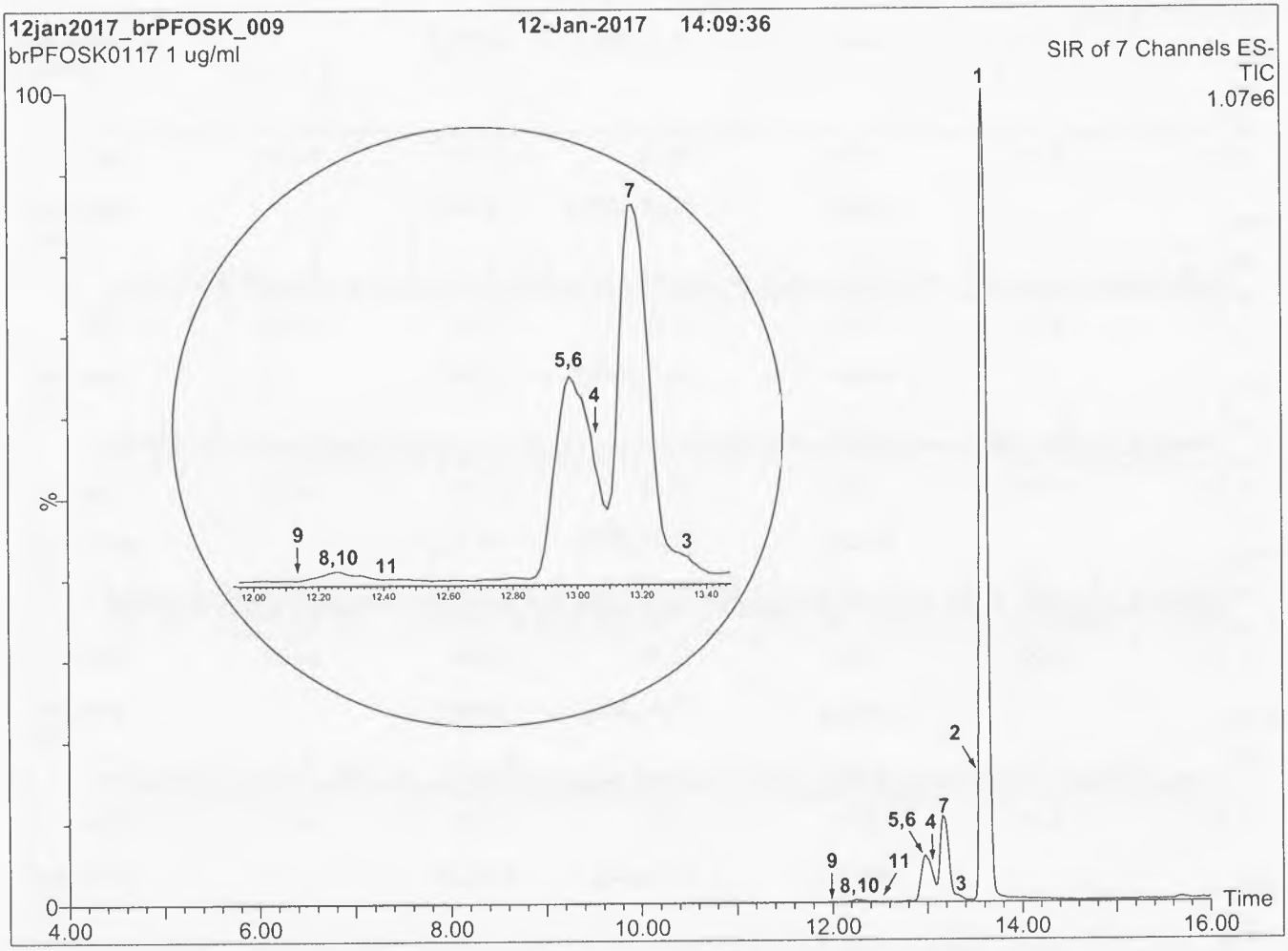
Flow: 300 µl/min

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**

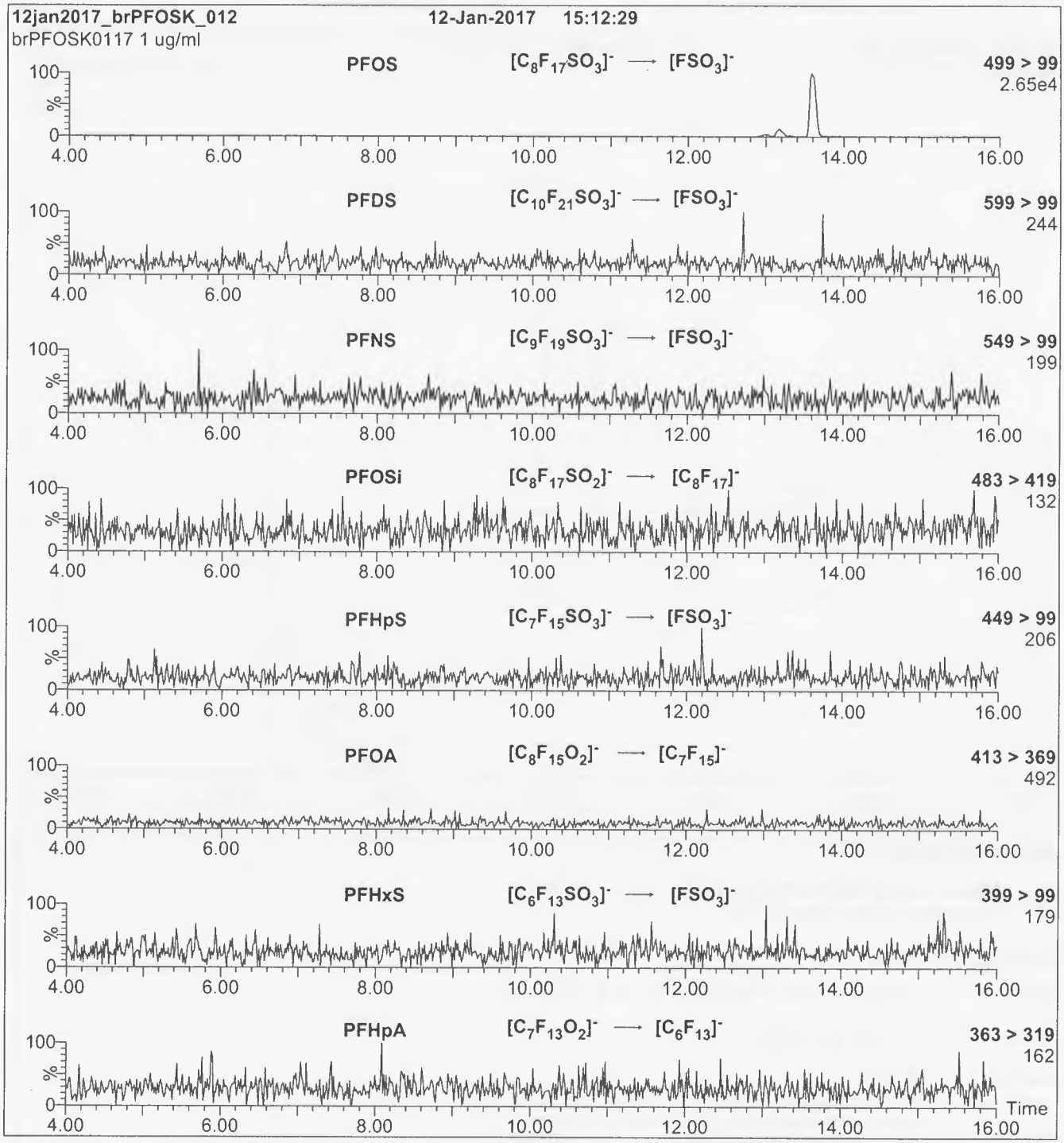
Chromatographic Conditions:

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
0.007 Flask Uncertainty

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

Note: All assigned values are anion concentrations.

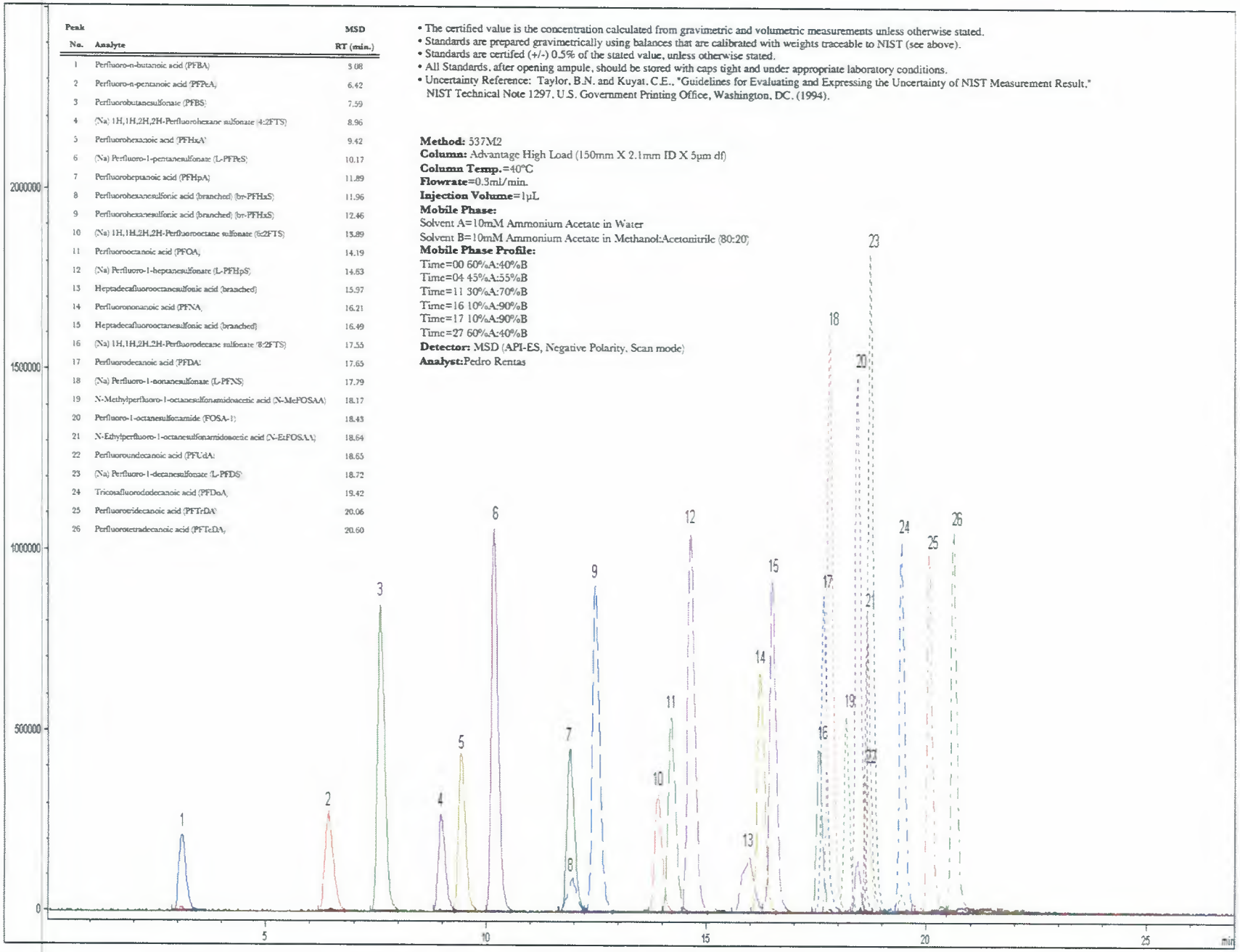
Formulated By:	Mario Luis	061918 DATE
Reviewed By:	Pedro L. Rentas	061918 DATE

	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

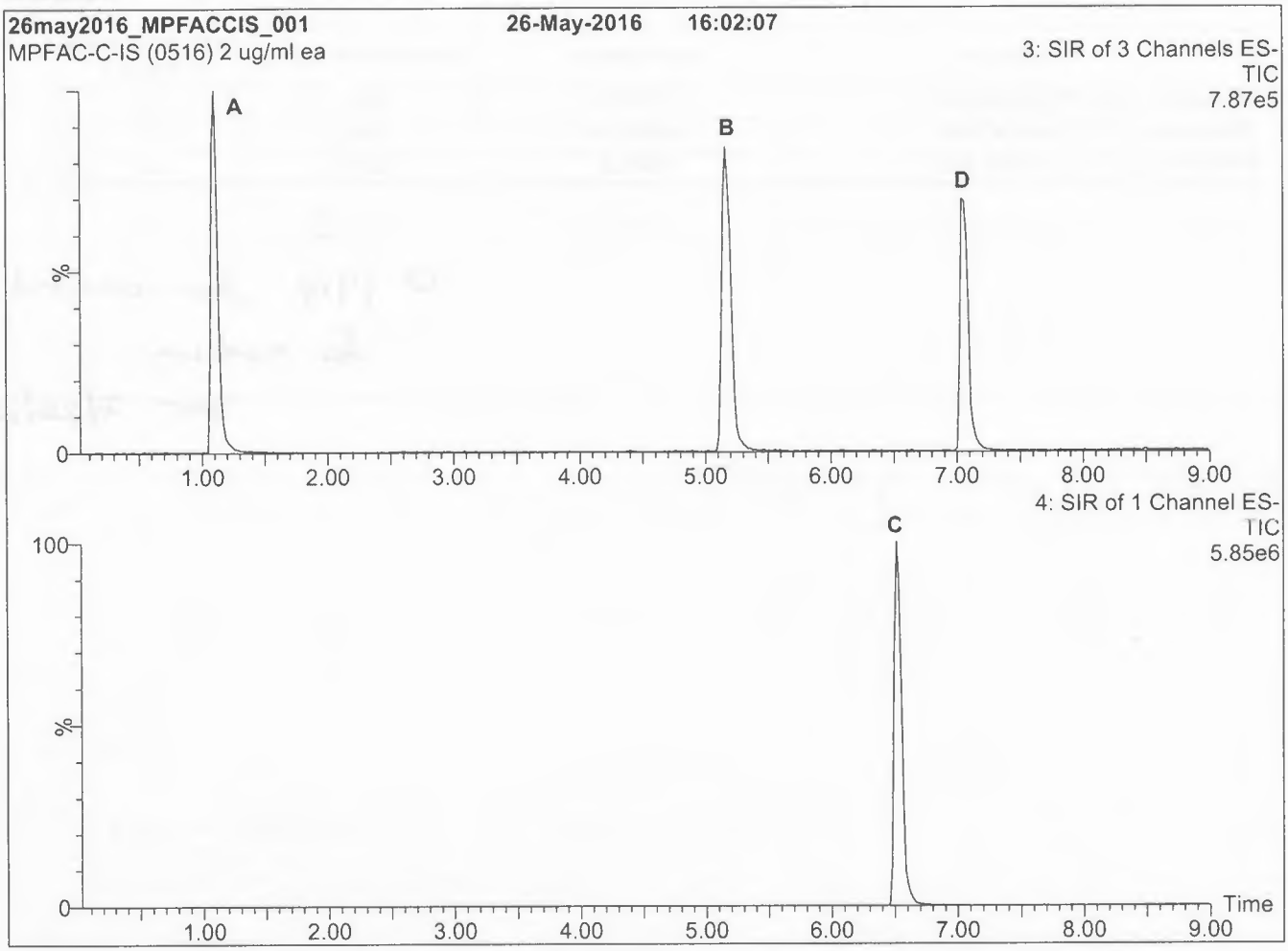
Table A: **MPFAC-C-IS; Components and Concentrations (ng/ml; ± 5% in Methanol / Water (<1%))**

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

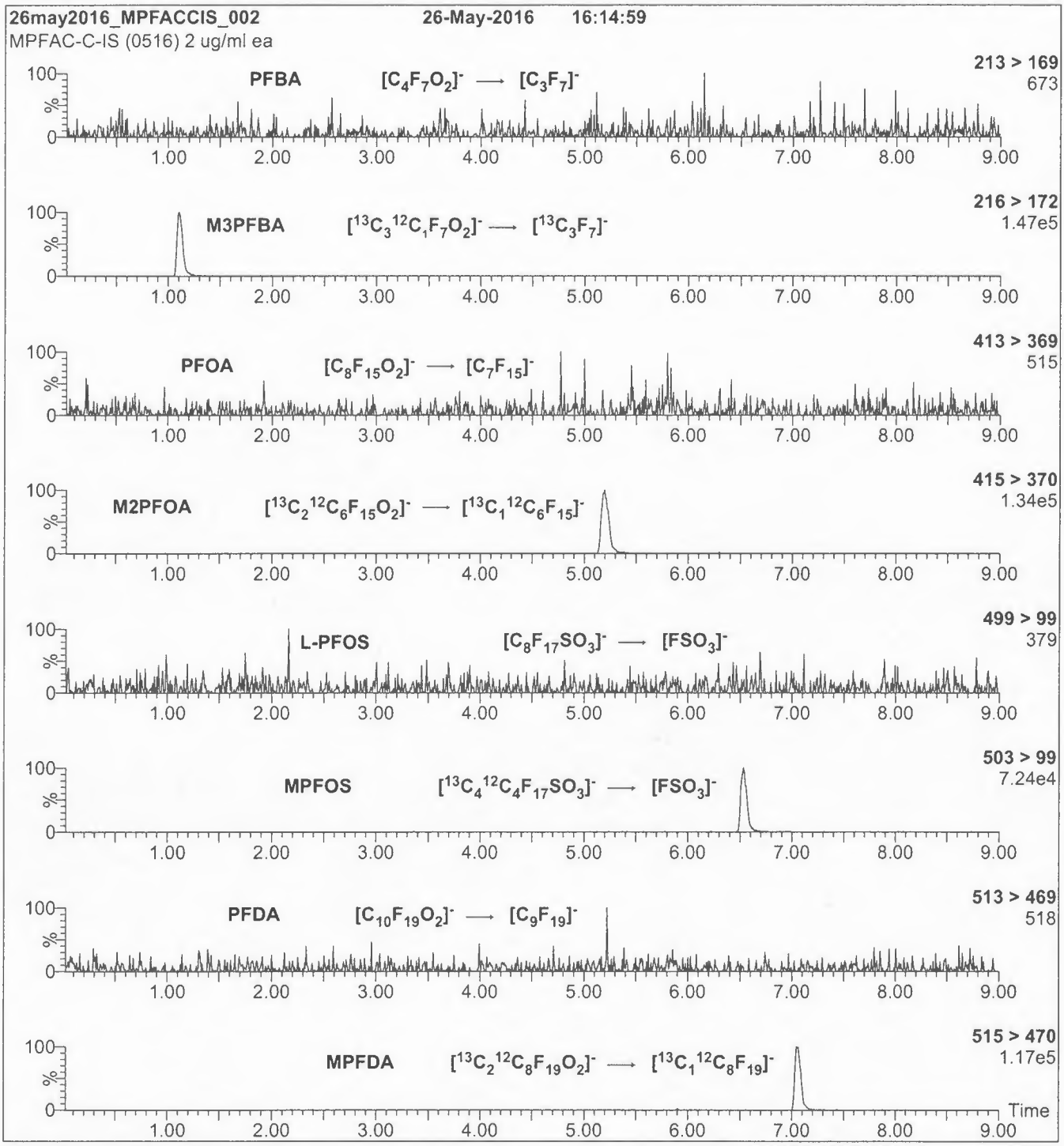
Flow: 300 µl/min

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 (^{2}H) perfluorooctanesulfonamidoacetic acids, and perfluoro-1-[$^{13}C_8$]octanesulfonamide. The components and their concentrations are given in Table A.

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

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HANDLING:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

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

UNCERTAINTY:

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

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

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

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

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

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

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

CALA Testing Accreditation No. A1226

ANAB ACCREDITED 9017034 REFERENCE MATERIAL PRODUCER

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

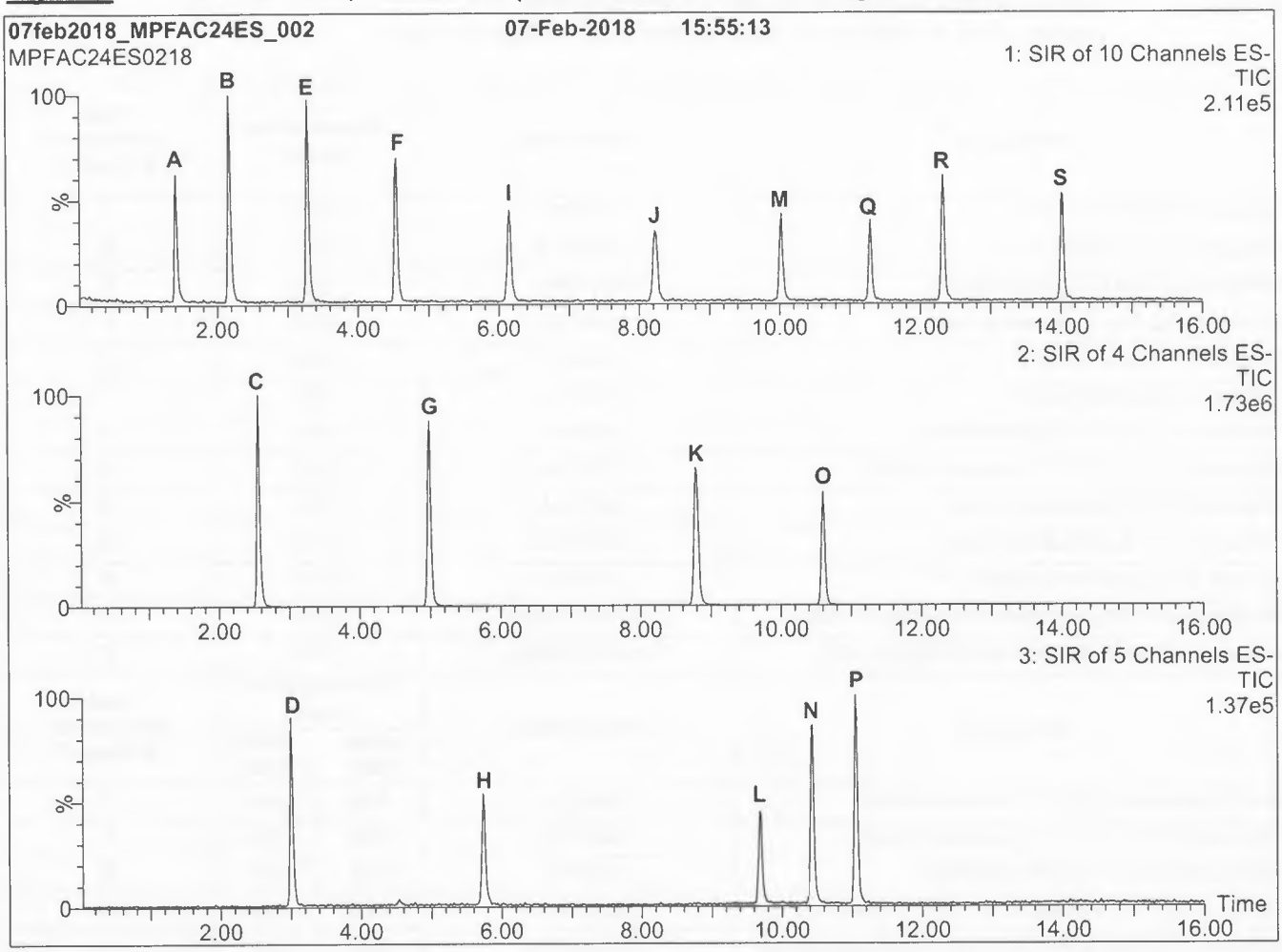
Table A: **MPFAC-24ES; Components and Concentrations (ng/ml, ± 5% in Methanol / Isopropanol (2%) / Water (<1%))**

Compound	Abbreviation	Concentration (ng/ml)		Peak Assignment in Figure 1
Perfluoro-n-[$^{13}C_4$]butanoic acid	MPFBA	1000		A
Perfluoro-n-[$^{13}C_5$]pentanoic acid	M5PFPeA	1000		B
Perfluoro-n-[1,2,3,4,6-$^{13}C_5$]hexanoic acid	M5PFHxA	1000		E
Perfluoro-n-[1,2,3,4-$^{13}C_4$]heptanoic acid	M4PFHpA	1000		F
Perfluoro-n-[$^{13}C_8$]octanoic acid	M8PFOA	1000		I
Perfluoro-n-[$^{13}C_9$]nonanoic acid	M9PFNA	1000		J
Perfluoro-n-[1,2,3,4,5,6-$^{13}C_6$]decanoic acid	M6PFDA	1000		M
Perfluoro-n-[1,2,3,4,5,6,7-$^{13}C_7$]undecanoic acid	M7PFUdA	1000		Q
Perfluoro-n-[1,2-$^{13}C_2$]dodecanoic acid	MPFDoA	1000		R
Perfluoro-n-[1,2-$^{13}C_2$]tetradecanoic acid	M2PFTeDA	1000		S
Perfluoro-1-[$^{13}C_8$]octanesulfonamide	M8FOSA	1000		O
N-methyl-d_3-perfluoro-1-octanesulfonamidoacetic acid	d3-N-MeFOSAA	1000		N
N-ethyl-d_5-perfluoro-1-octanesulfonamidoacetic acid	d5-N-EtFOSAA	1000		P
Compound	**Abbreviation**	**Concentration (ng/ml)**		**Peak Assignment in Figure 1**
		as the salt	**as the anion**	
Sodium perfluoro-1-[2,3,4-$^{13}C_3$]butanesulfonate	M3PFBS	1000	929	C
Sodium perfluoro-1-[1,2,3-$^{13}C_3$]hexanesulfonate	M3PFHxS	1000	946	G
Sodium perfluoro-1-[$^{13}C_8$]octanesulfonate	M8PFOS	1000	957	K
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-$^{13}C_2$]hexanesulfonate	M2-4:2FTS	1000	935	D
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-$^{13}C_2$]octanesulfonate	M2-6:2FTS	1000	949	H
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2-$^{13}C_2$]decanesulfonate	M2-8:2FTS	1000	958	L

Certified By: _____ **Date:** 02/09/2018
(mm/dd/yyyy)

B.G. Chittim, General Manager

Figure 1: **MPFAC-24ES; LC/MS Data (Total Ion Current Chromatogram; SIR)**



Conditions for Figure 1:

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

Chromatographic Conditions

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

Mobile phase: Gradient
Start: 40% (80:20 MeOH:ACN) / 60% H_2O
(both with 10 mM NH_4OAc buffer)
Ramp to 55% organic over 3.5 min.
Ramp to 70% organic over 6.5 min.
Ramp to 85% organic over 5 min and hold for
1 min before returning to initial conditions in 0.5 min.
Time: 17 min

Flow: 300 µl/min

MS Parameters

Experiment: SIR

Source: Electrospray (negative)
Capillary Voltage (kV) = 3.00
Cone Voltage (V) = variable (10-60)
Cone Gas Flow (l/hr) = 100
Desolvation Gas Flow (l/hr) = 750

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

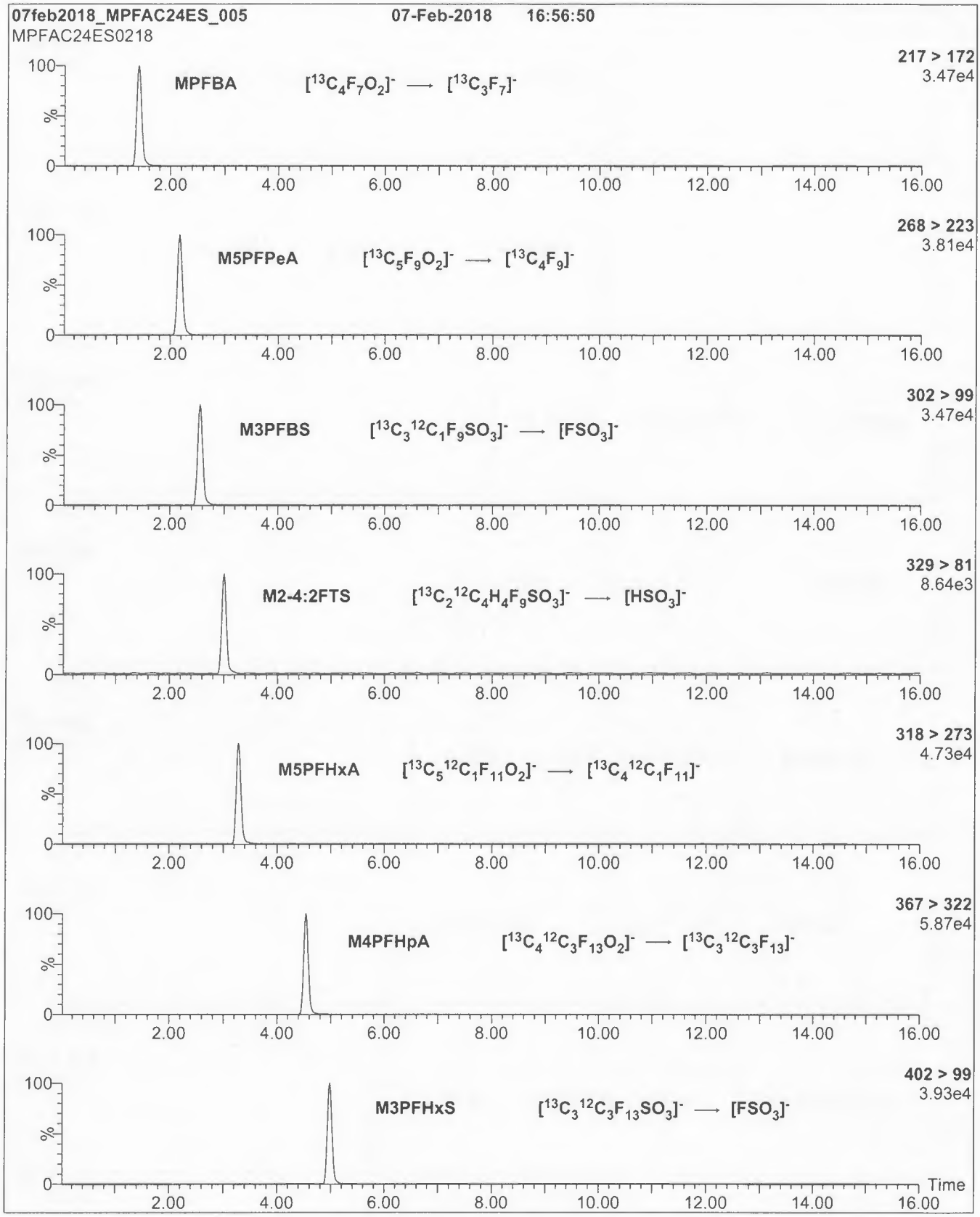


Figure 2: **MPFAC-24ES; LC/MS/MS Data (Selected MRM Transitions)**

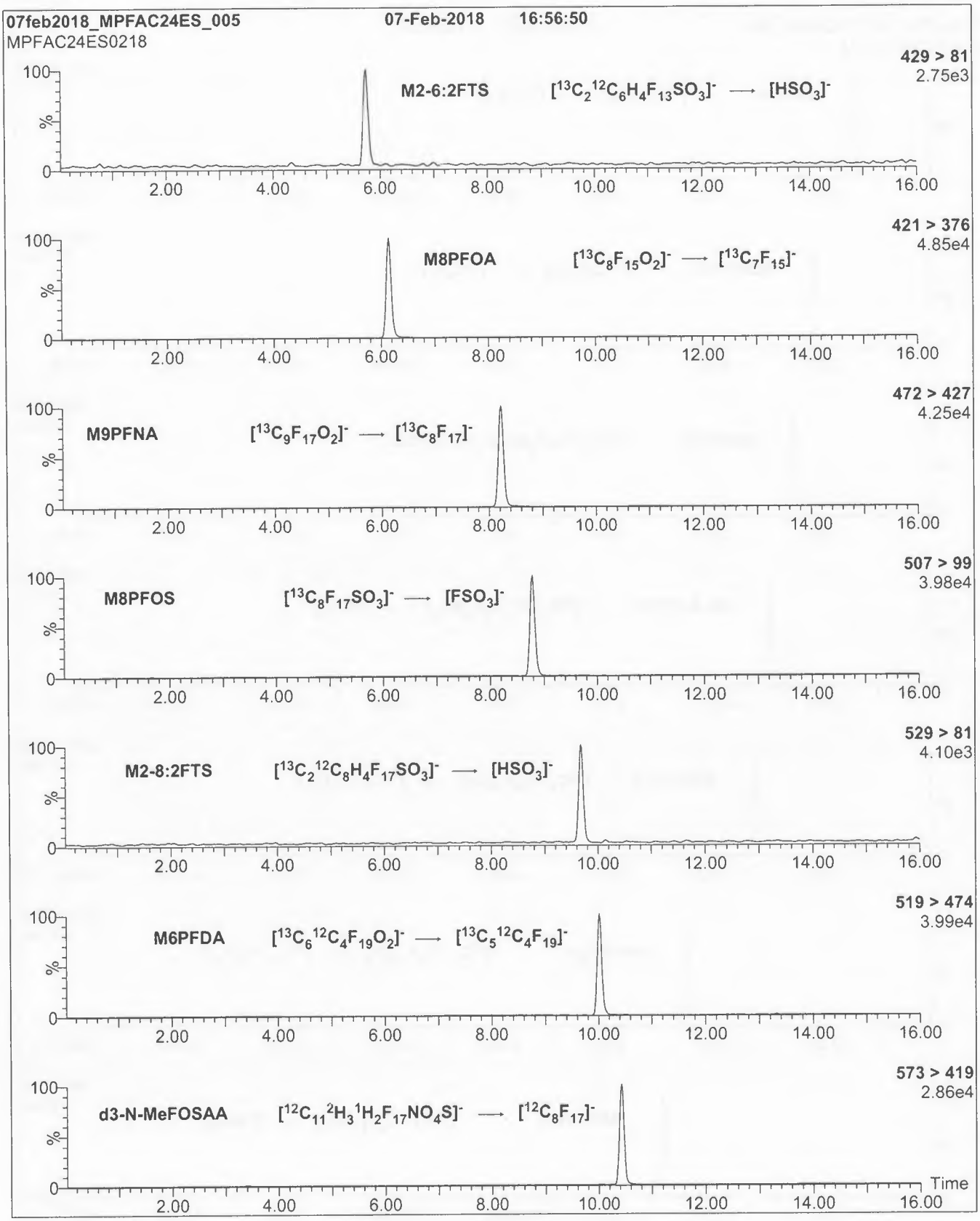
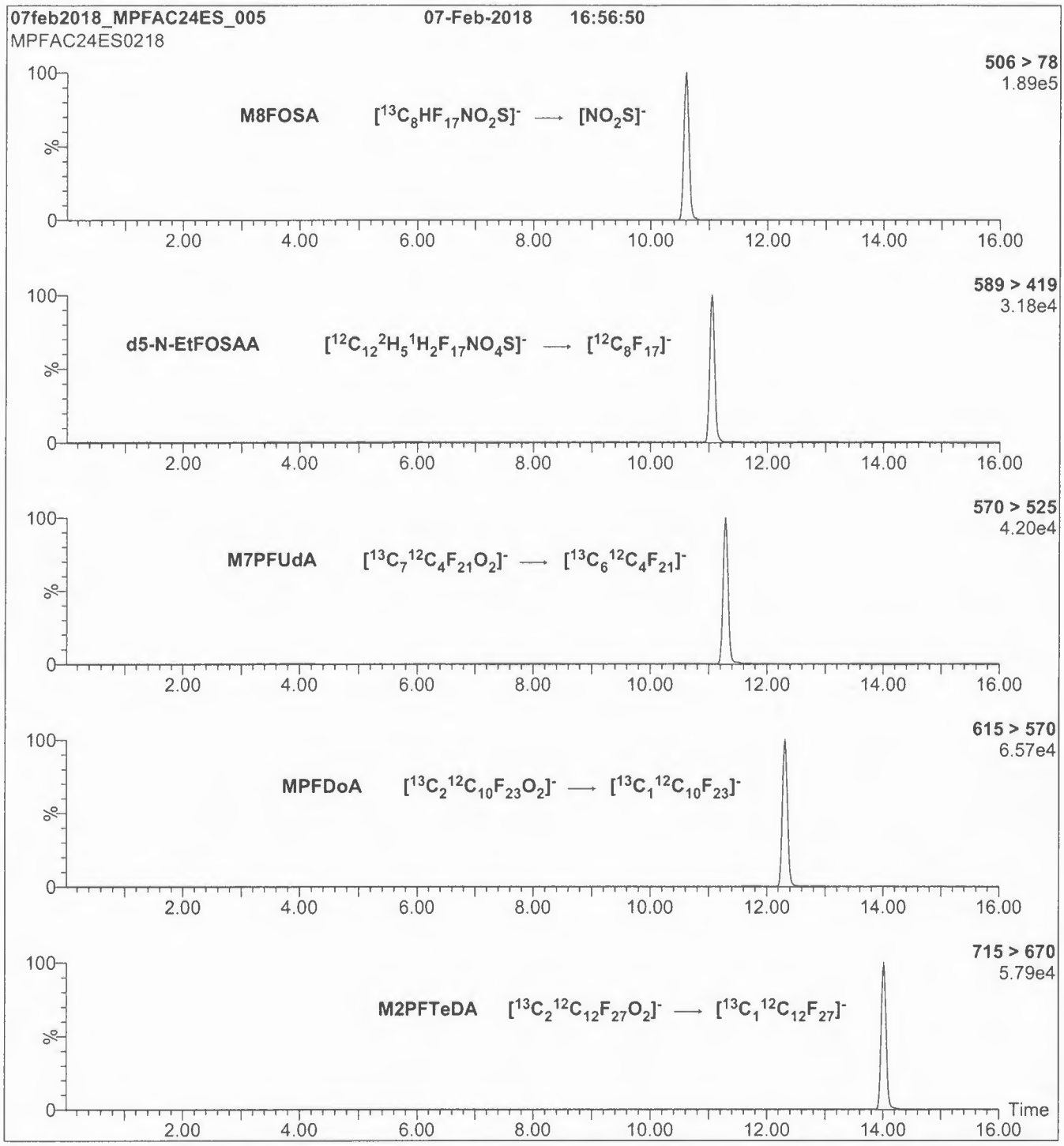


Figure 2: **MPFAC-24ES; LC/MS/MS Data (Selected MRM Transitions)**



Conditions for Figure 2:

Injection: On-column (MPFAC-24ES)

Mobile phase: Same as Figure 1

Flow: 300 µl/min

MS Parameters

Collision Gas (mbar) = 3.28e-3

Collision Energy (eV) = 8-40 (variable)

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It can be done

BDO Id: 181001-01

Reagent Receipt Report

Approved: ☐ **Authorized** ☐

Name: PFOA - 2nd source
Vendor: ABSOLUTE STANDARDS
Catalogue No: 99207
Type: Solution
Lot No: 092018
Quantity: 2 ea mL **% Moisture:**
Description: PFOA - 2nd source

Received: 10/1/2018
Custodian: Schumitz, Matt
Expires: 9/20/2023
Consumed:
Stored In: Sample Preparation - F0035

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	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	--	--	☐			1
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	1.0100	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	--	--	☐			2

Total Analytes: 24

Notes:

	Analyte:	Comment:
1	Perfluoro-1-hexanesulfonate	17 on C of A
2	Sodium perfluoro-1-pentanesulfonate	16 on C of A

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

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

181001-01

2nd Source

CERTIFIED WEIGHT REPORT

Part Number: 99207
Lot Number: 092018
Description: PFOA - DOD
24 components
Expiration Date: 092023
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

Eli Aliaga 092018
Formulated By: Eli Aliaga DATE

Pedro Rentas 092018
Reviewed By: Pedro L. Rentas DATE

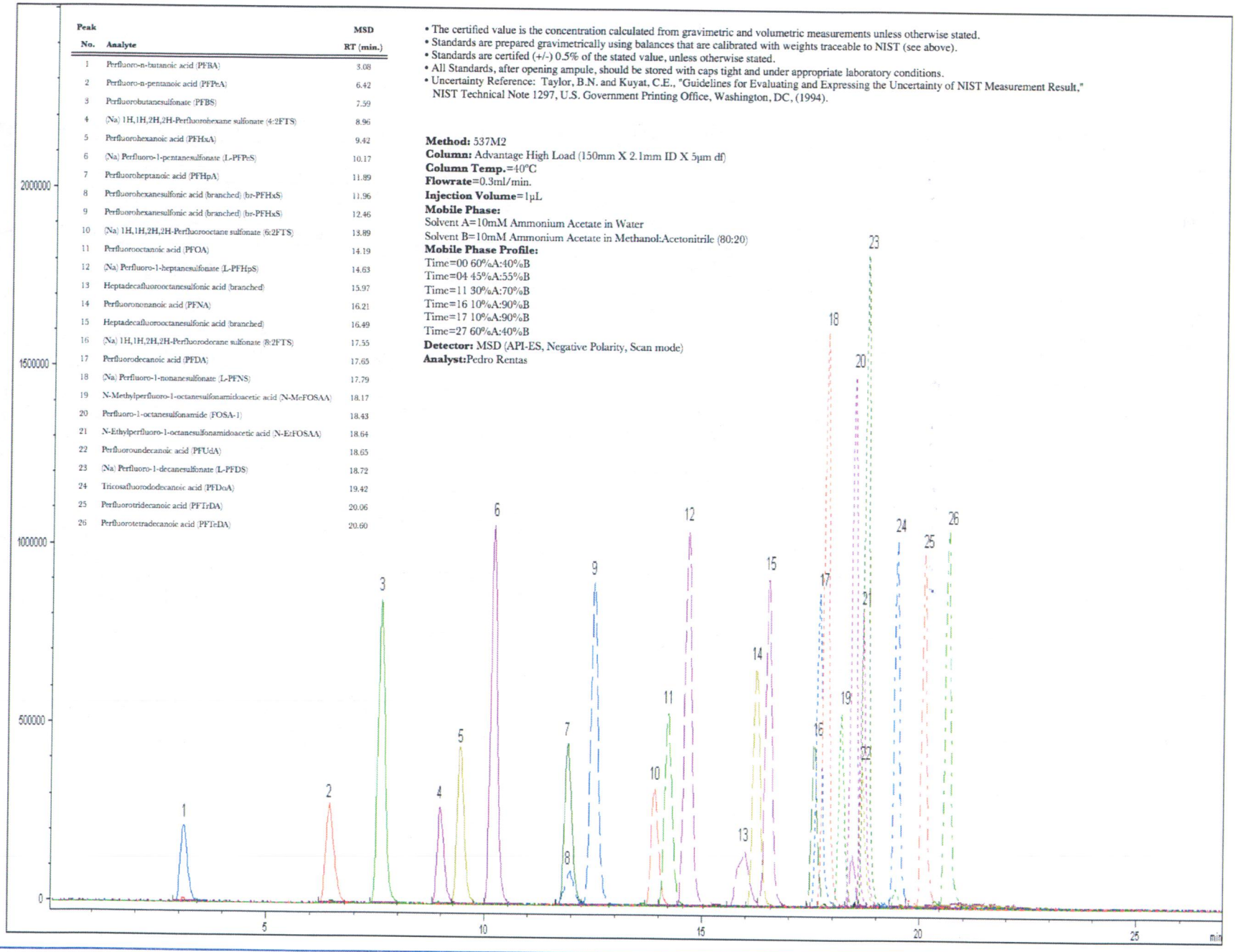
Note: All assigned values are anion concentrations.

	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 (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	FOSA0618I	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	LPFNS0718	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	LPFDS1117	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)	3.08
2	Perfluoro-n-pentanoic acid (PFPeA)	6.42
3	Perfluorobutanesulfonate (PFBS)	7.59
4	(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate (4:2FTS)	8.96
5	Perfluorohexanoic acid (PFHxA)	9.42
6	(Na) Perfluoro-1-pentanesulfonate (L-PFPeS)	10.17
7	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



Sample Preparation

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It can be done

BATTELLE - NORWELL OPERATIONS
SAMPLE PREPARATION RECORDS

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

18-0589

CTO-4164: Analysis of Solids

SB, SS

SOP Numbers (see workplan for modifications)

ExtractionSOP No. 5-370

This Batch Contains The Following Samples:			
CR902PB-FS	J8442-FS	J8448-FS	J8454MSD-FS
CR903LCS-FS	J8443-FS	J8449-FS	
J8438-FS	J8444-FS	J8450-FS	
J8439-FS	J8445-FS	J8451-FS	
J8440-FS	J8446-FS	J8452-FS	
J8441-FS	J8447-FS	J8453MS-FS	

Laboratory Preparation Records
COMPLETE AND VALIDATED

Prep Task Leader: Stephanie Schultz

Approved By:	Date	Initials
Denise Schumitz	10/24/2018	DMS

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
SAMPLE IDENTIFICATION PAGE

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

Project No.(s)
100110125-01

18-0589

CTO-4164: Analysis of Solids

SB, SS

Sample ID	Description
CR902PB-FS	Procedural Blank - Ottawa Sand (180507-02)
CR903LCS-FS	Laboratory Control Sample - Ottawa Sand (180507-02)
J8438-FS	VC-MS09-SS01-000H
J8439-FS	VC-MS09-SB01-0102
J8440-FS	VC-MS09-SB01-0506
J8441-FS	VC-MS09-SS02-000H
J8442-FS	VC-MS09-SB02-0102
J8443-FS	VC-MS09-SB02-0506
J8444-FS	VC-MS09-SS03-000H
J8445-FS	VC-MS09-SB03-0102
J8446-FS	VC-MS09-SB03-0506
J8447-FS	VC-MS09-SS04-000H
J8448-FS	VC-MS09-SB04-0102
J8449-FS	VC-MS09-SB04-0506
J8450-FS	VC-MS09-SS05-000H
J8451-FS	VC-MS09-SB05-0102
J8452-FS	VC-MS09-SB05-0506
J8453MS-FS	Matrix Spike of VC-MS09-SB04-0102-MS
J8454MSD-FS	Matrix Spike Duplicate of VC-MS09-SB04-0102-MSD

Samples Assigned By: Jonathan Thorn Date : September 28, 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

18-0589

CTO-4164: Analysis of Solids

SB, SS

Requested On/By:	10/01/2018 SAS	**Purpose:**	Sample Preparation
Relinquished On/By:	10/01/2018 MDS	**Last Activity:**	Return

Accepted On/By:	10/01/2018 SAS	**Returned On/To:**	10/01/2018 MDS
Stored In Facility:	Sample Preparation	**Returned To Facility:**	Custody: NA
Stored Until	10/01/2018		
Stored Comment:	NA	**Returned Comment:**	NA

No.	BDO-ID:	Ctrs	*	Condition:	Custody Comment:
1	J8438	1	--	Intact	NA
2	J8439	1	--	Intact	NA
3	J8440	1	--	Intact	NA
4	J8441	1	--	Intact	NA
5	J8442	1	--	Intact	NA
6	J8443	1	--	Intact	NA
7	J8444	1	--	Intact	NA
8	J8445	1	--	Intact	NA
9	J8446	1	--	Intact	NA
10	J8447	1	--	Intact	NA
11	J8448	1	--	Intact	NA
12	J8449	1	--	Intact	NA
13	J8450	1	--	Intact	NA
14	J8451	1	--	Intact	NA
15	J8452	1	--	Intact	NA

Total Samples 15 * "C" = Consumed Container

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
ELECTRONIC DRY WEIGHT DETERMINATION

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

Project No.(s)
100110125-01

18-0589

CTO-4164: Analysis of Solids

SB, SS

Sample ID:	Ctrs.	*	Tare Wt. (g)	Aliquot Wt. (g)	Dry Wt. (g)	Sample Wet Wt. (g)	% Dry Wt.	% Moisture	Sample Dry Wt. (g)
CR902PB-FS	NA	--	NA	NA	NA	2.02	100.00	0.00	2.02
CR903LCS-FS	NA	--	NA	NA	NA	2.04	100.00	0.00	2.04
J8438-FS	1	--	1.08	6.95	6.25	2.07	88.07	11.93	1.82
J8439-FS	1	--	1.12	6.90	6.06	1.96	85.47	14.53	1.68
J8440-FS	1	--	1.11	7.67	6.31	1.95	79.27	20.73	1.55
J8441-FS	1	--	1.05	7.07	5.92	2.01	80.90	19.10	1.63
J8442-FS	1	--	1.05	6.29	4.88	1.96	73.09	26.91	1.43
J8443-FS	1	--	1.12	6.69	5.33	2.07	75.58	24.42	1.56
J8444-FS	1	--	1.06	6.66	6.52	2.00	97.50	2.50	1.95
J8445-FS	1	--	1.12	7.20	6.42	1.99	87.17	12.83	1.73
J8446-FS	1	--	1.10	8.06	6.17	2.03	72.84	27.16	1.48
J8447-FS	1	--	1.05	8.14	8.04	2.04	98.59	1.41	2.01
J8448-FS	1	--	1.08	8.31	7.53	1.93	89.21	10.79	1.72
J8449-FS	1	--	1.08	6.21	4.92	1.96	74.85	25.15	1.47
J8450-FS	1	--	1.08	6.68	6.25	1.96	92.32	7.68	1.81
J8451-FS	1	--	1.07	6.51	5.95	2.02	89.71	10.29	1.81
J8452-FS	1	--	1.07	6.56	5.74	1.94	85.06	14.94	1.65
J8453MS-FS	1	--	1.06	7.65	6.89	2.00	88.47	11.53	1.77
J8454MSD-FS	1	--	1.06	6.46	5.91	1.92	89.81	10.19	1.72

Percent Dry Wt (%) = [(Sample Dry Wt. (g) - Tare Wt. (g))/(Aliquot Wet Wt. (g) - Tare Wt. (g))] * 100
Sample Dry Wt. (%) = [(Sample Wet Wt. (g) * (Percent Dry Wt./100)]
* "C" = Sample Container Is Consumed

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
ELECTRONIC DRY WEIGHT DETERMINATION

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

Project No.(s)
100110125-01

18-0589

CTO-4164: Analysis of Solids

SB, SS

Sample ID:	Ctrs.	*	Tare Wt. (g)	Aliquot Wt. (g)	Dry Wt. (g)	Sample Wet Wt. (g)	% Dry Wt.	% Moisture	Sample Dry Wt. (g)

Task: Wet Weight

BNO-ID:	Date/Initials:	Battelle-ID:
CR902PB-FS	10/08/2018 KB	BAL-009
CR903LCS-FS	10/08/2018 KB	BAL-015
J8438-FS	10/01/2018 KB	BAL-015
J8439-FS	10/01/2018 KB	BAL-015
J8440-FS	10/01/2018 KB	BAL-015
J8441-FS	10/01/2018 KB	BAL-015
J8442-FS	10/01/2018 KB	BAL-015
J8443-FS	10/01/2018 KB	BAL-015
J8444-FS	10/01/2018 KB	BAL-015
J8445-FS	10/01/2018 KB	BAL-015
J8446-FS	10/01/2018 KB	BAL-015
J8447-FS	10/01/2018 KB	BAL-015
J8448-FS	10/01/2018 KB	BAL-015
J8449-FS	10/01/2018 KB	BAL-015
J8450-FS	10/01/2018 KB	BAL-015
J8451-FS	10/01/2018 KB	BAL-015
J8452-FS	10/01/2018 KB	BAL-015
J8453MS-FS	10/01/2018 KB	BAL-015
J8454MSD-FS	10/01/2018 KB	BAL-015

Percent Dry Wt (%) = [(Sample Dry Wt. (g) - Tare Wt. (g))/(Aliquot Wet Wt. (g) - Tare Wt. (g))] * 100
Sample Dry Wt. (%) = [(Sample Wet Wt. (g) * (Percent Dry Wt./100)]
* "C" = Sample Container Is Consumed

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
ELECTRONIC DRY WEIGHT DETERMINATION

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

Project No.(s)
100110125-01

18-0589

CTO-4164: Analysis of Solids

SB, SS

Sample ID:	Ctrs.	*	Tare Wt. (g)	Aliquot Wt. (g)	Dry Wt. (g)	Sample Wet Wt. (g)	% Dry Wt.	% Moisture	Sample Dry Wt. (g)

Task: Tare Weight

BNO-ID:	Date/Initials:	Battelle-ID:
CR902PB-FS	--	--
CR903LCS-FS	--	--
J8438-FS	10/01/2018 KB	BAL-015
J8439-FS	10/01/2018 KB	BAL-015
J8440-FS	10/01/2018 KB	BAL-015
J8441-FS	10/01/2018 KB	BAL-015
J8442-FS	10/01/2018 KB	BAL-015
J8443-FS	10/01/2018 KB	BAL-015
J8444-FS	10/01/2018 KB	BAL-015
J8445-FS	10/01/2018 KB	BAL-015
J8446-FS	10/01/2018 KB	BAL-015
J8447-FS	10/01/2018 KB	BAL-015
J8448-FS	10/01/2018 KB	BAL-015
J8449-FS	10/01/2018 KB	BAL-015
J8450-FS	10/01/2018 KB	BAL-015
J8451-FS	10/01/2018 KB	BAL-015
J8452-FS	10/01/2018 KB	BAL-015
J8453MS-FS	10/01/2018 KB	BAL-015
J8454MSD-FS	10/01/2018 KB	BAL-015

Percent Dry Wt (%) = [(Sample Dry Wt. (g) - Tare Wt. (g))/(Aliquot Wet Wt. (g) - Tare Wt. (g))] * 100
Sample Dry Wt. (%) = [(Sample Wet Wt. (g) * (Percent Dry Wt./100)]
* "C" = Sample Container Is Consumed

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
ELECTRONIC DRY WEIGHT DETERMINATION

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

Project No.(s)
100110125-01

18-0589

CTO-4164: Analysis of Solids

SB, SS

Sample ID:	Ctrs.	*	Tare Wt. (g)	Aliquot Wt. (g)	Dry Wt. (g)	Sample Wet Wt. (g)	% Dry Wt.	% Moisture	Sample Dry Wt. (g)

Task: Aliquot Wet Weight

BNO-ID:	Date/Initials:	Battelle-ID:
CR902PB-FS	--	--
CR903LCS-FS	--	--
J8438-FS	10/01/2018 KB	BAL-015
J8439-FS	10/01/2018 KB	BAL-015
J8440-FS	10/01/2018 KB	BAL-015
J8441-FS	10/01/2018 KB	BAL-015
J8442-FS	10/01/2018 KB	BAL-015
J8443-FS	10/01/2018 KB	BAL-015
J8444-FS	10/01/2018 KB	BAL-015
J8445-FS	10/01/2018 KB	BAL-015
J8446-FS	10/01/2018 KB	BAL-015
J8447-FS	10/01/2018 KB	BAL-015
J8448-FS	10/01/2018 KB	BAL-015
J8449-FS	10/01/2018 KB	BAL-015
J8450-FS	10/01/2018 KB	BAL-015
J8451-FS	10/01/2018 KB	BAL-015
J8452-FS	10/01/2018 KB	BAL-015
J8453MS-FS	10/01/2018 KB	BAL-015
J8454MSD-FS	10/01/2018 KB	BAL-015

Percent Dry Wt (%) = [(Sample Dry Wt. (g) - Tare Wt. (g))/(Aliquot Wet Wt. (g) - Tare Wt. (g))] * 100
Sample Dry Wt. (%) = [(Sample Wet Wt. (g) * (Percent Dry Wt./100)]
* "C" = Sample Container Is Consumed

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
ELECTRONIC DRY WEIGHT DETERMINATION

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

Project No.(s)
100110125-01

18-0589

CTO-4164: Analysis of Solids

SB, SS

Sample ID:	Ctrs.	*	Tare Wt. (g)	Aliquot Wt. (g)	Dry Wt. (g)	Sample Wet Wt. (g)	% Dry Wt.	% Moisture	Sample Dry Wt. (g)

Task: Aliquot Dry Weight

BNO-ID:	Date/Initials:	Battelle-ID:
CR902PB-FS	--	--
CR903LCS-FS	--	--
J8438-FS	10/02/2018 KB	BAL-015
J8439-FS	10/02/2018 KB	BAL-015
J8440-FS	10/02/2018 KB	BAL-015
J8441-FS	10/02/2018 KB	BAL-015
J8442-FS	10/02/2018 KB	BAL-015
J8443-FS	10/02/2018 KB	BAL-015
J8444-FS	10/02/2018 KB	BAL-015
J8445-FS	10/02/2018 KB	BAL-015
J8446-FS	10/02/2018 KB	BAL-015
J8447-FS	10/02/2018 KB	BAL-015
J8448-FS	10/02/2018 KB	BAL-015
J8449-FS	10/02/2018 KB	BAL-015
J8450-FS	10/02/2018 KB	BAL-015
J8451-FS	10/02/2018 KB	BAL-015
J8452-FS	10/02/2018 KB	BAL-015
J8453MS-FS	10/02/2018 KB	BAL-015
J8454MSD-FS	10/02/2018 KB	BAL-015

Percent Dry Wt (%) = [(Sample Dry Wt. (g) - Tare Wt. (g))/(Aliquot Wet Wt. (g) - Tare Wt. (g))] * 100
Sample Dry Wt. (%) = [(Sample Wet Wt. (g) * (Percent Dry Wt./100)]
* "C" = Sample Container Is Consumed

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
SURROGATE SPIKE FORM

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

Project No.(s)
100110125-01

18-0589

CTO-4164: Analysis of Solids

SB, SS

Sample ID	Standard ID	Type	Vial No.	Vol Added (uL)	Date Spiked/ Spiked By	Witn'd By	Comment
CR902PB-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
CR903LCS-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
CR903LCS-FS	KC02	LCS/MS	1	300	10/08/18 KB	DMS	NA
J8438-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
J8439-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
J8440-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
J8441-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
J8442-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
J8443-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
J8444-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
J8445-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
J8446-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
J8447-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
J8448-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
J8449-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
J8450-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
J8451-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
J8452-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
J8453MS-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
J8453MS-FS	KC02	LCS/MS	1	800	10/08/18 KB	DMS	NA
J8454MSD-FS	KB71	SIS	1	50	10/08/18 KB	DMS	NA
J8454MSD-FS	KC02	LCS/MS	1	800	10/08/18 KB	DMS	NA

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
SURROGATE SPIKE FORM

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

Project No.(s)
100110125-01

18-0589

CTO-4164: Analysis of Solids

SB, SS

Sample ID	Standard ID	Type	Vial No.	Vol Added (uL)	Date Spiked/ Spiked By	Witn'd By	Comment

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
KB71	Pipette	B814659662
KC02	Pipette	B814657482
KC02	Pipette	B820865811

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

18-0589

CTO-4164: Analysis of Solids

SB, SS

Sample ID	1st Extraction	2nd Extraction	3rd Extraction	Conc. ID	Turbo °C	Turbo PSI	KD °C	Comment
CR902PB-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA
CR903LCS-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA
J8438-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA
J8439-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA
J8440-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA
J8441-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA
J8442-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA
J8443-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA
J8444-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA
J8445-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA
J8446-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA
J8447-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA
J8448-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA
J8449-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA
J8450-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA
J8451-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA
J8452-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA
J8453MS-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA
J8454MSD-FS	10/08/18 KB	10/08/18 KB	NA	NA	NA	NA	NA	NA

Solvents/Reagent Preparations:

Name	ID	Expires	Lot No	Procedure	Comments
0.4% NH3 in Methanol	RP-181008-2	10/08/18	183857	Per 100 mL, 3.5 mL ammonia solution brought to 100 mL with methanol	
0.4% NH3 in Methanol	RP-181008-2	10/08/18	SHBJ0412	Per 100 mL, 3.5 mL ammonia solution brought to 100 mL with methanol	

Solvents/Reagents:

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It can be done

BATTELLE - NORWELL OPERATIONS
COLUMN FRACTIONATION FORM

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

Project No.(s)
100110125-01

18-0589

CTO-4164: Analysis of Solids

SB, SS

Extract Id	Date	Init.	Conc. ID	Turbo °C	Turbo PSI	KD °C	Comments
CR902PB-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA
CR903LCS-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA
J8438-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA
J8439-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA
J8440-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA
J8441-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA
J8442-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA
J8443-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA
J8444-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA
J8445-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA
J8446-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA
J8447-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA
J8448-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA
J8449-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA
J8450-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA
J8451-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA
J8452-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA
J8453MS-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA
J8454MSD-FS(3)	10/09/18	KB	NA	NA	NA	NA	NA

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
COLUMN FRACTIONATION FORM

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

Project No.(s)
100110125-01

18-0589

CTO-4164: Analysis of Solids

SB, SS

Extract Id	Date	Init.	Conc. ID	Turbo °C	Turbo PSI	KD °C	Comments

Column Diameter: 13 mm **Procedure Comment:**

Elution Volume: 10 mL

Solvents

Reagents

Reagent Prep	Weight g	Name	Expires	Lot No	Procedure
RP-181009-1	Not Measured	0.4% NH3 in Methanol	10/09/18	183857	Per 100 mL, 3.5 mL ar brought to 100 mL with
RP-181009-1	Not Measured	0.4% NH3 in Methanol	10/09/18	SHBJ0412	Per 100 mL, 3.5 mL ar brought to 100 mL with
RP-181009-4	0.50	ENVI-CARB SPE	10/09/18	10215411	Rinse SPE cartridge w

Fractions

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
COLUMN FRACTIONATION FORM

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

Project No.(s)
100110125-01

18-0589

CTO-4164: Analysis of Solids

SB, SS

Extract Id	Date	Init.	Conc. ID	Turbo °C	Turbo PSI	KD °C	Comments
J8444-FS(5)	10/10/18	KB	NA	NA	NA	NA	NA

Column Diameter: 13 mm

Elution Volume: 10 mL

Procedure Comment: Column cleanup re-done on one sample due to not getting the second 5mL elution

Solvents

Reagents

Reagent Prep	Weight g	Name	Expires	Lot No	Procedure
RP-181010-3	Not Measured	0.4% NH3 in Methanol	10/10/18	183857	Per 100 mL, 3.5 mL ar brought to 100 mL with
RP-181010-3	Not Measured	0.4% NH3 in Methanol	10/10/18	SHBJ0412	Per 100 mL, 3.5 mL ar brought to 100 mL with
RP-181010-9	0.50	ENVI-CARB SPE	10/11/18	10215411	Rinse SPE cartridge w

Fractions

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
INTERNAL STANDARD SPIKING FORM

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

Project No.(s)
100110125-01

18-0589

CTO-4164: Analysis of Solids

SB, SS

(N/A Fraction)

Extract Id	Extr. Vol. (uL)	Added (uL)	Std. Id	Accm. (uL)	Vial No.	Pre Inj. Vol. (uL)^	Final Dilution *	Date Spiked/ Spiked By	Witn'd By
CR902PB-FS(3)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB
CR903LCS-FS(3)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB
J8438-FS(3)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB
J8438-FS-D(5)	960	40	KC03	50	1	1000	50.000	10/16/18 SAS	DMS
J8439-FS(3)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB
J8439-FS-D(5)	960	40	KC03	50	1	1000	50.000	10/16/18 SAS	DMS
J8440-FS(3)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB
J8440-FS-D(5)	960	40	KC03	50	1	1000	50.000	10/16/18 SAS	DMS
J8440-FS-D(7)	960	40	KC03	50	1	1000	250.000	10/22/18 SAS	KB
J8441-FS(3)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB
J8441-FS-D(5)	955	45	KC03	50	1	1000	100.000	10/16/18 SAS	DMS
J8441-FS-D(7)	951	49	KC03	50	1	1000	500.000	10/16/18 SAS	DMS
J8441-FS-D(9)	960	40	KC03	50	1	1000	2500.000	10/16/18 SAS	DMS
J8442-FS(3)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB
J8442-FS-D(5)	955	45	KC03	50	1	1000	100.000	10/16/18 SAS	DMS
J8442-FS-D(7)	960	40	KC03	50	1	1000	500.000	10/16/18 SAS	DMS
J8442-FS-D(9)	960	40	KC03	50	1	1000	2500.000	10/16/18 SAS	DMS
J8443-FS(3)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB
J8443-FS-D(5)	960	40	KC03	50	1	1000	50.000	10/16/18 SAS	DMS

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

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

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
INTERNAL STANDARD SPIKING FORM

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

Project No.(s)
100110125-01

18-0589

CTO-4164: Analysis of Solids

SB, SS

(N/A Fraction)

Extract Id	Extr. Vol. (uL)	Added (uL)	Std. Id	Accm. (uL)	Vial No.	Pre Inj. Vol. (uL)^	Final Dilution *	Date Spiked/ Spiked By	Witn'd By
J8443-FS-D(7)	960	40	KC03	50	1	1000	250.000	10/16/18 SAS	DMS
J8443-FS-D(9)	953	47	KC03	50	1	1000	4166.667	10/22/18 SAS	KB
J8444-FS(5)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB
J8444-FS-D(7)	960	40	KC03	50	1	1000	50.000	10/16/18 SAS	DMS
J8444-FS-D(9)	975	25	KC03	50	1	1000	100.000	10/16/18 SAS	DMS
J8444-FS-D(11)	965	35	KC03	50	1	1000	333.333	10/16/18 SAS	DMS
J8444-FS-D(13)	965	35	KC03	50	1	1000	1111.111	10/16/18 SAS	DMS
J8444-FS-D(15)	955	45	KC03	50	1	1000	11111.110	10/16/18 SAS	DMS
J8444-FS-D(17)	955	45	KC03	50.001	1	1000	111111.098	10/22/18 SAS	KB
J8445-FS(3)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB
J8445-FS-D(5)	952	48	KC03	50	1	1000	250.000	10/16/18 SAS	DMS
J8445-FS-D(7)	960	40	KC03	50	1	1000	1250.000	10/16/18 SAS	DMS
J8445-FS-D(9)	975	25	KC03	50	1	1000	2500.000	10/16/18 SAS	DMS
J8445-FS-D(11)	955	45	KC03	50	1	1000	25000.000	10/22/18 SAS	KB
J8446-FS(3)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB
J8446-FS-D(5)	960	40	KC03	50	1	1000	50.000	10/16/18 SAS	DMS
J8446-FS-D(7)	955	45	KC03	50	1	1000	500.000	10/22/18 SAS	KB
J8447-FS(3)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB
J8448-FS(3)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB

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

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

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
INTERNAL STANDARD SPIKING FORM

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

Project No.(s)
100110125-01

18-0589

CTO-4164: Analysis of Solids

SB, SS

(N/A Fraction)

Extract Id	Extr. Vol. (uL)	Added (uL)	Std. Id	Accm. (uL)	Vial No.	Pre Inj. Vol. (uL)^	Final Dilution *	Date Spiked/ Spiked By	Witn'd By
J8448-FS-D(5)	955	45	KC03	50	1	1000	100.000	10/16/18 SAS	DMS
J8449-FS(3)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB
J8449-FS-D(5)	975	25	KC03	50	1	1000	20.000	10/16/18 SAS	DMS
J8450-FS(3)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB
J8450-FS-D(5)	953	47	KC03	50	1	1000	166.667	10/16/18 SAS	DMS
J8450-FS-D(7)	953	47	KC03	50	1	1000	2777.778	10/22/18 SAS	KB
J8451-FS(3)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB
J8451-FS-D(5)	952	48	KC03	50	1	1000	250.000	10/16/18 SAS	DMS
J8452-FS(3)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB
J8452-FS-D(5)	960	40	KC03	50	1	1000	50.000	10/16/18 SAS	DMS
J8453MS-FS(3)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB
J8453MS-FS-D(5)	955	45	KC03	50	1	1000	100.000	10/16/18 SAS	DMS
J8454MSD-FS(3)	950	50	KC03	50	1	1000	10.000	10/11/18 SAS	KB
J8454MSD-FS-D(5)	955	45	KC03	50	1	1000	100.000	10/16/18 SAS	DMS

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
KB72	Pipette	B814659662
KC03	Pipette	B814659662
KC19	Pipette	B814659662

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

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

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It can be done

BATTELLE - NORWELL OPERATIONS
EXTRACT SPIKE FORM

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

Project No.(s)
100110125-01

18-0589

CTO-4164: Analysis of Solids

SB, SS

Extract Id	DF	Std. ID	Type	Vial No.	Vol. Added (uL)	Conc (ug/mL)	Added (ng)	Date Spiked/ Spiked By	Witn'd By
J8438-FS-D(5)	50	KB72	SIS	1	40	0	0	10/16/18 SAS	EMF
J8439-FS-D(5)	50	KB72	SIS	1	40	0	0	10/16/18 SAS	EMF
J8440-FS-D(5)	50	KB72	SIS	1	40	0	0	10/16/18 SAS	EMF
J8440-FS-D(7)	250	KC19	SIS	1	40	0	0	10/19/18 SAS	KB
J8441-FS-D(5)	100	KB72	SIS	1	45	0	0	10/16/18 SAS	EMF
J8441-FS-D(7)	500	KB72	SIS	1	49	0	0	10/16/18 SAS	EMF
J8441-FS-D(9)	2500	KB72	SIS	1	40	0	0	10/16/18 SAS	EMF
J8442-FS-D(5)	100	KB72	SIS	1	45	0	0	10/16/18 SAS	EMF
J8442-FS-D(7)	500	KB72	SIS	1	40	0	0	10/16/18 SAS	EMF
J8442-FS-D(9)	2500	KB72	SIS	1	40	0	0	10/16/18 SAS	EMF
J8443-FS-D(5)	50	KB72	SIS	1	40	0	0	10/16/18 SAS	EMF
J8443-FS-D(7)	250	KB72	SIS	1	40	0	0	10/16/18 SAS	EMF
J8443-FS-D(9)	4166.667	KC19	SIS	1	47	0	0	10/19/18 SAS	KB
J8444-FS-D(7)	50	KB72	SIS	1	40	0	0	10/16/18 SAS	EMF
J8444-FS-D(9)	100	KB72	SIS	1	25	0	0	10/16/18 SAS	EMF
J8444-FS-D(11)	333.333	KB72	SIS	1	35	0	0	10/16/18 SAS	EMF
J8444-FS-D(13)	1111.111	KB72	SIS	1	35	0	0	10/16/18 SAS	EMF
J8444-FS-D(15)	11111.11	KB72	SIS	1	45	0	0	10/16/18 SAS	EMF
J8444-FS-D(17)	11111.098	KC19	SIS	1	45	0	0	10/19/18 SAS	KB
J8445-FS-D(5)	250	KB72	SIS	1	48	0	0	10/16/18 SAS	EMF
J8445-FS-D(7)	1250	KB72	SIS	1	40	0	0	10/16/18 SAS	EMF
J8445-FS-D(9)	2500	KB72	SIS	1	25	0	0	10/16/18 SAS	EMF
J8445-FS-D(11)	25000	KC19	SIS	1	45	0	0	10/19/18 SAS	KB
J8446-FS-D(5)	50	KB72	SIS	1	40	0	0	10/16/18 SAS	EMF
J8446-FS-D(7)	500	KC19	SIS	1	45	0	0	10/19/18 SAS	KB

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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

18-0589

CTO-4164: Analysis of Solids

SB, SS

Extract Id	DF	Std. ID	Type	Vial No.	Vol. Added (uL)	Conc (ug/mL)	Added (ng)	Date Spiked/ Spiked By	Witn'd By
J8448-FS-D(5)	100	KB72	SIS	1	45	0	0	10/16/18 SAS	EMF
J8449-FS-D(5)	20	KB72	SIS	1	25	0	0	10/16/18 SAS	EMF
J8450-FS-D(5)	166.667	KB72	SIS	1	47	0	0	10/16/18 SAS	EMF
J8450-FS-D(7)	2777.778	KC19	SIS	1	47	0	0	10/19/18 SAS	KB
J8451-FS-D(5)	250	KB72	SIS	1	48	0	0	10/16/18 SAS	EMF
J8452-FS-D(5)	50	KB72	SIS	1	40	0	0	10/16/18 SAS	EMF
J8453MS-FS-D(5)	100	KB72	SIS	1	45	0	0	10/16/18 SAS	EMF
J8454MSD-FS-D(5)	100	KB72	SIS	1	45	0	0	10/16/18 SAS	EMF

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
KB72	Pipette	B814659662
KC03	Pipette	B814659662
KC19	Pipette	B814659662

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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

18-0589

CTO-4164: Analysis of Solids

SB, SS

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
CR902PB-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 KB
CR902PB-FS	2	--	10/9/2018 3:18:00 PM	CR902PB-FS	0	10000	9000	1.111	1.111	10/09/18 KB
CR902PB-FS	3	--	10/9/2018 3:18:00 PM	CR902PB-FS	0	10000	1000	10.000	10.000	10/09/18 KB
CR903LCS-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 KB
CR903LCS-FS	2	--	10/9/2018 3:18:00 PM	CR903LCS-FS	0	10000	9000	1.111	1.111	10/09/18 KB
CR903LCS-FS	3	--	10/9/2018 3:18:00 PM	CR903LCS-FS	0	10000	1000	10.000	10.000	10/09/18 KB
J8438-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 KB
J8438-FS	2	--	10/9/2018 3:18:00 PM	J8438-FS	0	10000	9000	1.111	1.111	10/09/18 KB
J8438-FS	3	C	10/9/2018 3:18:00 PM	J8438-FS	0	10000	1000	10.000	10.000	10/09/18 KB
J8438-FS	4	--	10/15/2018 2:44:00 PM	J8438-FS	3	1000	800	1.250	12.500	10/15/18 SAS
J8438-FS-D	5	--	10/15/2018 2:44:00 PM	J8438-FS	3	1000	200	5.000	50.000	10/15/18 SAS
J8439-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 KB
J8439-FS	2	--	10/9/2018 3:18:00 PM	J8439-FS	0	10000	9000	1.111	1.111	10/09/18 KB
J8439-FS	3	C	10/9/2018 3:18:00 PM	J8439-FS	0	10000	1000	10.000	10.000	10/09/18 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

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

18-0589

CTO-4164: Analysis of Solids

SB, SS

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J8439-FS	4	--	10/15/2018 2:44:00 PM	J8439-FS	3	1000	800	1.250	12.500	10/15/18 SAS
J8439-FS-D	5	--	10/15/2018 2:44:00 PM	J8439-FS	3	1000	200	5.000	50.000	10/15/18 SAS
J8440-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 KB
J8440-FS	2	--	10/9/2018 3:18:00 PM	J8440-FS	0	10000	9000	1.111	1.111	10/09/18 KB
J8440-FS	3	C	10/9/2018 3:18:00 PM	J8440-FS	0	10000	1000	10.000	10.000	10/09/18 KB
J8440-FS	4	--	10/15/2018 2:44:00 PM	J8440-FS	3	1000	800	1.250	12.500	10/15/18 SAS
J8440-FS-D	5	C	10/15/2018 2:44:00 PM	J8440-FS	3	1000	200	5.000	50.000	10/15/18 SAS
J8440-FS-D	6	--	10/19/2018 1:46:00 PM	J8440-FS-D	5	1000	800	1.250	62.500	10/19/18 SAS
J8440-FS-D	7	--	10/19/2018 1:46:00 PM	J8440-FS-D	5	1000	200	5.000	250.000	10/19/18 SAS
J8441-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 KB
J8441-FS	2	--	10/9/2018 3:18:00 PM	J8441-FS	0	10000	9000	1.111	1.111	10/09/18 KB
J8441-FS	3	C	10/9/2018 3:18:00 PM	J8441-FS	0	10000	1000	10.000	10.000	10/09/18 KB
J8441-FS	4	C	10/15/2018 2:45:00 PM	J8441-FS	3	1000	900	1.111	11.111	10/15/18 DTD
J8441-FS-D	5	--	10/15/2018 2:45:00 PM	J8441-FS	3	1000	100	10.000	100.000	10/15/18 DTD

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

18-0589

CTO-4164: Analysis of Solids

SB, SS

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J8441-FS	6	--	10/15/2018 2:46:00 PM	J8441-FS	4	900	880	1.023	11.364	10/15/18 SAS
J8441-FS-D	7	C	10/15/2018 2:46:00 PM	J8441-FS	4	900	20	45.000	500.000	10/15/18 SAS
J8441-FS-D	8	--	10/15/2018 2:47:00 PM	J8441-FS-D	7	1000	800	1.250	625.000	10/15/18 SAS
J8441-FS-D	9	--	10/15/2018 2:47:00 PM	J8441-FS-D	7	1000	200	5.000	2500.000	10/15/18 SAS
J8442-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 KB
J8442-FS	2	--	10/9/2018 3:18:00 PM	J8442-FS	0	10000	9000	1.111	1.111	10/09/18 KB
J8442-FS	3	C	10/9/2018 3:18:00 PM	J8442-FS	0	10000	1000	10.000	10.000	10/09/18 KB
J8442-FS	4	--	10/15/2018 2:48:00 PM	J8442-FS	3	1000	900	1.111	11.111	10/15/18 SAS
J8442-FS-D	5	C	10/15/2018 2:48:00 PM	J8442-FS	3	1000	100	10.000	100.000	10/15/18 SAS
J8442-FS-D	6	--	10/15/2018 2:50:00 PM	J8442-FS-D	5	1000	800	1.250	125.000	10/15/18 SAS
J8442-FS-D	7	C	10/15/2018 2:50:00 PM	J8442-FS-D	5	1000	200	5.000	500.000	10/15/18 SAS
J8442-FS-D	8	--	10/15/2018 2:51:00 PM	J8442-FS-D	7	1000	800	1.250	625.000	10/15/18 SAS
J8442-FS-D	9	--	10/15/2018 2:51:00 PM	J8442-FS-D	7	1000	200	5.000	2500.000	10/15/18 SAS
J8443-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 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

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

18-0589

CTO-4164: Analysis of Solids

SB, SS

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J8443-FS	2	--	10/9/2018 3:18:00 PM	J8443-FS	0	10000	9000	1.111	1.111	10/09/18 KB
J8443-FS	3	C	10/9/2018 3:18:00 PM	J8443-FS	0	10000	1000	10.000	10.000	10/09/18 KB
J8443-FS	4	--	10/15/2018 2:52:00 PM	J8443-FS	3	1000	800	1.250	12.500	10/15/18 SAS
J8443-FS-D	5	C	10/15/2018 2:52:00 PM	J8443-FS	3	1000	200	5.000	50.000	10/15/18 SAS
J8443-FS-D	6	--	10/15/2018 2:53:00 PM	J8443-FS-D	5	1000	800	1.250	62.500	10/15/18 SAS
J8443-FS-D	7	C	10/15/2018 2:53:00 PM	J8443-FS-D	5	1000	200	5.000	250.000	10/15/18 SAS
J8443-FS-D	8	--	10/19/2018 1:47:00 PM	J8443-FS-D	7	1000	940	1.064	265.957	10/19/18 SAS
J8443-FS-D	9	--	10/19/2018 1:47:00 PM	J8443-FS-D	7	1000	60	16.667	4166.667	10/19/18 SAS
J8444-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 KB
J8444-FS	2	C	10/9/2018 3:18:00 PM	J8444-FS	0	10000	9000	1.111	1.111	10/09/18 KB
J8444-FS	3	--	10/9/2018 3:18:00 PM	J8444-FS	0	10000	1000	10.000	10.000	10/09/18 KB
J8444-FS	4	--	10/10/2018 4:27:00 PM	J8444-FS	2	9000	8000	1.125	1.250	10/10/18 KB
J8444-FS	5	C	10/10/2018 4:27:00 PM	J8444-FS	2	9000	1000	9.000	10.000	10/10/18 KB
J8444-FS	6	--	10/15/2018 3:00:00 PM	J8444-FS	5	1000	800	1.250	12.500	10/15/18 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

18-0589

CTO-4164: Analysis of Solids

SB, SS

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J8444-FS-D	7	C	10/15/2018 3:00:00 PM	J8444-FS	5	1000	200	5.000	50.000	10/15/18 SAS
J8444-FS-D	8	--	10/15/2018 3:11:00 PM	J8444-FS-D	7	1000	500	2.000	100.000	10/15/18 SAS
J8444-FS-D	9	C	10/15/2018 3:11:00 PM	J8444-FS-D	7	1000	500	2.000	100.000	10/15/18 SAS
J8444-FS-D	10	--	10/15/2018 3:12:00 PM	J8444-FS-D	9	1000	700	1.429	142.857	10/15/18 SAS
J8444-FS-D	11	C	10/15/2018 3:12:00 PM	J8444-FS-D	9	1000	300	3.333	333.333	10/15/18 SAS
J8444-FS-D	12	--	10/15/2018 3:14:00 PM	J8444-FS-D	11	1000	700	1.429	476.190	10/15/18 SAS
J8444-FS-D	13	C	10/15/2018 3:14:00 PM	J8444-FS-D	11	1000	300	3.333	1111.111	10/15/18 SAS
J8444-FS-D	14	--	10/15/2018 3:15:00 PM	J8444-FS-D	13	1000	900	1.111	1234.568	10/15/18 SAS
J8444-FS-D	15	C	10/15/2018 3:15:00 PM	J8444-FS-D	13	1000	100	10.000	11111.110	10/15/18 SAS
J8444-FS-D	16	--	10/19/2018 1:49:00 PM	J8444-FS-D	15	1000	900	1.111	12345.677	10/19/18 SAS
J8444-FS-D	17	--	10/19/2018 1:49:00 PM	J8444-FS-D	15	1000	100	10.000	111111.098	10/19/18 SAS
J8445-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 KB
J8445-FS	2	--	10/9/2018 3:18:00 PM	J8445-FS	0	10000	9000	1.111	1.111	10/09/18 KB
J8445-FS	3	C	10/9/2018 3:18:00 PM	J8445-FS	0	10000	1000	10.000	10.000	10/09/18 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

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

18-0589

CTO-4164: Analysis of Solids

SB, SS

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J8445-FS	4	--	10/15/2018 3:16:00 PM	J8445-FS	3	1000	960	1.042	10.417	10/15/18 SAS
J8445-FS-D	5	C	10/15/2018 3:16:00 PM	J8445-FS	3	1000	40	25.000	250.000	10/15/18 SAS
J8445-FS-D	6	--	10/15/2018 3:17:00 PM	J8445-FS-D	5	1000	800	1.250	312.500	10/15/18 SAS
J8445-FS-D	7	C	10/15/2018 3:17:00 PM	J8445-FS-D	5	1000	200	5.000	1250.000	10/15/18 SAS
J8445-FS-D	8	--	10/15/2018 3:19:00 PM	J8445-FS-D	7	1000	500	2.000	2500.000	10/15/18 SAS
J8445-FS-D	9	C	10/15/2018 3:19:00 PM	J8445-FS-D	7	1000	500	2.000	2500.000	10/15/18 SAS
J8445-FS-D	10	--	10/19/2018 1:51:00 PM	J8445-FS-D	9	1000	900	1.111	2777.778	10/19/18 SAS
J8445-FS-D	11	--	10/19/2018 1:51:00 PM	J8445-FS-D	9	1000	100	10.000	25000.000	10/19/18 SAS
J8446-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 KB
J8446-FS	2	--	10/9/2018 3:18:00 PM	J8446-FS	0	10000	9000	1.111	1.111	10/09/18 KB
J8446-FS	3	C	10/9/2018 3:18:00 PM	J8446-FS	0	10000	1000	10.000	10.000	10/09/18 KB
J8446-FS	4	--	10/15/2018 4:00:00 PM	J8446-FS	3	1000	800	1.250	12.500	10/15/18 SAS
J8446-FS-D	5	C	10/15/2018 4:00:00 PM	J8446-FS	3	1000	200	5.000	50.000	10/15/18 SAS
J8446-FS-D	6	--	10/19/2018 1:51:00 PM	J8446-FS-D	5	1000	900	1.111	55.556	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

18-0589

CTO-4164: Analysis of Solids

SB, SS

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J8446-FS-D	7	--	10/19/2018 1:51:00 PM	J8446-FS-D	5	1000	100	10.000	500.000	10/19/18 SAS
J8447-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 KB
J8447-FS	2	--	10/9/2018 3:18:00 PM	J8447-FS	0	10000	9000	1.111	1.111	10/09/18 KB
J8447-FS	3	--	10/9/2018 3:18:00 PM	J8447-FS	0	10000	1000	10.000	10.000	10/09/18 KB
J8448-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 KB
J8448-FS	2	--	10/9/2018 3:18:00 PM	J8448-FS	0	10000	9000	1.111	1.111	10/09/18 KB
J8448-FS	3	C	10/9/2018 3:18:00 PM	J8448-FS	0	10000	1000	10.000	10.000	10/09/18 KB
J8448-FS	4	--	10/15/2018 4:01:00 PM	J8448-FS	3	1000	900	1.111	11.111	10/15/18 SAS
J8448-FS-D	5	--	10/15/2018 4:01:00 PM	J8448-FS	3	1000	100	10.000	100.000	10/15/18 SAS
J8449-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 KB
J8449-FS	2	--	10/9/2018 3:18:00 PM	J8449-FS	0	10000	9000	1.111	1.111	10/09/18 KB
J8449-FS	3	C	10/9/2018 3:18:00 PM	J8449-FS	0	10000	1000	10.000	10.000	10/09/18 KB
J8449-FS	4	--	10/15/2018 4:03:00 PM	J8449-FS	3	1000	500	2.000	20.000	10/15/18 SAS
J8449-FS-D	5	--	10/15/2018 4:03:00 PM	J8449-FS	3	1000	500	2.000	20.000	10/15/18 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

18-0589

CTO-4164: Analysis of Solids

SB, SS

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J8450-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 KB
J8450-FS	2	--	10/9/2018 3:18:00 PM	J8450-FS	0	10000	9000	1.111	1.111	10/09/18 KB
J8450-FS	3	C	10/9/2018 3:18:00 PM	J8450-FS	0	10000	1000	10.000	10.000	10/09/18 KB
J8450-FS	4	--	10/15/2018 4:05:00 PM	J8450-FS	3	1000	940	1.064	10.638	10/15/18 SAS
J8450-FS-D	5	C	10/15/2018 4:05:00 PM	J8450-FS	3	1000	60	16.667	166.667	10/15/18 SAS
J8450-FS-D	6	--	10/19/2018 1:54:00 PM	J8450-FS-D	5	1000	940	1.064	177.305	10/19/18 SAS
J8450-FS-D	7	--	10/19/2018 1:54:00 PM	J8450-FS-D	5	1000	60	16.667	2777.778	10/19/18 SAS
J8451-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 KB
J8451-FS	2	--	10/9/2018 3:18:00 PM	J8451-FS	0	10000	9000	1.111	1.111	10/09/18 KB
J8451-FS	3	C	10/9/2018 3:18:00 PM	J8451-FS	0	10000	1000	10.000	10.000	10/09/18 KB
J8451-FS	4	--	10/15/2018 4:06:00 PM	J8451-FS	3	1000	960	1.042	10.417	10/15/18 SAS
J8451-FS-D	5	--	10/15/2018 4:06:00 PM	J8451-FS	3	1000	40	25.000	250.000	10/15/18 SAS
J8452-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 KB
J8452-FS	2	--	10/9/2018 3:18:00 PM	J8452-FS	0	10000	9000	1.111	1.111	10/09/18 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

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

18-0589

CTO-4164: Analysis of Solids

SB, SS

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J8452-FS	3	C	10/9/2018 3:18:00 PM	J8452-FS	0	10000	1000	10.000	10.000	10/09/18 KB
J8452-FS	4	--	10/15/2018 4:07:00 PM	J8452-FS	3	1000	800	1.250	12.500	10/15/18 SAS
J8452-FS-D	5	--	10/15/2018 4:07:00 PM	J8452-FS	3	1000	200	5.000	50.000	10/15/18 SAS
J8453MS-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 KB
J8453MS-FS	2	--	10/9/2018 3:18:00 PM	J8453MS-FS	0	10000	9000	1.111	1.111	10/09/18 KB
J8453MS-FS	3	C	10/9/2018 3:18:00 PM	J8453MS-FS	0	10000	1000	10.000	10.000	10/09/18 KB
J8453MS-FS	4	--	10/15/2018 4:09:00 PM	J8453MS-FS	3	1000	900	1.111	11.111	10/15/18 SAS
J8453MS-FS-D	5	--	10/15/2018 4:09:00 PM	J8453MS-FS	3	1000	100	10.000	100.000	10/15/18 SAS
J8454MSD-FS	0	C	10/8/2018 1:30:00 PM	NA		NA	NA	1.000	1.000	10/08/18 KB
J8454MSD-FS	2	--	10/9/2018 3:18:00 PM	J8454MSD-FS	0	10000	9000	1.111	1.111	10/09/18 KB
J8454MSD-FS	3	C	10/9/2018 3:18:00 PM	J8454MSD-FS	0	10000	1000	10.000	10.000	10/09/18 KB
J8454MSD-FS	4	--	10/15/2018 4:09:00 PM	J8454MSD-FS	3	1000	900	1.111	11.111	10/15/18 SAS
J8454MSD-FS-D	5	--	10/15/2018 4:09:00 PM	J8454MSD-FS	3	1000	100	10.000	100.000	10/15/18 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

18-0589

CTO-4164: Analysis of Solids

SB, SS

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					

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
EXTRACT - INSTRUMENT FACILITY CUSTODY PAGE

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

Project No.(s)
100110125-01

18-0589

CTO-4164: Analysis of Solids

SB, SS

Purpose:	LC-MS/MS TRANSFER	**Last Activity:**	Prep->Inst
Relinquished On/By:	Oct 17 2018 4:40PM SAS	**Received On/By:**	Oct 17 2018 5:25PM DMS
Relinquished From:	Sample Preparation: NA	**Received Location:**	LC Laboratory: NA
Relinquish Comment:	NA	**Received Comment:**	NA

No.	BDO-ID:	PIV:	DF:	Condition:	Custody Comment:
1	CR902PB-FS(3)	1000	10	Intact	NA
2	CR903LCS-FS(3)	1000	10	Intact	NA
3	J8438-FS(3)	1000	10	Intact	NA
4	J8438-FS-D(5)	1000	50	Intact	NA
5	J8439-FS(3)	1000	10	Intact	NA
6	J8439-FS-D(5)	1000	50	Intact	NA
7	J8440-FS(3)	1000	10	Intact	NA
8	J8440-FS-D(5)	1000	50	Intact	NA
9	J8441-FS(3)	1000	10	Intact	NA
10	J8441-FS-D(5)	1000	100	Intact	NA
11	J8441-FS-D(7)	1000	500	Intact	NA
12	J8441-FS-D(9)	1000	2500	Intact	NA
13	J8442-FS(3)	1000	10	Intact	NA
14	J8442-FS-D(5)	1000	100	Intact	NA
15	J8442-FS-D(7)	1000	500	Intact	NA
16	J8442-FS-D(9)	1000	2500	Intact	NA
17	J8443-FS(3)	1000	10	Intact	NA
18	J8443-FS-D(5)	1000	50	Intact	NA
19	J8443-FS-D(7)	1000	250	Intact	NA
20	J8444-FS(5)	1000	10	Intact	NA
21	J8444-FS-D(7)	1000	50	Intact	NA
22	J8444-FS-D(9)	1000	100	Intact	NA
23	J8444-FS-D(11)	1000	333.333	Intact	NA
24	J8444-FS-D(13)	1000	1111.111	Intact	NA
25	J8444-FS-D(15)	1000	11111.11	Intact	NA
26	J8445-FS(3)	1000	10	Intact	NA
27	J8445-FS-D(5)	1000	250	Intact	NA
28	J8445-FS-D(7)	1000	1250	Intact	NA

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
EXTRACT - INSTRUMENT FACILITY CUSTODY PAGE

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

Project No.(s)
100110125-01

18-0589

CTO-4164: Analysis of Solids

SB, SS

29	J8445-FS-D(9)	1000	2500	Intact	NA
30	J8446-FS(3)	1000	10	Intact	NA
31	J8446-FS-D(5)	1000	50	Intact	NA
32	J8447-FS(3)	1000	10	Intact	NA
33	J8448-FS(3)	1000	10	Intact	NA
34	J8448-FS-D(5)	1000	100	Intact	NA
35	J8449-FS(3)	1000	10	Intact	NA
36	J8449-FS-D(5)	1000	20	Intact	NA
37	J8450-FS(3)	1000	10	Intact	NA
38	J8450-FS-D(5)	1000	166.667	Intact	NA
39	J8451-FS(3)	1000	10	Intact	NA
40	J8451-FS-D(5)	1000	250	Intact	NA
41	J8452-FS(3)	1000	10	Intact	NA
42	J8452-FS-D(5)	1000	50	Intact	NA
43	J8453MS-FS(3)	1000	10	Intact	NA
44	J8453MS-FS-D(5)	1000	100	Intact	NA
45	J8454MSD-FS(3)	1000	10	Intact	NA
46	J8454MSD-FS-D(5)	1000	100	Intact	NA

Total Extracts: 46

Purpose: LC-MS/MS TRANSFER

Last Activity: Prep->Inst

Relinquished On/By: Oct 19 2018 5:00PM SAS

Relinquished From: Sample Preparation: NA

Relinquish Comment: NA

Received On/By: Oct 19 2018 5:26PM DMS

Received Location: LC Laboratory: NA

Received Comment: NA

No.	BDO-ID:	PIV:	DF:	Condition:	Custody Comment:
1	J8440-FS-D(7)	1000	250	Intact	NA
2	J8443-FS-D(9)	1000	4166.667	Intact	NA
3	J8444-FS-D(17)	1000	111111.1	Intact	NA
4	J8445-FS-D(11)	1000	25000	Intact	NA
5	J8446-FS-D(7)	1000	500	Intact	NA
6	J8450-FS-D(7)	1000	2777.778	Intact	NA

Total Extracts: 6

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
SAMPLE SPECIFIC COMMENTS

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

Project No.(s)
100110125-01

18-0589

CTO-4164: Analysis of Solids

SB, SS

Sample ID:	Comment:	Date/Initials:
CR902PB-FS	NA	NA
CR903LCS-FS	NA	NA
J8438-FS	NA	NA
J8439-FS	NA	NA
J8440-FS	NA	NA
J8441-FS	NA	NA
J8442-FS	NA	NA
J8443-FS	NA	NA
J8444-FS	NA	NA
J8445-FS	NA	NA
J8446-FS	NA	NA
J8447-FS	NA	NA
J8448-FS	NA	NA
J8449-FS	NA	NA
J8450-FS	NA	NA
J8451-FS	NA	NA
J8452-FS	NA	NA
J8453MS-FS	NA	NA
J8454MSD-FS	NA	NA

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
MISCELLANEOUS DOCUMENTATION FORM

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

18-0589

CTO-4164: Analysis of Solids

SB, SS

Entered By:	**On:**

Task Leader Approval:	**On:**
SupervisorApproval:	**On:**
PM Approval:	**On:**

BATTELLE
It can be done

BATTELLE - NORWELL OPERATIONS
MISCELLANEOUS DOCUMENTATION FORM

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

18-0589

CTO-4164: Analysis of Solids

SB, SS

Task Leader Approval:	**On:**
SupervisorApproval:	**On:**
PM Approval:	**On:**

Analytical Calibrations

BATTELLE

Sequence Report

Created with Analyst Reporter
Printed: 25/10/2018 9:50:40 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	Instrument Blank	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 Standard	10/17/2018 9:24:41 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
1	MeOH		10/17/2018 9:35:33 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
~~12~~	~~CR904PB-FS(3)~~	~~Procedural Blank~~	~~10/17/2018 9:46:25 PM~~	~~5-0369.dam~~	~~Data18-0590_18-01588_18-0589.wiff~~
~~13~~	~~CR905LCS-FS(3)~~	~~Laboratory Control Sample~~	~~10/17/2018 9:57:17 PM~~	~~5-0369.dam~~	~~Data18-0590_18-01588_18-0589.wiff~~
~~14~~	~~J8465-FS(3)~~	~~VC-PM367-SS01-000H~~	~~10/17/2018 10:08:09 PM~~	~~5-0369.dam~~	~~Data18-0590_18-01588_18-0589.wiff~~
~~15~~	~~J8466-FS(3)~~	~~VC-PM367-SB01-0102~~	~~10/17/2018 10:19:02 PM~~	~~5-0369.dam~~	~~Data18-0590_18-01588_18-0589.wiff~~
~~16~~	~~J8467-FS(3)~~	~~VC-PM367-SB01-0506~~	~~10/17/2018 10:29:52 PM~~	~~5-0369.dam~~	~~Data18-0590_18-01588_18-0589.wiff~~
~~17~~	~~J8468-FS(3)~~	~~VC-PM367-SS02-000H~~	~~10/17/2018 10:40:44 PM~~	~~5-0369.dam~~	~~Data18-0590_18-01588_18-0589.wiff~~
~~18~~	~~J8469-FS(3)~~	~~VC-PM367-SB02-0102~~	~~10/17/2018 10:51:34 PM~~	~~5-0369.dam~~	~~Data18-0590_18-01588_18-0589.wiff~~
~~19~~	~~J8470-FS(3)~~	~~VC-PM367-SB02-0506~~	~~10/17/2018 11:02:25 PM~~	~~5-0369.dam~~	~~Data18-0590_18-01588_18-0589.wiff~~
~~20~~	~~J8471-FS(3)~~	~~VC-PM367-S03-000H~~	~~10/17/2018 11:13:17 PM~~	~~5-0369.dam~~	~~Data18-0590_18-01588_18-0589.wiff~~
~~21~~	~~J8472-FS(3)~~	~~VC-PM367-SB03-0102~~	~~10/17/2018 11:24:10 PM~~	~~5-0369.dam~~	~~Data18-0590_18-01588_18-0589.wiff~~
~~22~~	~~KB77-CCV~~	~~CCV~~	~~10/17/2018 11:35:03 PM~~	~~5-0369.dam~~	~~Data18-0590_18-01588_18-0589.wiff~~
~~23~~	~~MeOH~~		~~10/17/2018 11:45:54 PM~~	~~5-0369.dam~~	~~Data18-0590_18-01588_18-0589.wiff~~
~~24~~	~~J8473-FS(3)~~	~~VC-PM367-SB03-0506~~	~~10/17/2018 11:56:46 PM~~	~~5-0369.dam~~	~~Data18-0590_18-01588_18-0589.wiff~~
~~25~~	~~K8474-FS(3)~~	~~VC-PM367-SS04-000H~~	~~10/18/2018 12:07:38 AM~~	~~5-0369.dam~~	~~Data18-0590_18-01588_18-0589.wiff~~
~~26~~	~~J8475-FS(3)~~	~~VC-PM367-SB04-~~	~~10/18/2018 12:18:30~~	~~5-0369.dam~~	~~Data18-0590_18-~~

BATTELLE

Sequence Report

Created with Analyst Reporter
Printed: 25/10/2018 9:50:40 AM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
		0102	AM		01588_18-0589.wiff
27	J8476-FS(3)	VC-PM367-SB04-0506	10/18/2018 12:29:22 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
28	J8337-FS-D(13)	VC-PM324-DW02-0918	10/18/2018 12:40:14 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
29	KB76-CCV	CCV	10/18/2018 12:51:06 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
30	MeOH		10/18/2018 1:01:58 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
31	CR900PB-FS(0)	Procedural Blank	10/18/2018 1:12:51 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
32	CR901LCS-FS(0)	Laboratory Control Sample	10/18/2018 1:23:44 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
33	J8455-FS(0)	VC-SO-FB07-09262018	10/18/2018 1:34:36 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
34	J8456-FS(0)	VC-SO-EB07-09262018	10/18/2018 1:45:28 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
35	J8457-FS(0)	VC-MS09-DW01-0918	10/18/2018 1:56:20 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
36	J8457-FS-D(3)	VC-MS09-DW01-0918	10/18/2018 2:07:11 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
37	J8457-FS-D(5)	VC-MS09-DW01-0918	10/18/2018 2:18:02 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
38	J8457-FS-D(7)	VC-MS09-DW01-0918	10/18/2018 2:28:56 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
39	KB77-CCV	CCV	10/18/2018 2:39:48 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
40	MeOH		10/18/2018 2:50:41 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
41	J8458-FS(0)	VC-MS09-DW02-0918	10/18/2018 3:01:33 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
42	J8458-FS-D(3)	VC-MS09-DW02-0918	10/18/2018 3:12:26 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
43	J8458-FS-D(5)	VC-MS09-DW02-0918	10/18/2018 3:23:17 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
44	J8459-FS(0)	VC-MS09-DW03-0918	10/18/2018 3:34:08 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
45	J8459-FS-D(3)	VC-MS09-DW03-0918	10/18/2018 3:44:59 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
46	J8459-FS-D(5)	VC-MS09-DW03-0918	10/18/2018 3:55:51 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
47	J8460-FS(0)	VC-MS09-DW04-0918	10/18/2018 4:06:44 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
48	J8460-FS-D(3)	VC-MS09-DW04-0918	10/18/2018 4:17:36 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
49	J8460-FS-D(5)	VC-MS09-DW04-0918	10/18/2018 4:28:28 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
50	KB76-CCV	CCV	10/18/2018 4:39:20 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
51	MeOH		10/18/2018 4:50:12 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
52	J8461-FS(0)	VC-MS09-DW04P-0918	10/18/2018 5:01:04 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff

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Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
53	J8461-FS-D(3)	VC-MS09-DW04P-0918	10/18/2018 5:11:56 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
54	J8461-FS-D(5)	VC-MS09-DW04P-0918	10/18/2018 5:22:47 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
1	J8462-FS(0)	VC-MS09-DW05-0918	10/18/2018 5:33:39 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
2	J8462-FS-D(3)	VC-MS09-DW05-0918	10/18/2018 5:44:32 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
3	J8462-FS-D(5)	VC-MS09-DW05-0918	10/18/2018 5:55:26 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
4	J8463MS-FS(0)	VC-MS09-DW05-0918-MS	10/18/2018 6:06:18 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
5	J8463MS-FS-D(3)	VC-MS09-DW05-0918-MS	10/18/2018 6:17:11 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
6	J8463MS-FS-D(5)	VC-MS09-DW05-0918-MS	10/18/2018 6:28:05 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
7	KB77-CCV	CCV	10/18/2018 6:38:59 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
8	MeOH		10/18/2018 6:49:52 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
9	J8464MSD-FS(0)	VC-MS09-DW05-0918-MSD	10/18/2018 7:00:44 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
10	J8464MSD-FS-D(3)	VC-MS09-DW05-0918-MSD	10/18/2018 7:11:37 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
11	J8464MSD-FS-D(5)	VC-MS09-DW05-0918-MSD	10/18/2018 7:22:30 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
12	J8477-FS(0)	VC-PM367-DW01-0918	10/18/2018 7:33:23 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
13	J8477-FS-D(3)	VC-PM367-DW01-0918	10/18/2018 7:44:17 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
14	J8477-FS-D(5)	VC-PM367-DW01-0918	10/18/2018 7:55:10 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
15	J8478-FS(0)	VC-PM367-DW02-0918	10/18/2018 8:06:03 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
16	J8478-FS-D(3)	VC-PM367-DW02-0918	10/18/2018 8:16:56 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
18	KB76-CCV	CCV	10/18/2018 8:38:41 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
19	MeOH		10/18/2018 8:49:32 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
20	J8479-FS(0)	VC-PM367-DW03-0918	10/18/2018 9:00:25 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
21	J8479-FS-D(3)	VC-PM367-DW03-0918	10/18/2018 9:11:19 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
22	J8479-FS-D(5)	VC-PM367-DW03-0918	10/18/2018 9:22:14 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
23	J8480-FS(0)	VC-PM367-DW03P-0918	10/18/2018 9:33:08 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
24	J8480-FS-D(3)	VC-PM367-DW03P-0918	10/18/2018 9:44:00 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
25	J8480-FS-D(5)	VC-PM367-DW03P-0918	10/18/2018 9:54:54 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
26	J8481-FS(0)	VC-PM367-DW04-	10/18/2018 10:05:48	5-0369.dam	Data18-0590_18-



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Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
		0918	AM		01588_18-0589.wiff
27	J8481-FS-D(3)	VC-PM367-DW04-0918	10/18/2018 10:16:41 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
28	J8481-FS-D(5)	VC-PM367-DW04-0918	10/18/2018 10:27:34 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
29	KB77 CCV	CCV	10/18/2018 10:38:28 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
30	MeOH		10/18/2018 10:49:21 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
31	J8482-FS(0)	VC-AQ-FB08-09272018	10/18/2018 11:00:14 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
32	J8483-FS(0)	VC-AQ-EB08-09272018	10/18/2018 11:11:06 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
33	KB76 CCV	CCCV	10/18/2018 11:22:00 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
34	MeOH		10/18/2018 11:32:53 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
35	CR902PB-FS(3)	Procedural Blank	10/18/2018 11:43:47 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
36	CR903LCS-FS(3)	Laboratory Control Sample	10/18/2018 11:54:39 AM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
37	J8438-FS(3)	VC-MS09-SS01-000H	10/18/2018 12:05:31 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
38	J8438-FS-D(5)	VC-MS09-SS01-000H	10/18/2018 12:16:25 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
39	J8439-FS(3)	VC-MS09-SB01-0102	10/18/2018 12:27:18 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
40	J8439-FS-D(5)	VC-MS09-SB01-0102	10/18/2018 12:38:11 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
41	J8440-FS(3)	VC-MS09-SB01-0506	10/18/2018 12:49:05 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
42	J8440-FS-D(5)	VC-MS09-SB01-0506	10/18/2018 12:59:57 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
43	KB77 CCV	CCV	10/18/2018 1:10:49 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
44	MeOH		10/18/2018 1:21:42 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
45	J8441-FS(3)	VC-MS09-SS02-000H	10/18/2018 1:32:35 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
46	J8441-FS-D(5)	VC-MS09-SS02-000H	10/18/2018 1:43:28 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
47	J8441-FS-D(7)	VC-MS09-SS02-000H	10/18/2018 1:54:21 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
48	J8441-FS-D(9)	VC-MS09-SS02-000H	10/18/2018 2:05:14 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
30	MeOH		10/18/2018 2:16:07 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
49	J8442-FS(3)	VC-MS09-SB02-0102	10/18/2018 2:48:44 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
50	J8442-FS-D(5)	VC-MS09-SB02-0102	10/18/2018 2:59:38 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
51	J8442-FS-D(7)	VC-MS09-SB02-0102	10/18/2018 3:10:33 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff

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Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
52	J8442-FS-D(9)	VC-MS09-SB02-0102	10/18/2018 3:21:26 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
53	KB76 CCV	CCV	10/18/2018 3:32:19 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
54	MeOH		10/18/2018 3:43:13 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff
1	J8443-FS(3)	VC-MS09-SB02-0506	10/18/2018 3:54:05 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
2	J8443-FS-D(5)	VC-MS09-SB02-0506	10/18/2018 4:04:56 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
3	J8443-FS-D(7)	VC-MS09-SB02-0506	10/18/2018 4:15:48 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
4	J8444-FS-D(7)	VC-MS09-SS03-000H	10/18/2018 4:26:39 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
~~5~~	~~J8444-FS-D(9)~~	~~VC-MS09-SS03-000H~~	~~10/18/2018 4:37:32 PM~~	~~5-0369.dam~~	~~18-0590_18-01588_18-0589.wiff~~ 2
6	J8444-FS-D(11)	VC-MS09-SS03-000H	10/18/2018 4:48:24 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
7	J8444-FS-D(13)	VC-MS09-SS03-000H	10/18/2018 4:59:16 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
8	J8444-FS-D(15)	VC-MS09-SS03-000H	10/18/2018 5:10:08 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
9	KB77 CCV	CCV	10/18/2018 5:20:59 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
10	MeOH		10/18/2018 5:31:50 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
11	J8445-FS(3)	VC-MS09-SB03-0102	10/18/2018 5:42:42 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
12	J8445-FS-D(5)	VC-MS09-SB03-0102	10/18/2018 5:53:34 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
13	J8445-FS-D(7)	VC-MS09-SB03-0102	10/18/2018 6:04:26 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
14	J8445-FS-D(9)	VC-MS09-SB03-0102	10/18/2018 6:15:17 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
15	J8446-FS(3)	VC-MS09-SB03-0506	10/18/2018 6:26:09 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
16	J8446-FS-D(5)	VC-MS09-SB03-0506	10/18/2018 6:37:01 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
17	J8447-FS(3)	VC-MS09-SS04-000H	10/18/2018 6:47:52 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
18	J8448-FS(3)	VC-MS09-SB04-0102	10/18/2018 6:58:43 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
19	J8448-FS-D(5)	VC-MS09-SB04-0102	10/18/2018 7:09:33 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
20	KB76 CCV	CCV	10/18/2018 7:20:24 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
21	MeOH		10/18/2018 7:31:17 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
22	J8449-FS(3)	VC-MS09-SB04-0506	10/18/2018 7:42:10 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
23	J8449-FS-D(5)	VC-MS09-SB04-0506	10/18/2018 7:53:03 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
24	J8450-FS(3)	VC-MS09-SS05-000H	10/18/2018 8:03:55	5-0369.dam	18-0590_18-01588_18-

2 Dilution not needed DMS 10/26/2018

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Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
			PM		0589.wiff
25	J8450-FS-D(5)	VC-MS09-SS05-000H	10/18/2018 8:14:47 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
26	J8451-FS(3)	VC-MS09-SB05-0102	10/18/2018 8:25:38 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
27	J8451-FS-D(5)	VC-MS09-SB05-0102	10/18/2018 8:36:29 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
28	J8452-FS(3)	VC-MS09-SB05-0506	10/18/2018 8:47:20 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
29	J8452-FS-D(5)	VC-MS09-SB05-0506	10/18/2018 8:58:12 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
30	KB77 CCV	CCV	10/18/2018 9:09:03 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
31	MeOH		10/18/2018 9:19:54 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
32	J8453MS-FS(3)	VC-MS09-SB04-0102-MS	10/18/2018 9:30:47 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
33	J8453MS-FS-D(5)	VC-MS09-SB04-0102-MS	10/18/2018 9:41:39 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
34	J8454MSD-FS(3)	VC-MS09-SB04-0102-MSD	10/18/2018 9:52:29 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
35	J8454MSD-FS-D(5)	VC-MS09-SB04-0102-MSD	10/18/2018 10:03:21 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
36	KB76 CCV	CCV	10/18/2018 10:14:13 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
37	MeOH		10/18/2018 10:25:04 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
38	J8444-FS(5)	VC-MS09-SS03-000H	10/18/2018 10:35:56 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
19	MeOH		10/18/2018 11:41:06 PM	5-0369.dam	18-0590_18-01588_18-0589.wiff
~~1~~	~~CR904PB-FS(3)~~	~~Procedural Blank~~	~~10/18/2018 11:51:59 PM~~	~~5-0369.dam~~	~~18-0590_18-01588_18-0589.wiff~~
~~2~~	~~CR905LCS-FS(3)~~	~~Laboratory Control Sample~~	~~10/19/2018 12:02:52 AM~~	~~5-0369.dam~~	~~18-0590_18-01588_18-0589.wiff~~
~~3~~	~~J8465-FS(3)~~	~~VC-PM367-SS01-000H~~	~~10/19/2018 12:13:45 AM~~	~~5-0369.dam~~	~~18-0590_18-01588_18-0589.wiff~~
~~4~~	~~J8466-FS(3)~~	~~VC-PM367-SB01-0102~~	~~10/19/2018 12:24:40 AM~~	~~5-0369.dam~~	~~18-0590_18-01588_18-0589.wiff~~
~~5~~	~~J8467-FS(3)~~	~~VC-PM367-SB01-0506~~	~~10/19/2018 12:35:32 AM~~	~~5-0369.dam~~	~~18-0590_18-01588_18-0589.wiff~~
~~6~~	~~J8468-FS(3)~~	~~VC-PM367-SS02-000H~~	~~10/19/2018 12:46:24 AM~~	~~5-0369.dam~~	~~18-0590_18-01588_18-0589.wiff~~
~~7~~	~~J8469-FS(3)~~	~~VC-PM367-SB02-0102~~	~~10/19/2018 12:57:16 AM~~	~~5-0369.dam~~	~~18-0590_18-01588_18-0589.wiff~~
~~8~~	~~J8470-FS(3)~~	~~VC-PM367-SB02-0506~~	~~10/19/2018 1:08:08 AM~~	~~5-0369.dam~~	~~18-0590_18-01588_18-0589.wiff~~
~~9~~	~~J8471-FS(3)~~	~~VC-PM367-SS03-000H~~	~~10/19/2018 1:19:00 AM~~	~~5-0369.dam~~	~~18-0590_18-01588_18-0589.wiff~~
10	KB76 CCV	CCV	10/19/2018 1:29:53 AM	5-0369.dam	18-0590_18-01588_18-0589.wiff
11	MeOH		10/19/2018 1:40:47 AM	5-0369.dam	18-0590_18-01588_18-0589.wiff

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Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
12	J8472-FS(3)	VC-PM367-SB03-0102	10/19/2018 1:51:41 AM	5-0369.dam	18-0590_18-01588_18-0589.wiff
13	J8473-FS(3)	VC-PM367-SB03-0506	10/19/2018 2:02:34 AM	5-0369.dam	18-0590_18-01588_18-0589.wiff
14	J8474-FS(3)	VC-PM367-SS04-000H	10/19/2018 2:13:28 AM	5-0369.dam	18-0590_18-01588_18-0589.wiff
15	J8475-FS(3)	VC-PM367-SB04-0102	10/19/2018 2:24:20 AM	5-0369.dam	18-0590_18-01588_18-0589.wiff
16	J8476-FS(3)	VC-PM367-SB04-0506	10/19/2018 2:35:12 AM	5-0369.dam	18-0590_18-01588_18-0589.wiff
17	J8337-FS-D(13)	VC-PM324-DW02-0918	10/19/2018 2:46:05 AM	5-0369.dam	18-0590_18-01588_18-0589.wiff
18	KB77 CCV	CCCV	10/19/2018 2:56:57 AM	5-0369.dam	18-0590_18-01588_18-0589.wiff

1

1 Samples from another batch not reported with this one. DMS 10/25/2018

BATTELLE

Sequence Report

Created with Analyst Reporter
Printed: 25/10/2018 10:24:47 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	Instrument Blank	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 Standard	10/17/2018 9:24:41 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff	
1	MeOH		10/17/2018 9:35:33 PM	5-0369.dam	Data18-0590_18-01588_18-0589.wiff	
1	KB75 ISC	Instrument Sensitivity Check	10/19/2018 6:16:51 PM	5-0369.dam	10192018.wiff	
2	KB80 IB	Instrument Blank	10/19/2018 6:27:43 PM	5-0369.dam	10192018.wiff	
3	MeOH		10/19/2018 6:38:37 PM	5-0369.dam	10192018.wiff	
~~4~~	~~KC52 CKC 1~~	~~Standard Check~~	~~10/19/2018 6:49:30 PM~~	~~5-0369.dam~~	~~10192018.wiff~~	1
~~5~~	~~KC52 CHK2~~	~~Standard Check~~	~~10/19/2018 7:00:22 PM~~	~~5-0369.dam~~	~~10192018.wiff~~	
~~6~~	~~CR904PB FS(3)~~	~~Procedural Blank~~	~~10/19/2018 7:11:14 PM~~	~~5-0369.dam~~	~~10192018.wiff~~	
~~7~~	~~CR890PB FS(0)~~	~~Prodedural Blank~~	~~10/19/2018 7:22:06 PM~~	~~5-0369.dam~~	~~10192018.wiff~~	
~~8~~	~~J8384 FS D(5)~~	~~VC PM64B DW03 0918~~	~~10/19/2018 7:32:58 PM~~	~~5-0369.dam~~	~~10192018.wiff~~	
~~9~~	~~J8358 FS(0)~~	~~VC PM323 DW01 0918~~	~~10/19/2018 7:43:49 PM~~	~~5-0369.dam~~	~~10192018.wiff~~	
~~1~~	~~MeOH~~		~~10/19/2018 7:54:40 PM~~	~~5-0369.dam~~	~~10192018.wiff~~	
~~10~~	~~J8400 FS D(9)~~	~~VC HS09 DW03P 0918~~	~~10/19/2018 8:05:33 PM~~	~~5-0369.dam~~	~~10192018.wiff~~	
~~11~~	~~J8371 FS D(9)~~	~~VC PM324 DW01P 0918~~	~~10/19/2018 8:16:26 PM~~	~~5-0369.dam~~	~~10192018.wiff~~	
~~12~~	~~J8464MSD FS D(7)~~	~~VC MS09 DW05 0918 MSD~~	~~10/19/2018 8:27:19 PM~~	~~5-0369.dam~~	~~10192018.wiff~~	
~~13~~	~~KB76 CCV~~	~~CCV~~	~~10/19/2018 8:38:12 PM~~	~~5-0369.dam~~	~~10192018.wiff~~	
~~1~~	~~MeOH~~		~~10/19/2018 8:49:05~~	~~5-0369.dam~~	~~10192018.wiff~~	

1samples from another batch not reported with this one. DMS 10/26/2018

** Same files as previous sequence (repeated to show that the calibration is the same).

BATTELLE

Sequence Report

Created with Analyst Reporter
Printed: 25/10/2018 10:24:47 AM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
			PM		
~~14~~	~~J8462-FS-D(7)~~	~~VC-CS12-SB02-0102~~	~~10/19/2018 8:59:57 PM~~	~~5-0369.dam~~	~~10192018.wiff~~
~~15~~	~~J8477-FS-D(7)~~	~~VC-CS10-SS03-000H~~	~~10/19/2018 9:10:49 PM~~	~~5-0369.dam~~	~~10192018.wiff~~
~~16~~	~~J8478-FS-D(7)~~	~~VC-CS10-SB03-0102~~	~~10/19/2018 9:21:41 PM~~	~~5-0369.dam~~	~~10192018.wiff~~
~~17~~	~~J8479-FS-D(7)~~	~~VC-CS10-SB03-0506~~	~~10/19/2018 9:32:32 PM~~	~~5-0369.dam~~	~~10192018.wiff~~
~~18~~	~~J8480-FS-D(7)~~	~~VC-CS10-SS04-000H~~	~~10/19/2018 9:43:23 PM~~	~~5-0369.dam~~	~~10192018.wiff~~
~~19~~	~~J8481-FS-D(7)~~	~~VC-CS10-SB04-0102~~	~~10/19/2018 9:54:14 PM~~	~~5-0369.dam~~	~~10192018.wiff~~
~~20~~	~~J8460-FS-D(7)~~	~~VC-CS12-SB01-0506~~	~~10/19/2018 10:05:06 PM~~	~~5-0369.dam~~	~~10192018.wiff~~
~~21~~	~~J8461-FS-D(7)~~	~~VC-CS12-SS02-000H~~	~~10/19/2018 10:15:59 PM~~	~~5-0369.dam~~	~~10192018.wiff~~
22	KB77 CCV	CCV	10/19/2018 10:26:52 PM	5-0369.dam	10192018.wiff
1	MeOH		10/19/2018 10:37:43 PM	5-0369.dam	10192018.wiff
23	J8440-FS-D(7)	VC-MS09-SB01-0506	10/19/2018 10:48:35 PM	5-0369.dam	10192018.wiff
24	J8443-FS-D(9)	VC-MS09-SB02-0506	10/19/2018 10:59:28 PM	5-0369.dam	10192018.wiff
25	J8445-FS-D(11)	VC-MS09-SB03-0102	10/19/2018 11:10:20 PM	5-0369.dam	10192018.wiff
26	J8446-FS-D(7)	VC-MS09-SB03-0506	10/19/2018 11:21:12 PM	5-0369.dam	10192018.wiff
27	J8450-FS-D(7)	VC-MS09-SS05-000H	10/19/2018 11:32:04 PM	5-0369.dam	10192018.wiff
28	J8444-FS-D(17)	VC-MS09-SS03-000H	10/19/2018 11:42:56 PM	5-0369.dam	10192018.wiff
29	KB76 CCV	CCV	10/19/2018 11:53:48 PM	5-0369.dam	10192018.wiff

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1samples from another batch not reported with this one. DMS 10/26/2018

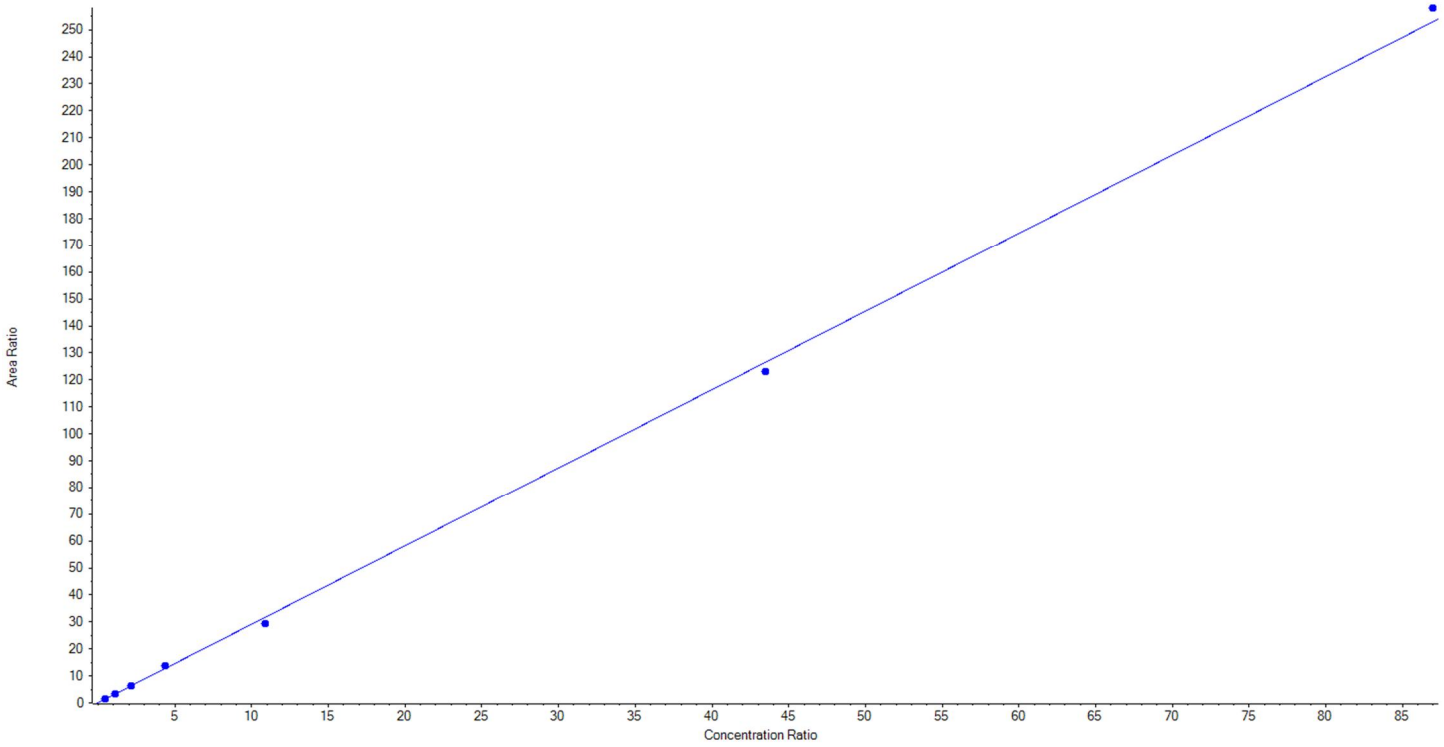
BATTELLE

Calibration Summary Report

Analyte Name	PFBS_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	298.9 / 80.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C3-PFBS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



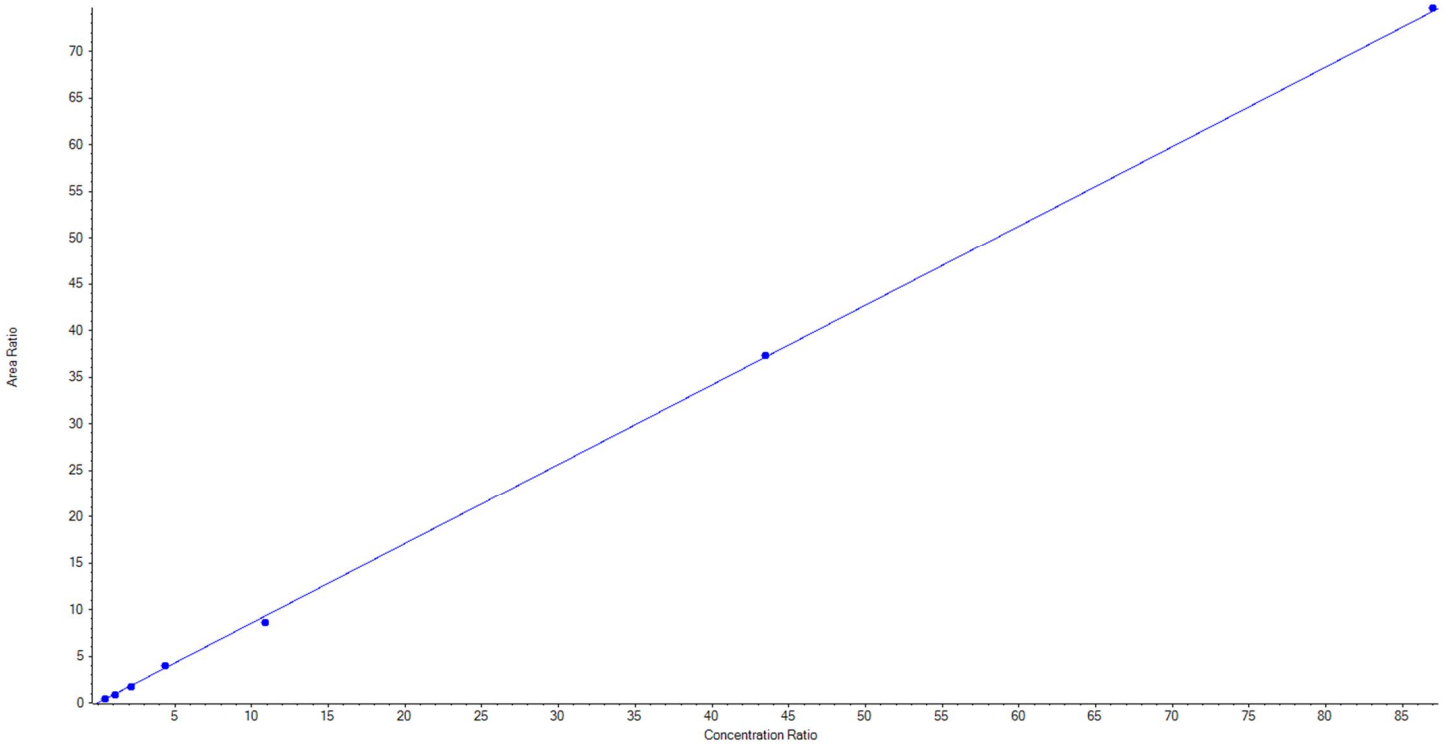
BATTELLE

Calibration Summary Report

Analyte Name	PFBS_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	298.9 / 99.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C3-PFBS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



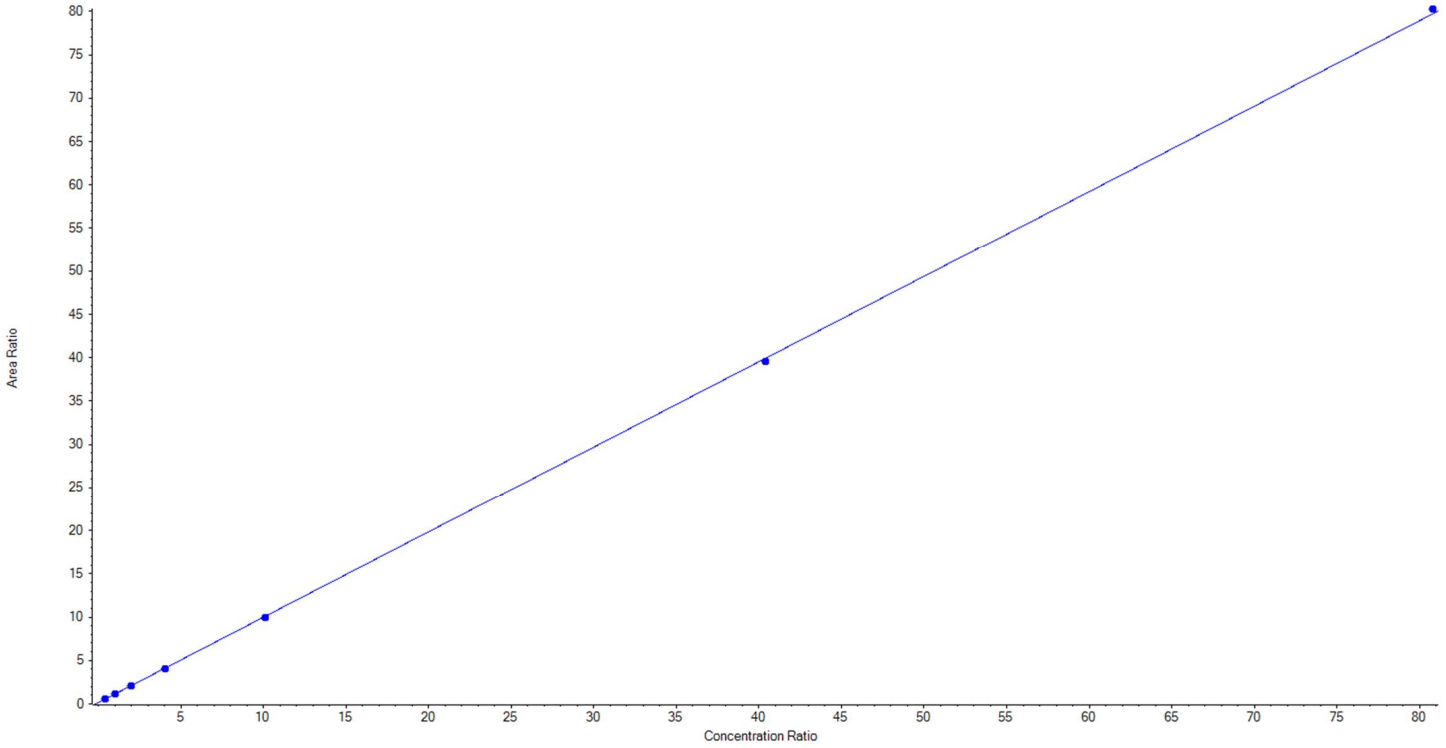
BATTELLE

Calibration Summary Report

Analyte Name	PFHxA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	313.0 / 269.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C5-PFHxA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



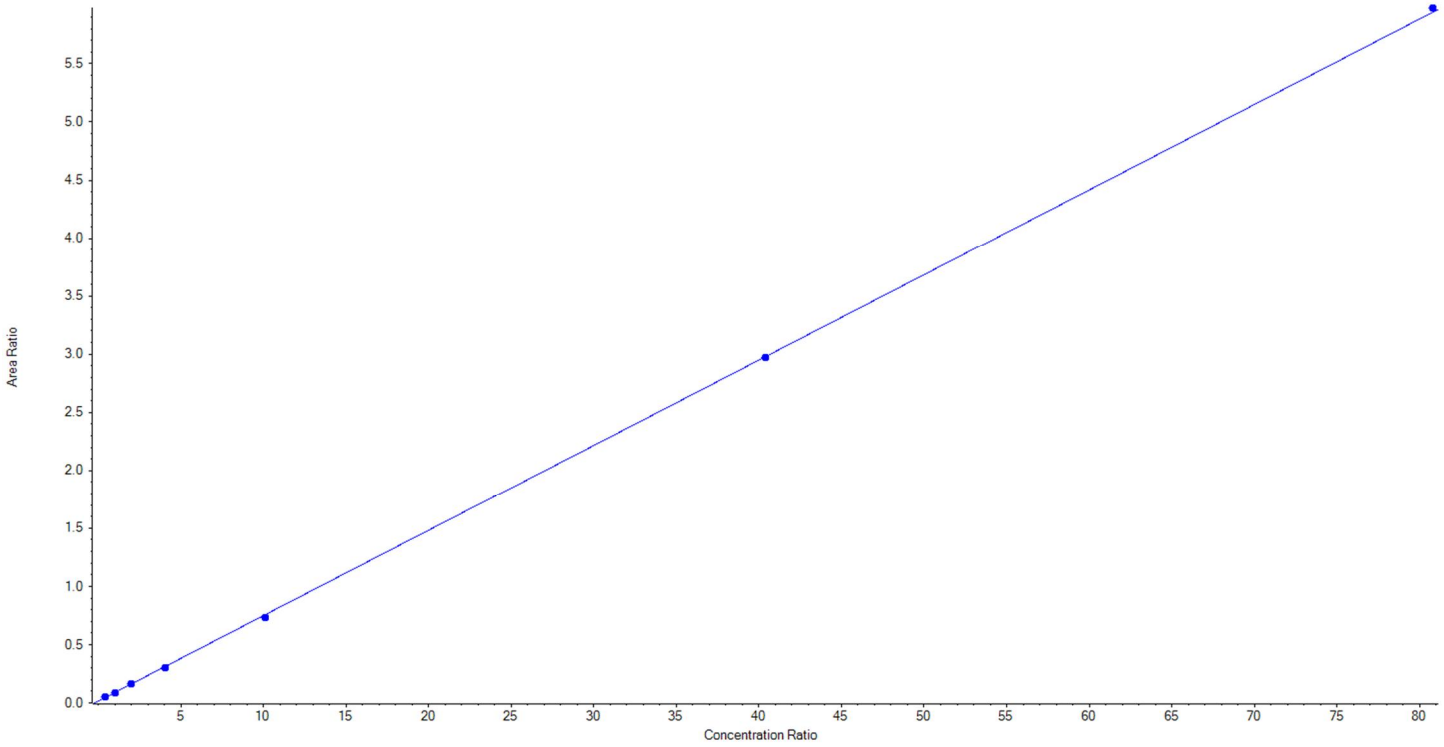
BATTELLE

Calibration Summary Report

Analyte Name	PFHxA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	313.0 / 119.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C5-PFHxA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



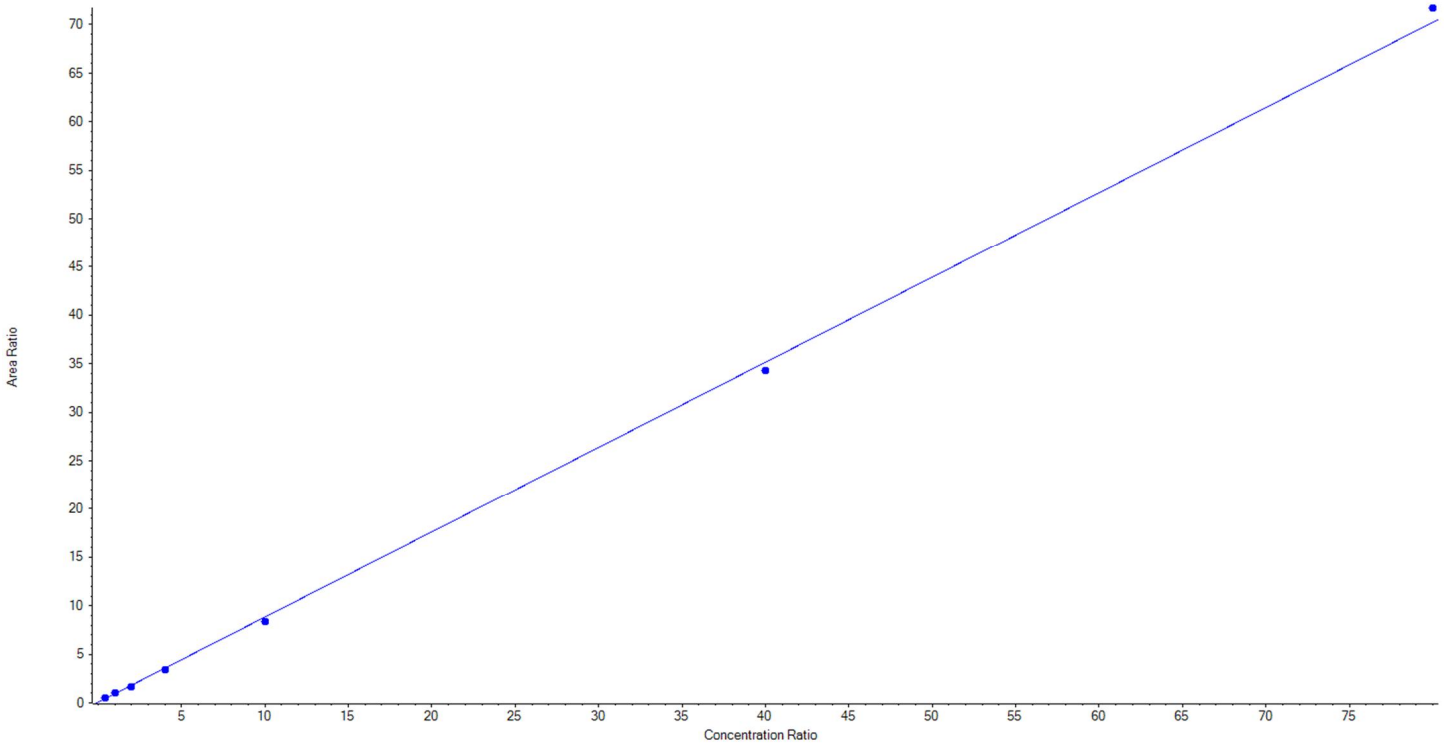
BATTELLE

Calibration Summary Report

Analyte Name	PFHpA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	363.0 / 319.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C4-PFHpA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



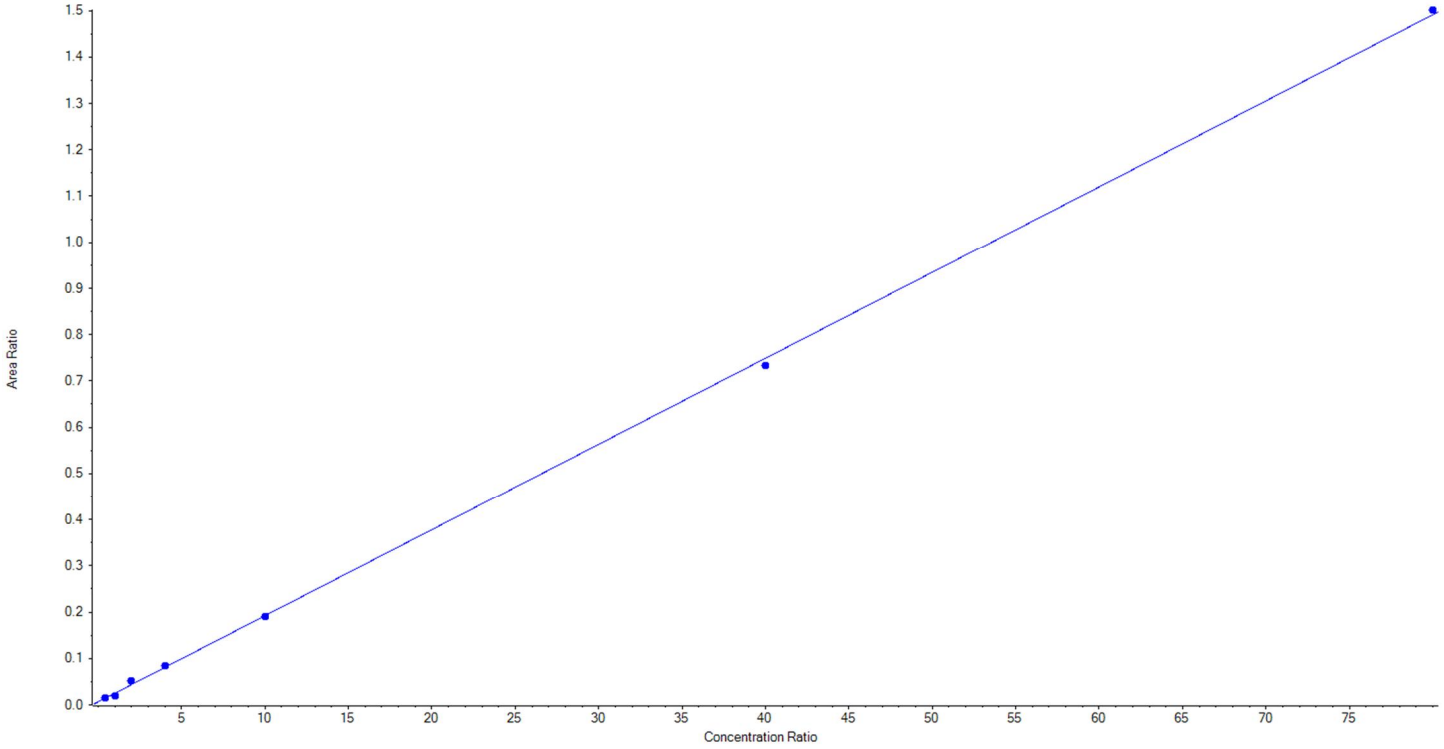
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Calibration Summary Report

Analyte Name	PFHpA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	363.0 / 169.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C4-PFHpA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



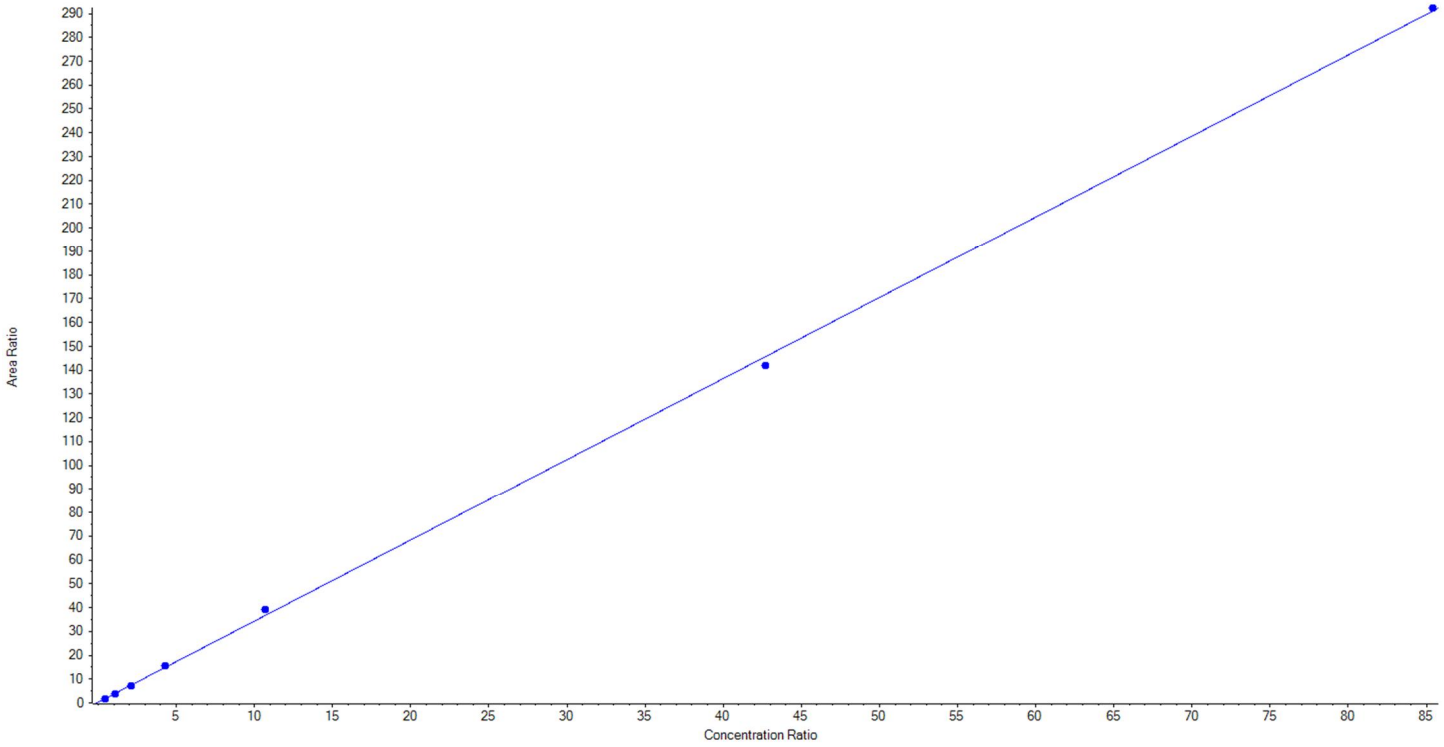
BATTELLE

Calibration Summary Report

Analyte Name	PFHxS_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	399.0 / 80.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C3-PFHxS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



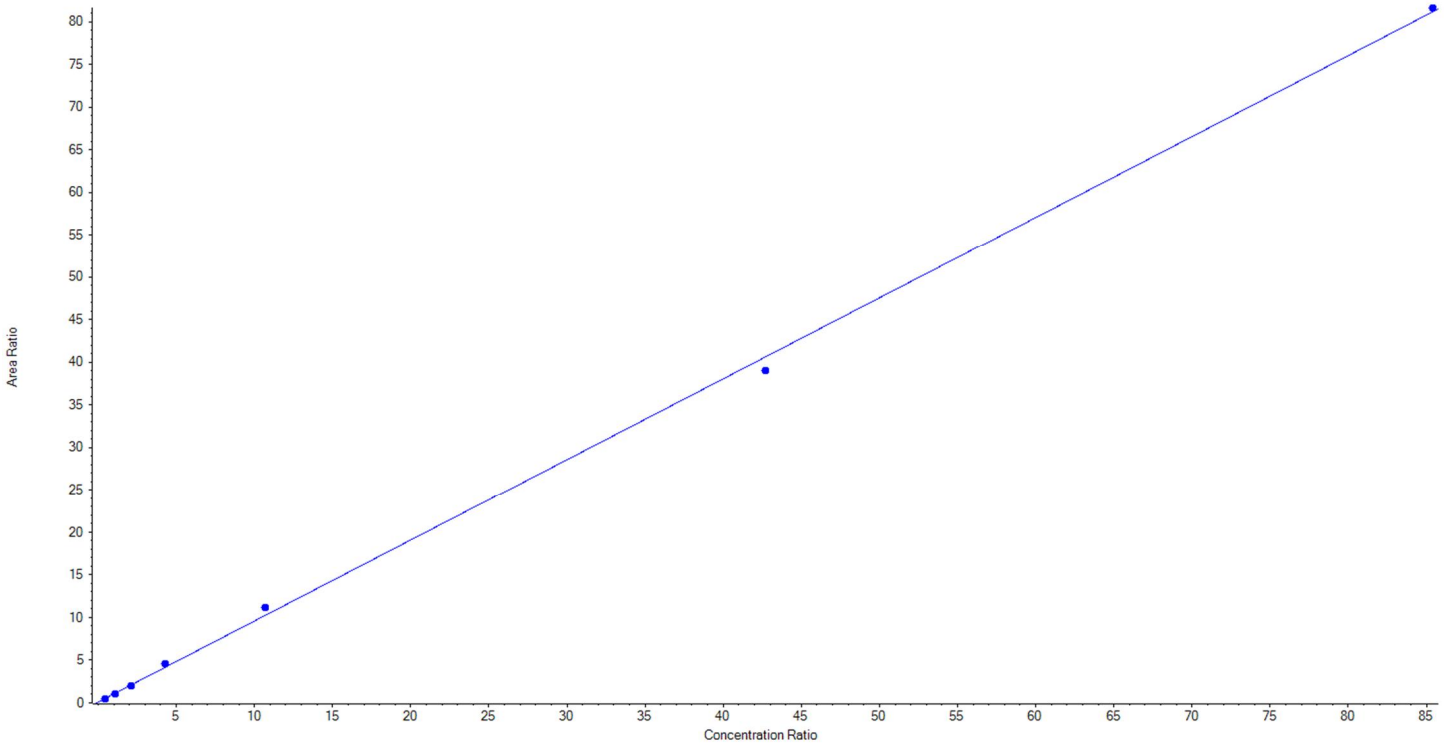
BATTELLE

Calibration Summary Report

Analyte Name	PFHxS_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	399.0 / 99.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C3-PFHxS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



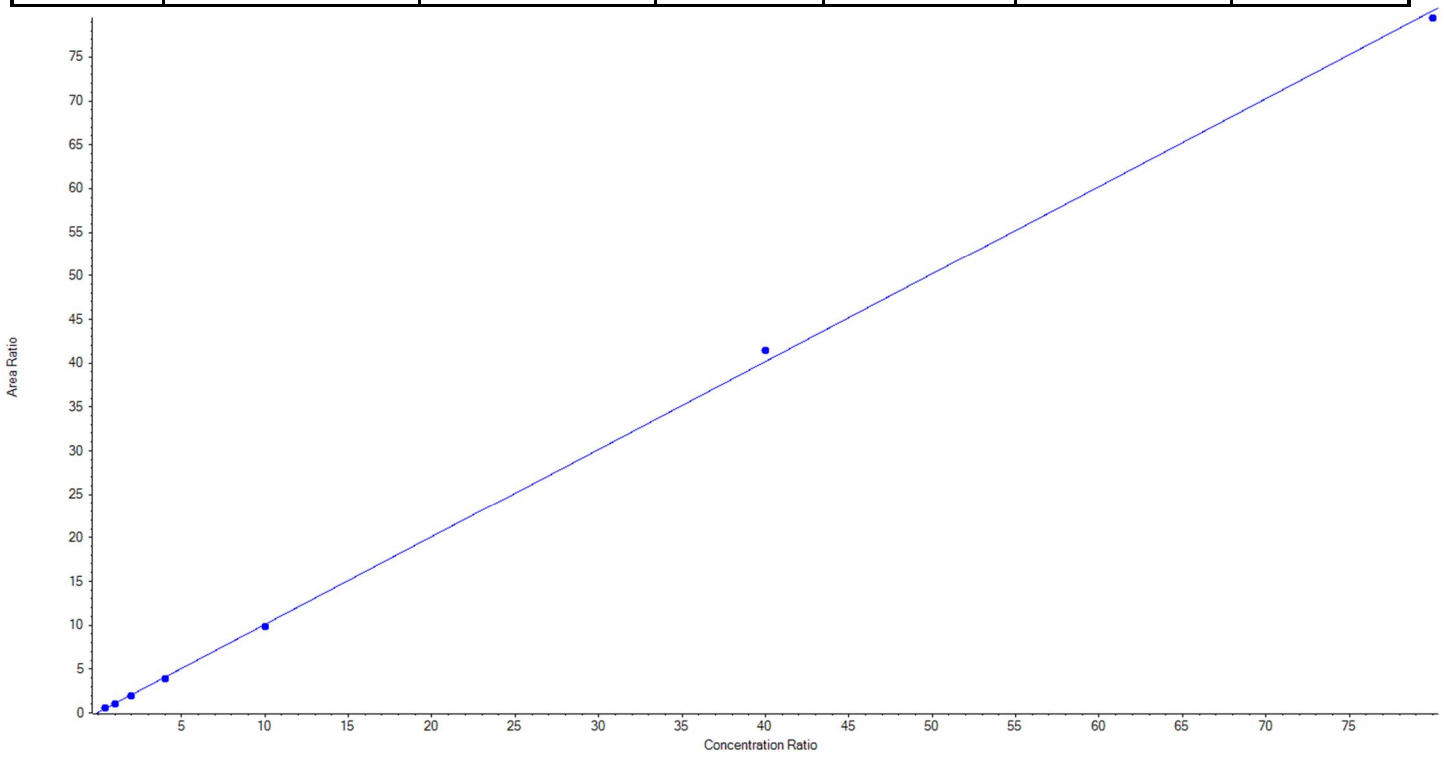
BATTELLE

Calibration Summary Report

Analyte Name	PFOA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	413.0 / 369.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C8-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



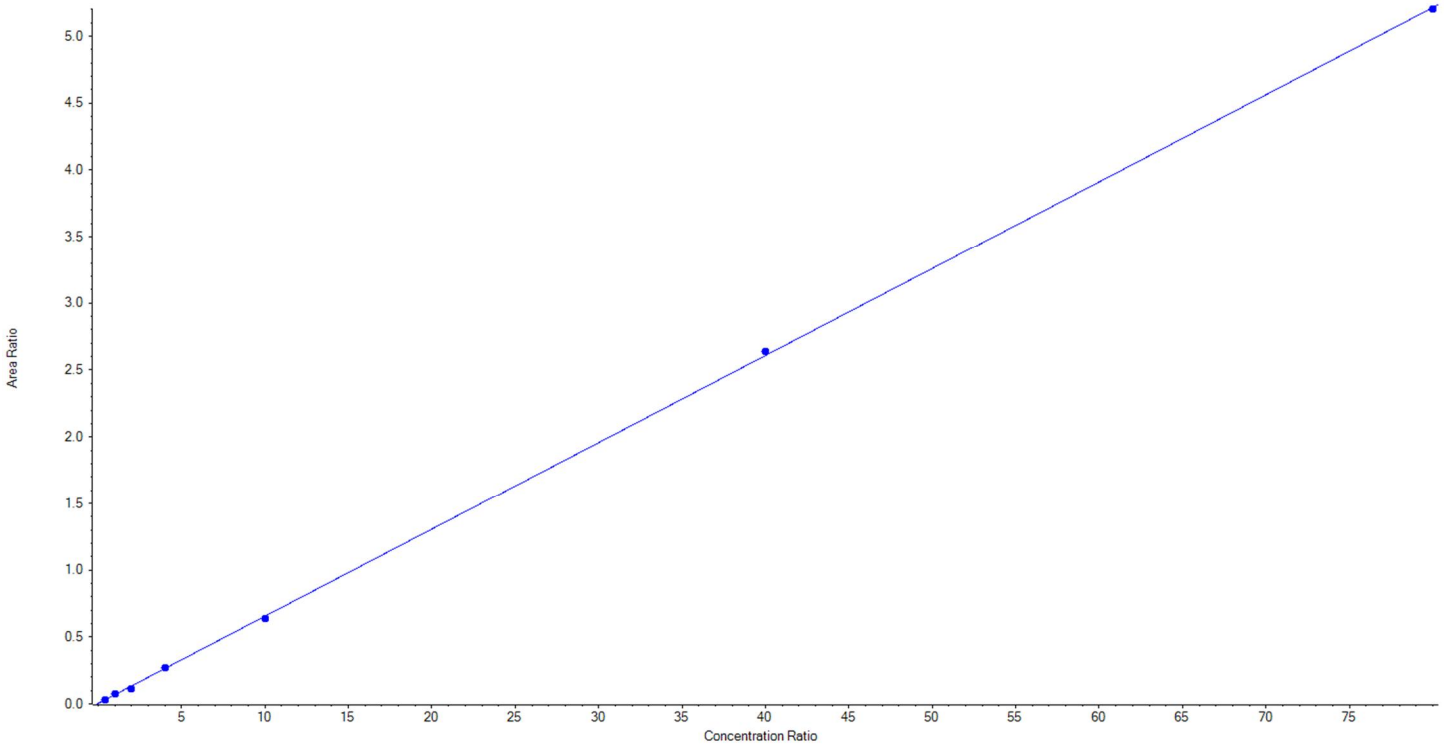
BATTELLE

Calibration Summary Report

Analyte Name	PFOA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	413.0 / 169.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C8-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



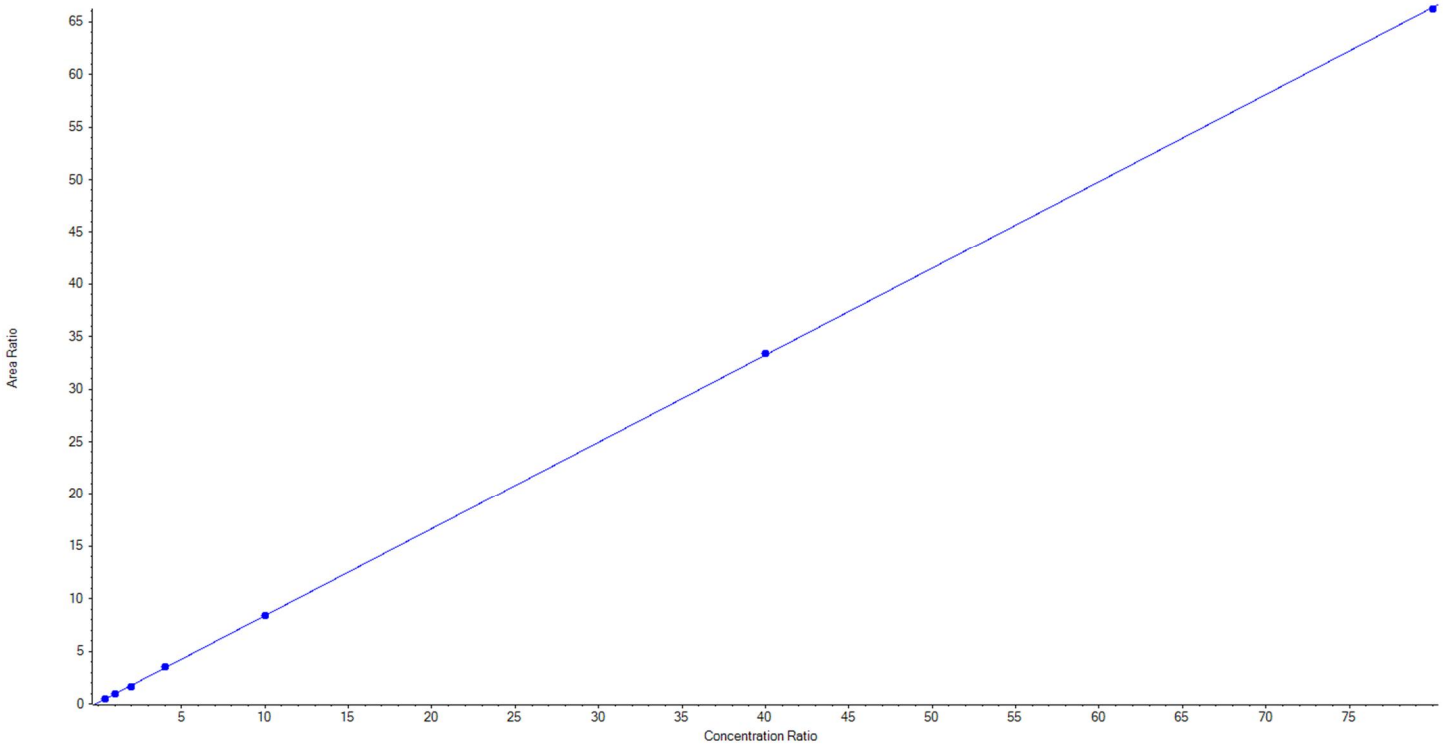
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Calibration Summary Report

Analyte Name	PFNA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	463.0 / 419.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C9-PFNA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



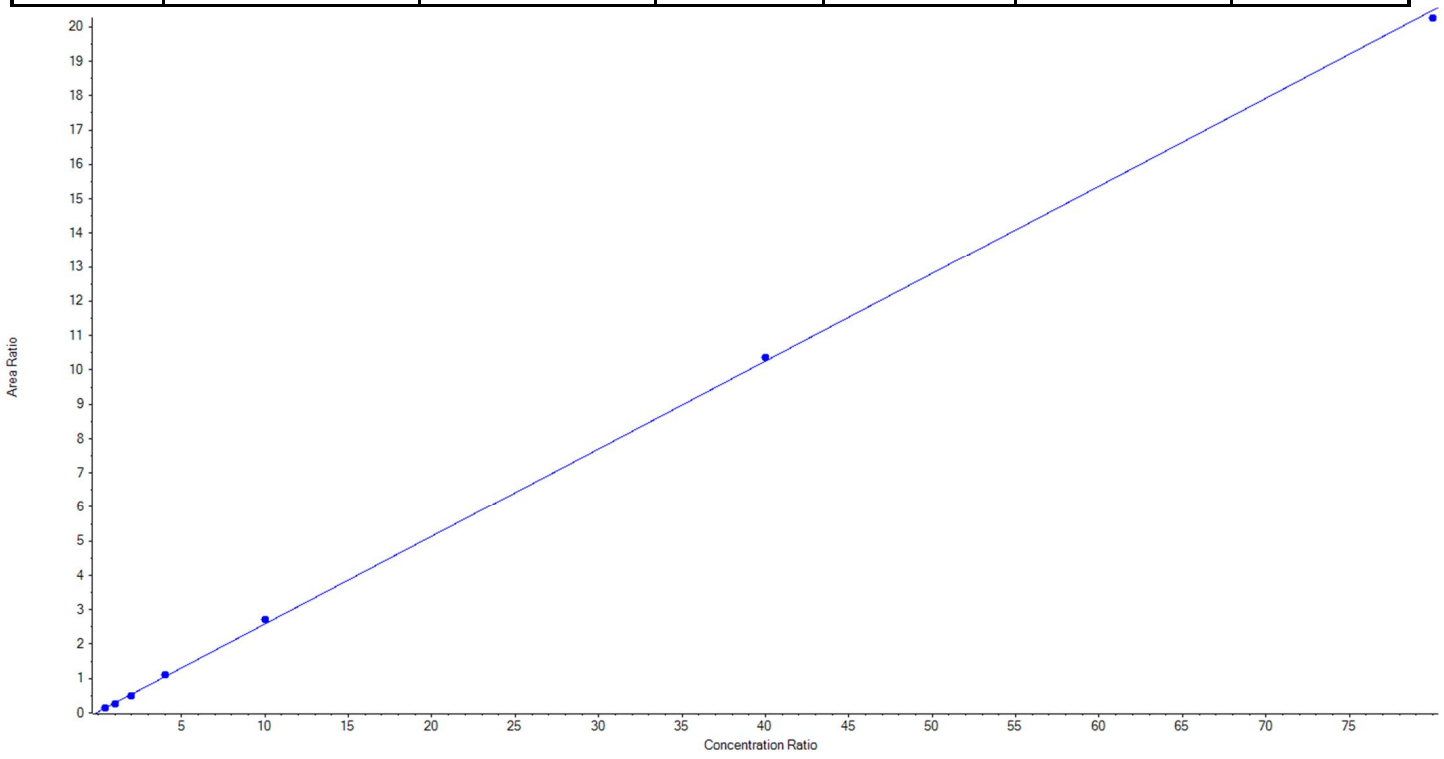
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Calibration Summary Report

Analyte Name	PFNA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	463.0 / 219.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C9-PFNA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



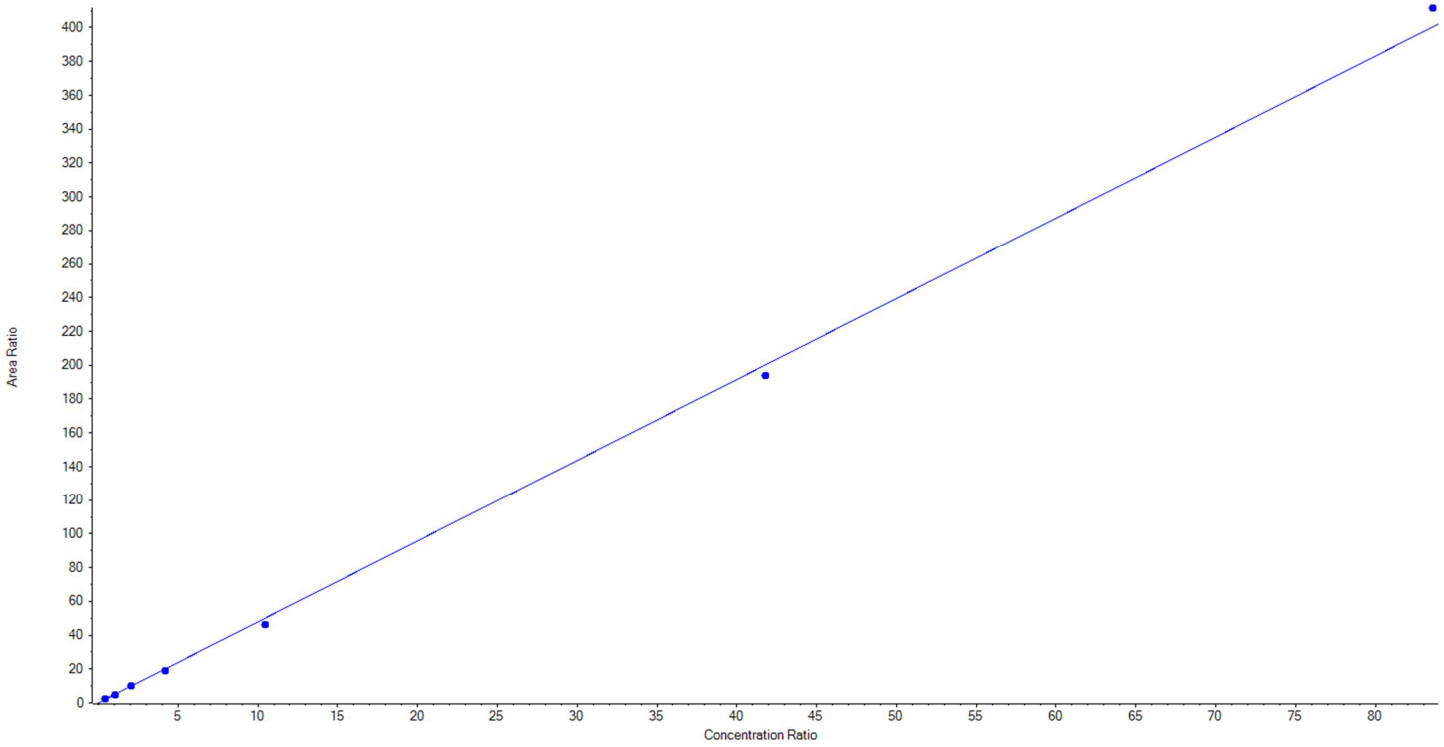
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Calibration Summary Report

Analyte Name	PFOS_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	499.0 / 80.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C8-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



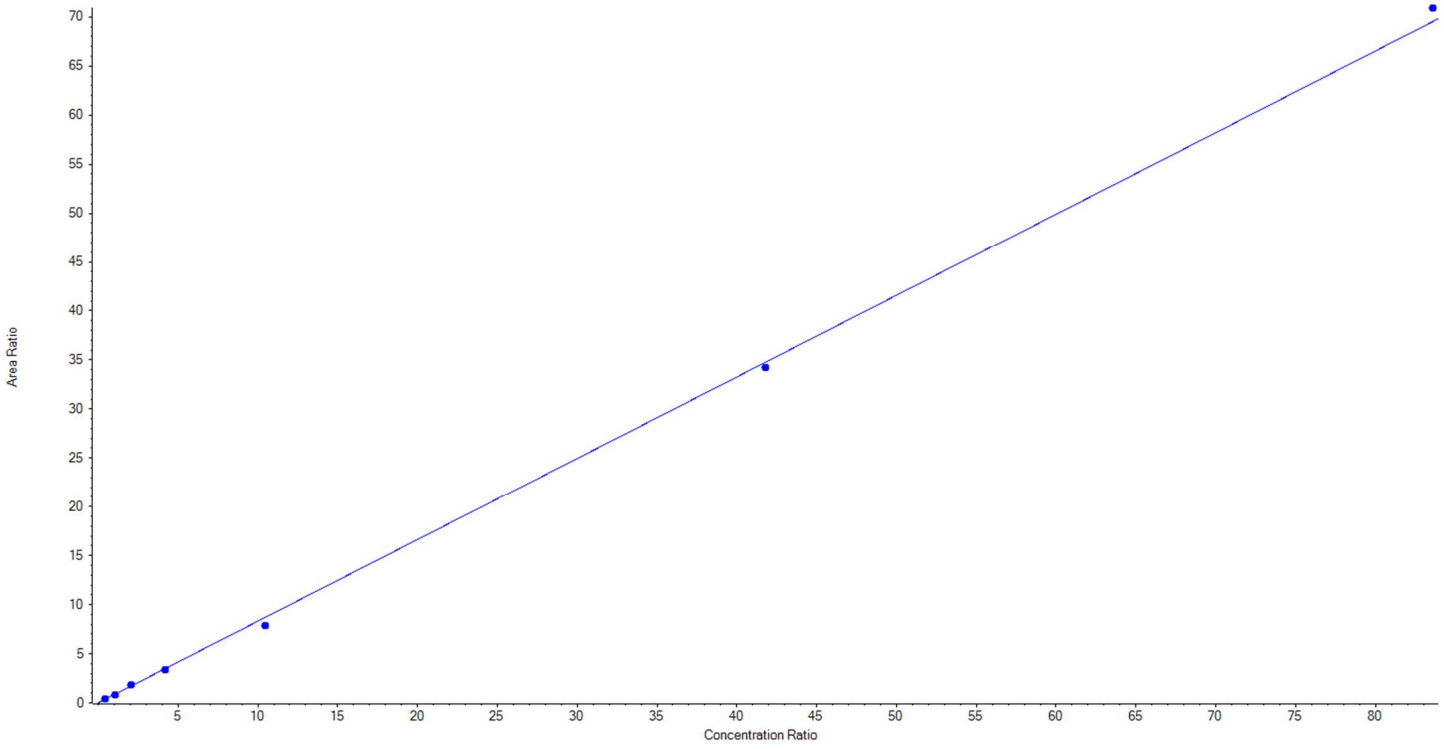
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Calibration Summary Report

Analyte Name	PFOS_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	499.0 / 99.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C8-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



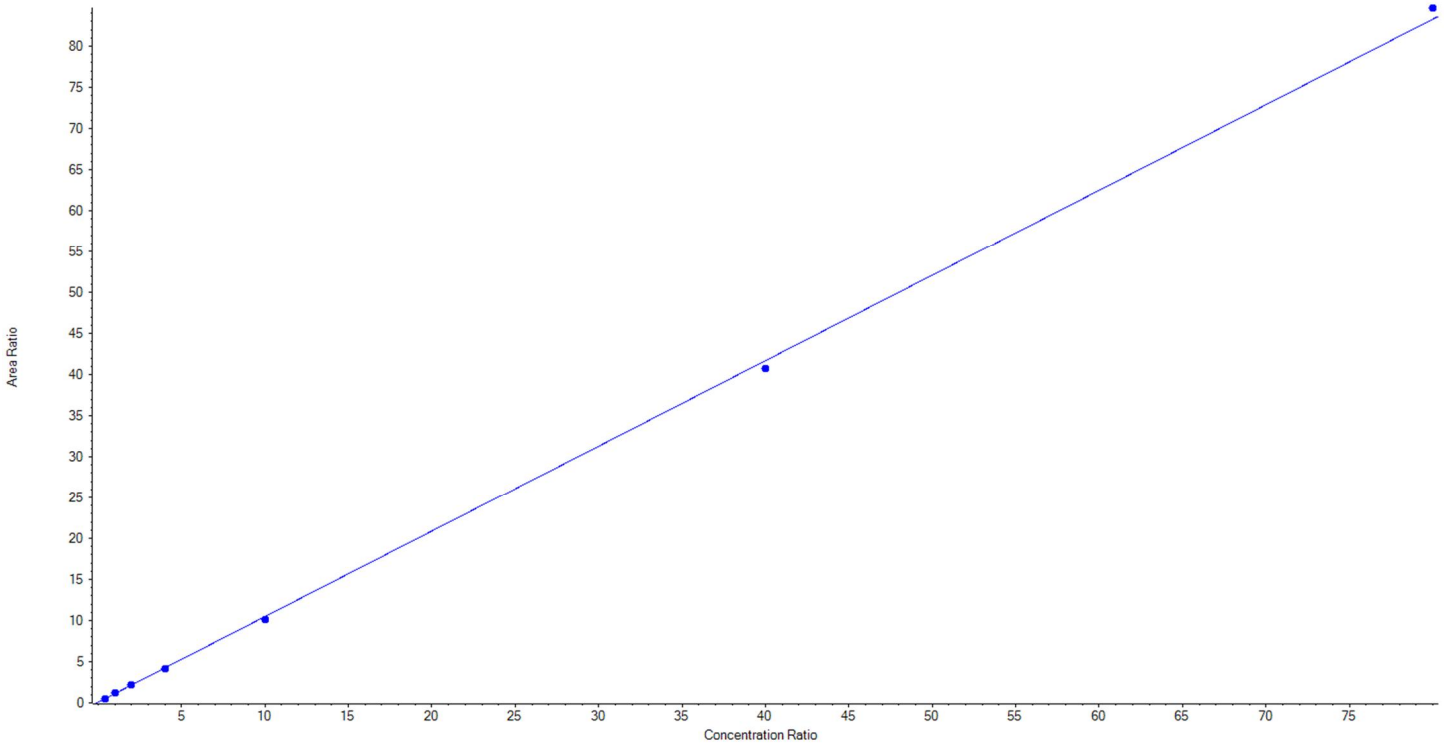
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Calibration Summary Report

Analyte Name	PFDA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	513.0 / 469.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C6-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



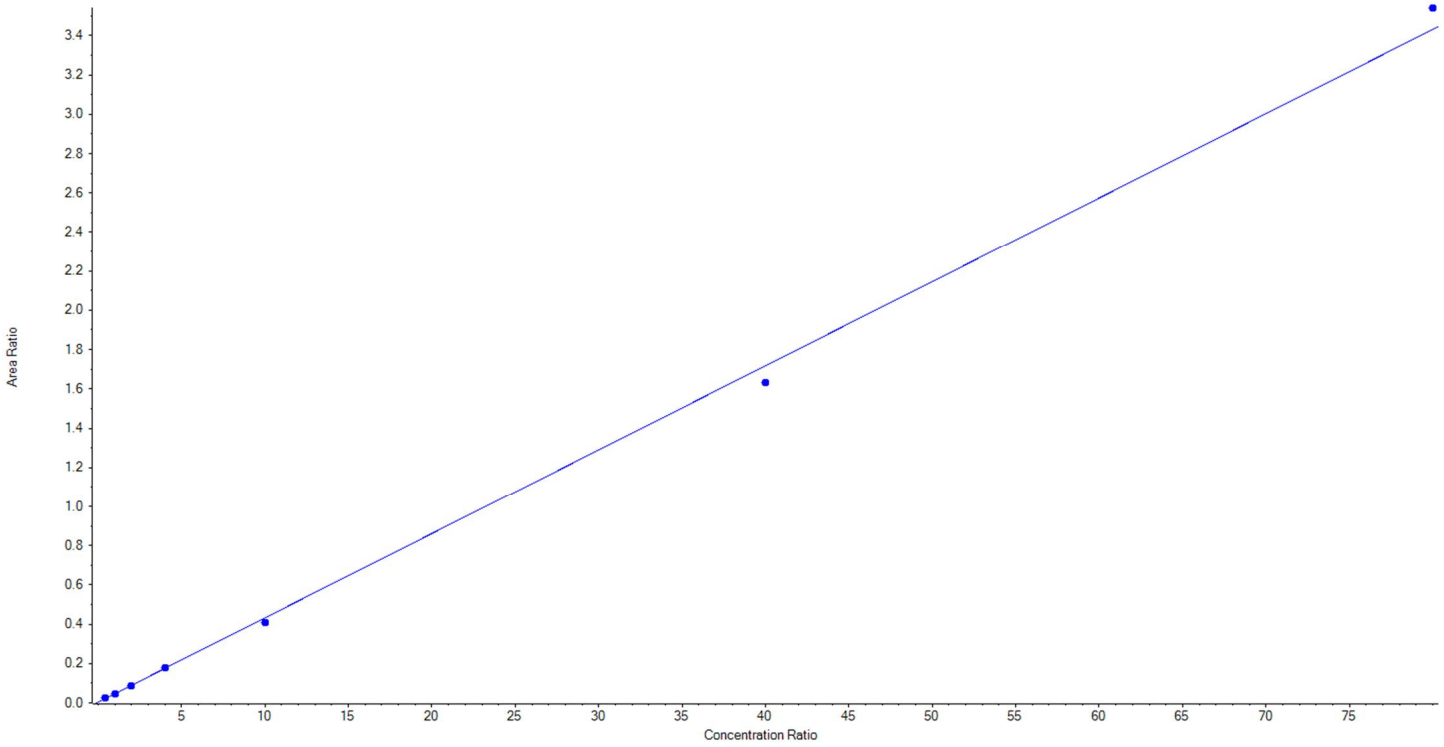
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Calibration Summary Report

Analyte Name	PFDA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	513.0 / 219.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C6-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



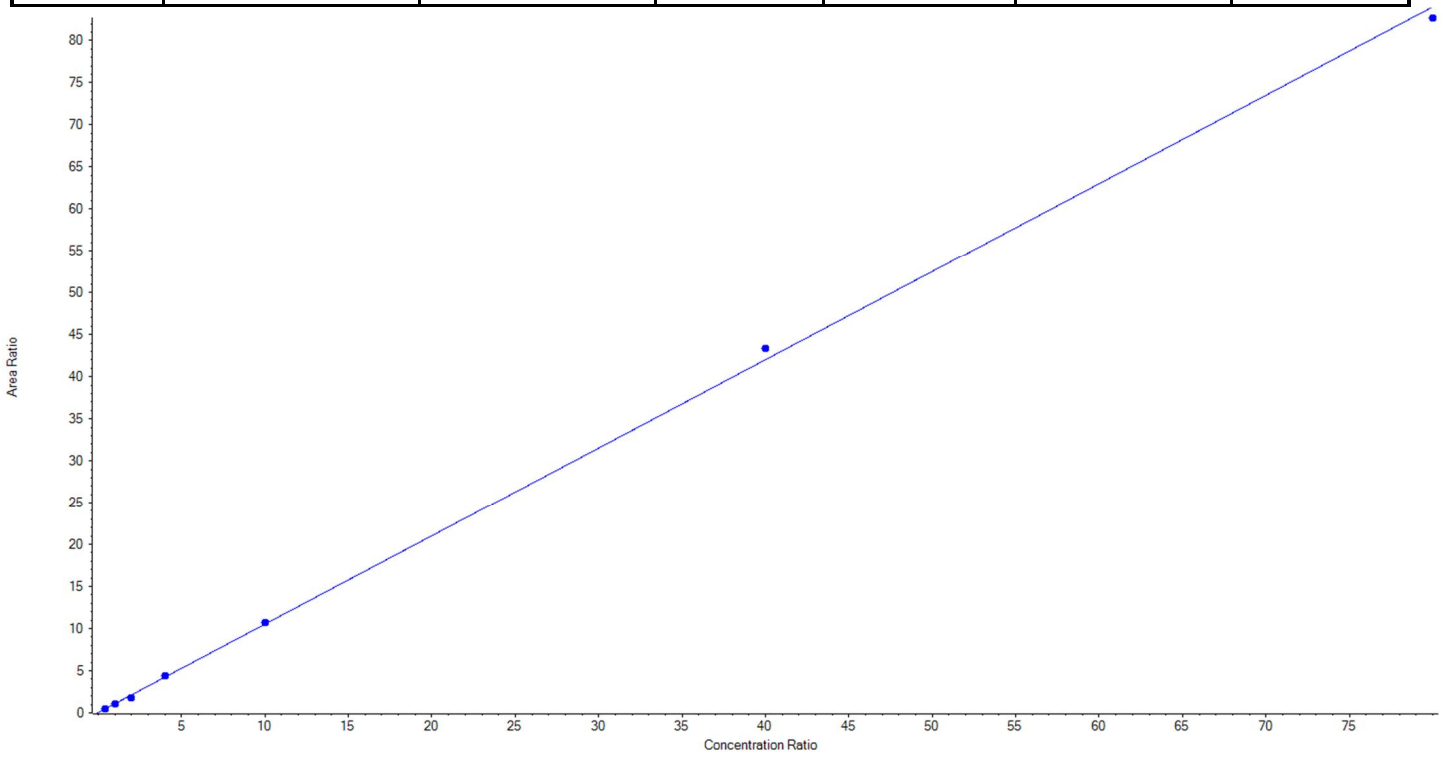
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Calibration Summary Report

Analyte Name	PFUnA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	563.0 / 519.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C7-PFUnA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



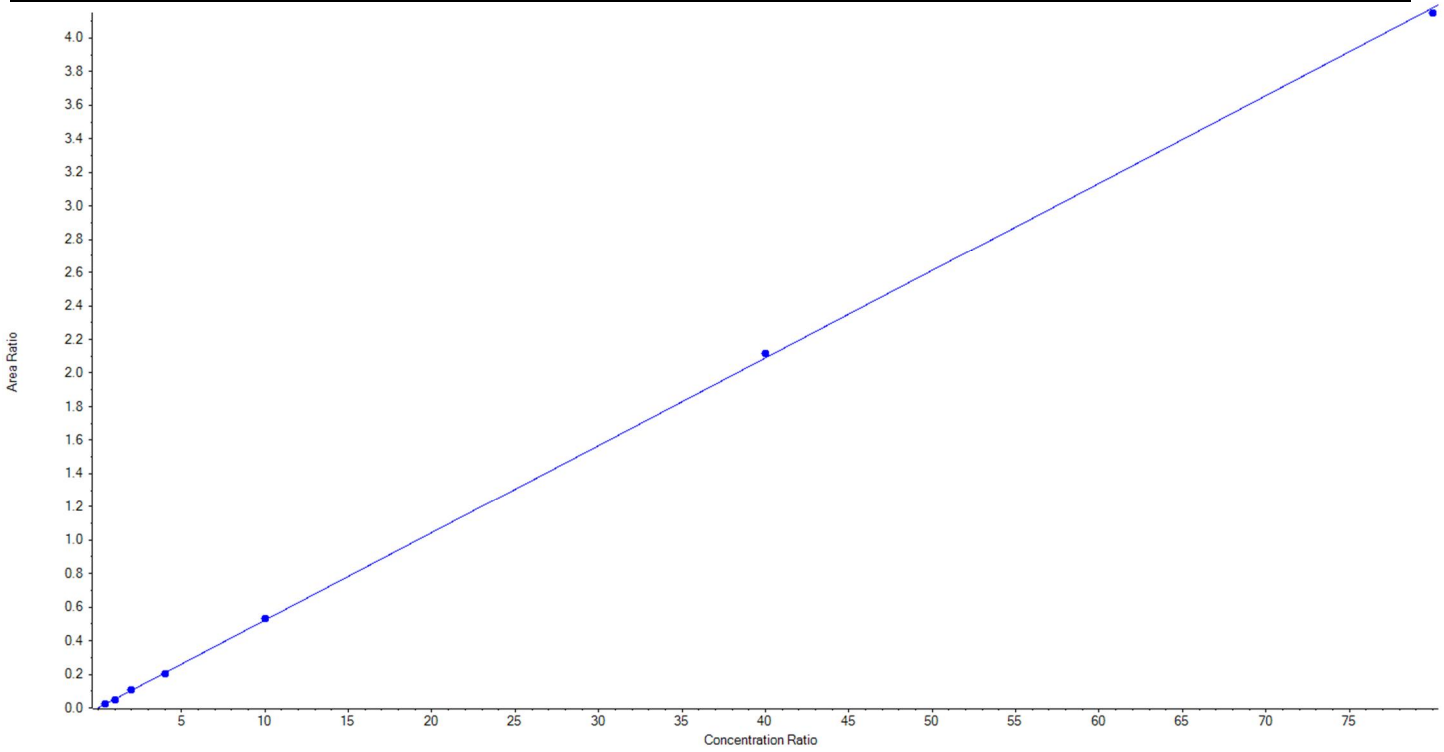
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Calibration Summary Report

Analyte Name	PFUnA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	563.0 / 269.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C7-PFUnA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



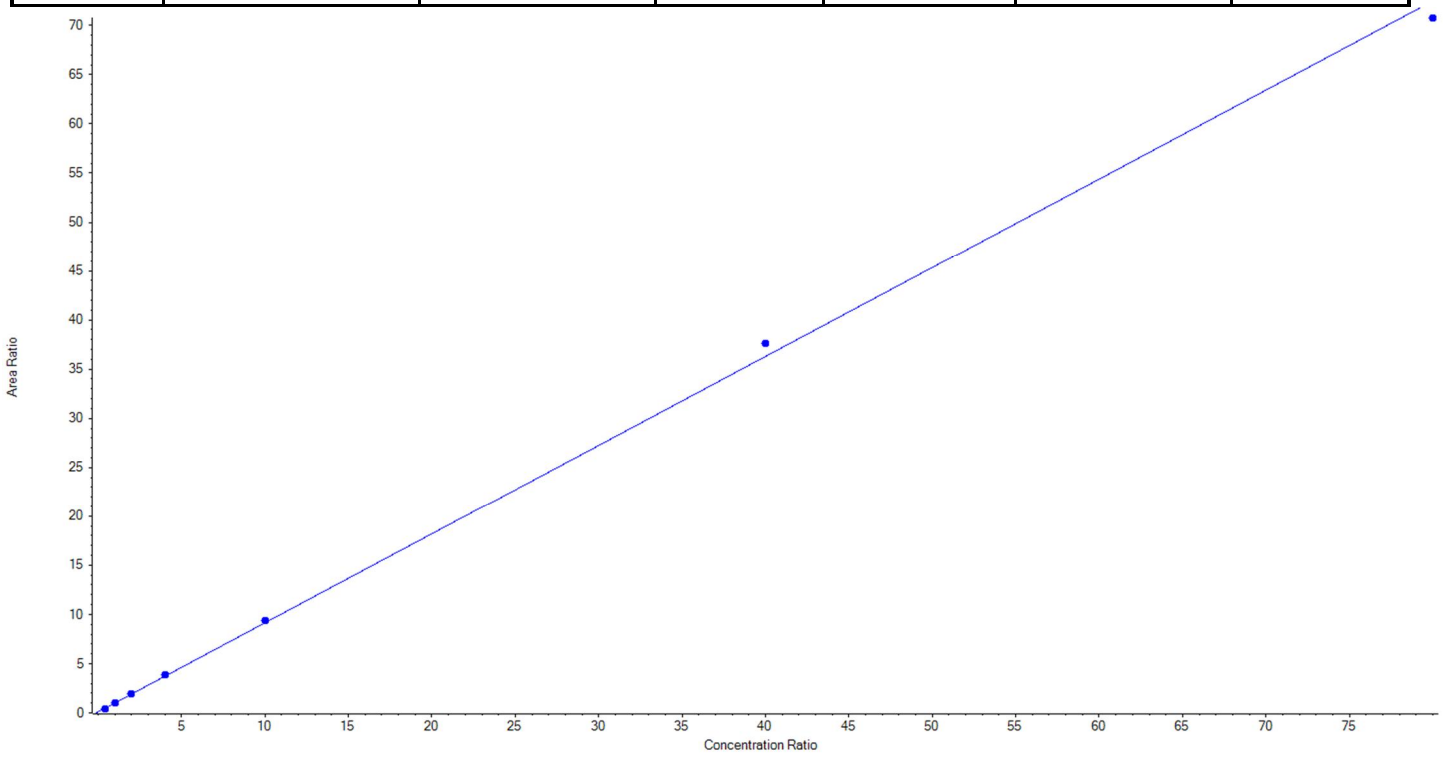
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Calibration Summary Report

Analyte Name	PFDoA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	613.0 / 569.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C2-PFDoA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



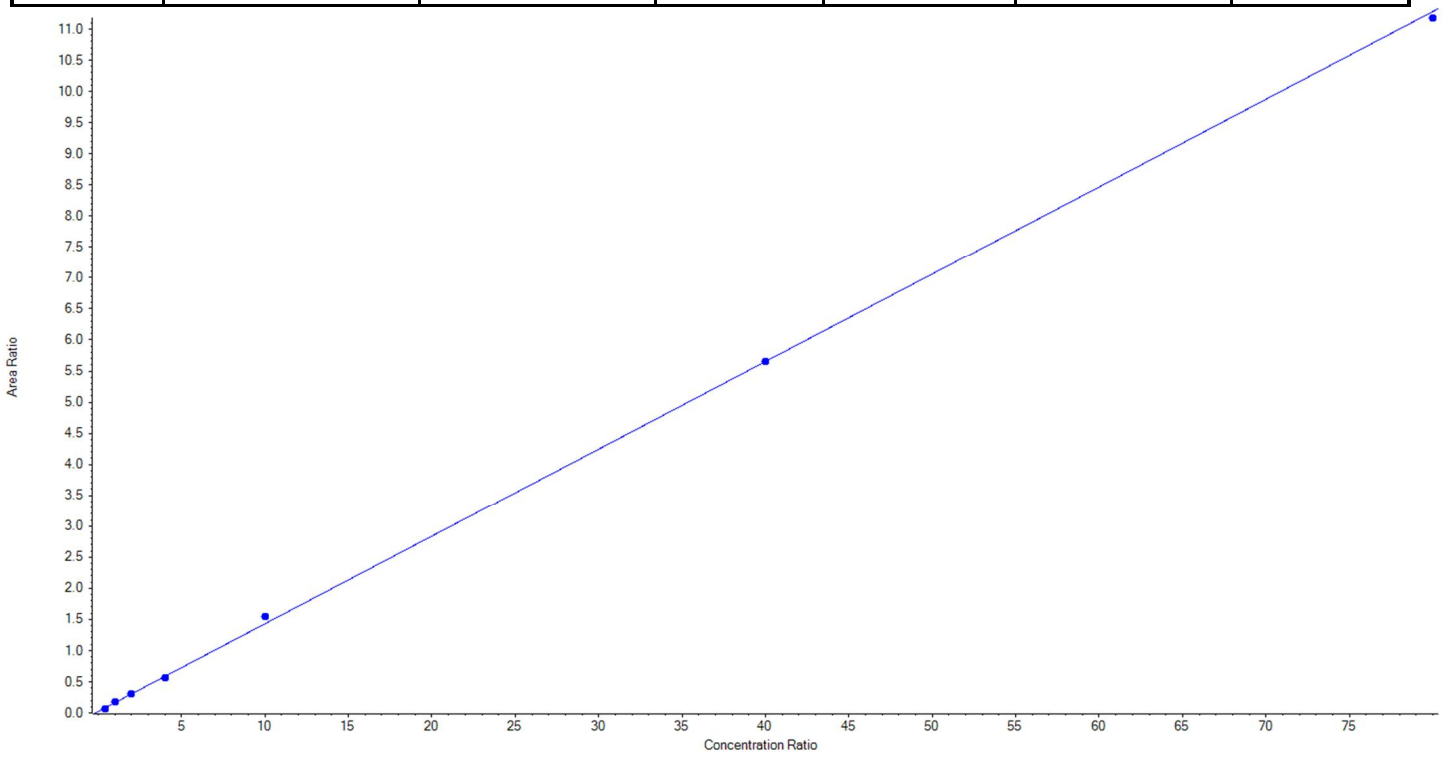
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Calibration Summary Report

Analyte Name	PFDoA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	613.0 / 319.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C2-PFDoA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



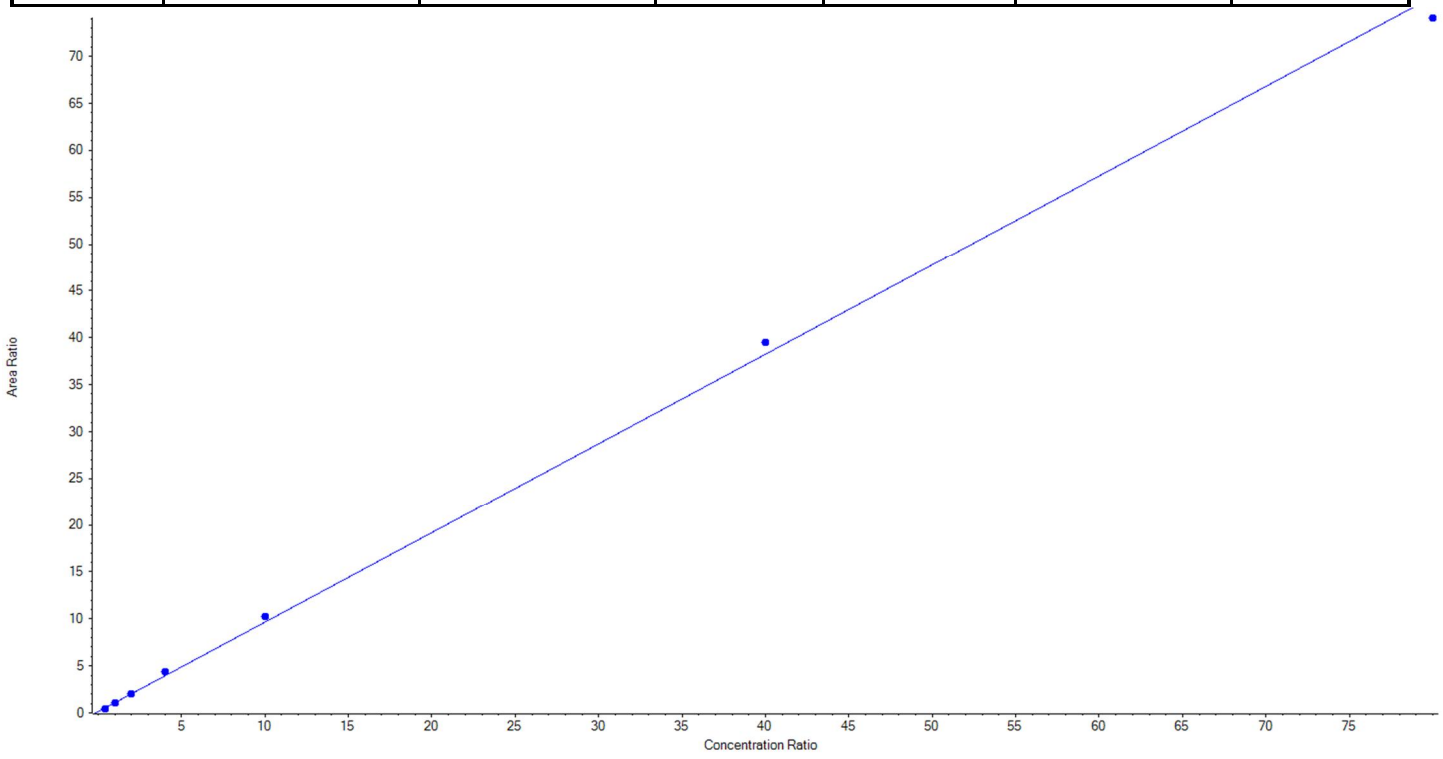
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Calibration Summary Report

Analyte Name	PFTrDA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	663.0 / 619.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C2-PFTeDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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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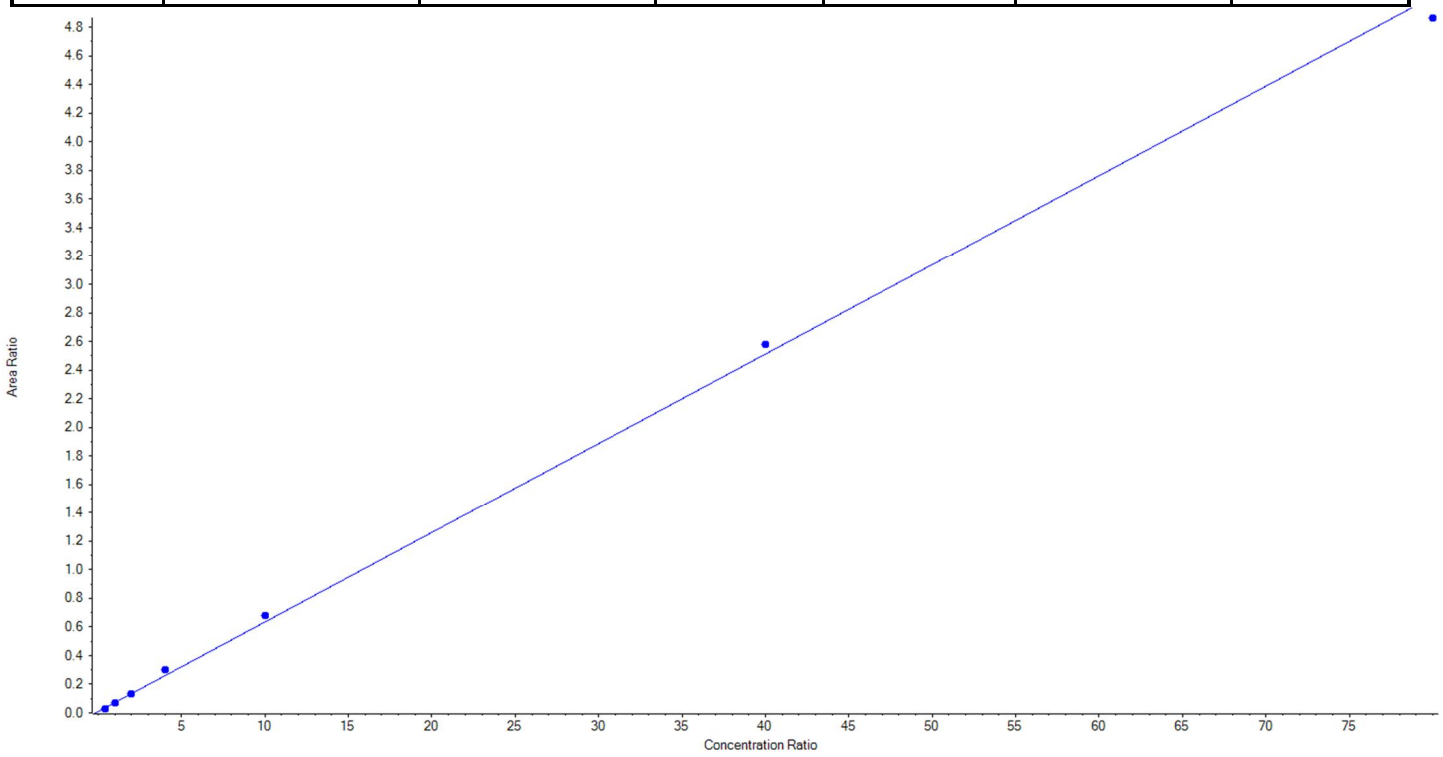
Calibration Summary Report

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Printed: 25/10/2018 11:26:55 AM

Analyte Name	PFTrDA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	663.0 / 169.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C2-PFTeDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



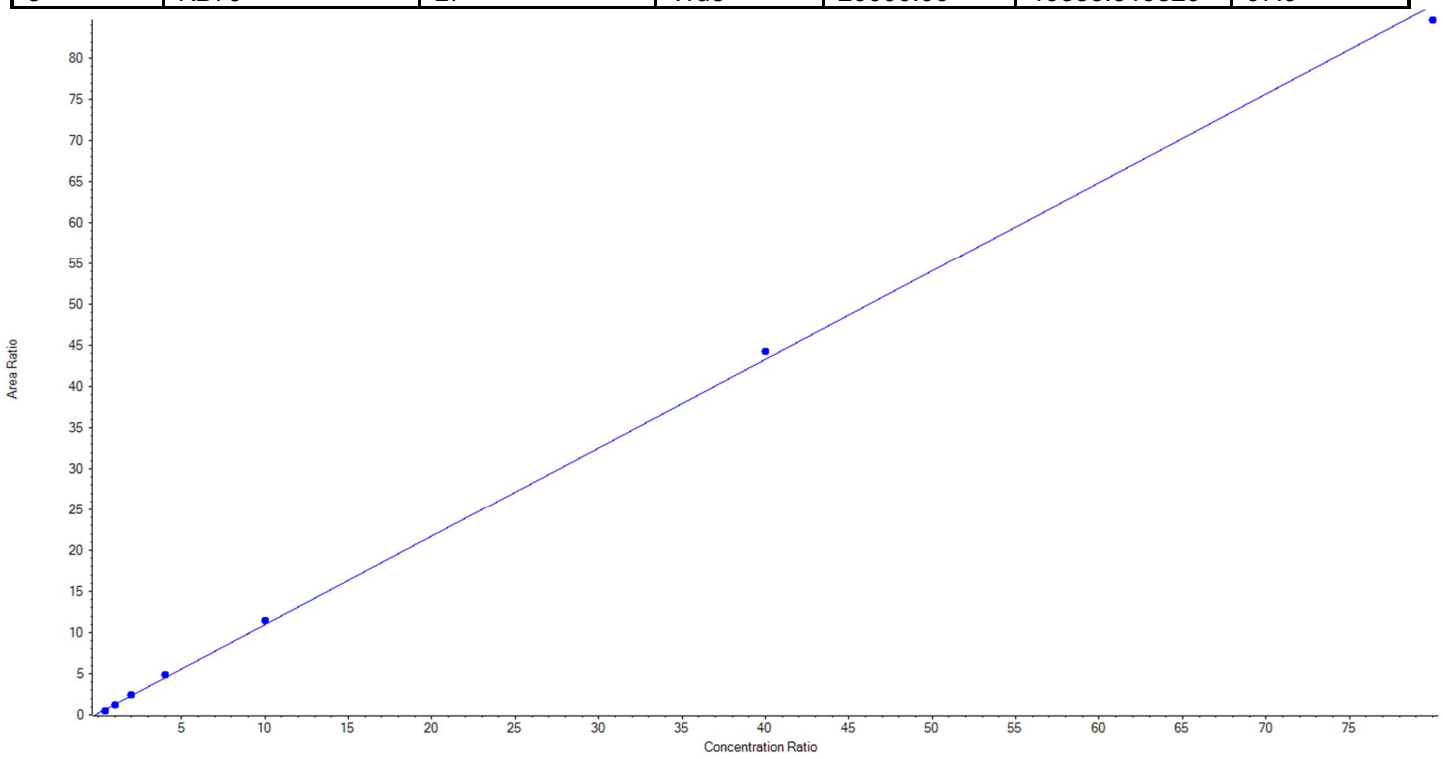
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Calibration Summary Report

Analyte Name	PFTeDA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	713.0 / 669.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C2-PFTeDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



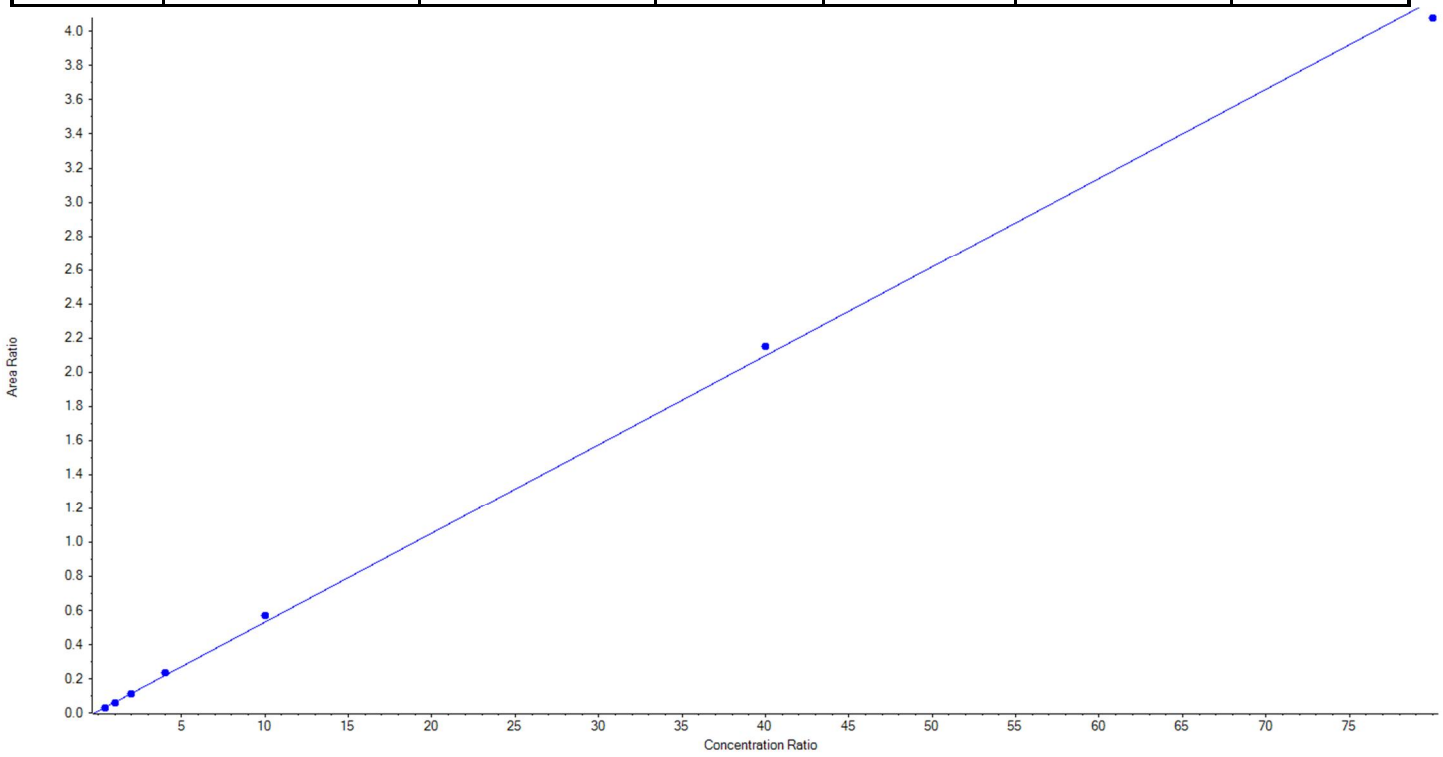
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Calibration Summary Report

Analyte Name	PFTeDA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	713.0 / 169.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	13C2-PFTeDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



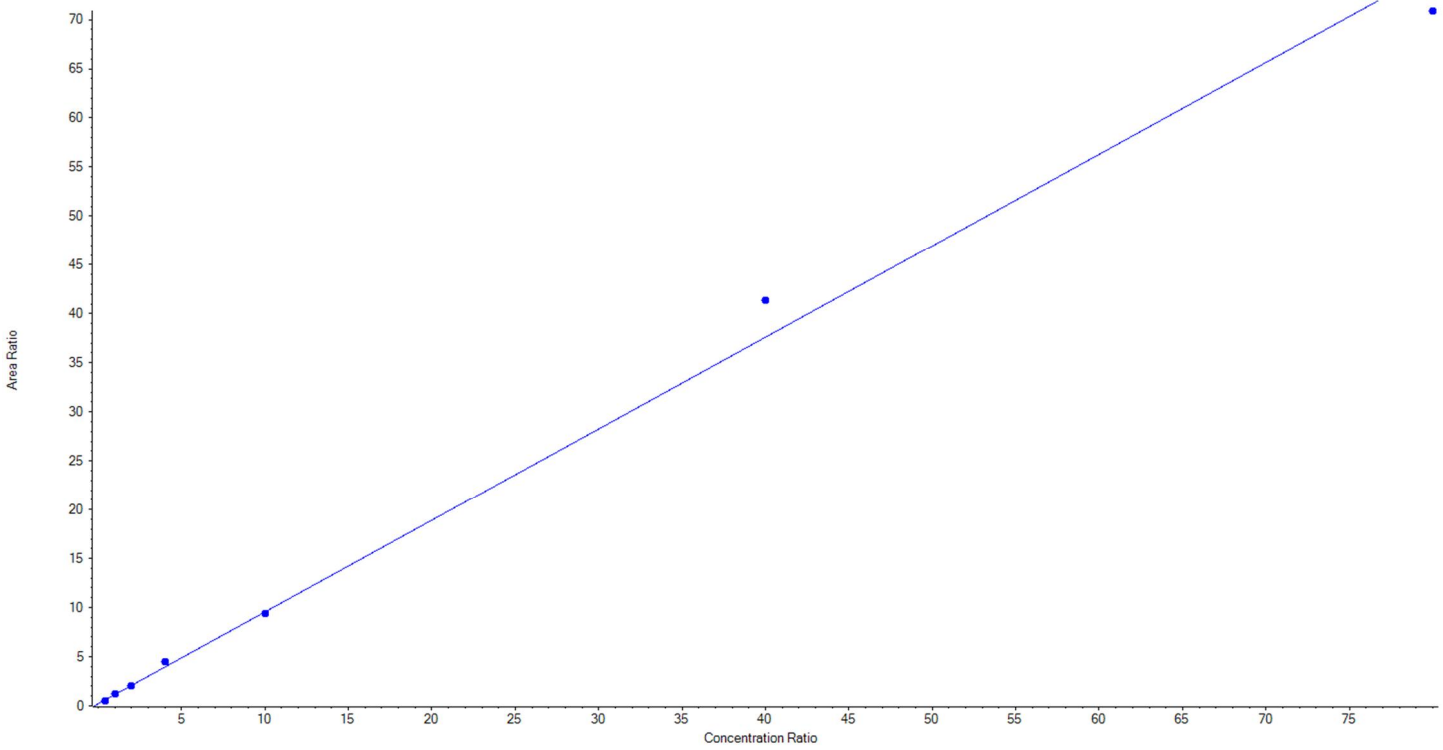
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Calibration Summary Report

Analyte Name	NMeFOSAA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	570.0 / 419.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	d3-MeFOSAA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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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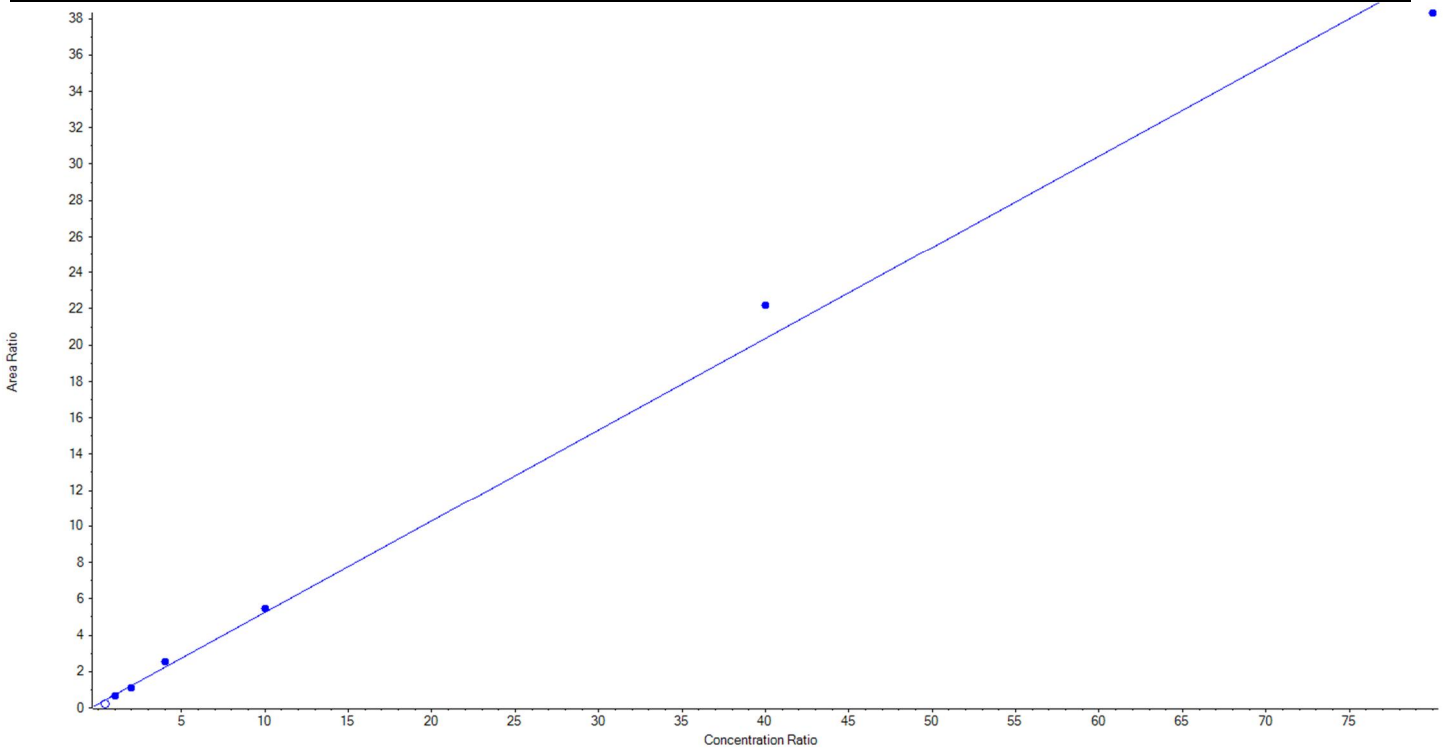
Calibration Summary Report

Created with Analyst Reporter
Printed: 25/10/2018 11:26:55 AM

Analyte Name	NMeFOSAA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	570.0 / 512.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	d3-MeFOSAA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



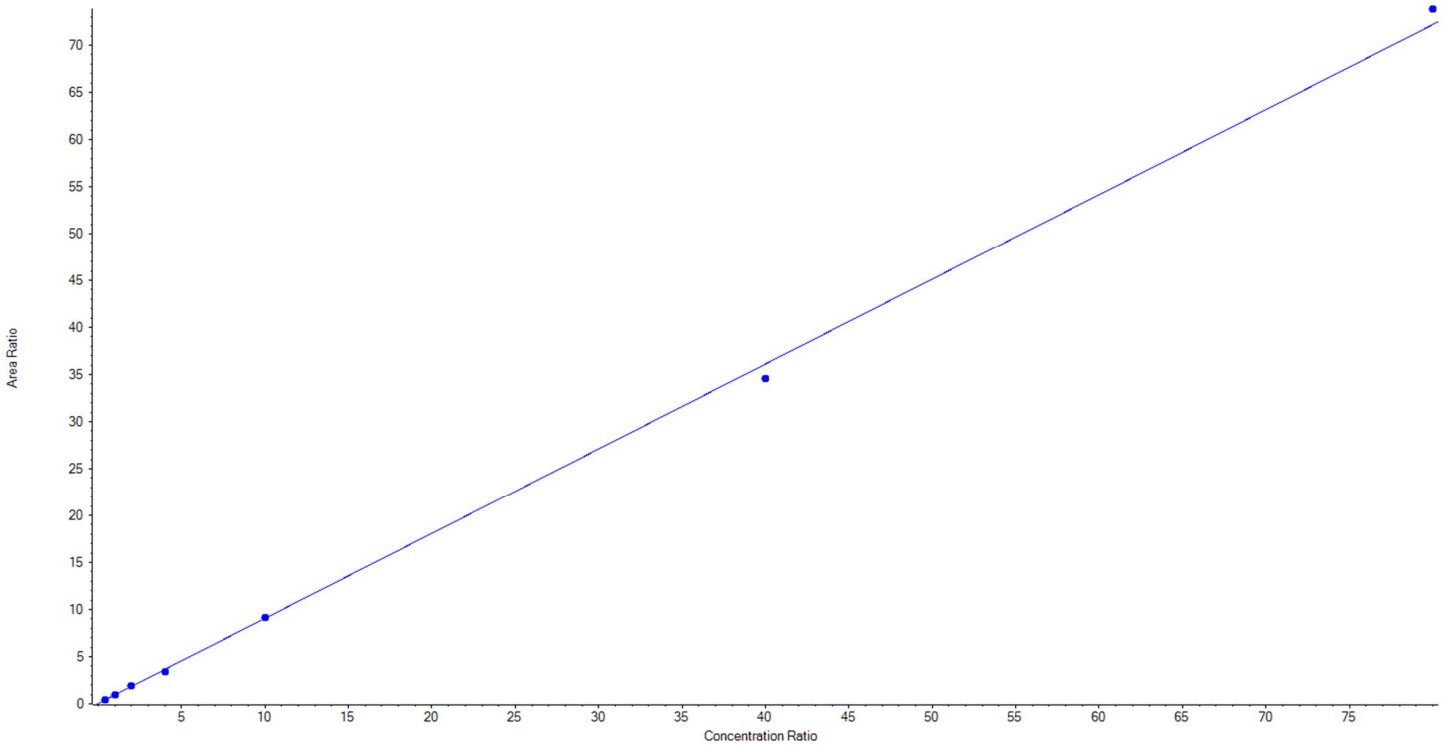
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Calibration Summary Report

Analyte Name	NEtFOSAA_1	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	584.0 / 419.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	d5-EtFOSAA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



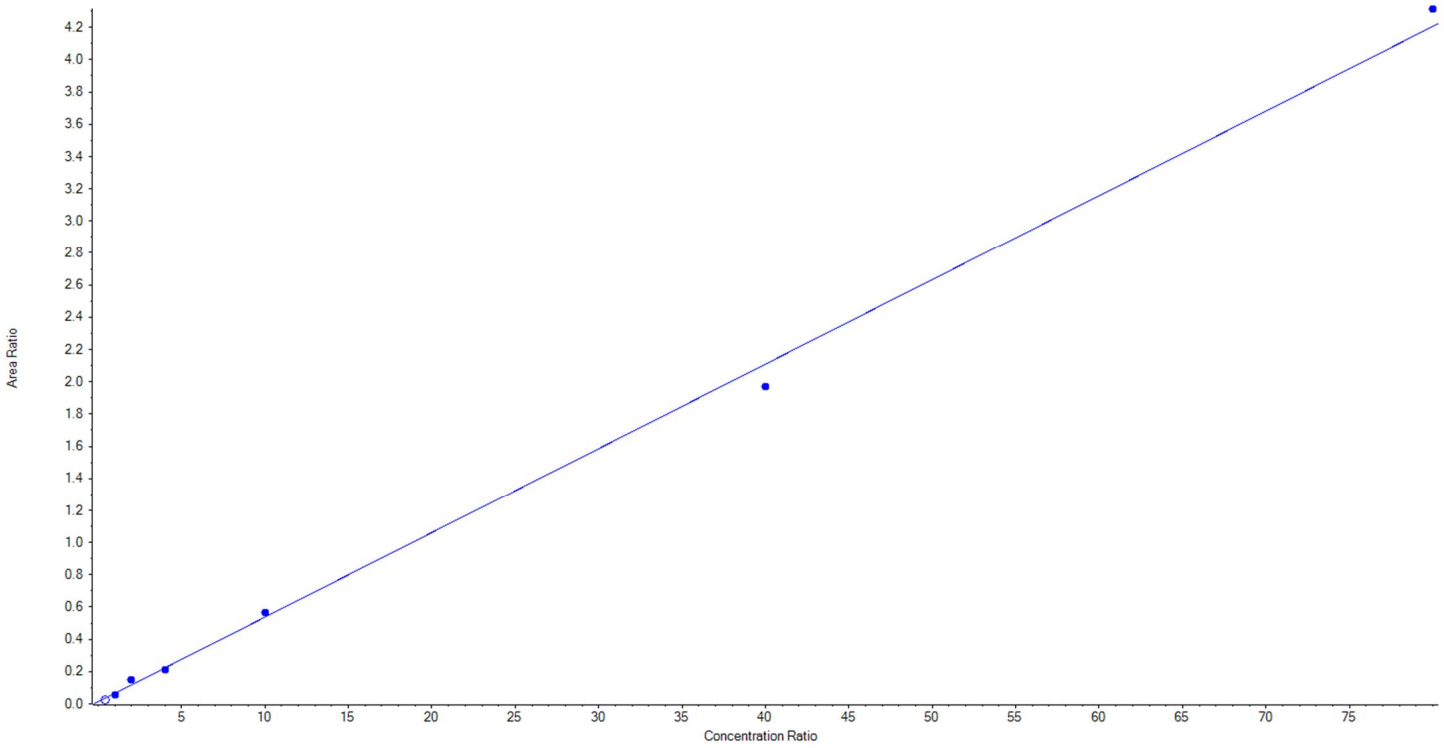
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Calibration Summary Report

Analyte Name	NEtFOSAA_2	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	584.0 / 483.0	**Result Table**	18-0590_18-0588_18-0589_BASE
Internal Standard	d5-EtFOSAA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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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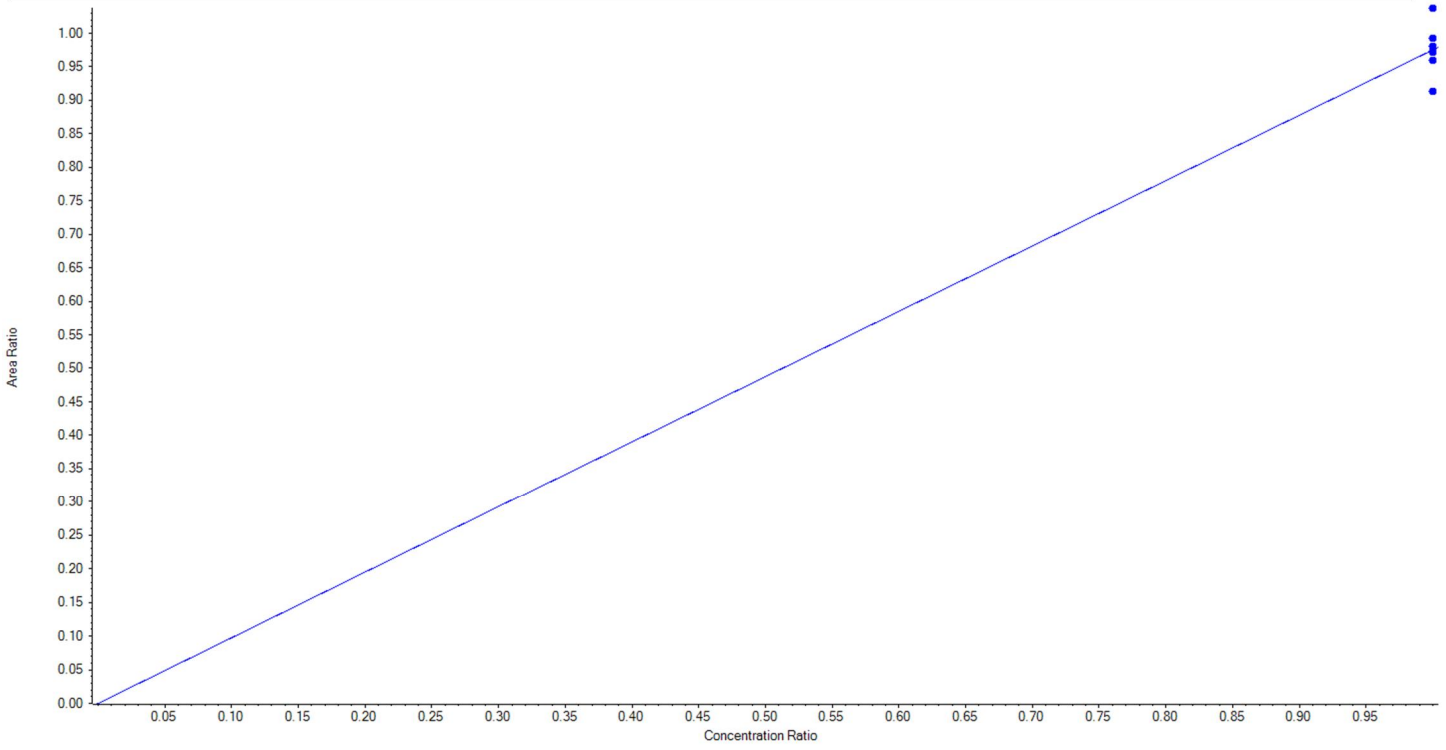
Calibration Summary Report

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Printed: 25/10/2018 10:46:32 AM

Analyte Name	13C2-PFDoA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	615.0 / 570.0	**Result Table**	18-0590_18-0588_18-0589_SIS
Internal Standard	13C2-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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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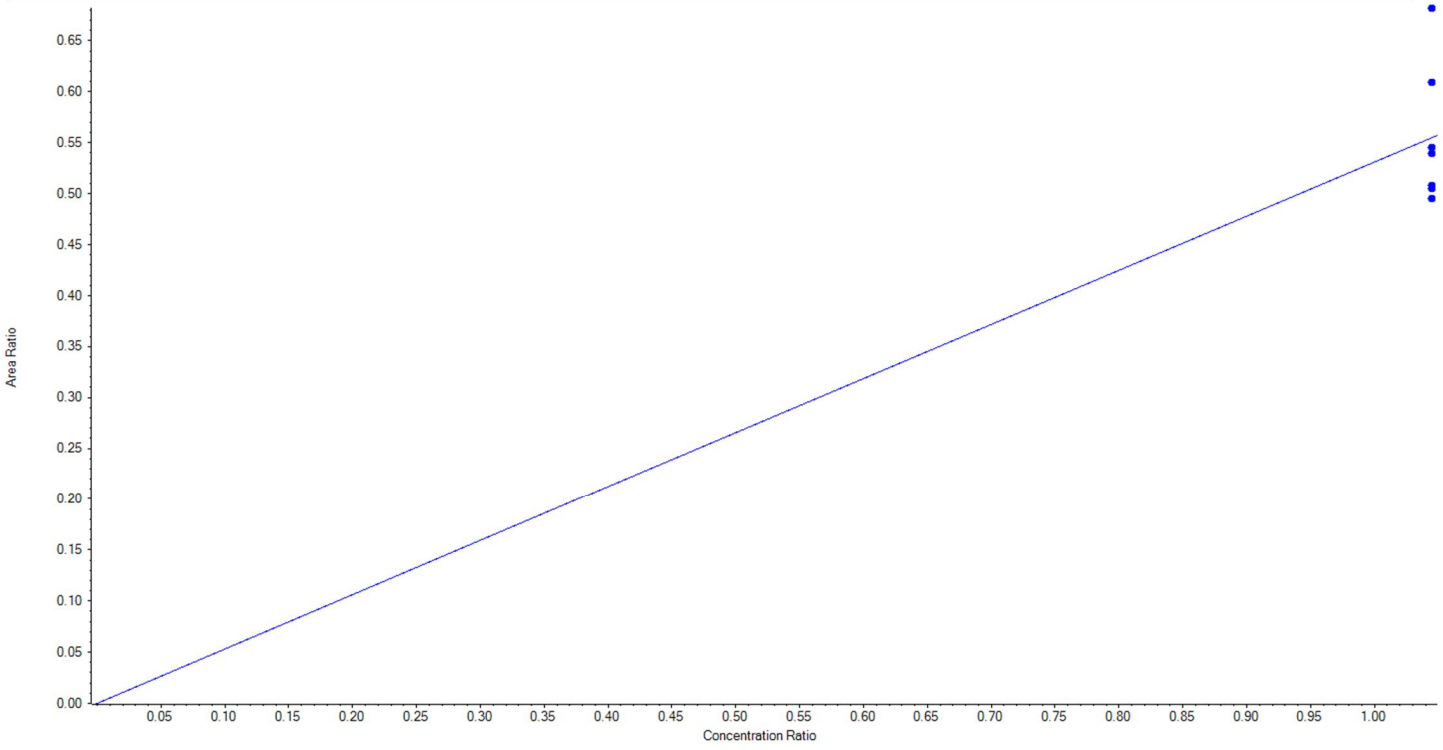
Calibration Summary Report

Created with Analyst Reporter
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Analyte Name	d3-MeFOSAA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	573.0 / 419.0	**Result Table**	18-0590_18-0588_18-0589_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 PM	**Acquisition Method**	5-0369.dam

Regression Equation: y = 0.53102 x (std. dev. = 0.06498) (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	243.102584	97.2
3	KB74	L2	True	250.00	228.792666	91.5
4	KB75	L3	True	250.00	245.689732	98.3
5	KB76	L4	True	250.00	223.328296	89.3
6	KB77	L5	True	250.00	227.365315	91.0
7	KB78	L6	True	250.00	274.494088	109.8
8	KB79	L7	True	250.00	307.227320	122.9



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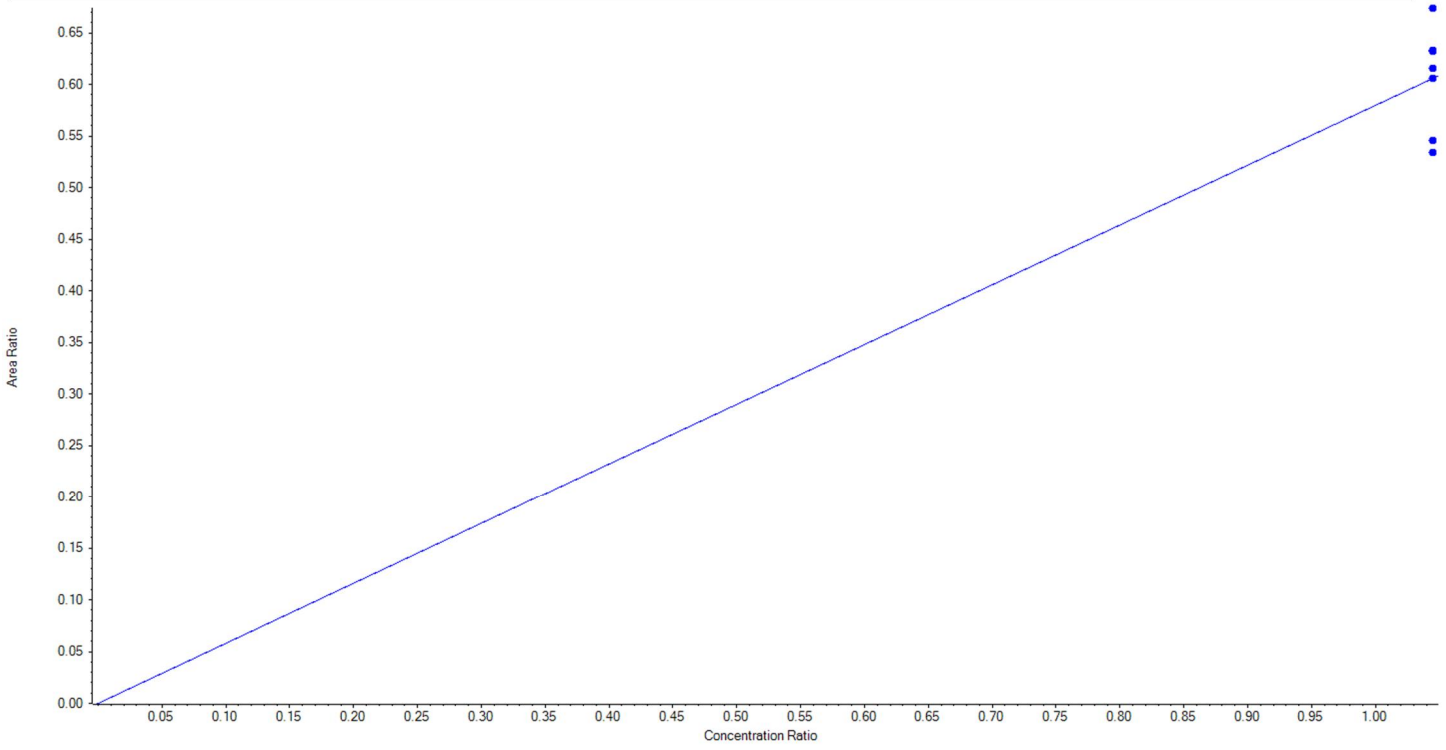
Calibration Summary Report

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Analyte Name	d5-EtFOSAA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	589.0 / 419.0	**Result Table**	18-0590_18-0588_18-0589_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



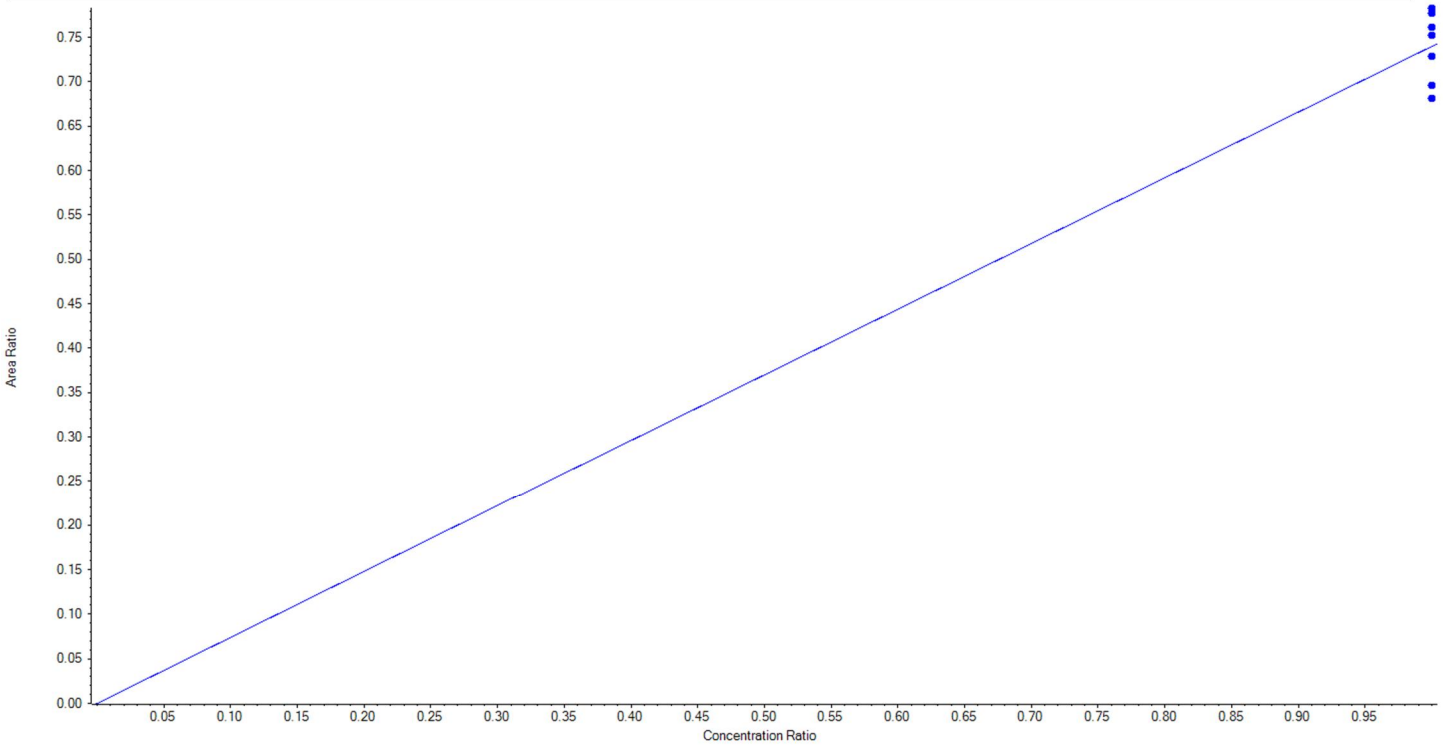
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Calibration Summary Report

Analyte Name	13C5-PFHxA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	318.0 / 273.0	**Result Table**	18-0590_18-0588_18-0589_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



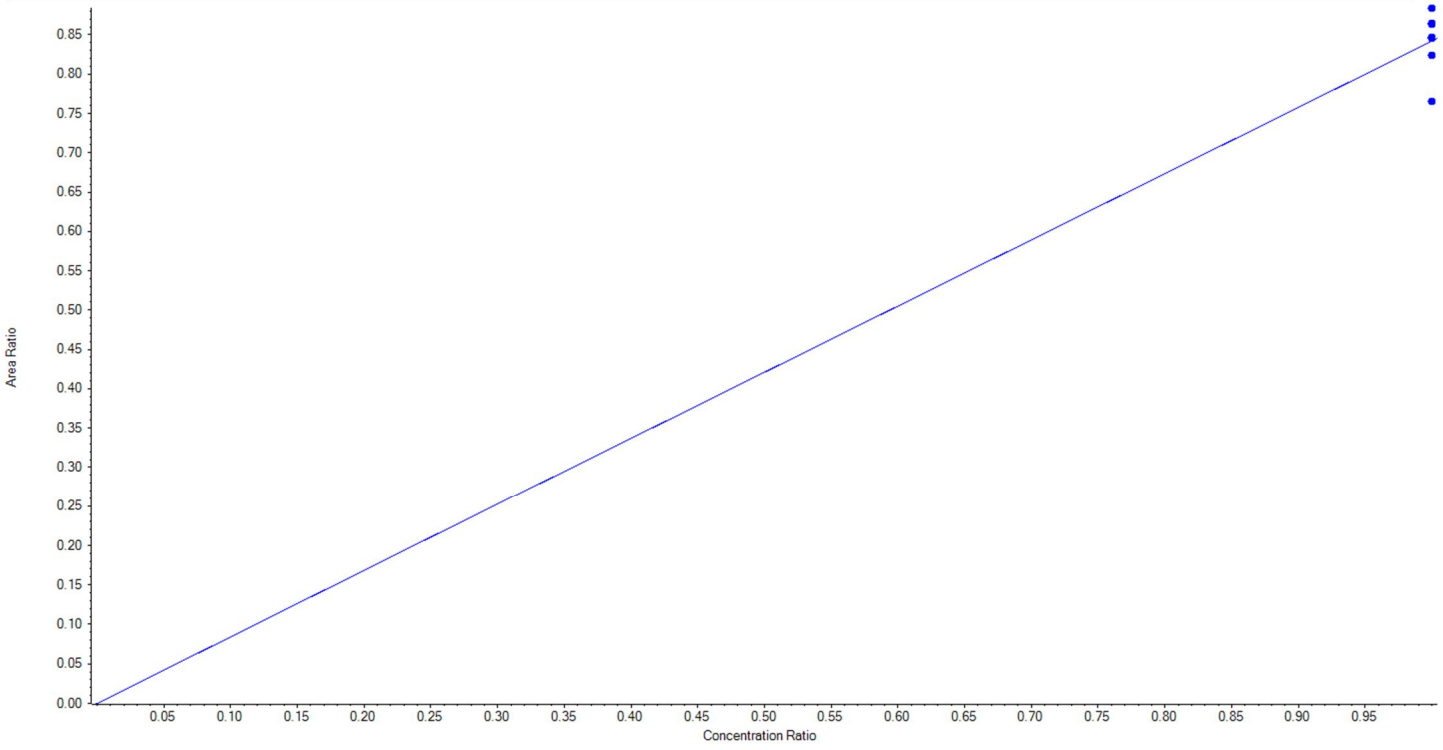
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Calibration Summary Report

Analyte Name	13C4-PFHpA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	367.0 / 322.0	**Result Table**	18-0590_18-0588_18-0589_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



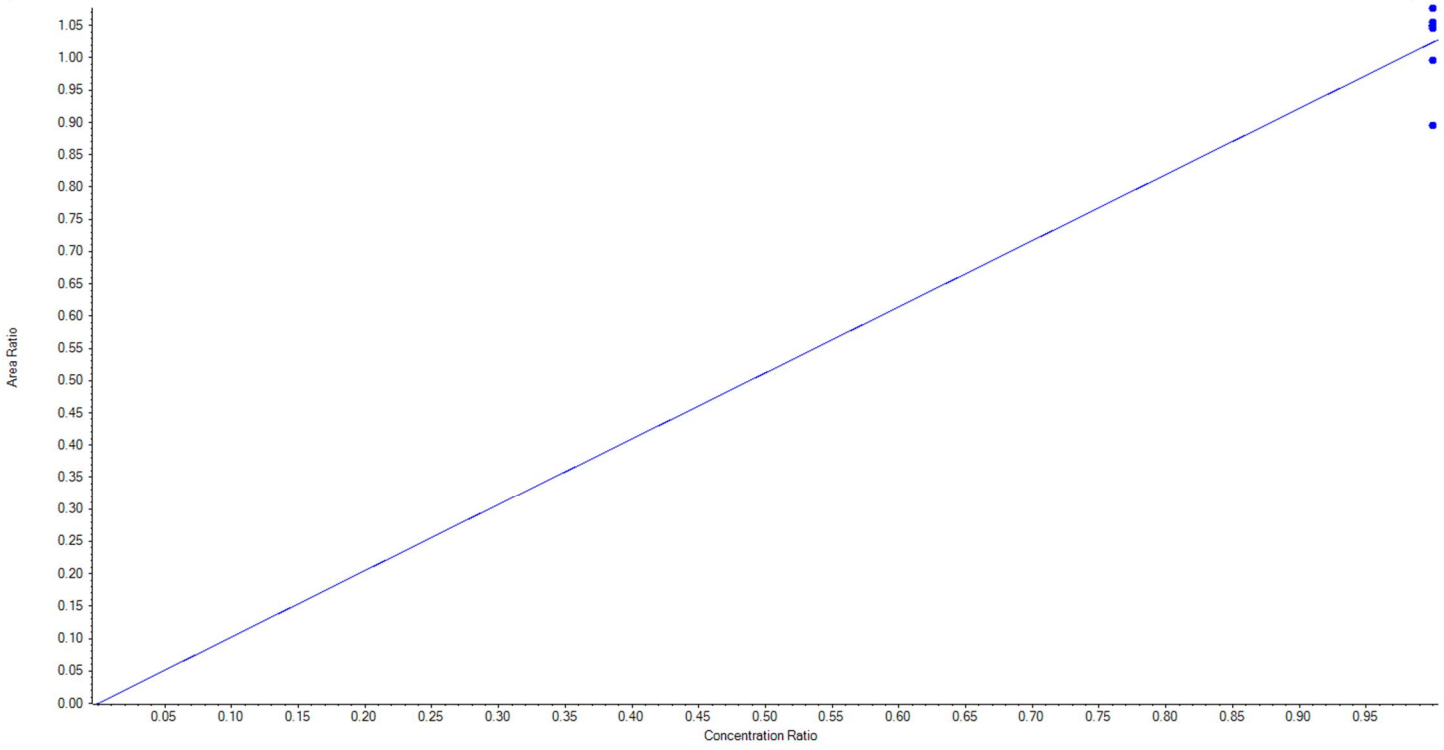
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Calibration Summary Report

Analyte Name	13C8-PFOA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	421.0 / 376.0	**Result Table**	18-0590_18-0588_18-0589_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



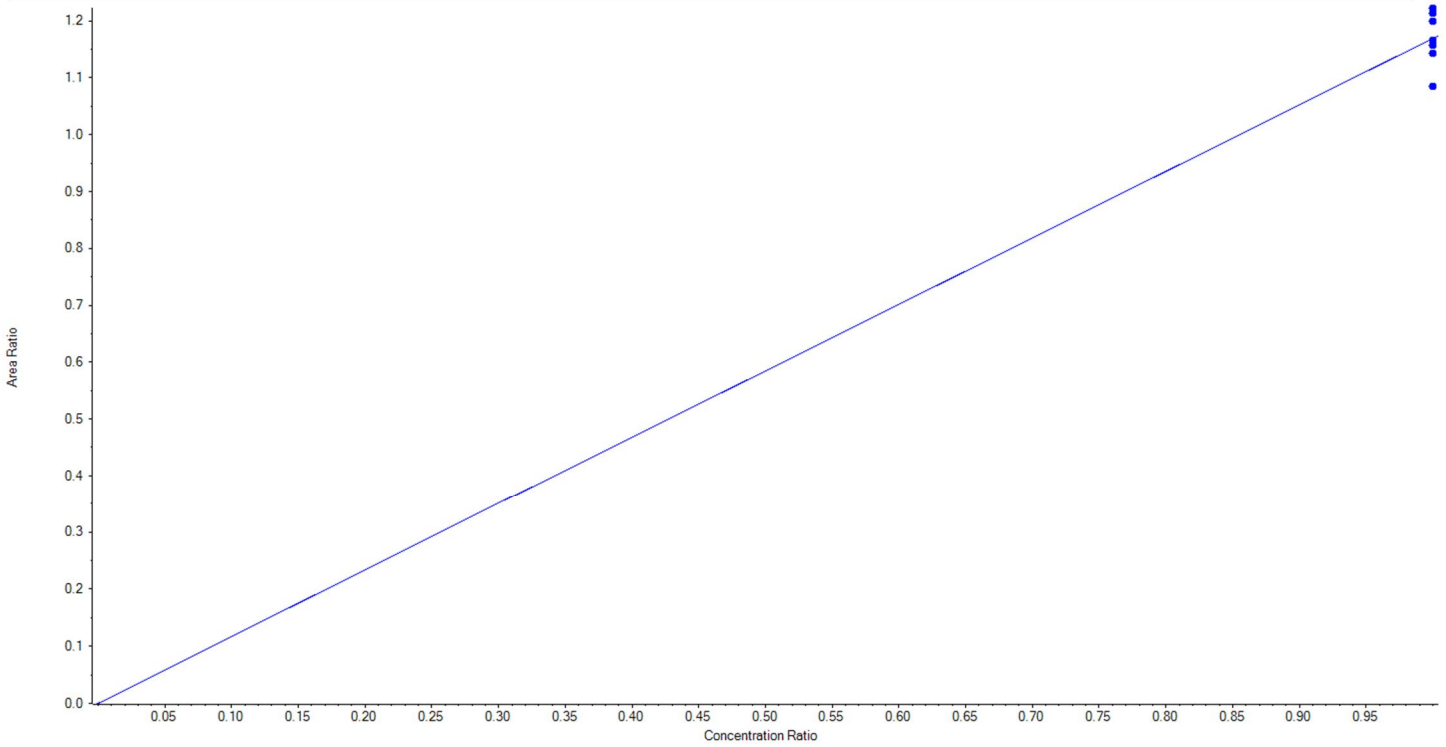
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Calibration Summary Report

Analyte Name	13C9-PFNA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	472.0 / 427.0	**Result Table**	18-0590_18-0588_18-0589_SIS
Internal Standard	13C2-PFOA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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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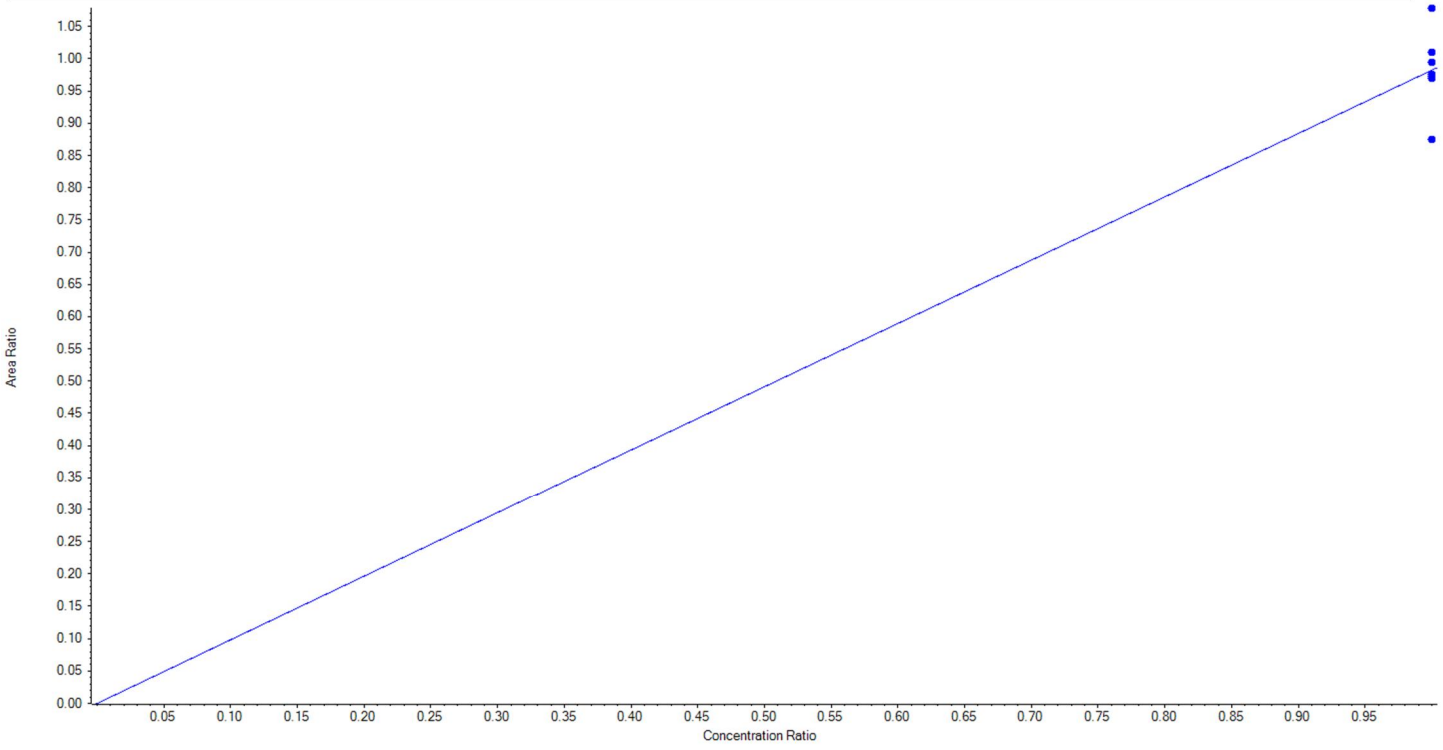
Calibration Summary Report

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Analyte Name	13C6-PFDA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	519.0 / 474.0	**Result Table**	18-0590_18-0588_18-0589_SIS
Internal Standard	13C2-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



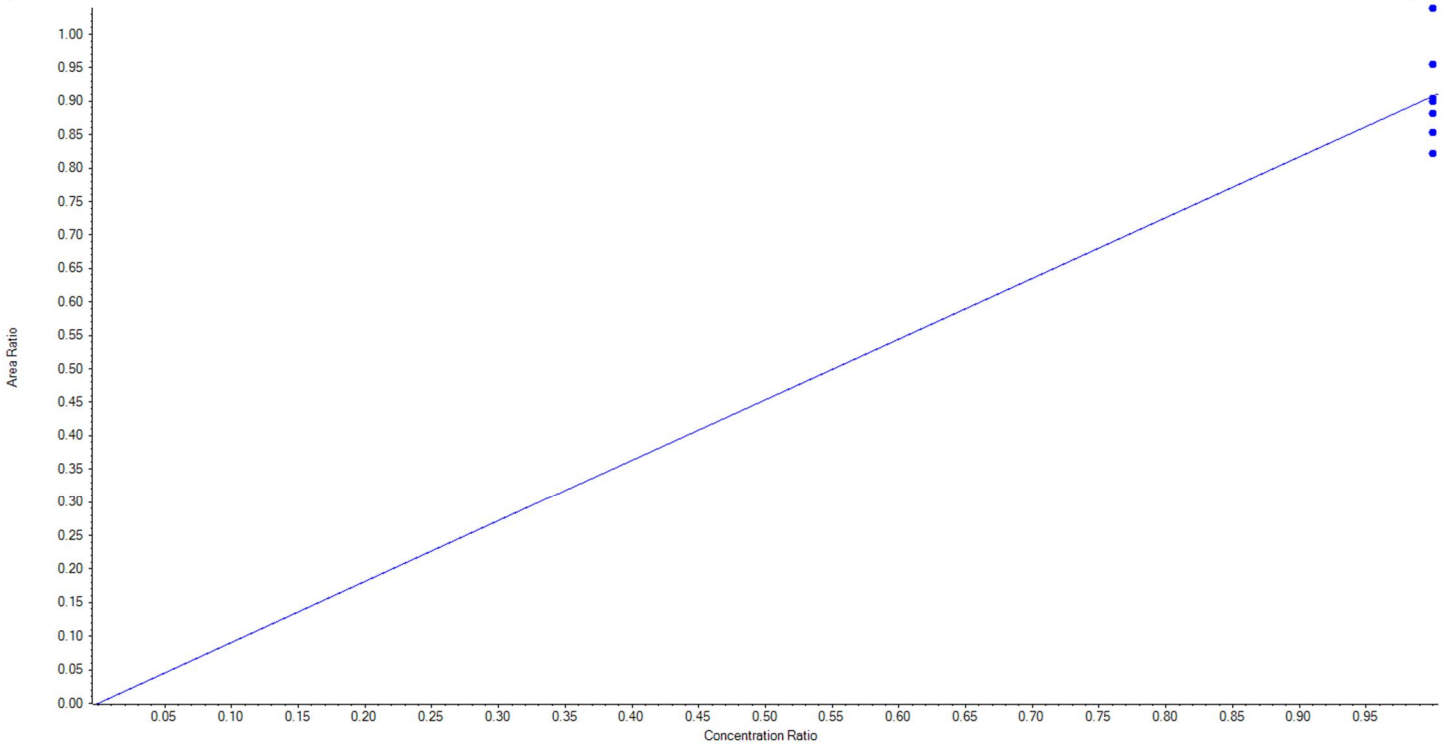
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Calibration Summary Report

Analyte Name	13C7-PFUnA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	570.0 / 525.0	**Result Table**	18-0590_18-0588_18-0589_SIS
Internal Standard	13C2-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



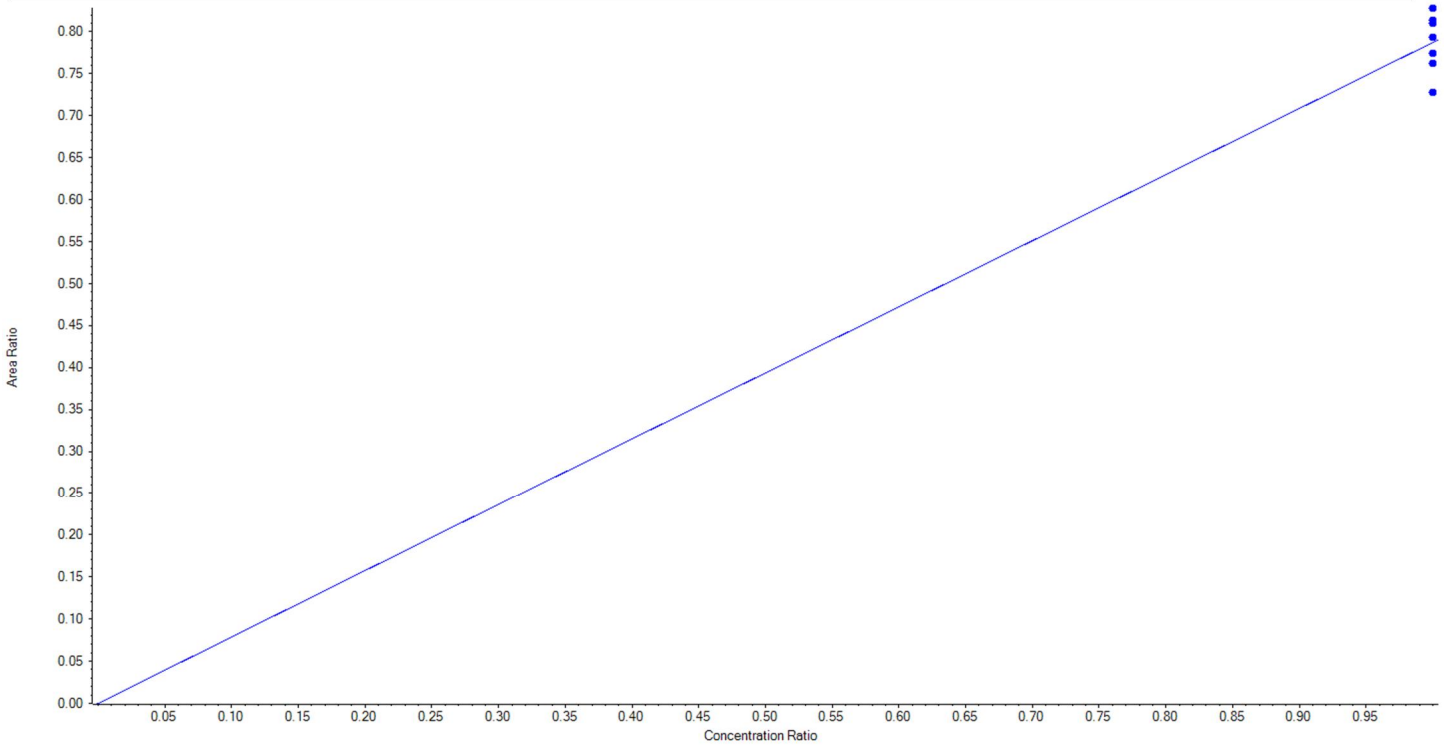
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Calibration Summary Report

Analyte Name	13C2-PFTeDA	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	715.0 / 670.0	**Result Table**	18-0590_18-0588_18-0589_SIS
Internal Standard	13C2-PFDA	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



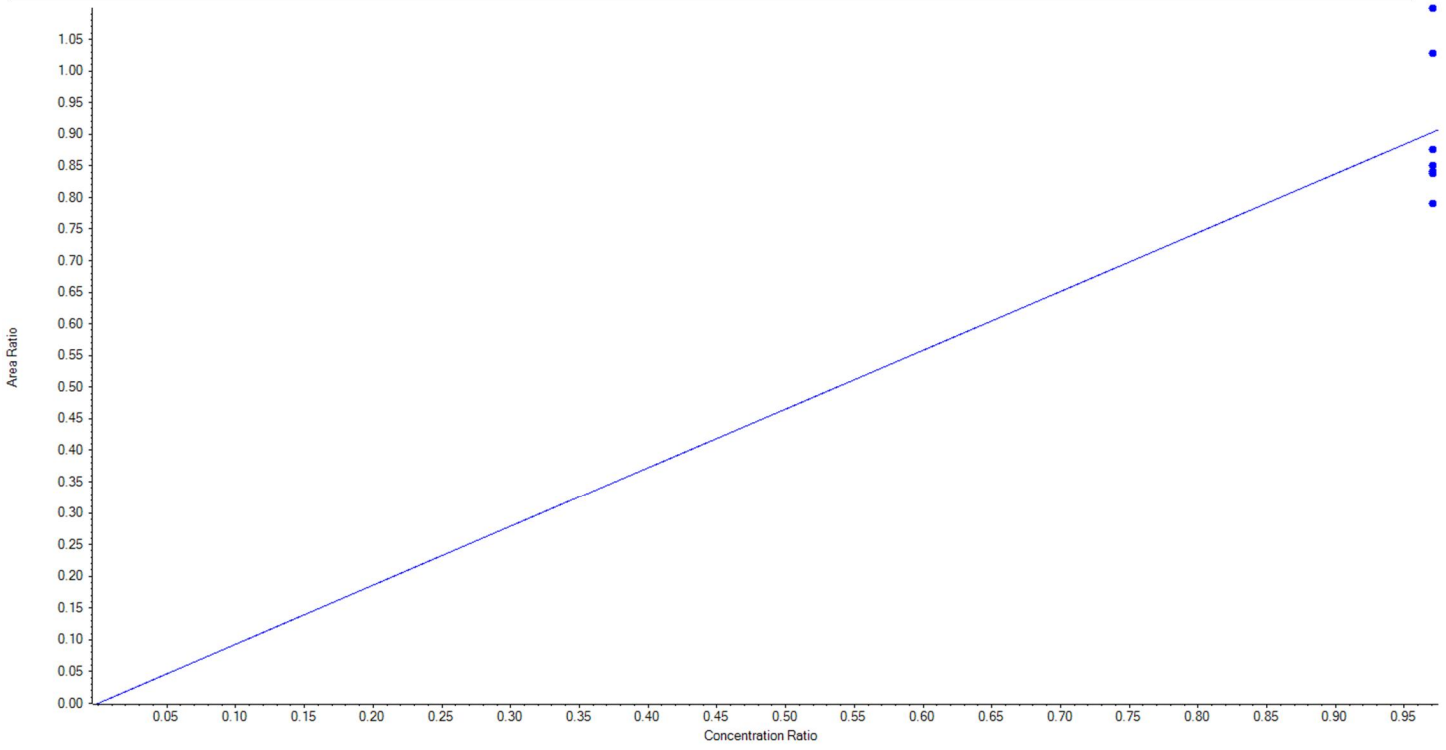
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Calibration Summary Report

Analyte Name	13C3-PFBS	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	302.0 / 99.0	**Result Table**	18-0590_18-0588_18-0589_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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



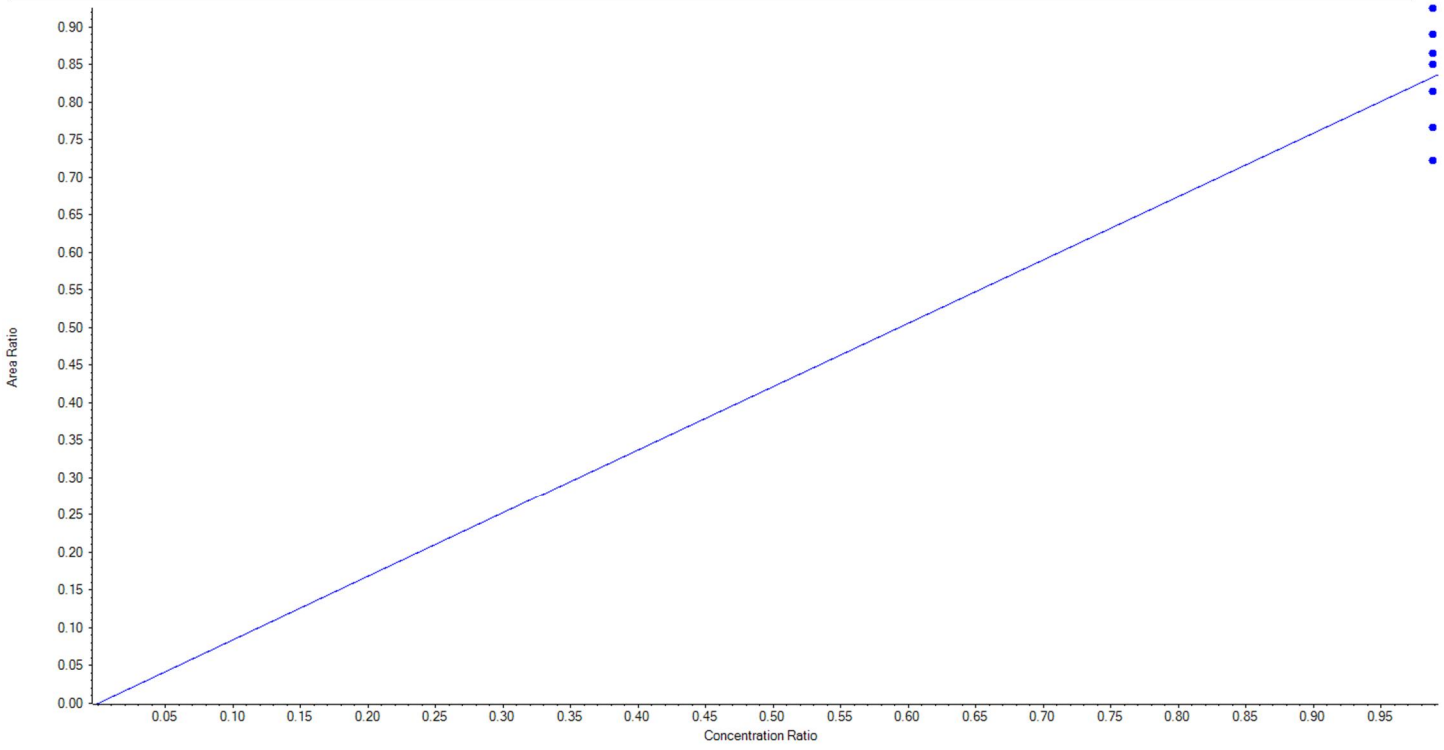
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Calibration Summary Report

Analyte Name	13C3-PFHxS	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	402.0 / 99.0	**Result Table**	18-0590_18-0588_18-0589_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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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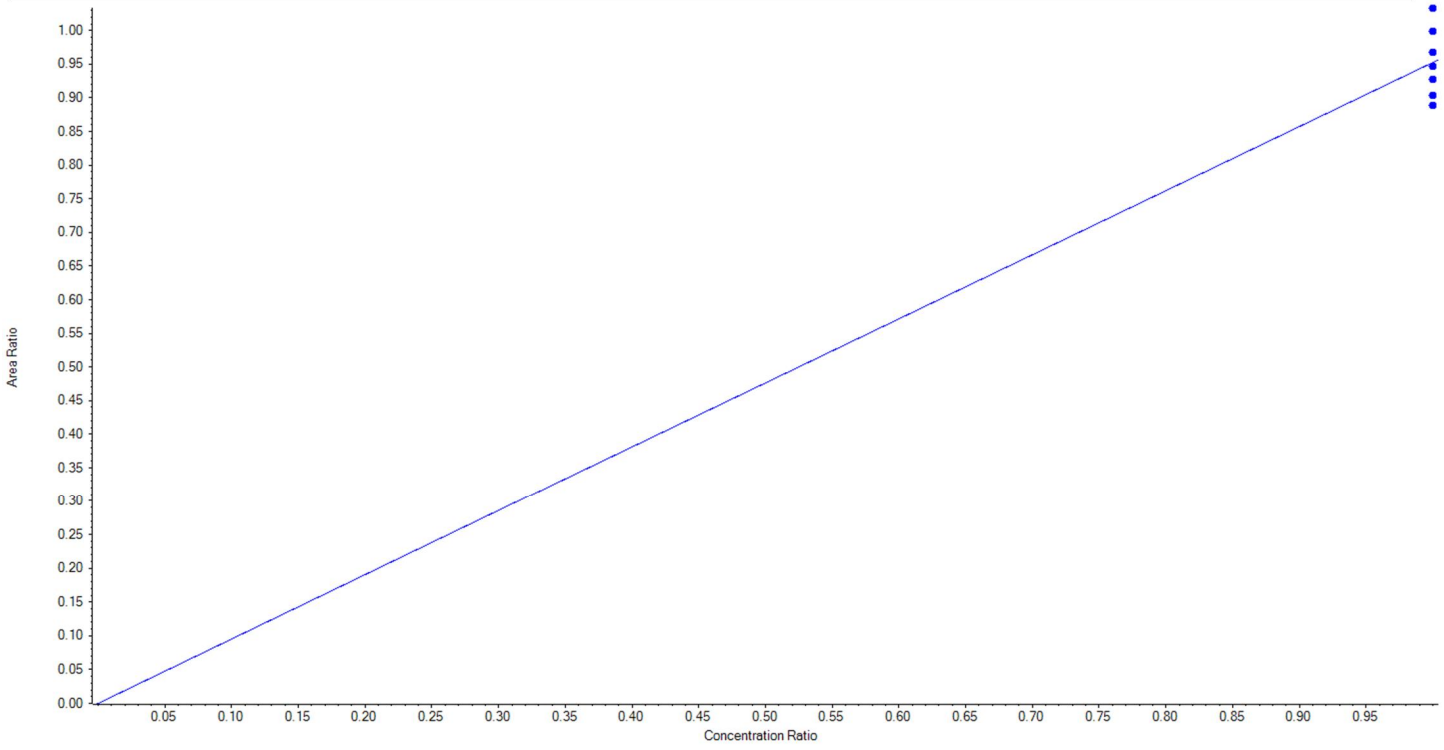
Calibration Summary Report

Created with Analyst Reporter
Printed: 25/10/2018 10:46:32 AM

Analyte Name	13C8-PFOS	**Data File**	Data18-0590_18-01588_18-0589.wiff
MRM Transition	507.0 / 99.0	**Result Table**	18-0590_18-0588_18-0589_SIS
Internal Standard	13C4-PFOS	**Instrument Name**	QTRAP 5500
Acquisition Date	10/17/2018 7:46:52 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**	18-0590_18-0588_18-0589_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**	18-0590_18-0588_18-0589_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**	18-0590_18-0588_18-0589_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**	18-0590_18-0588_18-0589_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**	18-0590_18-0588_18-0589_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

Created with Analyst Reporter
Printed: 25/10/2018 11:30:22 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**	18-0590_18-0588_18-0589_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

Created with Analyst Reporter
Printed: 25/10/2018 11:30:32 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**	18-0590_18-0588_18-0589_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

Created with Analyst Reporter
Printed: 25/10/2018 10:47:35 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**	18-0590_18-0588_18-0589_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	243.102584	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

Created with Analyst Reporter
Printed: 25/10/2018 10:47:40 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**	18-0590_18-0588_18-0589_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	228.792666	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

Created with Analyst Reporter
Printed: 25/10/2018 10:47:43 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**	18-0590_18-0588_18-0589_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	245.689732	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

Created with Analyst Reporter
Printed: 25/10/2018 10:47:47 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**	18-0590_18-0588_18-0589_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	223.328296	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

Created with Analyst Reporter
Printed: 25/10/2018 10:47:51 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**	18-0590_18-0588_18-0589_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	227.365315	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

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:47:55 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**	18-0590_18-0588_18-0589_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	274.494088	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

BATTELLE

Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:47:59 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**	18-0590_18-0588_18-0589_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	307.227320	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

BATTELLE

Summary Ion Ratio Report

Created with Analyst Reporter
Printed: 25/10/2018 11:31:35 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**	18-0590_18-0588_18-0589_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

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**	18-0590_18-0588_18-0589_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

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**	18-0590_18-0588_18-0589_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**	18-0590_18-0588_18-0589_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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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**	18-0590_18-0588_18-0589_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**	18-0590_18-0588_18-0589_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

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Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T20:52:06	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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**	18-0590_18-0588_18-0589_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

BATTELLE

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**	18-0590_18-0588_18-0589_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**	18-0590_18-0588_18-0589_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**	18-0590_18-0588_18-0589_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**	18-0590_18-0588_18-0589_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**	18-0590_18-0588_18-0589_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**	18-0590_18-0588_18-0589_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

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Printed: 25/10/2018 10:49:21 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**	18-0590_18-0588_18-0589_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**	18-0590_18-0588_18-0589_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**	18-0590_18-0588_18-0589_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**	18-0590_18-0588_18-0589_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**	18-0590_18-0588_18-0589_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**	18-0590_18-0588_18-0589_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**	18-0590_18-0588_18-0589_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

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QC Summary 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**	18-0590_18-0588_18-0589_BASE
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	KB76 CCV	**Injection Vial**	33
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:22:00	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.54	1000.777598	1010.00	99.09
PFBS_2	298.9 / 99.0	1.54	1025.754242	1010.00	101.56
PFHxA_1	313.0 / 269.0	1.86	957.919919	1010.00	94.84
PFHxA_2	313.0 / 119.0	1.86	962.187337	1010.00	95.27
PFHpA_1	363.0 / 319.0	2.27	1008.164181	1000.00	100.82
PFHpA_2	363.0 / 169.0	2.27	996.522008	1000.00	99.65
PFHxS_1	399.0 / 80.0	2.29	1068.715508	1010.00	105.81
PFHxS_2	399.0 / 99.0	2.29	1192.296643	1010.00	118.05
PFOA_1	413.0 / 369.0	2.67	1123.706465	1000.00	112.37
PFOA_2	413.0 / 169.0	2.67	1047.332543	1000.00	104.73
PFNA_1	463.0 / 419.0	3.07	1065.832279	1000.00	106.58
PFNA_2	463.0 / 219.0	3.07	1022.850924	1000.00	102.29
PFOS_1	499.0 / 80.0	3.06	1115.078654	1000.00	111.51
PFOS_2	499.0 / 99.0	3.06	1189.220781	1000.00	118.92
PFDA_1	513.0 / 469.0	3.42	944.269083	1000.00	94.43
PFDA_2	513.0 / 219.0	3.42	806.869653	1000.00	80.69
PFUnA_1	563.0 / 519.0	3.74	1082.809569	1000.00	108.28
PFUnA_2	563.0 / 269.0	3.74	1152.625907	1000.00	115.26
PFDoA_1	613.0 / 569.0	4.02	981.546865	1000.00	98.15
PFDoA_2	613.0 / 319.0	4.02	1073.710594	1000.00	107.37
PFTrDA_1	663.0 / 619.0	4.26	1067.893500	1000.00	106.79
PFTrDA_2	663.0 / 169.0	4.26	1108.121509	1000.00	110.81
PFTeDA_1	713.0 / 669.0	4.47	1007.488087	1000.00	100.75
PFTeDA_2	713.0 / 169.0	4.47	1019.523253	1000.00	101.95
NMeFOSAA_1	570.0 / 419.0	3.57	1115.171799	1000.00	111.52
NMeFOSAA_2	570.0 / 512.0	3.58	1070.017497	1000.00	107.00
NEtFOSAA_1	584.0 / 419.0	3.73	914.736115	1000.00	91.47
NEtFOSAA_2	584.0 / 483.0	3.73	1017.712184	1000.00	101.77

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QC Summary Report

Sample Name	KB77 CCV	**Injection Vial**	43
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:10:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.53	2578.208858	2525.00	102.11
PFBS_2	298.9 / 99.0	1.53	2555.658763	2525.00	101.21
PFHxA_1	313.0 / 269.0	1.85	2370.253957	2525.00	93.87
PFHxA_2	313.0 / 119.0	1.85	2420.629153	2525.00	95.87
PFHpA_1	363.0 / 319.0	2.26	2553.445042	2500.00	102.14
PFHpA_2	363.0 / 169.0	2.26	2411.726119	2500.00	96.47
PFHxS_1	399.0 / 80.0	2.28	2561.508191	2525.00	101.45
PFHxS_2	399.0 / 99.0	2.28	2551.903525	2525.00	101.07
PFOA_1	413.0 / 369.0	2.67	2329.092737	2500.00	93.16
PFOA_2	413.0 / 169.0	2.67	2332.414078	2500.00	93.30
PFNA_1	463.0 / 419.0	3.06	2876.378517	2500.00	115.06
PFNA_2	463.0 / 219.0	3.06	2882.353725	2500.00	115.29
PFOS_1	499.0 / 80.0	3.06	2637.427731	2500.00	105.50
PFOS_2	499.0 / 99.0	3.06	2708.918485	2500.00	108.36
PFDA_1	513.0 / 469.0	3.42	2314.776324	2500.00	92.59
PFDA_2	513.0 / 219.0	3.42	2489.828039	2500.00	99.59
PFUnA_1	563.0 / 519.0	3.74	2470.863261	2500.00	98.83
PFUnA_2	563.0 / 269.0	3.74	2498.957691	2500.00	99.96
PFDoA_1	613.0 / 569.0	4.02	2593.357904	2500.00	103.73
PFDoA_2	613.0 / 319.0	4.02	2629.415185	2500.00	105.18
PFTrDA_1	663.0 / 619.0	4.26	2698.593967	2500.00	107.94
PFTrDA_2	663.0 / 169.0	4.25	2824.063987	2500.00	112.96
PFTeDA_1	713.0 / 669.0	4.47	2570.196954	2500.00	102.81
PFTeDA_2	713.0 / 169.0	4.47	2640.792022	2500.00	105.63
NMeFOSAA_1	570.0 / 419.0	3.57	2418.496342	2500.00	96.74
NMeFOSAA_2	570.0 / 512.0	3.57	2500.421705	2500.00	100.02
NEtFOSAA_1	584.0 / 419.0	3.73	2651.182493	2500.00	106.05
NEtFOSAA_2	584.0 / 483.0	3.73	2923.429868	2500.00	116.94

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QC Summary Report

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Sample Name	KB76 CCV	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:32:19	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.53	975.098994	1010.00	96.54
PFBS_2	298.9 / 99.0	1.53	962.213656	1010.00	95.27
PFHxA_1	313.0 / 269.0	1.85	941.679925	1010.00	93.24
PFHxA_2	313.0 / 119.0	1.85	904.379478	1010.00	89.54
PFHpA_1	363.0 / 319.0	2.26	1016.902166	1000.00	101.69
PFHpA_2	363.0 / 169.0	2.26	922.776099	1000.00	92.28
PFHxS_1	399.0 / 80.0	2.28	1105.552258	1010.00	109.46
PFHxS_2	399.0 / 99.0	2.28	1150.493672	1010.00	113.91
PFOA_1	413.0 / 369.0	2.67	1053.343404	1000.00	105.33
PFOA_2	413.0 / 169.0	2.67	1016.954298	1000.00	101.70
PFNA_1	463.0 / 419.0	3.07	1084.106474	1000.00	108.41
PFNA_2	463.0 / 219.0	3.07	1176.044891	1000.00	117.60
PFOS_1	499.0 / 80.0	3.07	1260.836145	1000.00	126.08
PFOS_2	499.0 / 99.0	3.07	1279.642940	1000.00	127.96
PFDA_1	513.0 / 469.0	3.42	937.962650	1000.00	93.80
PFDA_2	513.0 / 219.0	3.42	1004.513452	1000.00	100.45
PFUnA_1	563.0 / 519.0	3.74	946.903992	1000.00	94.69
PFUnA_2	563.0 / 269.0	3.74	1131.199283	1000.00	113.12
PFDoA_1	613.0 / 569.0	4.02	1010.449012	1000.00	101.04
PFDoA_2	613.0 / 319.0	4.02	1052.919392	1000.00	105.29
PFTrDA_1	663.0 / 619.0	4.26	1082.082349	1000.00	108.21
PFTrDA_2	663.0 / 169.0	4.25	1143.215999	1000.00	114.32
PFTeDA_1	713.0 / 669.0	4.47	1030.403518	1000.00	103.04
PFTeDA_2	713.0 / 169.0	4.47	1076.053132	1000.00	107.61
NMeFOSAA_1	570.0 / 419.0	3.57	1087.744084	1000.00	108.77
NMeFOSAA_2	570.0 / 512.0	3.57	1090.738505	1000.00	109.07
NEtFOSAA_1	584.0 / 419.0	3.73	957.261960	1000.00	95.73
NEtFOSAA_2	584.0 / 483.0	3.73	1050.100642	1000.00	105.01

Sample Name	KB77 CCV	**Injection Vial**	9
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:20:59	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.53	2325.443793	2525.00	92.10
PFBS_2	298.9 / 99.0	1.53	2342.836869	2525.00	92.79
PFHxA_1	313.0 / 269.0	1.85	2470.654869	2525.00	97.85
PFHxA_2	313.0 / 119.0	1.85	2543.507222	2525.00	100.73
PFHpA_1	363.0 / 319.0	2.26	2432.746667	2500.00	97.31
PFHpA_2	363.0 / 169.0	2.26	2357.673942	2500.00	94.31
PFHxS_1	399.0 / 80.0	2.28	2429.740453	2525.00	96.23
PFHxS_2	399.0 / 99.0	2.28	2441.916454	2525.00	96.71
PFOA_1	413.0 / 369.0	2.67	2412.567486	2500.00	96.50
PFOA_2	413.0 / 169.0	2.67	2394.802031	2500.00	95.79
PFNA_1	463.0 / 419.0	3.07	2911.418730	2500.00	116.46
PFNA_2	463.0 / 219.0	3.07	2857.033935	2500.00	114.28
PFOS_1	499.0 / 80.0	3.06	2809.763912	2500.00	112.39
PFOS_2	499.0 / 99.0	3.06	2675.811561	2500.00	107.03
PFDA_1	513.0 / 469.0	3.42	2412.842485	2500.00	96.51
PFDA_2	513.0 / 219.0	3.42	2301.554822	2500.00	92.06
PFUnA_1	563.0 / 519.0	3.74	2317.882053	2500.00	92.72
PFUnA_2	563.0 / 269.0	3.74	2477.197201	2500.00	99.09
PFDoA_1	613.0 / 569.0	4.01	2603.906963	2500.00	104.16
PFDoA_2	613.0 / 319.0	4.01	2624.608648	2500.00	104.98
PFTrDA_1	663.0 / 619.0	4.25	2887.919736	2500.00	115.52
PFTrDA_2	663.0 / 169.0	4.25	2896.484145	2500.00	115.86
PFTeDA_1	713.0 / 669.0	4.47	2608.828796	2500.00	104.35
PFTeDA_2	713.0 / 169.0	4.46	2742.834248	2500.00	109.71
NMeFOSAA_1	570.0 / 419.0	3.57	2892.770765	2500.00	115.71
NMeFOSAA_2	570.0 / 512.0	3.57	2888.945658	2500.00	115.56
NEtFOSAA_1	584.0 / 419.0	3.73	2553.582824	2500.00	102.14
NEtFOSAA_2	584.0 / 483.0	3.73	2533.121060	2500.00	101.32

Sample Name	KB76 CCV	**Injection Vial**	20
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:20:24	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.53	967.948286	1010.00	95.84
PFBS_2	298.9 / 99.0	1.53	993.392187	1010.00	98.36
PFHxA_1	313.0 / 269.0	1.85	1011.432480	1010.00	100.14
PFHxA_2	313.0 / 119.0	1.85	961.079057	1010.00	95.16
PFHpA_1	363.0 / 319.0	2.26	944.893607	1000.00	94.49
PFHpA_2	363.0 / 169.0	2.27	866.662131	1000.00	86.67
PFHxS_1	399.0 / 80.0	2.29	1079.322707	1010.00	106.86
PFHxS_2	399.0 / 99.0	2.29	1141.666225	1010.00	113.04
PFOA_1	413.0 / 369.0	2.67	1067.409988	1000.00	106.74
PFOA_2	413.0 / 169.0	2.67	960.963909	1000.00	96.10
PFNA_1	463.0 / 419.0	3.07	1043.471959	1000.00	104.35
PFNA_2	463.0 / 219.0	3.07	1042.190764	1000.00	104.22
PFOS_1	499.0 / 80.0	3.07	1199.456360	1000.00	119.95
PFOS_2	499.0 / 99.0	3.07	1195.632909	1000.00	119.56
PFDA_1	513.0 / 469.0	3.42	1002.269178	1000.00	100.23
PFDA_2	513.0 / 219.0	3.42	843.247274	1000.00	84.32
PFUnA_1	563.0 / 519.0	3.74	963.932564	1000.00	96.39
PFUnA_2	563.0 / 269.0	3.74	1014.649259	1000.00	101.46
PFDoA_1	613.0 / 569.0	4.02	987.351246	1000.00	98.74
PFDoA_2	613.0 / 319.0	4.01	994.790684	1000.00	99.48
PFTrDA_1	663.0 / 619.0	4.25	1080.548878	1000.00	108.05
PFTrDA_2	663.0 / 169.0	4.25	1093.701940	1000.00	109.37
PFTeDA_1	713.0 / 669.0	4.47	997.310259	1000.00	99.73
PFTeDA_2	713.0 / 169.0	4.46	1064.895745	1000.00	106.49
NMeFOSAA_1	570.0 / 419.0	3.58	1127.920731	1000.00	112.79
NMeFOSAA_2	570.0 / 512.0	3.57	1045.293851	1000.00	104.53
NEtFOSAA_1	584.0 / 419.0	3.73	1118.462266	1000.00	111.85
NEtFOSAA_2	584.0 / 483.0	3.73	1114.666497	1000.00	111.47

Sample Name	KB77 CCV	**Injection Vial**	30
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:09:03	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.54	2510.374715	2525.00	99.42
PFBS_2	298.9 / 99.0	1.54	2462.045965	2525.00	97.51
PFHxA_1	313.0 / 269.0	1.85	2567.484999	2525.00	101.68
PFHxA_2	313.0 / 119.0	1.85	2826.415879	2525.00	111.94
PFHpA_1	363.0 / 319.0	2.26	2452.518690	2500.00	98.10
PFHpA_2	363.0 / 169.0	2.27	2407.903444	2500.00	96.32
PFHxS_1	399.0 / 80.0	2.29	2630.719819	2525.00	104.19
PFHxS_2	399.0 / 99.0	2.29	2810.068112	2525.00	111.29
PFOA_1	413.0 / 369.0	2.67	2572.200597	2500.00	102.89
PFOA_2	413.0 / 169.0	2.67	2585.523146	2500.00	103.42
PFNA_1	463.0 / 419.0	3.07	2714.774693	2500.00	108.59
PFNA_2	463.0 / 219.0	3.07	2742.522808	2500.00	109.70
PFOS_1	499.0 / 80.0	3.07	2373.851509	2500.00	94.95
PFOS_2	499.0 / 99.0	3.07	2442.073173	2500.00	97.68
PFDA_1	513.0 / 469.0	3.42	2464.146258	2500.00	98.57
PFDA_2	513.0 / 219.0	3.42	2551.038991	2500.00	102.04
PFUnA_1	563.0 / 519.0	3.74	2557.263437	2500.00	102.29
PFUnA_2	563.0 / 269.0	3.74	2642.451545	2500.00	105.70
PFDoA_1	613.0 / 569.0	4.02	2562.046423	2500.00	102.48
PFDoA_2	613.0 / 319.0	4.02	2552.030992	2500.00	102.08
PFTrDA_1	663.0 / 619.0	4.26	2729.882239	2500.00	109.20
PFTrDA_2	663.0 / 169.0	4.26	2848.034945	2500.00	113.92
PFTeDA_1	713.0 / 669.0	4.47	2492.717075	2500.00	99.71
PFTeDA_2	713.0 / 169.0	4.47	2572.585397	2500.00	102.90
NMeFOSAA_1	570.0 / 419.0	3.57	2741.860503	2500.00	109.67
NMeFOSAA_2	570.0 / 512.0	3.57	2582.052364	2500.00	103.28
NEtFOSAA_1	584.0 / 419.0	3.73	2721.349802	2500.00	108.85
NEtFOSAA_2	584.0 / 483.0	3.73	2919.194315	2500.00	116.77

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QC Summary Report

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Sample Name	KB76 CCV	**Injection Vial**	36
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:14:13	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.54	996.485985	1010.00	98.66
PFBS_2	298.9 / 99.0	1.53	1000.372875	1010.00	99.05
PFHxA_1	313.0 / 269.0	1.85	977.437042	1010.00	96.78
PFHxA_2	313.0 / 119.0	1.85	981.712472	1010.00	97.20
PFHpA_1	363.0 / 319.0	2.26	976.835914	1000.00	97.68
PFHpA_2	363.0 / 169.0	2.27	812.349526	1000.00	81.23
PFHxS_1	399.0 / 80.0	2.29	1063.716441	1010.00	105.32
PFHxS_2	399.0 / 99.0	2.29	1041.583255	1010.00	103.13
PFOA_1	413.0 / 369.0	2.67	1051.896414	1000.00	105.19
PFOA_2	413.0 / 169.0	2.67	976.312150	1000.00	97.63
PFNA_1	463.0 / 419.0	3.07	1032.549403	1000.00	103.25
PFNA_2	463.0 / 219.0	3.07	1086.393081	1000.00	108.64
PFOS_1	499.0 / 80.0	3.07	869.792420	1000.00	86.98
PFOS_2	499.0 / 99.0	3.07	882.826262	1000.00	88.28
PFDA_1	513.0 / 469.0	3.42	989.476098	1000.00	98.95
PFDA_2	513.0 / 219.0	3.42	1055.500870	1000.00	105.55
PFUnA_1	563.0 / 519.0	3.74	1077.907346	1000.00	107.79
PFUnA_2	563.0 / 269.0	3.74	1178.928083	1000.00	117.89
PFDoA_1	613.0 / 569.0	4.02	1008.278825	1000.00	100.83
PFDoA_2	613.0 / 319.0	4.02	1009.621633	1000.00	100.96
PFTrDA_1	663.0 / 619.0	4.26	1092.935983	1000.00	109.29
PFTrDA_2	663.0 / 169.0	4.26	1124.888837	1000.00	112.49
PFTeDA_1	713.0 / 669.0	4.47	1027.280136	1000.00	102.73
PFTeDA_2	713.0 / 169.0	4.47	1068.140424	1000.00	106.81
NMeFOSAA_1	570.0 / 419.0	3.58	1087.130075	1000.00	108.71
NMeFOSAA_2	570.0 / 512.0	3.57	1052.854293	1000.00	105.29
NEtFOSAA_1	584.0 / 419.0	3.73	1048.796327	1000.00	104.88
NEtFOSAA_2	584.0 / 483.0	3.73	1119.836994	1000.00	111.98

QC Summary Report

Sample Name	KB76 CCV	**Injection Vial**	10
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T01:29:53	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.53	956.389077	1010.00	94.69
PFBS_2	298.9 / 99.0	1.53	981.318602	1010.00	97.16
PFHxA_1	313.0 / 269.0	1.85	1025.620499	1010.00	101.55
PFHxA_2	313.0 / 119.0	1.85	1003.776643	1010.00	99.38
PFHpA_1	363.0 / 319.0	2.26	917.746844	1000.00	91.77
PFHpA_2	363.0 / 169.0	2.26	992.950732	1000.00	99.30
PFHxS_1	399.0 / 80.0	2.28	1092.761428	1010.00	108.19
PFHxS_2	399.0 / 99.0	2.28	1088.553503	1010.00	107.78
PFOA_1	413.0 / 369.0	2.67	1025.791649	1000.00	102.58
PFOA_2	413.0 / 169.0	2.67	900.820792	1000.00	90.08
PFNA_1	463.0 / 419.0	3.06	1121.856972	1000.00	112.19
PFNA_2	463.0 / 219.0	3.06	1107.587043	1000.00	110.76
PFOS_1	499.0 / 80.0	3.06	1157.277499	1000.00	115.73
PFOS_2	499.0 / 99.0	3.06	1205.128560	1000.00	120.51
PFDA_1	513.0 / 469.0	3.42	952.992958	1000.00	95.30
PFDA_2	513.0 / 219.0	3.42	1003.984822	1000.00	100.40
PFUnA_1	563.0 / 519.0	3.74	1049.219338	1000.00	104.92
PFUnA_2	563.0 / 269.0	3.74	1185.641235	1000.00	118.56
PFDoA_1	613.0 / 569.0	4.01	1020.457319	1000.00	102.05
PFDoA_2	613.0 / 319.0	4.01	1075.976997	1000.00	107.60
PFTrDA_1	663.0 / 619.0	4.26	1077.547399	1000.00	107.75
PFTrDA_2	663.0 / 169.0	4.25	1083.254336	1000.00	108.33
PFTeDA_1	713.0 / 669.0	4.47	1030.691144	1000.00	103.07
PFTeDA_2	713.0 / 169.0	4.47	1043.734938	1000.00	104.37
NMeFOSAA_1	570.0 / 419.0	3.57	1003.036559	1000.00	100.30
NMeFOSAA_2	570.0 / 512.0	3.57	916.089890	1000.00	91.61
NEtFOSAA_1	584.0 / 419.0	3.73	1048.296795	1000.00	104.83
NEtFOSAA_2	584.0 / 483.0	3.73	977.121338	1000.00	97.71

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QC Summary 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**	18-0590_18-0588_18-0589_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	235.098552	250.00	94.04
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

QC Summary Report

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Sample Name	KB76 CCV	**Injection Vial**	33
Sample ID		**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:22:00	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	238.560244	250.00	95.42
d3-MeFOSAA	573.0 / 419.0	3.57	212.383634	250.00	84.95
d5-EtFOSAA	589.0 / 419.0	3.72	261.275783	250.00	104.51
13C5-PFHxA	318.0 / 273.0	1.85	262.246414	250.00	104.90
13C4-PFHpA	367.0 / 322.0	2.25	240.449823	250.00	96.18
13C8-PFOA	421.0 / 376.0	2.66	258.797131	250.00	103.52
13C9-PFNA	472.0 / 427.0	3.05	251.683903	250.00	100.67
13C6-PFDA	519.0 / 474.0	3.40	243.934337	250.00	97.57
13C7-PFUnA	570.0 / 525.0	3.72	234.392961	250.00	93.76
13C2-PFTeDA	715.0 / 670.0	4.47	228.203597	250.00	91.28
13C3-PFBS	302.0 / 99.0	1.52	211.345646	232.25	91.00
13C3-PFHxS	402.0 / 99.0	2.28	229.150108	236.50	96.89
13C8-PFOS	507.0 / 99.0	3.05	213.378841	239.25	89.19

Sample Name	KB77 CCV	**Injection Vial**	43
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:10:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	232.269832	250.00	92.91
d3-MeFOSAA	573.0 / 419.0	3.57	265.654964	250.00	106.26
d5-EtFOSAA	589.0 / 419.0	3.72	253.867288	250.00	101.55
13C5-PFHxA	318.0 / 273.0	1.84	259.169082	250.00	103.67
13C4-PFHpA	367.0 / 322.0	2.25	229.245199	250.00	91.70
13C8-PFOA	421.0 / 376.0	2.66	276.100380	250.00	110.44
13C9-PFNA	472.0 / 427.0	3.05	221.498863	250.00	88.60
13C6-PFDA	519.0 / 474.0	3.40	254.707750	250.00	101.88
13C7-PFUnA	570.0 / 525.0	3.72	262.109877	250.00	104.84
13C2-PFTeDA	715.0 / 670.0	4.46	233.215980	250.00	93.29
13C3-PFBS	302.0 / 99.0	1.51	253.242455	232.25	109.04
13C3-PFHxS	402.0 / 99.0	2.27	254.345048	236.50	107.55
13C8-PFOS	507.0 / 99.0	3.05	235.710929	239.25	98.52

QC Summary Report

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Sample Name	KB76 CCV	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:32:19	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	237.420646	250.00	94.97
d3-MeFOSAA	573.0 / 419.0	3.56	231.374897	250.00	92.55
d5-EtFOSAA	589.0 / 419.0	3.72	260.208804	250.00	104.08
13C5-PFHxA	318.0 / 273.0	1.84	272.748462	250.00	109.10
13C4-PFHpA	367.0 / 322.0	2.25	249.314533	250.00	99.73
13C8-PFOA	421.0 / 376.0	2.66	277.395234	250.00	110.96
13C9-PFNA	472.0 / 427.0	3.05	248.989410	250.00	99.60
13C6-PFDA	519.0 / 474.0	3.41	258.620004	250.00	103.45
13C7-PFUnA	570.0 / 525.0	3.72	275.756555	250.00	110.30
13C2-PFTeDA	715.0 / 670.0	4.46	235.445472	250.00	94.18
13C3-PFBS	302.0 / 99.0	1.51	239.391165	232.25	103.07
13C3-PFHxS	402.0 / 99.0	2.27	232.571779	236.50	98.34
13C8-PFOS	507.0 / 99.0	3.05	217.985567	239.25	91.11

Sample Name	KB77 CCV	**Injection Vial**	9
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:20:59	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C2-PFDoA	615.0 / 570.0	4.00	244.135511	250.00	97.65
d3-MeFOSAA	573.0 / 419.0	3.56	222.759948	250.00	89.10
d5-EtFOSAA	589.0 / 419.0	3.72	240.569680	250.00	96.23
13C5-PFHxA	318.0 / 273.0	1.84	251.990612	250.00	100.80
13C4-PFHpA	367.0 / 322.0	2.25	239.638350	250.00	95.86
13C8-PFOA	421.0 / 376.0	2.66	254.023452	250.00	101.61
13C9-PFNA	472.0 / 427.0	3.05	222.133972	250.00	88.85
13C6-PFDA	519.0 / 474.0	3.40	247.514719	250.00	99.01
13C7-PFUnA	570.0 / 525.0	3.72	281.492502	250.00	112.60
13C2-PFTeDA	715.0 / 670.0	4.46	237.540858	250.00	95.02
13C3-PFBS	302.0 / 99.0	1.51	251.562441	232.25	108.32
13C3-PFHxS	402.0 / 99.0	2.27	250.702765	236.50	106.01
13C8-PFOS	507.0 / 99.0	3.05	223.021235	239.25	93.22

Sample Name	KB76 CCV	**Injection Vial**	20
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:20:24	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	240.651735	250.00	96.26
d3-MeFOSAA	573.0 / 419.0	3.57	223.955041	250.00	89.58
d5-EtFOSAA	589.0 / 419.0	3.73	221.426875	250.00	88.57
13C5-PFHxA	318.0 / 273.0	1.84	228.477809	250.00	91.39
13C4-PFHpA	367.0 / 322.0	2.25	222.897417	250.00	89.16
13C8-PFOA	421.0 / 376.0	2.66	236.986052	250.00	94.79
13C9-PFNA	472.0 / 427.0	3.06	222.472104	250.00	88.99
13C6-PFDA	519.0 / 474.0	3.41	241.026499	250.00	96.41
13C7-PFUnA	570.0 / 525.0	3.72	266.482474	250.00	106.59
13C2-PFTeDA	715.0 / 670.0	4.46	229.428818	250.00	91.77
13C3-PFBS	302.0 / 99.0	1.51	238.983565	232.25	102.90
13C3-PFHxS	402.0 / 99.0	2.28	246.337270	236.50	104.16
13C8-PFOS	507.0 / 99.0	3.05	236.561315	239.25	98.88

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Sample Name	KB77 CCV	**Injection Vial**	30
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:09:03	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	244.010767	250.00	97.60
d3-MeFOSAA	573.0 / 419.0	3.57	233.709042	250.00	93.48
d5-EtFOSAA	589.0 / 419.0	3.73	231.642118	250.00	92.66
13C5-PFHxA	318.0 / 273.0	1.84	250.520584	250.00	100.21
13C4-PFHpA	367.0 / 322.0	2.25	249.033205	250.00	99.61
13C8-PFOA	421.0 / 376.0	2.66	257.693714	250.00	103.08
13C9-PFNA	472.0 / 427.0	3.05	238.145825	250.00	95.26
13C6-PFDA	519.0 / 474.0	3.41	239.336998	250.00	95.73
13C7-PFUnA	570.0 / 525.0	3.72	249.186995	250.00	99.67
13C2-PFTeDA	715.0 / 670.0	4.46	240.884711	250.00	96.35
13C3-PFBS	302.0 / 99.0	1.52	238.170703	232.25	102.55
13C3-PFHxS	402.0 / 99.0	2.28	233.849233	236.50	98.88
13C8-PFOS	507.0 / 99.0	3.06	260.048324	239.25	108.69

Sample Name	KB76 CCV	**Injection Vial**	36
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:14:13	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	264.617967	250.00	105.85
d3-MeFOSAA	573.0 / 419.0	3.57	222.730750	250.00	89.09
d5-EtFOSAA	589.0 / 419.0	3.72	231.395931	250.00	92.56
13C5-PFHxA	318.0 / 273.0	1.84	240.245977	250.00	96.10
13C4-PFHpA	367.0 / 322.0	2.25	236.686452	250.00	94.67
13C8-PFOA	421.0 / 376.0	2.66	241.843152	250.00	96.74
13C9-PFNA	472.0 / 427.0	3.06	234.354318	250.00	93.74
13C6-PFDA	519.0 / 474.0	3.41	263.984340	250.00	105.59
13C7-PFUnA	570.0 / 525.0	3.72	264.937251	250.00	105.97
13C2-PFTeDA	715.0 / 670.0	4.46	246.336541	250.00	98.53
13C3-PFBS	302.0 / 99.0	1.52	227.157987	232.25	97.81
13C3-PFHxS	402.0 / 99.0	2.28	242.957336	236.50	102.73
13C8-PFOS	507.0 / 99.0	3.05	289.898023	239.25	121.17

Sample Name	KB76 CCV	**Injection Vial**	10
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T01:29:53	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	239.029987	250.00	95.61
d3-MeFOSAA	573.0 / 419.0	3.57	245.088085	250.00	98.04
d5-EtFOSAA	589.0 / 419.0	3.72	251.921278	250.00	100.77
13C5-PFHxA	318.0 / 273.0	1.84	238.948279	250.00	95.58
13C4-PFHpA	367.0 / 322.0	2.25	239.872612	250.00	95.95
13C8-PFOA	421.0 / 376.0	2.66	254.993940	250.00	102.00
13C9-PFNA	472.0 / 427.0	3.05	236.785517	250.00	94.71
13C6-PFDA	519.0 / 474.0	3.40	256.302750	250.00	102.52
13C7-PFUnA	570.0 / 525.0	3.72	252.408689	250.00	100.96
13C2-PFTeDA	715.0 / 670.0	4.46	237.157464	250.00	94.86
13C3-PFBS	302.0 / 99.0	1.52	229.924192	232.25	99.00
13C3-PFHxS	402.0 / 99.0	2.27	239.967035	236.50	101.47
13C8-PFOS	507.0 / 99.0	3.05	239.321833	239.25	100.03

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QC Summary Report

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Sample Name	KB75 ISC	**Injection Vial**	1
Sample ID	Instrument Sensitivity Check	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T18:16:51	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.57	502.963491	505.00	99.60
PFBS_2	298.9 / 99.0	1.57	496.453145	505.00	98.31
PFHxA_1	313.0 / 269.0	1.91	480.896992	505.00	95.23
PFHxA_2	313.0 / 119.0	1.91	485.682826	505.00	96.17
PFHpA_1	363.0 / 319.0	2.33	481.224420	500.00	96.24
PFHpA_2	363.0 / 169.0	2.32	452.441038	500.00	90.49
PFHxS_1	399.0 / 80.0	2.35	518.322649	505.00	102.64
PFHxS_2	399.0 / 99.0	2.35	520.806905	505.00	103.13
PFOA_1	413.0 / 369.0	2.74	450.789129	500.00	90.16
PFOA_2	413.0 / 169.0	2.74	546.555914	500.00	109.31
PFNA_1	463.0 / 419.0	3.14	494.521439	500.00	98.90
PFNA_2	463.0 / 219.0	3.14	507.732683	500.00	101.55
PFOS_1	499.0 / 80.0	3.14	441.273324	500.00	88.25
PFOS_2	499.0 / 99.0	3.14	470.431215	500.00	94.09
PFDA_1	513.0 / 469.0	3.50	451.709750	500.00	90.34
PFDA_2	513.0 / 219.0	3.50	556.902124	500.00	111.38
PFUnA_1	563.0 / 519.0	3.83	457.038917	500.00	91.41
PFUnA_2	563.0 / 269.0	3.83	585.085583	500.00	117.02
PFDoA_1	613.0 / 569.0	4.11	507.066970	500.00	101.41
PFDoA_2	613.0 / 319.0	4.11	531.157147	500.00	106.23
PFTrDA_1	663.0 / 619.0	4.36	452.740787	500.00	90.55
PFTrDA_2	663.0 / 169.0	4.36	467.337333	500.00	93.47
PFTeDA_1	713.0 / 669.0	4.58	504.192869	500.00	100.84
PFTeDA_2	713.0 / 169.0	4.58	503.867021	500.00	100.77
NMeFOSAA_1	570.0 / 419.0	3.66	429.345311	500.00	85.87
NMeFOSAA_2	570.0 / 512.0	3.66	376.857105	500.00	75.37
NEtFOSAA_1	584.0 / 419.0	3.82	419.389608	500.00	83.88
NEtFOSAA_2	584.0 / 483.0	3.81	616.043667	500.00	123.21

Sample Name	KB77 CCV	**Injection Vial**	22
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T22:26:52	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.55	2322.242184	2525.00	91.97
PFBS_2	298.9 / 99.0	1.55	2405.198838	2525.00	95.26
PFHxA_1	313.0 / 269.0	1.87	2684.553499	2525.00	106.32
PFHxA_2	313.0 / 119.0	1.87	2433.262799	2525.00	96.37
PFHpA_1	363.0 / 319.0	2.28	2300.150540	2500.00	92.01
PFHpA_2	363.0 / 169.0	2.28	2199.027765	2500.00	87.96
PFHxS_1	399.0 / 80.0	2.30	2562.982634	2525.00	101.50
PFHxS_2	399.0 / 99.0	2.30	2601.047254	2525.00	103.01
PFOA_1	413.0 / 369.0	2.69	2414.839164	2500.00	96.59
PFOA_2	413.0 / 169.0	2.69	2288.022419	2500.00	91.52
PFNA_1	463.0 / 419.0	3.09	2461.190173	2500.00	98.45
PFNA_2	463.0 / 219.0	3.09	2517.862973	2500.00	100.71
PFOS_1	499.0 / 80.0	3.08	2211.970335	2500.00	88.48
PFOS_2	499.0 / 99.0	3.08	2317.507414	2500.00	92.70
PFDA_1	513.0 / 469.0	3.44	2315.516284	2500.00	92.62
PFDA_2	513.0 / 219.0	3.44	2431.142037	2500.00	97.25
PFUnA_1	563.0 / 519.0	3.76	2445.384516	2500.00	97.82
PFUnA_2	563.0 / 269.0	3.76	2218.955034	2500.00	88.76
PFDoA_1	613.0 / 569.0	4.04	2487.970055	2500.00	99.52
PFDoA_2	613.0 / 319.0	4.04	2463.809113	2500.00	98.55
PFTrDA_1	663.0 / 619.0	4.28	2581.520469	2500.00	103.26
PFTrDA_2	663.0 / 169.0	4.28	2605.556865	2500.00	104.22
PFTeDA_1	713.0 / 669.0	4.49	2618.080958	2500.00	104.72
PFTeDA_2	713.0 / 169.0	4.49	2645.330359	2500.00	105.81
NMeFOSAA_1	570.0 / 419.0	3.59	2696.349725	2500.00	107.85
NMeFOSAA_2	570.0 / 512.0	3.59	2810.677429	2500.00	112.43
NEtFOSAA_1	584.0 / 419.0	3.75	2273.071945	2500.00	90.92
NEtFOSAA_2	584.0 / 483.0	3.75	2196.441577	2500.00	87.86

Sample Name	KB76 CCV	**Injection Vial**	29
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:53:48	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.55	986.691854	1010.00	97.69
PFBS_2	298.9 / 99.0	1.55	1061.248612	1010.00	105.07
PFHxA_1	313.0 / 269.0	1.87	966.012728	1010.00	95.64
PFHxA_2	313.0 / 119.0	1.87	827.216460	1010.00	81.90
PFHpA_1	363.0 / 319.0	2.28	1004.898918	1000.00	100.49
PFHpA_2	363.0 / 169.0	2.27	950.708776	1000.00	95.07
PFHxS_1	399.0 / 80.0	2.30	1072.365734	1010.00	106.17
PFHxS_2	399.0 / 99.0	2.30	1086.321195	1010.00	107.56
PFOA_1	413.0 / 369.0	2.68	1035.491532	1000.00	103.55
PFOA_2	413.0 / 169.0	2.68	857.036091	1000.00	85.70
PFNA_1	463.0 / 419.0	3.08	1047.997138	1000.00	104.80
PFNA_2	463.0 / 219.0	3.08	1077.037555	1000.00	107.70
PFOS_1	499.0 / 80.0	3.08	982.860895	1000.00	98.29
PFOS_2	499.0 / 99.0	3.08	1020.364587	1000.00	102.04
PFDA_1	513.0 / 469.0	3.43	1009.965193	1000.00	101.00
PFDA_2	513.0 / 219.0	3.43	952.774350	1000.00	95.28
PFUnA_1	563.0 / 519.0	3.76	1020.238968	1000.00	102.02
PFUnA_2	563.0 / 269.0	3.75	1053.764625	1000.00	105.38
PFDoA_1	613.0 / 569.0	4.03	976.057556	1000.00	97.61
PFDoA_2	613.0 / 319.0	4.03	954.388605	1000.00	95.44
PFTrDA_1	663.0 / 619.0	4.28	1089.692092	1000.00	108.97
PFTrDA_2	663.0 / 169.0	4.27	1042.502485	1000.00	104.25
PFTeDA_1	713.0 / 669.0	4.49	1046.607861	1000.00	104.66
PFTeDA_2	713.0 / 169.0	4.49	1041.898346	1000.00	104.19
NMeFOSAA_1	570.0 / 419.0	3.59	1042.149783	1000.00	104.21
NMeFOSAA_2	570.0 / 512.0	3.59	920.903758	1000.00	92.09
NEtFOSAA_1	584.0 / 419.0	3.75	925.608913	1000.00	92.56
NEtFOSAA_2	584.0 / 483.0	3.76	1014.791195	1000.00	101.48

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Summary Quant Report

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:13:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	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	KB76 CCV	**Injection Vial**	33
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:22:00	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	203571.90	1000.777598	354.3	false
PFBS_2	298.9 / 99.0	1.54	61158.89	1025.754242	327.7	false
PFHxA_1	313.0 / 269.0	1.86	153502.46	957.919919	10.7	false
PFHxA_2	313.0 / 119.0	1.86	11678.13	962.187337	11.6	false
PFHpA_1	363.0 / 319.0	2.27	147729.51	1008.164181	91.3	false
PFHpA_2	363.0 / 169.0	2.27	3303.15	996.522008	104.2	false
PFHxS_1	399.0 / 80.0	2.29	239616.25	1068.715508	266.0	false
PFHxS_2	399.0 / 99.0	2.29	74707.48	1192.296643	300.9	false
PFOA_1	413.0 / 369.0	2.67	245090.68	1123.706465	189.3	false
PFOA_2	413.0 / 169.0	2.67	14838.66	1047.332543	160.1	false
PFNA_1	463.0 / 419.0	3.07	216876.44	1065.832279	236.5	false
PFNA_2	463.0 / 219.0	3.07	64080.17	1022.850924	228.4	false
PFOS_1	499.0 / 80.0	3.06	382981.49	1115.078654	268.2	false
PFOS_2	499.0 / 99.0	3.06	70997.68	1189.220781	394.4	false
PFDA_1	513.0 / 469.0	3.42	252128.88	944.269083	350.4	false
PFDA_2	513.0 / 219.0	3.42	8933.01	806.869653	257.3	false
PFUnA_1	563.0 / 519.0	3.74	255494.17	1082.809569	281.0	false
PFUnA_2	563.0 / 269.0	3.74	13414.45	1152.625907	247.0	false
PFDoA_1	613.0 / 569.0	4.02	222812.20	981.546865	395.2	false
PFDoA_2	613.0 / 319.0	4.02	38218.66	1073.710594	363.0	false
PFTrDA_1	663.0 / 619.0	4.26	197509.03	1067.893500	628.3	false
PFTrDA_2	663.0 / 169.0	4.26	13490.16	1108.121509	349.6	false
PFTeDA_1	713.0 / 669.0	4.47	213052.56	1007.488087	1204.9	false
PFTeDA_2	713.0 / 169.0	4.47	10480.23	1019.523253	557.1	false
NMeFOSAA_1	570.0 / 419.0	3.57	41675.62	1115.171799	498.8	false
NMeFOSAA_2	570.0 / 512.0	3.58	22562.76	1070.017497	319.2	false
NEtFOSAA_1	584.0 / 419.0	3.73	42109.78	914.736115	494.7	false
NEtFOSAA_2	584.0 / 483.0	3.73	2850.61	1017.712184	929.8	false

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Summary Quant Report

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Sample Name	KB77 CCV	**Injection Vial**	43
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:10:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	914067.48	2578.208858	978.4	false
PFBS_2	298.9 / 99.0	1.53	265908.09	2555.658763	772.4	false
PFHxA_1	313.0 / 269.0	1.85	608996.00	2370.253957	73.8	false
PFHxA_2	313.0 / 119.0	1.85	46628.22	2420.629153	60.4	false
PFHpA_1	363.0 / 319.0	2.26	584067.08	2553.445042	268.5	false
PFHpA_2	363.0 / 169.0	2.26	12011.64	2411.726119	190.2	false
PFHxS_1	399.0 / 80.0	2.28	938933.73	2561.508191	852.8	false
PFHxS_2	399.0 / 99.0	2.28	261330.34	2551.903525	911.1	false
PFOA_1	413.0 / 369.0	2.67	891346.94	2329.092737	397.9	false
PFOA_2	413.0 / 169.0	2.67	57948.44	2332.414078	391.5	false
PFNA_1	463.0 / 419.0	3.06	837030.56	2876.378517	470.9	false
PFNA_2	463.0 / 219.0	3.06	258514.27	2882.353725	494.3	false
PFOS_1	499.0 / 80.0	3.06	1443643.79	2637.427731	482.7	false
PFOS_2	499.0 / 99.0	3.06	257549.95	2708.918485	782.5	false
PFDA_1	513.0 / 469.0	3.42	993641.55	2314.776324	636.6	false
PFDA_2	513.0 / 219.0	3.42	44038.73	2489.828039	713.3	false
PFUnA_1	563.0 / 519.0	3.74	1012056.99	2470.863261	479.6	false
PFUnA_2	563.0 / 269.0	3.74	50750.56	2498.957691	377.2	false
PFDoA_1	613.0 / 569.0	4.02	878276.40	2593.357904	724.5	false
PFDoA_2	613.0 / 319.0	4.02	139109.31	2629.415185	674.6	false
PFTrDA_1	663.0 / 619.0	4.26	781093.43	2698.593967	1031.5	false
PFTrDA_2	663.0 / 169.0	4.25	53726.79	2824.063987	478.8	false
PFTeDA_1	713.0 / 669.0	4.47	845330.50	2570.196954	1963.6	false
PFTeDA_2	713.0 / 169.0	4.47	42089.37	2640.792022	891.0	false
NMeFOSAA_1	570.0 / 419.0	3.57	159362.55	2418.496342	819.8	false
NMeFOSAA_2	570.0 / 512.0	3.57	90471.70	2500.421705	751.9	false
NEtFOSAA_1	584.0 / 419.0	3.73	166811.55	2651.182493	823.6	false
NEtFOSAA_2	584.0 / 483.0	3.73	10867.72	2923.429868	468.2	false

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Summary Quant Report

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Sample Name	KB76 CCV	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:32:19	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	349936.35	975.098994	557.2	false
PFBS_2	298.9 / 99.0	1.53	101225.09	962.213656	370.6	false
PFHxA_1	313.0 / 269.0	1.85	243719.98	941.679925	40.9	false
PFHxA_2	313.0 / 119.0	1.85	17774.73	904.379478	36.3	false
PFHpA_1	363.0 / 319.0	2.26	239751.75	1016.902166	152.2	false
PFHpA_2	363.0 / 169.0	2.26	4954.55	922.776099	97.6	false
PFHxS_1	399.0 / 80.0	2.28	399927.35	1105.552258	506.7	false
PFHxS_2	399.0 / 99.0	2.28	116468.09	1150.493672	595.2	false
PFOA_1	413.0 / 369.0	2.67	382527.68	1053.343404	276.7	false
PFOA_2	413.0 / 169.0	2.67	23978.43	1016.954298	243.9	false
PFNA_1	463.0 / 419.0	3.07	338529.17	1084.106474	298.7	false
PFNA_2	463.0 / 219.0	3.07	112718.77	1176.044891	480.4	false
PFOS_1	499.0 / 80.0	3.07	684115.30	1260.836145	279.7	false
PFOS_2	499.0 / 99.0	3.07	120669.67	1279.642940	361.3	false
PFDA_1	513.0 / 469.0	3.42	414764.32	937.962650	481.8	false
PFDA_2	513.0 / 219.0	3.42	18311.20	1004.513452	342.6	false
PFUnA_1	563.0 / 519.0	3.74	411068.88	946.903992	345.7	false
PFUnA_2	563.0 / 269.0	3.74	24190.09	1131.199283	312.7	false
PFDoA_1	613.0 / 569.0	4.02	356236.94	1010.449012	476.1	false
PFDoA_2	613.0 / 319.0	4.02	58297.72	1052.919392	508.1	false
PFTrDA_1	663.0 / 619.0	4.26	322364.34	1082.082349	771.3	false
PFTrDA_2	663.0 / 169.0	4.25	22403.84	1143.215999	411.2	false
PFTeDA_1	713.0 / 669.0	4.47	350804.75	1030.403518	1211.6	false
PFTeDA_2	713.0 / 169.0	4.47	17782.03	1076.053132	673.4	false
NMeFOSAA_1	570.0 / 419.0	3.57	68485.36	1087.744084	1183.1	false
NMeFOSAA_2	570.0 / 512.0	3.57	38633.18	1090.738505	847.9	false
NEtFOSAA_1	584.0 / 419.0	3.73	68200.16	957.261960	789.5	false
NEtFOSAA_2	584.0 / 483.0	3.73	4546.79	1050.100642	932.3	false

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Summary Quant Report

Sample Name	KB77 CCV	**Injection Vial**	9
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:20:59	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	834084.87	2325.443793	1020.8	false
PFBS_2	298.9 / 99.0	1.53	246587.23	2342.836869	639.5	false
PFHxA_1	313.0 / 269.0	1.85	590565.70	2470.654869	76.9	false
PFHxA_2	313.0 / 119.0	1.85	45562.38	2543.507222	61.4	false
PFHpA_1	363.0 / 319.0	2.26	557101.58	2432.746667	265.6	false
PFHpA_2	363.0 / 169.0	2.26	11761.26	2357.673942	213.0	false
PFHxS_1	399.0 / 80.0	2.28	898375.06	2429.740453	840.5	false
PFHxS_2	399.0 / 99.0	2.28	252245.68	2441.916454	1162.6	false
PFOA_1	413.0 / 369.0	2.67	813079.48	2412.567486	427.9	false
PFOA_2	413.0 / 169.0	2.67	52399.47	2394.802031	425.9	false
PFNA_1	463.0 / 419.0	3.07	813333.20	2911.418730	460.7	false
PFNA_2	463.0 / 219.0	3.07	246047.09	2857.033935	465.0	false
PFOS_1	499.0 / 80.0	3.06	1497998.21	2809.763912	393.7	false
PFOS_2	499.0 / 99.0	3.06	247778.82	2675.811561	563.2	false
PFDA_1	513.0 / 469.0	3.42	953117.17	2412.842485	760.1	false
PFDA_2	513.0 / 219.0	3.42	37504.45	2301.554822	532.5	false
PFUnA_1	563.0 / 519.0	3.74	966153.06	2317.882053	565.7	false
PFUnA_2	563.0 / 269.0	3.74	51183.05	2477.197201	414.4	false
PFDoA_1	613.0 / 569.0	4.01	878038.29	2603.906963	669.8	false
PFDoA_2	613.0 / 319.0	4.01	138265.08	2624.608648	543.7	false
PFTrDA_1	663.0 / 619.0	4.25	805895.40	2887.919736	1027.9	false
PFTrDA_2	663.0 / 169.0	4.25	53152.71	2896.484145	611.7	false
PFTeDA_1	713.0 / 669.0	4.47	827716.71	2608.828796	1863.3	false
PFTeDA_2	713.0 / 169.0	4.46	42153.10	2742.834248	952.9	false
NMeFOSAA_1	570.0 / 419.0	3.57	156337.00	2892.770765	682.7	false
NMeFOSAA_2	570.0 / 512.0	3.57	85579.99	2888.945658	657.7	false
NEtFOSAA_1	584.0 / 419.0	3.73	158029.46	2553.582824	1095.3	false
NEtFOSAA_2	584.0 / 483.0	3.73	9290.41	2533.121060	1917.0	false

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Summary Quant Report

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Sample Name	KB76 CCV	**Injection Vial**	20
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:20:24	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	348320.09	967.948286	668.7	false
PFBS_2	298.9 / 99.0	1.53	104773.80	993.392187	530.6	false
PFHxA_1	313.0 / 269.0	1.85	257782.91	1011.432480	45.4	false
PFHxA_2	313.0 / 119.0	1.85	18587.20	961.079057	38.0	false
PFHpA_1	363.0 / 319.0	2.26	235031.33	944.893607	129.5	false
PFHpA_2	363.0 / 169.0	2.27	4930.39	866.662131	84.5	false
PFHxS_1	399.0 / 80.0	2.29	416018.55	1079.322707	435.7	false
PFHxS_2	399.0 / 99.0	2.29	123113.38	1141.666225	560.3	false
PFOA_1	413.0 / 369.0	2.67	390170.68	1067.409988	335.8	false
PFOA_2	413.0 / 169.0	2.67	22829.26	960.963909	234.8	false
PFNA_1	463.0 / 419.0	3.07	343465.43	1043.471959	406.3	false
PFNA_2	463.0 / 219.0	3.07	105496.58	1042.190764	459.2	false
PFOS_1	499.0 / 80.0	3.07	711193.55	1199.456360	347.3	false
PFOS_2	499.0 / 99.0	3.07	123214.62	1195.632909	584.6	false
PFDA_1	513.0 / 469.0	3.42	431899.07	1002.269178	392.7	false
PFDA_2	513.0 / 219.0	3.42	15067.61	843.247274	266.6	false
PFUnA_1	563.0 / 519.0	3.74	423374.47	963.932564	358.0	false
PFUnA_2	563.0 / 269.0	3.74	21955.88	1014.649259	304.9	false
PFDoA_1	613.0 / 569.0	4.02	369706.79	987.351246	492.1	false
PFDoA_2	613.0 / 319.0	4.01	58587.92	994.790684	496.0	false
PFTrDA_1	663.0 / 619.0	4.25	328483.28	1080.548878	689.0	false
PFTrDA_2	663.0 / 169.0	4.25	21901.94	1093.701940	472.6	false
PFTeDA_1	713.0 / 669.0	4.47	346914.58	997.310259	1276.1	false
PFTeDA_2	713.0 / 169.0	4.46	17964.40	1064.895745	619.9	false
NMeFOSAA_1	570.0 / 419.0	3.58	67566.92	1127.920731	619.7	false
NMeFOSAA_2	570.0 / 512.0	3.57	35427.10	1045.293851	503.2	false
NEtFOSAA_1	584.0 / 419.0	3.73	67799.29	1118.462266	823.6	false
NEtFOSAA_2	584.0 / 483.0	3.73	4101.11	1114.666497	1203.3	false

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Summary Quant Report

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Sample Name	KB77 CCV	**Injection Vial**	30
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:09:03	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	960467.49	2510.374715	1224.1	false
PFBS_2	298.9 / 99.0	1.54	276444.21	2462.045965	754.2	false
PFHxA_1	313.0 / 269.0	1.85	676452.78	2567.484999	77.1	false
PFHxA_2	313.0 / 119.0	1.85	55725.08	2826.415879	63.6	false
PFHpA_1	363.0 / 319.0	2.26	647379.57	2452.518690	274.8	false
PFHpA_2	363.0 / 169.0	2.27	13836.13	2407.903444	279.6	false
PFHxS_1	399.0 / 80.0	2.29	1021838.31	2630.719819	676.7	false
PFHxS_2	399.0 / 99.0	2.29	304724.71	2810.068112	999.5	false
PFOA_1	413.0 / 369.0	2.67	975114.90	2572.200597	557.9	false
PFOA_2	413.0 / 169.0	2.67	63632.60	2585.523146	435.5	false
PFNA_1	463.0 / 419.0	3.07	902632.67	2714.774693	609.1	false
PFNA_2	463.0 / 219.0	3.07	280994.90	2742.522808	545.2	false
PFOS_1	499.0 / 80.0	3.07	1638945.86	2373.851509	518.5	false
PFOS_2	499.0 / 99.0	3.07	292874.61	2442.073173	580.4	false
PFDA_1	513.0 / 469.0	3.42	1097025.31	2464.146258	538.0	false
PFDA_2	513.0 / 219.0	3.42	46811.89	2551.038991	491.9	false
PFUnA_1	563.0 / 519.0	3.74	1099562.62	2557.263437	540.5	false
PFUnA_2	563.0 / 269.0	3.74	56342.79	2642.451545	553.8	false
PFDoA_1	613.0 / 569.0	4.02	1006782.58	2562.046423	730.4	false
PFDoA_2	613.0 / 319.0	4.02	156712.85	2552.030992	619.0	false
PFTrDA_1	663.0 / 619.0	4.26	901163.16	2729.882239	985.1	false
PFTrDA_2	663.0 / 169.0	4.26	61797.28	2848.034945	584.0	false
PFTeDA_1	713.0 / 669.0	4.47	935639.19	2492.717075	1693.3	false
PFTeDA_2	713.0 / 169.0	4.47	46791.77	2572.585397	1159.2	false
NMeFOSAA_1	570.0 / 419.0	3.57	182771.34	2741.860503	1045.1	false
NMeFOSAA_2	570.0 / 512.0	3.57	94646.59	2582.052364	1514.4	false
NEtFOSAA_1	584.0 / 419.0	3.73	183268.67	2721.349802	1092.8	false
NEtFOSAA_2	584.0 / 483.0	3.73	11617.05	2919.194315	639.5	false

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Summary Quant Report

Sample Name	KB76 CCV	**Injection Vial**	36
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:14:13	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	339293.48	996.485985	773.9	false
PFBS_2	298.9 / 99.0	1.53	99846.23	1000.372875	494.6	false
PFHxA_1	313.0 / 269.0	1.85	249099.17	977.437042	48.6	false
PFHxA_2	313.0 / 119.0	1.85	18943.38	981.712472	35.7	false
PFHpA_1	363.0 / 319.0	2.26	244914.45	976.835914	166.5	false
PFHpA_2	363.0 / 169.0	2.27	4690.48	812.349526	107.9	false
PFHxS_1	399.0 / 80.0	2.29	402107.01	1063.716441	437.0	false
PFHxS_2	399.0 / 99.0	2.29	110357.64	1041.583255	603.9	false
PFOA_1	413.0 / 369.0	2.67	372788.45	1051.896414	340.4	false
PFOA_2	413.0 / 169.0	2.67	22477.55	976.312150	278.1	false
PFNA_1	463.0 / 419.0	3.07	340185.39	1032.549403	367.2	false
PFNA_2	463.0 / 219.0	3.07	109916.72	1086.393081	383.4	false
PFOS_1	499.0 / 80.0	3.07	620922.69	869.792420	319.6	false
PFOS_2	499.0 / 99.0	3.07	109585.80	882.826262	343.6	false
PFDA_1	513.0 / 469.0	3.42	426635.84	989.476098	409.5	false
PFDA_2	513.0 / 219.0	3.42	18761.95	1055.500870	435.7	false
PFUnA_1	563.0 / 519.0	3.74	429427.40	1077.907346	389.2	false
PFUnA_2	563.0 / 269.0	3.74	23165.18	1178.928083	255.7	false
PFDoA_1	613.0 / 569.0	4.02	378931.47	1008.278825	467.5	false
PFDoA_2	613.0 / 319.0	4.02	59681.13	1009.621633	462.1	false
PFTrDA_1	663.0 / 619.0	4.26	325699.87	1092.935983	767.1	false
PFTrDA_2	663.0 / 169.0	4.26	22069.68	1124.888837	408.4	false
PFTeDA_1	713.0 / 669.0	4.47	349998.56	1027.280136	1175.7	false
PFTeDA_2	713.0 / 169.0	4.47	17667.72	1068.140424	679.2	false
NMeFOSAA_1	570.0 / 419.0	3.58	65328.04	1087.130075	887.0	false
NMeFOSAA_2	570.0 / 512.0	3.57	35706.61	1052.854293	794.0	false
NEtFOSAA_1	584.0 / 419.0	3.73	66569.48	1048.796327	1718.8	false
NEtFOSAA_2	584.0 / 483.0	3.73	4309.65	1119.836994	45963.5	false

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Summary Quant Report

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Sample Name	KB76 CCV	**Injection Vial**	10
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T01:29:53	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	289807.06	956.389077	572.0	false
PFBS_2	298.9 / 99.0	1.53	87152.51	981.318602	426.2	false
PFHxA_1	313.0 / 269.0	1.85	223626.96	1025.620499	44.8	false
PFHxA_2	313.0 / 119.0	1.85	16579.70	1003.776643	31.5	false
PFHpA_1	363.0 / 319.0	2.26	201165.21	917.746844	147.5	false
PFHpA_2	363.0 / 169.0	2.26	4915.75	992.950732	101.6	false
PFHxS_1	399.0 / 80.0	2.28	359129.50	1092.761428	613.2	false
PFHxS_2	399.0 / 99.0	2.28	100216.08	1088.553503	730.9	false
PFOA_1	413.0 / 369.0	2.67	330362.81	1025.791649	264.0	false
PFOA_2	413.0 / 169.0	2.67	18863.12	900.820792	193.8	false
PFNA_1	463.0 / 419.0	3.06	320959.37	1121.856972	309.2	false
PFNA_2	463.0 / 219.0	3.06	97501.40	1107.587043	383.4	false
PFOS_1	499.0 / 80.0	3.06	602374.00	1157.277499	328.1	false
PFOS_2	499.0 / 99.0	3.06	109030.47	1205.128560	443.3	true
PFDA_1	513.0 / 469.0	3.42	376749.93	952.992958	424.7	false
PFDA_2	513.0 / 219.0	3.42	16367.98	1003.984822	425.0	false
PFUnA_1	563.0 / 519.0	3.74	375859.75	1049.219338	314.1	false
PFUnA_2	563.0 / 269.0	3.74	20943.32	1185.641235	233.3	false
PFDoA_1	613.0 / 569.0	4.01	326771.56	1020.457319	468.2	false
PFDoA_2	613.0 / 319.0	4.01	54082.56	1075.976997	609.8	false
PFTrDA_1	663.0 / 619.0	4.26	291833.62	1077.547399	661.8	false
PFTrDA_2	663.0 / 169.0	4.25	19330.66	1083.254336	361.2	false
PFTeDA_1	713.0 / 669.0	4.47	318961.85	1030.691144	1265.4	false
PFTeDA_2	713.0 / 169.0	4.47	15698.90	1043.734938	677.0	false
NMeFOSAA_1	570.0 / 419.0	3.57	59041.88	1003.036559	540.6	false
NMeFOSAA_2	570.0 / 512.0	3.57	30726.62	916.089890	461.2	false
NEtFOSAA_1	584.0 / 419.0	3.73	61772.01	1048.296795	1184.7	false
NEtFOSAA_2	584.0 / 483.0	3.73	3518.32	977.121338	261.3	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**	18-0590_18-0588_18-0589_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	235.098552	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	KB76 CCV	**Injection Vial**	33
Sample ID		**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:22:00	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	60918.57	238.560244	964.2	false
d3-MeFOSAA	573.0 / 419.0	3.57	9267.03	212.383634	164.1	false
d5-EtFOSAA	589.0 / 419.0	3.72	12446.63	261.275783	181.7	false
13C5-PFHxA	318.0 / 273.0	1.85	39283.43	262.246414	638.5	false
13C4-PFHpA	367.0 / 322.0	2.25	40977.87	240.449823	804.9	false
13C8-PFOA	421.0 / 376.0	2.66	53651.80	258.797131	741.1	false
13C9-PFNA	472.0 / 427.0	3.05	59577.97	251.683903	1962.8	false
13C6-PFDA	519.0 / 474.0	3.40	62757.15	243.934337	806.7	false
13C7-PFUnA	570.0 / 525.0	3.72	55703.49	234.392961	1270.2	false
13C2-PFTeDA	715.0 / 670.0	4.47	47048.92	228.203597	1323.3	false
13C3-PFBS	302.0 / 99.0	1.52	16158.92	211.345646	496.5	false
13C3-PFHxS	402.0 / 99.0	2.28	15875.99	229.150108	455.2	false
13C8-PFOS	507.0 / 99.0	3.05	16700.36	213.378841	237.7	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:53:04 AM

Sample Name	KB77 CCV	**Injection Vial**	43
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:10:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	92543.69	232.269832	1300.5	false
d3-MeFOSAA	573.0 / 419.0	3.57	16917.91	265.654964	252.1	false
d5-EtFOSAA	589.0 / 419.0	3.72	17650.97	253.867288	225.2	false
13C5-PFHxA	318.0 / 273.0	1.84	64292.97	259.169082	853.5	false
13C4-PFHpA	367.0 / 322.0	2.25	64700.21	229.245199	824.5	false
13C8-PFOA	421.0 / 376.0	2.66	94792.14	276.100380	1913.1	false
13C9-PFNA	472.0 / 427.0	3.05	86832.50	221.498863	1479.1	false
13C6-PFDA	519.0 / 474.0	3.40	102243.27	254.707750	2624.9	false
13C7-PFUnA	570.0 / 525.0	3.72	97190.45	262.109877	942.0	false
13C2-PFTeDA	715.0 / 670.0	4.46	75021.85	233.215980	1373.2	false
13C3-PFBS	302.0 / 99.0	1.51	28259.52	253.242455	732.3	false
13C3-PFHxS	402.0 / 99.0	2.27	25718.95	254.345048	591.2	false
13C8-PFOS	507.0 / 99.0	3.05	26925.47	235.710929	340.3	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:53:09 AM

Sample Name	KB76 CCV	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:32:19	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	94690.15	237.420646	1301.8	false
d3-MeFOSAA	573.0 / 419.0	3.56	15722.36	231.374897	220.1	false
d5-EtFOSAA	589.0 / 419.0	3.72	19304.41	260.208804	211.2	false
13C5-PFHxA	318.0 / 273.0	1.84	63409.68	272.748462	815.5	false
13C4-PFHpA	367.0 / 322.0	2.25	65942.58	249.314533	1413.9	false
13C8-PFOA	421.0 / 376.0	2.66	89251.86	277.395234	1314.2	false
13C9-PFNA	472.0 / 427.0	3.05	91475.46	248.989410	845.1	false
13C6-PFDA	519.0 / 474.0	3.41	103917.10	258.620004	980.9	false
13C7-PFUnA	570.0 / 525.0	3.72	102352.48	275.756555	656.6	false
13C2-PFTeDA	715.0 / 670.0	4.46	75814.48	235.445472	1215.3	false
13C3-PFBS	302.0 / 99.0	1.51	28504.22	239.391165	726.8	false
13C3-PFHxS	402.0 / 99.0	2.27	25093.42	232.571779	955.9	false
13C8-PFOS	507.0 / 99.0	3.05	26569.55	217.985567	277.7	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:53:14 AM

Sample Name	KB77 CCV	**Injection Vial**	9
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:20:59	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	92147.93	244.135511	849.4	false
d3-MeFOSAA	573.0 / 419.0	3.56	14444.39	222.759948	185.9	false
d5-EtFOSAA	589.0 / 419.0	3.72	17030.83	240.569680	246.1	false
13C5-PFHxA	318.0 / 273.0	1.84	59847.85	251.990612	855.1	false
13C4-PFHpA	367.0 / 322.0	2.25	64750.88	239.638350	882.4	false
13C8-PFOA	421.0 / 376.0	2.66	83495.49	254.023452	1215.8	false
13C9-PFNA	472.0 / 427.0	3.05	83369.98	222.133972	1111.2	false
13C6-PFDA	519.0 / 474.0	3.40	94122.67	247.514719	16582.4	false
13C7-PFUnA	570.0 / 525.0	3.72	98879.82	281.492502	955.8	false
13C2-PFTeDA	715.0 / 670.0	4.46	72388.31	237.540858	1517.9	false
13C3-PFBS	302.0 / 99.0	1.51	28582.96	251.562441	653.4	false
13C3-PFHxS	402.0 / 99.0	2.27	25812.04	250.702765	537.3	false
13C8-PFOS	507.0 / 99.0	3.05	25939.59	223.021235	282.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:53:19 AM

Sample Name	KB76 CCV	**Injection Vial**	20
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:20:24	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	100503.50	240.651735	1001.6	false
d3-MeFOSAA	573.0 / 419.0	3.57	15285.17	223.955041	195.8	false
d5-EtFOSAA	589.0 / 419.0	3.73	16499.58	221.426875	255.5	false
13C5-PFHxA	318.0 / 273.0	1.84	62592.91	228.477809	718.7	false
13C4-PFHpA	367.0 / 322.0	2.25	69472.24	222.897417	1239.6	false
13C8-PFOA	421.0 / 376.0	2.66	89852.25	236.986052	19369.7	false
13C9-PFNA	472.0 / 427.0	3.06	96313.51	222.472104	1016.7	false
13C6-PFDA	519.0 / 474.0	3.41	101413.46	241.026499	1029.6	false
13C7-PFUnA	570.0 / 525.0	3.72	103573.12	266.482474	749.9	false
13C2-PFTeDA	715.0 / 670.0	4.46	77359.86	229.428818	1368.0	false
13C3-PFBS	302.0 / 99.0	1.51	28580.97	238.983565	520.9	false
13C3-PFHxS	402.0 / 99.0	2.28	26695.67	246.337270	580.2	false
13C8-PFOS	507.0 / 99.0	3.05	28960.63	236.561315	274.5	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:53:24 AM

Sample Name	KB77 CCV	**Injection Vial**	30
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:09:03	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	107366.24	244.010767	1471.0	false
d3-MeFOSAA	573.0 / 419.0	3.57	17076.98	233.709042	194.4	false
d5-EtFOSAA	589.0 / 419.0	3.73	18479.33	231.642118	198.9	false
13C5-PFHxA	318.0 / 273.0	1.84	65999.91	250.520584	948.9	false
13C4-PFHpA	367.0 / 322.0	2.25	74641.84	249.033205	1111.7	false
13C8-PFOA	421.0 / 376.0	2.66	93956.92	257.693714	1712.9	false
13C9-PFNA	472.0 / 427.0	3.05	99145.59	238.145825	1358.7	false
13C6-PFDA	519.0 / 474.0	3.41	106098.00	239.336998	1131.1	false
13C7-PFUnA	570.0 / 525.0	3.72	102039.97	249.186995	641.2	false
13C2-PFTeDA	715.0 / 670.0	4.46	85574.32	240.884711	2229.2	false
13C3-PFBS	302.0 / 99.0	1.52	30494.63	238.170703	771.1	false
13C3-PFHxS	402.0 / 99.0	2.28	27131.44	233.849233	432.7	false
13C8-PFOS	507.0 / 99.0	3.06	34083.53	260.048324	336.6	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:53:29 AM

Sample Name	KB76 CCV	**Injection Vial**	36
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:14:13	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	100933.21	264.617967	1174.9	false
d3-MeFOSAA	573.0 / 419.0	3.57	15134.87	222.730750	217.3	false
d5-EtFOSAA	589.0 / 419.0	3.72	17166.72	231.395931	239.9	false
13C5-PFHxA	318.0 / 273.0	1.84	62517.66	240.245977	933.1	false
13C4-PFHpA	367.0 / 322.0	2.25	70072.09	236.686452	1125.9	false
13C8-PFOA	421.0 / 376.0	2.66	87097.44	241.843152	1205.9	false
13C9-PFNA	472.0 / 427.0	3.06	96371.81	234.354318	15768.0	false
13C6-PFDA	519.0 / 474.0	3.41	101445.20	263.984340	1283.8	false
13C7-PFUnA	570.0 / 525.0	3.72	94046.79	264.937251	1162.2	false
13C2-PFTeDA	715.0 / 670.0	4.46	75861.09	246.336541	1515.2	false
13C3-PFBS	302.0 / 99.0	1.52	27047.43	227.157987	664.7	false
13C3-PFHxS	402.0 / 99.0	2.28	26213.79	242.957336	567.2	false
13C8-PFOS	507.0 / 99.0	3.05	35334.48	289.898023	300.8	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:53:33 AM

Sample Name	KB76 CCV	**Injection Vial**	10
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T01:29:53	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	86029.84	239.029987	1753.8	false
d3-MeFOSAA	573.0 / 419.0	3.57	14639.73	245.088085	233.9	false
d5-EtFOSAA	589.0 / 419.0	3.72	16428.91	251.921278	231.9	false
13C5-PFHxA	318.0 / 273.0	1.84	53572.26	238.948279	611.2	false
13C4-PFHpA	367.0 / 322.0	2.25	61184.56	239.872612	786.0	false
13C8-PFOA	421.0 / 376.0	2.66	79120.85	254.993940	2052.0	false
13C9-PFNA	472.0 / 427.0	3.05	83892.22	236.785517	1691.9	false
13C6-PFDA	519.0 / 474.0	3.40	92936.99	256.302750	1145.4	false
13C7-PFUnA	570.0 / 525.0	3.72	84544.87	252.408689	899.9	false
13C2-PFTeDA	715.0 / 670.0	4.46	68914.25	237.157464	1449.8	false
13C3-PFBS	302.0 / 99.0	1.52	24065.50	229.924192	1260.3	false
13C3-PFHxS	402.0 / 99.0	2.27	22759.55	239.967035	500.1	false
13C8-PFOS	507.0 / 99.0	3.05	25641.77	239.321833	293.3	false

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Summary Quant Report

Sample Name	KB75 ISC	**Injection Vial**	1
Sample ID	Instrument Sensitivity Check	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T18:16:51	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.57	168978.15	502.963491	322.3	false
PFBS_2	298.9 / 99.0	1.57	48809.67	496.453145	291.2	false
PFHxA_1	313.0 / 269.0	1.91	126916.53	480.896992	53.4	false
PFHxA_2	313.0 / 119.0	1.91	9853.35	485.682826	37.8	false
PFHpA_1	363.0 / 319.0	2.33	122684.07	481.224420	144.6	false
PFHpA_2	363.0 / 169.0	2.32	2810.04	452.441038	71.0	false
PFHxS_1	399.0 / 80.0	2.35	189643.10	518.322649	373.4	false
PFHxS_2	399.0 / 99.0	2.35	53628.52	520.806905	306.2	false
PFOA_1	413.0 / 369.0	2.74	161964.93	450.789129	221.4	false
PFOA_2	413.0 / 169.0	2.74	12663.26	546.555914	171.1	false
PFNA_1	463.0 / 419.0	3.14	153809.90	494.521439	245.9	false
PFNA_2	463.0 / 219.0	3.14	48313.22	507.732683	267.6	false
PFOS_1	499.0 / 80.0	3.14	271288.67	441.273324	138.3	false
PFOS_2	499.0 / 99.0	3.14	50370.97	470.431215	328.2	false
PFDA_1	513.0 / 469.0	3.50	192864.33	451.709750	246.1	false
PFDA_2	513.0 / 219.0	3.50	9748.77	556.902124	140.1	false
PFUnA_1	563.0 / 519.0	3.83	182696.97	457.038917	282.3	false
PFUnA_2	563.0 / 269.0	3.83	11392.08	585.085583	150.5	false
PFDoA_1	613.0 / 569.0	4.11	176881.65	507.066970	383.4	false
PFDoA_2	613.0 / 319.0	4.11	29345.59	531.157147	282.3	false
PFTrDA_1	663.0 / 619.0	4.36	153271.81	452.740787	539.5	false
PFTrDA_2	663.0 / 169.0	4.36	10446.97	467.337333	231.0	false
PFTeDA_1	713.0 / 669.0	4.58	194920.48	504.192869	1043.6	false
PFTeDA_2	713.0 / 169.0	4.58	9520.51	503.867021	572.8	false
NMeFOSAA_1	570.0 / 419.0	3.66	25942.22	429.345311	543.2	false
NMeFOSAA_2	570.0 / 512.0	3.66	13927.12	376.857105	561.8	false
NEtFOSAA_1	584.0 / 419.0	3.82	25050.06	419.389608	464.9	false
NEtFOSAA_2	584.0 / 483.0	3.81	2285.31	616.043667	3911.2	false

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Summary Quant Report

Sample Name	KB77 CCV	**Injection Vial**	22
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T22:26:52	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	672413.29	2322.242184	508.9	false
PFBS_2	298.9 / 99.0	1.55	204354.70	2405.198838	478.7	false
PFHxA_1	313.0 / 269.0	1.87	486728.91	2684.553499	124.6	false
PFHxA_2	313.0 / 119.0	1.87	33126.46	2433.262799	89.3	false
PFHpA_1	363.0 / 319.0	2.28	468782.11	2300.150540	276.0	false
PFHpA_2	363.0 / 169.0	2.28	9784.21	2199.027765	145.7	false
PFHxS_1	399.0 / 80.0	2.30	710258.67	2562.982634	640.6	false
PFHxS_2	399.0 / 99.0	2.30	201338.51	2601.047254	726.9	false
PFOA_1	413.0 / 369.0	2.69	674074.49	2414.839164	495.2	false
PFOA_2	413.0 / 169.0	2.69	41477.02	2288.022419	270.2	false
PFNA_1	463.0 / 419.0	3.09	617599.62	2461.190173	417.2	false
PFNA_2	463.0 / 219.0	3.09	194641.75	2517.862973	518.5	false
PFOS_1	499.0 / 80.0	3.08	1036710.88	2211.970335	268.4	false
PFOS_2	499.0 / 99.0	3.08	188682.56	2317.507414	505.6	false
PFDA_1	513.0 / 469.0	3.44	745941.63	2315.516284	664.5	false
PFDA_2	513.0 / 219.0	3.44	32278.45	2431.142037	230.6	false
PFUnA_1	563.0 / 519.0	3.76	747738.20	2445.384516	437.6	false
PFUnA_2	563.0 / 269.0	3.76	33639.73	2218.955034	276.2	false
PFDoA_1	613.0 / 569.0	4.04	716145.43	2487.970055	593.2	false
PFDoA_2	613.0 / 319.0	4.04	110848.99	2463.809113	475.3	false
PFTrDA_1	663.0 / 619.0	4.28	640196.30	2581.520469	889.5	false
PFTrDA_2	663.0 / 169.0	4.28	42493.63	2605.556865	462.4	false
PFTeDA_1	713.0 / 669.0	4.49	737127.11	2618.080958	1566.8	false
PFTeDA_2	713.0 / 169.0	4.49	36102.17	2645.330359	816.5	false
NMeFOSAA_1	570.0 / 419.0	3.59	100781.30	2696.349725	648.3	false
NMeFOSAA_2	570.0 / 512.0	3.59	57560.06	2810.677429	783.2	false
NEtFOSAA_1	584.0 / 419.0	3.75	100695.85	2273.071945	696.7	false
NEtFOSAA_2	584.0 / 483.0	3.75	5784.27	2196.441577	389.3	false

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Summary Quant Report

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Sample Name	KB76 CCV	**Injection Vial**	29
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:53:48	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	333531.66	986.691854	420.7	false
PFBS_2	298.9 / 99.0	1.55	105128.84	1061.248612	395.1	false
PFHxA_1	313.0 / 269.0	1.87	247129.86	966.012728	73.4	false
PFHxA_2	313.0 / 119.0	1.87	16164.36	827.216460	47.3	false
PFHpA_1	363.0 / 319.0	2.28	241027.03	1004.898918	238.2	false
PFHpA_2	363.0 / 169.0	2.27	5178.34	950.708776	128.4	false
PFHxS_1	399.0 / 80.0	2.30	351659.20	1072.365734	419.6	false
PFHxS_2	399.0 / 99.0	2.30	99763.18	1086.321195	486.3	false
PFOA_1	413.0 / 369.0	2.68	362275.17	1035.491532	291.5	false
PFOA_2	413.0 / 169.0	2.68	19513.85	857.036091	194.8	false
PFNA_1	463.0 / 419.0	3.08	305238.37	1047.997138	316.1	false
PFNA_2	463.0 / 219.0	3.08	96399.87	1077.037555	388.1	false
PFOS_1	499.0 / 80.0	3.08	522326.33	982.860895	147.9	false
PFOS_2	499.0 / 99.0	3.08	94272.51	1020.364587	610.2	false
PFDA_1	513.0 / 469.0	3.43	391918.74	1009.965193	409.9	false
PFDA_2	513.0 / 219.0	3.43	15285.06	952.774350	173.5	false
PFUnA_1	563.0 / 519.0	3.76	366319.06	1020.238968	325.8	false
PFUnA_2	563.0 / 269.0	3.75	18651.17	1053.764625	201.7	false
PFDoA_1	613.0 / 569.0	4.03	347061.09	976.057556	393.7	false
PFDoA_2	613.0 / 319.0	4.03	53447.13	954.388605	269.7	false
PFTrDA_1	663.0 / 619.0	4.28	320084.24	1089.692092	759.3	false
PFTrDA_2	663.0 / 169.0	4.27	20210.24	1042.502485	319.5	false
PFTeDA_1	713.0 / 669.0	4.49	351189.36	1046.607861	1163.6	false
PFTeDA_2	713.0 / 169.0	4.49	17003.84	1041.898346	597.5	false
NMeFOSAA_1	570.0 / 419.0	3.59	50746.54	1042.149783	487.4	false
NMeFOSAA_2	570.0 / 512.0	3.59	25589.76	920.903758	899.6	false
NEtFOSAA_1	584.0 / 419.0	3.75	51177.13	925.608913	475.0	false
NEtFOSAA_2	584.0 / 483.0	3.76	3415.05	1014.791195	191.5	false

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Summary Ion Ratio Report

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:13:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	0.280	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

Sample Name	KB76 CCV	**Injection Vial**	33
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:22:00	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.86	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	0.310	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	0.300	0.306	ü
PFOS_1	499.0 / 80.0	3.06	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	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	0.170	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	3.58	NMeFOSAA	0.540	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.070	0.062	ü

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Summary Ion Ratio Report

Sample Name	KB77 CCV	**Injection Vial**	43
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:10:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.080	0.077	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	0.280	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	0.310	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	3.42	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	4.25	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	0.570	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.070	0.062	ü

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Summary Ion Ratio Report

Sample Name	KB76 CCV	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:32:19	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	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	2.67	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.330	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	0.060	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	4.25	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	0.560	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.070	0.062	ü

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Summary Ion Ratio Report

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Sample Name	KB77 CCV	**Injection Vial**	9
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:20:59	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.080	0.077	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	0.280	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	0.300	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	3.42	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	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.160	0.160	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.46	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.550	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

Sample Name	KB76 CCV	**Injection Vial**	20
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:20:24	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	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	0.030	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	4.02	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.160	0.160	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.46	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.58	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.520	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

Sample Name	KB77 CCV	**Injection Vial**	30
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:09:03	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	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	2.27	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	0.070	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	0.180	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	0.070	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

Sample Name	KB76 CCV	**Injection Vial**	36
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:14:13	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	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	2.67	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	0.320	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	0.070	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	3.58	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.550	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

Sample Name	KB76 CCV	**Injection Vial**	10
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T01:29:53	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	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	0.280	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	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.300	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	3.42	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	0.060	0.049	ü
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.170	0.160	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	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

Sample Name	KB75 ISC	**Injection Vial**	1
Sample ID	Instrument Sensitivity Check	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T18:16:51	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
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	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.91	PFHxA			
PFHxA_2	313.0 / 119.0	1.91	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.33	PFHpA			
PFHpA_2	363.0 / 169.0	2.32	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.35	PFHxS			
PFHxS_2	399.0 / 99.0	2.35	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.74	PFOA			
PFOA_2	413.0 / 169.0	2.74	PFOA	0.080	0.065	ü
PFNA_1	463.0 / 419.0	3.14	PFNA			
PFNA_2	463.0 / 219.0	3.14	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	3.14	PFOS			
PFOS_2	499.0 / 99.0	3.14	PFOS	0.190	0.174	ü
PFDA_1	513.0 / 469.0	3.50	PFDA			
PFDA_2	513.0 / 219.0	3.50	PFDA	0.050	0.041	ü
PFUnA_1	563.0 / 519.0	3.83	PFUnA			
PFUnA_2	563.0 / 269.0	3.83	PFUnA	0.060	0.049	ü
PFDoA_1	613.0 / 569.0	4.11	PFDoA			
PFDoA_2	613.0 / 319.0	4.11	PFDoA	0.170	0.160	ü
PFTrDA_1	663.0 / 619.0	4.36	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.36	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	3.66	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.66	NMeFOSAA	0.540	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.82	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.81	NEtFOSAA	0.090	0.062	ü

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Summary Ion Ratio Report

Sample Name	KB77 CCV	**Injection Vial**	22
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T22:26:52	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.28	PFHpA			
PFHpA_2	363.0 / 169.0	2.28	PFHpA	0.020	0.025	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	2.69	PFOA			
PFOA_2	413.0 / 169.0	2.69	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.09	PFNA			
PFNA_2	463.0 / 219.0	3.09	PFNA	0.320	0.306	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.180	0.174	ü
PFDA_1	513.0 / 469.0	3.44	PFDA			
PFDA_2	513.0 / 219.0	3.44	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.76	PFUnA			
PFUnA_2	563.0 / 269.0	3.76	PFUnA	0.040	0.049	ü
PFDoA_1	613.0 / 569.0	4.04	PFDoA			
PFDoA_2	613.0 / 319.0	4.04	PFDoA	0.150	0.160	ü
PFTrDA_1	663.0 / 619.0	4.28	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.28	PFTrDA	0.070	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	3.59	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.59	NMeFOSAA	0.570	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.75	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.75	NEtFOSAA	0.060	0.062	ü

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Summary Ion Ratio Report

Sample Name	KB76 CCV	**Injection Vial**	29
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:53:48	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
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	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.28	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	0.050	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	0.180	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	3.76	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	0.150	0.160	ü
PFTrDA_1	663.0 / 619.0	4.28	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	3.59	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.59	NMeFOSAA	0.500	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.75	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.76	NEtFOSAA	0.070	0.062	ü

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Summary Internal Standard Report

Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:13:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	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	KB76 CCV	**Injection Vial**	33
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:22:00	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	16158.92	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	16158.92	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	39283.43	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	39283.43	250.00
PFHpA_1	363.0 / 319.0	2.27	13C4-PFHpA	367.0 / 322.0	40977.87	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	40977.87	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	15287.84	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	15287.84	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	53651.80	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	53651.80	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	59577.97	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	59577.97	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	17178.99	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	17178.99	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	62757.15	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	62757.15	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	55703.49	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	55703.49	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	60918.57	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	60918.57	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	47048.92	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	47048.92	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	47048.92	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	47048.92	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	9506.75	250.00
NMeFOSAA_2	570.0 / 512.0	3.58	d3-MeFOSAA	573.0 / 419.0	9506.75	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	12579.21	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	12579.21	250.00

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Summary Internal Standard Report

Sample Name	KB77 CCV	**Injection Vial**	43
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:10:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	28259.52	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	28259.52	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	64292.97	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	64292.97	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	64700.21	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	64700.21	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	25265.62	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	25265.62	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	94792.14	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	94792.14	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	86832.50	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	86832.50	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	27352.82	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	27352.82	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	102243.27	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	102243.27	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	97190.45	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	97190.45	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	92543.69	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	92543.69	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	75021.85	250.00
PFTrDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	75021.85	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	75021.85	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	75021.85	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	17215.81	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	17215.81	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	17357.25	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	17357.25	250.00

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Summary Internal Standard Report

Sample Name	KB76 CCV	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:32:19	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	28504.22	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	28504.22	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	63409.68	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	63409.68	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	65942.58	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	65942.58	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	24680.90	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	24680.90	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	89251.86	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	89251.86	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	91475.46	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	91475.46	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	27134.10	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	27134.10	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	103917.10	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	103917.10	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	102352.48	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	102352.48	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	94690.15	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	94690.15	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	75814.48	250.00
PFTrDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	75814.48	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	75814.48	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	75814.48	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	15996.61	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	15996.61	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	19480.47	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	19480.47	250.00

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Summary Internal Standard Report

Sample Name	KB77 CCV	**Injection Vial**	9
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:20:59	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	28582.96	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	28582.96	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	59847.85	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	59847.85	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	64750.88	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	64750.88	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	25474.47	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	25474.47	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	83495.49	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	83495.49	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	83369.98	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	83369.98	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	26640.73	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	26640.73	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	94122.67	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	94122.67	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	98879.82	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	98879.82	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	92147.93	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	92147.93	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	72388.31	250.00
PFTrDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	72388.31	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	72388.31	250.00
PFTeDA_2	713.0 / 169.0	4.46	13C2-PFTeDA	715.0 / 670.0	72388.31	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	14173.79	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	14173.79	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	17068.65	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	17068.65	250.00

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Summary Internal Standard Report

Sample Name	KB76 CCV	**Injection Vial**	20
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:20:24	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	28580.97	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	28580.97	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	62592.91	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	62592.91	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	69472.24	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	69472.24	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	26286.46	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	26286.46	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	89852.25	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	89852.25	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	96313.51	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	96313.51	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	29653.75	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	29653.75	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	101413.46	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	101413.46	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	103573.12	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	103573.12	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	100503.50	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	100503.50	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	77359.86	250.00
PFTrDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	77359.86	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	77359.86	250.00
PFTeDA_2	713.0 / 169.0	4.46	13C2-PFTeDA	715.0 / 670.0	77359.86	250.00
NMeFOSAA_1	570.0 / 419.0	3.58	d3-MeFOSAA	573.0 / 419.0	15247.11	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	15247.11	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	16607.88	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	16607.88	250.00

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Summary Internal Standard Report

Sample Name	KB77 CCV	**Injection Vial**	30
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:09:03	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	30494.63	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	30494.63	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	65999.91	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	65999.91	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	74641.84	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	74641.84	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	26778.57	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	26778.57	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	93956.92	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	93956.92	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	99145.59	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	99145.59	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	34503.77	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	34503.77	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	106098.00	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	106098.00	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	102039.97	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	102039.97	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	107366.24	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	107366.24	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	85574.32	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	85574.32	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	85574.32	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	85574.32	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	17463.73	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	17463.73	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	18580.39	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	18580.39	250.00

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Summary Internal Standard Report

Sample Name	KB76 CCV	**Injection Vial**	36
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:14:13	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	27047.43	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	27047.43	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	62517.66	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	62517.66	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	70072.09	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	70072.09	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	25773.30	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	25773.30	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	87097.44	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	87097.44	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	96371.81	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	96371.81	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	35722.70	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	35722.70	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	101445.20	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	101445.20	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	94046.79	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	94046.79	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	100933.21	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	100933.21	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	75861.09	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	75861.09	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	75861.09	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	75861.09	250.00
NMeFOSAA_1	570.0 / 419.0	3.58	d3-MeFOSAA	573.0 / 419.0	15267.32	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	15267.32	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	17376.12	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	17376.12	250.00

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Summary Internal Standard Report

Sample Name	KB76 CCV	**Injection Vial**	10
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T01:29:53	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	24065.50	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	24065.50	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	53572.26	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	53572.26	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	61184.56	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	61184.56	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	22417.86	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	22417.86	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	79120.85	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	79120.85	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	83892.22	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	83892.22	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	26033.27	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	26033.27	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	92936.99	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	92936.99	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	84544.87	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	84544.87	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	86029.84	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	86029.84	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	68914.25	250.00
PFTrDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	68914.25	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	68914.25	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	68914.25	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	14892.52	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	14892.52	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	16131.46	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	16131.46	250.00

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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**	18-0590_18-0588_18-0589_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	KB76 CCV	**Injection Vial**	33
Sample ID		**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:22:00	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	65473.33	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	19659.10	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	19659.10	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	50610.87	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	50610.87	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	50610.87	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	50610.87	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	65473.33	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	65473.33	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	65473.33	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	19659.10	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	19659.10	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	19659.10	239.25

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Summary Internal Standard Report

Sample Name	KB77 CCV	**Injection Vial**	43
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:10:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	102156.68	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	28692.79	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	28692.79	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	83815.50	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	83815.50	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	83815.50	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	83815.50	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	102156.68	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	102156.68	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	102156.68	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	28692.79	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	28692.79	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	28692.79	239.25

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Summary Internal Standard Report

Sample Name	KB76 CCV	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:32:19	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	102258.43	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	30615.80	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	30615.80	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	78548.39	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	78548.39	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	78548.39	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	78548.39	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	102258.43	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	102258.43	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	102258.43	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	30615.80	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	30615.80	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	30615.80	239.25

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Summary Internal Standard Report

Sample Name	KB77 CCV	**Injection Vial**	9
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:20:59	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	96775.95	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	29215.01	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	29215.01	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	80243.20	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	80243.20	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	80243.20	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	80243.20	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	96775.95	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	96775.95	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	96775.95	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	29215.01	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	29215.01	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	29215.01	239.25

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Summary Internal Standard Report

Sample Name	KB76 CCV	**Injection Vial**	20
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:20:24	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	107079.17	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	30750.59	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	30750.59	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	92560.39	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	92560.39	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	92560.39	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	92560.39	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	107079.17	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	107079.17	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	107079.17	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	30750.59	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	30750.59	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	30750.59	239.25

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Summary Internal Standard Report

Sample Name	KB77 CCV	**Injection Vial**	30
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:09:03	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	112816.22	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	32921.50	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	32921.50	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	89011.06	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	89011.06	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	89011.06	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	89011.06	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	112816.22	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	112816.22	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	112816.22	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	32921.50	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	32921.50	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	32921.50	239.25

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Summary Internal Standard Report

Sample Name	KB76 CCV	**Injection Vial**	36
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:14:13	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	97797.45	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	30615.59	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	30615.59	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	87920.60	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	87920.60	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	87920.60	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	87920.60	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	97797.45	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	97797.45	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	97797.45	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	30615.59	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	30615.59	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	30615.59	239.25

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Summary Internal Standard Report

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Sample Name	KB76 CCV	**Injection Vial**	10
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T01:29:53	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	92280.41	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	26912.55	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	26912.55	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	75749.56	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	75749.56	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	75749.56	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	75749.56	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	92280.41	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	92280.41	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	92280.41	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	26912.55	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	26912.55	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	26912.55	239.25

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Summary Internal Standard Report

Sample Name	KB75 ISC	**Injection Vial**	1
Sample ID	Instrument Sensitivity Check	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T18:16:51	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
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	26543.28	232.25
PFBS_2	298.9 / 99.0	1.57	13C3-PFBS	302.0 / 99.0	26543.28	232.25
PFHxA_1	313.0 / 269.0	1.91	13C5-PFHxA	318.0 / 273.0	62579.70	250.00
PFHxA_2	313.0 / 119.0	1.91	13C5-PFHxA	318.0 / 273.0	62579.70	250.00
PFHpA_1	363.0 / 319.0	2.33	13C4-PFHpA	367.0 / 322.0	69859.85	250.00
PFHpA_2	363.0 / 169.0	2.32	13C4-PFHpA	367.0 / 322.0	69859.85	250.00
PFHxS_1	399.0 / 80.0	2.35	13C3-PFHxS	402.0 / 99.0	24467.83	236.50
PFHxS_2	399.0 / 99.0	2.35	13C3-PFHxS	402.0 / 99.0	24467.83	236.50
PFOA_1	413.0 / 369.0	2.74	13C8-PFOA	421.0 / 376.0	86658.98	250.00
PFOA_2	413.0 / 169.0	2.74	13C8-PFOA	421.0 / 376.0	86658.98	250.00
PFNA_1	463.0 / 419.0	3.14	13C9-PFNA	472.0 / 427.0	88035.85	250.00
PFNA_2	463.0 / 219.0	3.14	13C9-PFNA	472.0 / 427.0	88035.85	250.00
PFOS_1	499.0 / 80.0	3.14	13C8-PFOS	507.0 / 99.0	30825.96	239.25
PFOS_2	499.0 / 99.0	3.14	13C8-PFOS	507.0 / 99.0	30825.96	239.25
PFDA_1	513.0 / 469.0	3.50	13C6-PFDA	519.0 / 474.0	97968.15	250.00
PFDA_2	513.0 / 219.0	3.50	13C6-PFDA	519.0 / 474.0	97968.15	250.00
PFUnA_1	563.0 / 519.0	3.83	13C7-PFUnA	570.0 / 525.0	93214.36	250.00
PFUnA_2	563.0 / 269.0	3.83	13C7-PFUnA	570.0 / 525.0	93214.36	250.00
PFDoA_1	613.0 / 569.0	4.11	13C2-PFDoA	615.0 / 570.0	91153.41	250.00
PFDoA_2	613.0 / 319.0	4.11	13C2-PFDoA	615.0 / 570.0	91153.41	250.00
PFTrDA_1	663.0 / 619.0	4.36	13C2-PFTeDA	715.0 / 670.0	82671.66	250.00
PFTrDA_2	663.0 / 169.0	4.36	13C2-PFTeDA	715.0 / 670.0	82671.66	250.00
PFTeDA_1	713.0 / 669.0	4.58	13C2-PFTeDA	715.0 / 670.0	82671.66	250.00
PFTeDA_2	713.0 / 169.0	4.58	13C2-PFTeDA	715.0 / 670.0	82671.66	250.00
NMeFOSAA_1	570.0 / 419.0	3.66	d3-MeFOSAA	573.0 / 419.0	14257.30	250.00
NMeFOSAA_2	570.0 / 512.0	3.66	d3-MeFOSAA	573.0 / 419.0	14257.30	250.00
NEtFOSAA_1	584.0 / 419.0	3.82	d5-EtFOSAA	589.0 / 419.0	16047.60	250.00
NEtFOSAA_2	584.0 / 483.0	3.81	d5-EtFOSAA	589.0 / 419.0	16047.60	250.00

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Summary Internal Standard Report

Sample Name	KB77 CCV	**Injection Vial**	22
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T22:26:52	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
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	23074.39	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	23074.39	232.25
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	45443.87	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	45443.87	250.00
PFHpA_1	363.0 / 319.0	2.28	13C4-PFHpA	367.0 / 322.0	57600.50	250.00
PFHpA_2	363.0 / 169.0	2.28	13C4-PFHpA	367.0 / 322.0	57600.50	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	19101.33	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	19101.33	236.50
PFOA_1	413.0 / 369.0	2.69	13C8-PFOA	421.0 / 376.0	69156.30	250.00
PFOA_2	413.0 / 169.0	2.69	13C8-PFOA	421.0 / 376.0	69156.30	250.00
PFNA_1	463.0 / 419.0	3.09	13C9-PFNA	472.0 / 427.0	74735.18	250.00
PFNA_2	463.0 / 219.0	3.09	13C9-PFNA	472.0 / 427.0	74735.18	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	23423.82	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	23423.82	239.25
PFDA_1	513.0 / 469.0	3.44	13C6-PFDA	519.0 / 474.0	76731.26	250.00
PFDA_2	513.0 / 219.0	3.44	13C6-PFDA	519.0 / 474.0	76731.26	250.00
PFUnA_1	563.0 / 519.0	3.76	13C7-PFUnA	570.0 / 525.0	72552.39	250.00
PFUnA_2	563.0 / 269.0	3.76	13C7-PFUnA	570.0 / 525.0	72552.39	250.00
PFDoA_1	613.0 / 569.0	4.04	13C2-PFDoA	615.0 / 570.0	78619.39	250.00
PFDoA_2	613.0 / 319.0	4.04	13C2-PFDoA	615.0 / 570.0	78619.39	250.00
PFTrDA_1	663.0 / 619.0	4.28	13C2-PFTeDA	715.0 / 670.0	64241.58	250.00
PFTrDA_2	663.0 / 169.0	4.28	13C2-PFTeDA	715.0 / 670.0	64241.58	250.00
PFTeDA_1	713.0 / 669.0	4.49	13C2-PFTeDA	715.0 / 670.0	64241.58	250.00
PFTeDA_2	713.0 / 169.0	4.49	13C2-PFTeDA	715.0 / 670.0	64241.58	250.00
NMeFOSAA_1	570.0 / 419.0	3.59	d3-MeFOSAA	573.0 / 419.0	9788.76	250.00
NMeFOSAA_2	570.0 / 512.0	3.59	d3-MeFOSAA	573.0 / 419.0	9788.76	250.00
NEtFOSAA_1	584.0 / 419.0	3.75	d5-EtFOSAA	589.0 / 419.0	12210.39	250.00
NEtFOSAA_2	584.0 / 483.0	3.75	d5-EtFOSAA	589.0 / 419.0	12210.39	250.00

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Summary Internal Standard Report

Sample Name	KB76 CCV	**Injection Vial**	29
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:53:48	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
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	26850.56	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	26850.56	232.25
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	62732.09	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	62732.09	250.00
PFHpA_1	363.0 / 319.0	2.28	13C4-PFHpA	367.0 / 322.0	67070.31	250.00
PFHpA_2	363.0 / 169.0	2.27	13C4-PFHpA	367.0 / 322.0	67070.31	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	22361.36	236.50
PFHxS_2	399.0 / 99.0	2.30	13C3-PFHxS	402.0 / 99.0	22361.36	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	85962.73	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	85962.73	250.00
PFNA_1	463.0 / 419.0	3.08	13C9-PFNA	472.0 / 427.0	85235.60	250.00
PFNA_2	463.0 / 219.0	3.08	13C9-PFNA	472.0 / 427.0	85235.60	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	26586.99	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	26586.99	239.25
PFDA_1	513.0 / 469.0	3.43	13C6-PFDA	519.0 / 474.0	91339.16	250.00
PFDA_2	513.0 / 219.0	3.43	13C6-PFDA	519.0 / 474.0	91339.16	250.00
PFUnA_1	563.0 / 519.0	3.76	13C7-PFUnA	570.0 / 525.0	84716.91	250.00
PFUnA_2	563.0 / 269.0	3.75	13C7-PFUnA	570.0 / 525.0	84716.91	250.00
PFDoA_1	613.0 / 569.0	4.03	13C2-PFDoA	615.0 / 570.0	95407.36	250.00
PFDoA_2	613.0 / 319.0	4.03	13C2-PFDoA	615.0 / 570.0	95407.36	250.00
PFTrDA_1	663.0 / 619.0	4.28	13C2-PFTeDA	715.0 / 670.0	74768.37	250.00
PFTrDA_2	663.0 / 169.0	4.27	13C2-PFTeDA	715.0 / 670.0	74768.37	250.00
PFTeDA_1	713.0 / 669.0	4.49	13C2-PFTeDA	715.0 / 670.0	74768.37	250.00
PFTeDA_2	713.0 / 169.0	4.49	13C2-PFTeDA	715.0 / 670.0	74768.37	250.00
NMeFOSAA_1	570.0 / 419.0	3.59	d3-MeFOSAA	573.0 / 419.0	12344.77	250.00
NMeFOSAA_2	570.0 / 512.0	3.59	d3-MeFOSAA	573.0 / 419.0	12344.77	250.00
NEtFOSAA_1	584.0 / 419.0	3.75	d5-EtFOSAA	589.0 / 419.0	15110.83	250.00
NEtFOSAA_2	584.0 / 483.0	3.76	d5-EtFOSAA	589.0 / 419.0	15110.83	250.00

Raw Analytical Data

BATTELLE

Summary Quant Report

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Printed: 25/10/2018 11:39:32 AM

Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:02:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	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

BATTELLE

Summary Quant Report

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Sample Name	CR902PB-FS(3)	**Injection Vial**	35
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:43:47	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.29	11061.37	8.030355	35.4	true
PFHxS_2	399.0 / 99.0	2.29	3645.90	7.944740	36.2	false
PFOA_1	413.0 / 369.0	2.67	14126.08	20.606085	25.4	false
PFOA_2	413.0 / 169.0	2.68	584.07	8.349891	12.0	false
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.04	23543.70	40.612035	46.4	false
PFOS_2	499.0 / 99.0	3.06	4568.44	43.781022	55.7	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	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	CR903LCS-FS(3)	**Injection Vial**	36
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:54:39	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	2531376.74	5979.953979	1456.3	false
PFBS_2	298.9 / 99.0	1.53	752551.55	6055.373092	1099.2	false
PFHxA_1	313.0 / 269.0	1.85	1698857.09	6575.669523	75.8	false
PFHxA_2	313.0 / 119.0	1.85	123307.62	6390.514150	69.6	false
PFHpA_1	363.0 / 319.0	2.26	1642315.08	6509.665856	374.8	false
PFHpA_2	363.0 / 169.0	2.26	30638.26	5668.487263	355.7	false
PFHxS_1	399.0 / 80.0	2.28	2478005.69	6238.556271	928.2	false
PFHxS_2	399.0 / 99.0	2.28	682019.19	6153.158572	1052.8	false
PFOA_1	413.0 / 369.0	2.67	2421095.74	7083.130205	659.1	false
PFOA_2	413.0 / 169.0	2.67	144730.48	6519.669655	449.3	false
PFNA_1	463.0 / 419.0	3.06	2184739.55	7320.065887	766.6	false
PFNA_2	463.0 / 219.0	3.06	680796.43	7395.253906	1001.8	false
PFOS_1	499.0 / 80.0	3.06	3823793.59	7138.121665	627.6	false
PFOS_2	499.0 / 99.0	3.06	665457.97	7154.369263	1160.2	false
PFDA_1	513.0 / 469.0	3.42	2632665.99	6339.710837	904.2	false
PFDA_2	513.0 / 219.0	3.42	116551.95	6812.653961	931.9	false
PFUnA_1	563.0 / 519.0	3.74	2723217.04	6519.626967	720.1	false
PFUnA_2	563.0 / 269.0	3.74	143991.45	6934.962968	471.3	false
PFDoA_1	613.0 / 569.0	4.02	2377640.48	6076.903450	910.5	false
PFDoA_2	613.0 / 319.0	4.02	391684.41	6425.351263	773.2	false
PFTrDA_1	663.0 / 619.0	4.26	2112219.88	6456.755454	1448.1	false
PFTrDA_2	663.0 / 169.0	4.26	147159.98	6847.646467	766.2	false
PFTeDA_1	713.0 / 669.0	4.47	2442783.35	6589.572588	2322.7	false
PFTeDA_2	713.0 / 169.0	4.47	119495.86	6657.708288	1439.1	false
NMeFOSAA_1	570.0 / 419.0	3.57	477121.38	6919.871791	1555.4	false
NMeFOSAA_2	570.0 / 512.0	3.57	252424.20	6742.404174	942.8	false
NEtFOSAA_1	584.0 / 419.0	3.73	455439.94	7458.087315	1370.7	true
NEtFOSAA_2	584.0 / 483.0	3.73	26815.83	7505.348831	1138.6	false

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Summary Quant Report

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Sample Name	J8438-FS(3)	**Injection Vial**	37
Sample ID	VC-MS09-SS01-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:05:31	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	249392.41	624.167064	460.3	false
PFBS_2	298.9 / 99.0	1.53	75091.90	641.926337	372.2	false
PFHxA_1	313.0 / 269.0	1.85	418327.45	1535.533044	51.9	false
PFHxA_2	313.0 / 119.0	1.85	26256.95	1271.721073	36.2	false
PFHpA_1	363.0 / 319.0	2.26	93873.06	321.797309	70.7	false
PFHpA_2	363.0 / 169.0	2.26	1675.33	198.265525	44.6	false
PFHxS_1	399.0 / 80.0	2.28	1720270.71	4689.626134	1146.9	false
PFHxS_2	399.0 / 99.0	2.28	495790.25	4843.269389	1382.5	false
PFOA_1	413.0 / 369.0	2.67	559781.04	1465.528198	300.6	false
PFOA_2	413.0 / 169.0	2.67	34938.34	1408.663664	247.3	false
PFNA_1	463.0 / 419.0	3.06	925998.78	3044.030959	463.6	false
PFNA_2	463.0 / 219.0	3.06	281463.40	3001.375952	478.7	false
PFOS_1	499.0 / 80.0	3.06	40875639.73	80515.501217	2051.5	false
PFOS_2	499.0 / 99.0	3.06	7808646.23	88599.139941	4007.5	false
PFDA_1	513.0 / 469.0	3.42	64312.45	127.505814	218.5	false
PFDA_2	513.0 / 219.0	3.42	2828.01	135.297763	108.7	false
PFUnA_1	563.0 / 519.0	3.74	95389.09	208.956258	188.0	false
PFUnA_2	563.0 / 269.0	3.73	5178.85	238.929305	102.5	false
PFDoA_1	613.0 / 569.0	4.01	14253.21	10.398981	100.8	false
PFDoA_2	613.0 / 319.0	4.02	1841.12	< 0	44.3	true
PFTrDA_1	663.0 / 619.0	4.25	19290.83	26.802812	167.3	false
PFTrDA_2	663.0 / 169.0	4.22	2602.70	86.919462	83.4	false
PFTeDA_1	713.0 / 669.0	4.43	15899.27	1.632768	126.2	false
PFTeDA_2	713.0 / 169.0	4.47	433.79	< 0	40.3	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

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Summary Quant Report

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Printed: 25/10/2018 11:39:49 AM

Sample Name	J8438-FS-D(5)	**Injection Vial**	38
Sample ID	VC-MS09-SS01-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:16:25	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.06	9730486.51	17284.059365	1262.4	false
PFOS_2	499.0 / 99.0	3.06	1811697.59	18535.640135	2804.8	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

BATTELLE

Summary Quant Report

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Sample Name	J8439-FS(3)	**Injection Vial**	39
Sample ID	VC-MS09-SB01-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:27:18	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	1394381.91	3625.335175	1188.7	false
PFBS_2	298.9 / 99.0	1.53	411307.95	3643.199910	783.7	false
PFHxA_1	313.0 / 269.0	1.85	4663429.16	18075.733037	190.6	false
PFHxA_2	313.0 / 119.0	1.85	313348.32	16287.471017	182.3	false
PFHpA_1	363.0 / 319.0	2.26	448961.70	1798.218274	194.8	false
PFHpA_2	363.0 / 169.0	2.26	9769.46	1780.128834	174.6	false
PFHxS_1	399.0 / 80.0	2.28	3849859.10	10312.473343	1176.3	false
PFHxS_2	399.0 / 99.0	2.28	1093505.76	10501.342126	1474.3	false
PFOA_1	413.0 / 369.0	2.67	665043.51	1597.830574	318.9	false
PFOA_2	413.0 / 169.0	2.67	44174.75	1635.408001	274.2	false
PFNA_1	463.0 / 419.0	3.06	892503.88	3113.027581	535.2	false
PFNA_2	463.0 / 219.0	3.06	274926.99	3110.953869	573.7	false
PFOS_1	499.0 / 80.0	3.06	39890440.80	69025.451883	2007.3	false
PFOS_2	499.0 / 99.0	3.06	7435455.83	74111.500474	4071.1	false
PFDA_1	513.0 / 469.0	3.42	37433.12	60.892188	146.2	false
PFDA_2	513.0 / 219.0	3.44	1862.88	75.784633	67.4	false
PFUnA_1	563.0 / 519.0	3.74	39071.06	78.135671	117.9	false
PFUnA_2	563.0 / 269.0	3.69	2793.18	126.676437	30.4	false
PFDoA_1	613.0 / 569.0	4.01	5620.28	< 0	60.8	false
PFDoA_2	613.0 / 319.0	4.03	1175.12	< 0	25.8	true
PFTrDA_1	663.0 / 619.0	4.26	3205.12	< 0	81.0	false
PFTrDA_2	663.0 / 169.0	4.20	255.93	< 0	14.5	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

BATTELLE

Summary Quant Report

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Sample Name	J8439-FS-D(5)	**Injection Vial**	40
Sample ID	VC-MS09-SB01-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:38:11	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.06	10163530.15	15499.569478	1525.2	false
PFOS_2	499.0 / 99.0	3.06	1871564.27	16439.419205	2313.2	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8440-FS(3)	**Injection Vial**	41
Sample ID	VC-MS09-SB01-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:49:05	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	207512.23	480.036690	359.5	false
PFBS_2	298.9 / 99.0	1.53	62310.64	492.790638	305.8	false
PFHxA_1	313.0 / 269.0	1.85	947270.79	3345.543774	82.7	false
PFHxA_2	313.0 / 119.0	1.85	63254.90	2979.061727	64.9	false
PFHpA_1	363.0 / 319.0	2.26	270167.60	944.167752	150.6	false
PFHpA_2	363.0 / 169.0	2.26	6425.65	993.757218	165.5	false
PFHxS_1	399.0 / 80.0	2.28	3962027.38	9685.837647	1276.8	false
PFHxS_2	399.0 / 99.0	2.28	1105551.83	9688.836666	1713.5	false
PFOA_1	413.0 / 369.0	2.67	788140.69	2000.161144	354.5	false
PFOA_2	413.0 / 169.0	2.66	59122.10	2313.528001	277.1	false
PFNA_1	463.0 / 419.0	3.06	244885.60	755.697231	269.4	false
PFNA_2	463.0 / 219.0	3.06	79237.47	797.721224	380.0	false
PFOS_1	499.0 / 80.0	3.06	45811973.89	87498.349772	1253.6	false
PFOS_2	499.0 / 99.0	3.06	8326869.21	91609.840956	3983.2	false
PFDA_1	513.0 / 469.0	3.41	18251.65	16.095835	75.1	false
PFDA_2	513.0 / 219.0	3.41	601.81	6.317740	20.4	false
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	4.22	217.28	< 0	15.7	false
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	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	J8440-FS-D(5)	**Injection Vial**	42
Sample ID	VC-MS09-SB01-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:59:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.06	11331143.38	18128.297879	1000.2	false
PFOS_2	499.0 / 99.0	3.06	2003325.91	18460.681110	1788.5	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8441-FS(3)	**Injection Vial**	45
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:32:35	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	27815343.26	58242.109156	2117.1	false
PFBS_2	298.9 / 99.0	1.53	8524433.02	60779.783219	2573.9	false
PFHxA_1	313.0 / 269.0	1.84	41779777.03	147976.296349	585.8	false
PFHxA_2	313.0 / 119.0	1.84	3075970.24	146263.078502	536.5	false
PFHpA_1	363.0 / 319.0	2.25	15171261.20	71398.704569	690.9	false
PFHpA_2	363.0 / 169.0	2.25	318603.34	70812.090913	705.5	false
PFHxS_1	399.0 / 80.0	2.27	115237143.26	356311.425115	638.1	false
PFHxS_2	399.0 / 99.0	2.28	58664302.88	650615.538057	1279.1	false
PFOA_1	413.0 / 369.0	2.66	21292555.86	78131.820022	967.0	false
PFOA_2	413.0 / 169.0	2.65	1269851.97	71751.941318	646.9	true
PFNA_1	463.0 / 419.0	3.06	648682.76	6438.682103	320.2	false
PFNA_2	463.0 / 219.0	3.06	207655.43	6683.639944	350.6	false
PFOS_1	499.0 / 80.0	2.97	186930155.31	983380.335400	450.0	false
PFOS_2	499.0 / 99.0	3.06	94224948.97	2855314.199753	2521.9	false
PFDA_1	513.0 / 469.0	3.41	863334.24	2434.462679	423.0	false
PFDA_2	513.0 / 219.0	3.41	34939.12	2389.025075	193.2	true
PFUnA_1	563.0 / 519.0	3.72	233109.24	494.712921	283.3	false
PFUnA_2	563.0 / 269.0	3.72	7418.47	322.826376	42.5	true
PFDoA_1	613.0 / 569.0	4.00	211258.61	513.282370	389.8	false
PFDoA_2	613.0 / 319.0	4.00	20061.55	290.415695	70.2	true
PFTrDA_1	663.0 / 619.0	4.25	46391.24	94.631230	253.4	false
PFTrDA_2	663.0 / 169.0	4.21	3851.79	124.770235	123.9	true
PFTeDA_1	713.0 / 669.0	4.46	44567.50	66.516440	313.2	false
PFTeDA_2	713.0 / 169.0	4.46	1622.74	33.988277	137.6	true
NMeFOSAA_1	570.0 / 419.0	3.57	28480.96	532.255489	80.2	false
NMeFOSAA_2	570.0 / 512.0	3.56	3850.44	39.916338	62.9	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	J8441-FS-D(5)	**Injection Vial**	46
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:43:28	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	2635604.39	5709.042281	1203.0	false
PFBS_2	298.9 / 99.0	1.53	800014.86	5902.784987	1194.0	false
PFHxA_1	313.0 / 269.0	1.85	4312571.55	15389.979610	179.3	false
PFHxA_2	313.0 / 119.0	1.85	296542.69	14189.475819	178.5	false
PFHpA_1	363.0 / 319.0	2.26	1769102.37	6003.543231	433.4	false
PFHpA_2	363.0 / 169.0	2.26	37551.99	5954.158955	340.6	false
PFHxS_1	399.0 / 80.0	2.28	27584963.99	70443.976965	1728.7	false
PFHxS_2	399.0 / 99.0	2.28	8185506.76	74972.149156	2090.6	false
PFOA_1	413.0 / 369.0	2.67	2863782.84	7490.546997	540.9	false
PFOA_2	413.0 / 169.0	2.66	163035.40	6565.441325	423.8	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.07	94672059.52	235130.096485	1311.6	false
PFOS_2	499.0 / 99.0	3.06	26781053.47	383140.234507	4141.8	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8441-FS-D(7)	**Injection Vial**	47
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:54:21	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.28	5696802.36	13487.861650	1444.8	false
PFHxS_2	399.0 / 99.0	2.28	1573582.83	13357.700828	1899.8	false
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.06	35418461.95	55955.183034	2667.8	false
PFOS_2	499.0 / 99.0	3.06	7150357.29	65068.925712	3790.5	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8441-FS-D(9)	**Injection Vial**	48
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:05:14	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.06	7757508.00	13731.764267	1837.7	false
PFOS_2	499.0 / 99.0	3.06	1589389.15	16204.465615	1723.3	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8442-FS(3)	**Injection Vial**	49
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:48:44	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	44666267.50	101833.330103	2675.1	false
PFBS_2	298.9 / 99.0	1.53	14112136.11	109556.480462	3203.8	false
PFHxA_1	313.0 / 269.0	1.84	63942478.80	236386.658149	649.3	false
PFHxA_2	313.0 / 119.0	1.85	5053707.81	250839.547820	585.9	false
PFHpA_1	363.0 / 319.0	2.25	22528021.23	103293.904060	841.3	false
PFHpA_2	363.0 / 169.0	2.25	464658.60	100646.902013	716.5	false
PFHxS_1	399.0 / 80.0	2.25	128907294.35	452410.047314	585.4	false
PFHxS_2	399.0 / 99.0	2.28	80202542.90	1009617.669570	1246.4	false
PFOA_1	413.0 / 369.0	2.67	36781133.12	151888.752995	965.3	false
PFOA_2	413.0 / 169.0	2.66	2440895.42	155215.867583	821.7	true
PFNA_1	463.0 / 419.0	3.06	558923.70	5074.752730	313.6	false
PFNA_2	463.0 / 219.0	3.06	182729.84	5381.642130	308.4	false
PFOS_1	499.0 / 80.0	2.96	220288220.16	1140145.644551	197.4	false
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	true
PFDA_1	513.0 / 469.0	3.40	138334.58	311.561359	173.7	false
PFDA_2	513.0 / 219.0	3.41	3418.32	176.002059	67.1	true
PFUnA_1	563.0 / 519.0	3.72	23866.88	44.402184	73.6	false
PFUnA_2	563.0 / 269.0	3.72	1229.27	56.443944	19.5	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	4027.49	< 0	87.3	true
PFTrDA_2	663.0 / 169.0	4.26	224.98	< 0	16.9	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	5378.88	50.538461	56.4	false
NMeFOSAA_2	570.0 / 512.0	3.56	1174.10	< 0	32.7	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	J8442-FS-D(5)	**Injection Vial**	50
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:59:38	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	4448393.83	10332.070965	1683.4	false
PFBS_2	298.9 / 99.0	1.53	1342474.60	10619.356020	1583.5	false
PFHxA_1	313.0 / 269.0	1.85	7067583.69	25913.939646	243.2	false
PFHxA_2	313.0 / 119.0	1.85	457055.90	22479.923130	193.0	false
PFHpA_1	363.0 / 319.0	2.26	2480509.09	9173.141240	472.8	false
PFHpA_2	363.0 / 169.0	2.26	54654.96	9485.492484	518.2	false
PFHxS_1	399.0 / 80.0	2.28	40261615.84	116489.383481	1685.1	false
PFHxS_2	399.0 / 99.0	2.28	12873086.98	133590.675864	1985.9	false
PFOA_1	413.0 / 369.0	2.67	5081443.08	14460.002218	690.6	false
PFOA_2	413.0 / 169.0	2.66	301884.91	13227.810651	580.4	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.02	136841467.36	298769.639578	559.1	false
PFOS_2	499.0 / 99.0	3.06	26791338.76	336943.922741	1537.5	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8442-FS-D(7)	**Injection Vial**	51
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:10:33	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	1.85	1380206.56	5271.382531	102.5	false
PFHxA_2	313.0 / 119.0	1.85	91339.98	4663.208446	78.3	false
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.28	8374447.66	23601.264526	1595.1	false
PFHxS_2	399.0 / 99.0	2.28	2349101.75	23740.697744	1916.9	false
PFOA_1	413.0 / 369.0	2.67	1187344.73	3219.493701	444.5	false
PFOA_2	413.0 / 169.0	2.66	65982.84	2753.573619	246.5	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.06	42041775.35	80380.916465	723.5	false
PFOS_2	499.0 / 99.0	3.06	7080457.75	77978.038230	1817.9	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8442-FS-D(9)	**Injection Vial**	52
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:21:26	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.28	1698738.70	4872.276470	949.3	false
PFHxS_2	399.0 / 99.0	2.28	478497.17	4917.547223	1324.2	false
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	2.66	13056.61	524.350067	146.8	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.06	9214574.49	14323.783391	659.0	false
PFOS_2	499.0 / 99.0	3.06	1631020.67	14603.123689	1688.7	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	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	J8443-FS(3)	**Injection Vial**	1
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:54:05	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	6735962.42	16103.678137	692.3	false
PFBS_2	298.9 / 99.0	1.53	2022827.01	16468.812313	1038.4	false
PFHxA_1	313.0 / 269.0	1.84	11639810.08	51865.674914	322.1	false
PFHxA_2	313.0 / 119.0	1.84	776137.90	46415.037599	313.5	false
PFHpA_1	363.0 / 319.0	2.25	2306776.89	10341.341934	391.7	false
PFHpA_2	363.0 / 169.0	2.25	48980.33	10310.222248	422.0	false
PFHxS_1	399.0 / 80.0	2.28	31181044.57	110670.583345	1049.0	false
PFHxS_2	399.0 / 99.0	2.28	9507865.23	121037.030115	1592.6	false
PFOA_1	413.0 / 369.0	2.66	4135464.49	15551.162017	671.7	false
PFOA_2	413.0 / 169.0	2.65	231482.23	13402.805995	521.0	true
PFNA_1	463.0 / 419.0	3.06	28836.43	171.369407	74.9	false
PFNA_2	463.0 / 219.0	3.06	8956.30	176.503551	72.1	false
PFOS_1	499.0 / 80.0	2.99	172414580.58	742131.058705	562.2	false
PFOS_2	499.0 / 99.0	3.06	53118295.14	1317032.216716	2294.5	false
PFDA_1	513.0 / 469.0	3.41	30981.65	65.831645	113.8	false
PFDA_2	513.0 / 219.0	3.41	883.50	36.674303	44.7	true
PFUnA_1	563.0 / 519.0	3.72	14839.77	28.665065	59.3	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.00	15431.07	18.316135	103.4	false
PFDoA_2	613.0 / 319.0	4.00	1623.21	< 0	17.1	true
PFTrDA_1	663.0 / 619.0	4.22	5591.02	< 0	91.1	false
PFTrDA_2	663.0 / 169.0	4.19	627.22	< 0	33.5	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	11226.64	169.916934	216.3	false
NMeFOSAA_2	570.0 / 512.0	3.57	6610.35	140.300709	206.1	false
NEtFOSAA_1	584.0 / 419.0	3.73	11051.48	184.237317	123.9	false
NEtFOSAA_2	584.0 / 483.0	3.73	594.41	119.625049	36.1	false

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Summary Quant Report

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Sample Name	J8443-FS-D(5)	**Injection Vial**	2
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:04:56	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	1.84	2593910.19	9401.821839	130.7	false
PFHxA_2	313.0 / 119.0	1.84	169311.52	8218.666548	107.1	false
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.28	7133886.75	18023.580405	988.4	false
PFHxS_2	399.0 / 99.0	2.28	2008907.17	18199.556948	1220.1	false
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.06	90718349.55	188163.747631	815.5	false
PFOS_2	499.0 / 99.0	3.06	18196957.81	217411.653400	3904.5	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8443-FS-D(7)	**Injection Vial**	3
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:15:48	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.28	1311380.12	3666.149049	768.6	false
PFHxS_2	399.0 / 99.0	2.28	363015.34	3634.734495	1038.7	false
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.06	22859851.23	43246.407609	1261.6	false
PFOS_2	499.0 / 99.0	3.06	4136628.31	45077.048657	3142.1	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8444-FS-D(7)	**Injection Vial**	4
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:26:39	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	4487060.80	9796.536874	2302.1	false
PFBS_2	298.9 / 99.0	1.53	1348792.07	10029.226118	1353.8	false
PFHxA_1	313.0 / 269.0	1.84	12957702.60	49545.679008	335.3	false
PFHxA_2	313.0 / 119.0	1.85	845551.34	43389.387824	315.1	false
PFHpA_1	363.0 / 319.0	2.25	2559117.89	10032.881171	368.6	false
PFHpA_2	363.0 / 169.0	2.24	63904.83	11776.997396	462.9	false
PFHxS_1	399.0 / 80.0	2.29	88656579.51	257607.095552	948.9	false
PFHxS_2	399.0 / 99.0	2.28	43505305.63	453423.854941	1653.1	false
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	2.93	216982038.49	1303131.692385	162.0	true
PFOS_2	499.0 / 99.0	3.04	133600545.25	4621881.064749	1581.9	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8444-FS-D(9)	**Injection Vial**	5
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:37:32	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	1.85	6389190.76	23664.200099	249.1	false
PFHxA_2	313.0 / 119.0	1.85	414786.61	20606.222224	180.3	false
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.28	66504617.51	195270.316748	1391.0	false
PFHxS_2	399.0 / 99.0	2.28	25637102.44	269999.529503	2109.8	false
PFOA_1	413.0 / 369.0	2.67	23195247.14	84488.455090	976.3	false
PFOA_2	413.0 / 169.0	2.66	1475844.71	82779.867700	721.5	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	2.98	214937824.79	896477.556444	275.4	false
PFOS_2	499.0 / 99.0	3.06	97301645.80	2337720.235076	1416.5	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8444-FS-D(11)	**Injection Vial**	6
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:48:24	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	1.84	2092881.00	7330.378514	113.2	false
PFHxA_2	313.0 / 119.0	1.85	141871.18	6651.883801	99.3	false
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.28	28598093.97	76881.179701	1936.5	false
PFHxS_2	399.0 / 99.0	2.28	8752722.94	84394.679670	2110.5	false
PFOA_1	413.0 / 369.0	2.67	9421635.13	28501.953046	983.4	false
PFOA_2	413.0 / 169.0	2.66	555576.14	25880.004514	623.2	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	2.99	195427502.11	609309.844268	416.4	false
PFOS_2	499.0 / 99.0	3.06	49996168.70	897913.959473	2010.0	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8444-FS-D(13)	**Injection Vial**	7
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:59:16	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.28	8144075.47	25572.452263	1497.0	false
PFHxS_2	399.0 / 99.0	2.28	2332184.91	26261.651736	1618.4	false
PFOA_1	413.0 / 369.0	2.67	2938285.47	8761.094043	568.6	false
PFOA_2	413.0 / 169.0	2.66	185769.02	8529.787898	585.6	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	2.99	111971679.94	211914.471327	604.7	false
PFOS_2	499.0 / 99.0	3.06	18539650.85	202114.611104	1791.2	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8444-FS-D(15)	**Injection Vial**	8
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:10:08	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.28	866113.53	2278.324836	942.3	false
PFHxS_2	399.0 / 99.0	2.28	243109.10	2288.681864	830.3	false
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.01	15045106.34	26221.448529	573.6	false
PFOS_2	499.0 / 99.0	3.06	2385839.82	23951.166050	1194.3	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8445-FS(3)	**Injection Vial**	11
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:42:42	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	87756997.64	246764.349950	1927.8	false
PFBS_2	298.9 / 99.0	1.53	40142919.68	384362.705624	3805.5	false
PFHxA_1	313.0 / 269.0	1.84	103990913.73	502860.911240	502.1	false
PFHxA_2	313.0 / 119.0	1.85	17346106.85	1126269.762824	781.5	false
PFHpA_1	363.0 / 319.0	2.25	37840630.61	254457.197090	737.2	false
PFHpA_2	363.0 / 169.0	2.22	1033663.46	328526.104816	1116.4	false
PFHxS_1	399.0 / 80.0	2.24	140380461.67	681361.103943	233.5	true
PFHxS_2	399.0 / 99.0	2.28	129741952.00	2258731.939249	638.1	false
PFOA_1	413.0 / 369.0	2.64	112219137.29	715624.491611	617.5	false
PFOA_2	413.0 / 169.0	2.66	13260272.83	1302142.636376	812.2	true
PFNA_1	463.0 / 419.0	3.05	516122.91	5811.784103	334.2	false
PFNA_2	463.0 / 219.0	3.01	203885.18	7452.071043	178.6	true
PFOS_1	499.0 / 80.0	2.92	233874036.04	1625541.280839	133.7	false
PFOS_2	499.0 / 99.0	3.06	128250362.95	5134766.780283	1284.8	false
PFDA_1	513.0 / 469.0	3.41	507750.63	1586.269899	303.0	false
PFDA_2	513.0 / 219.0	3.41	13353.59	1002.661685	93.9	true
PFUnA_1	563.0 / 519.0	3.72	68898.04	175.181741	173.3	false
PFUnA_2	563.0 / 269.0	3.72	1934.27	104.638844	25.7	true
PFDoA_1	613.0 / 569.0	4.00	65621.26	168.105044	230.2	false
PFDoA_2	613.0 / 319.0	4.01	7118.27	96.842433	39.6	true
PFTrDA_1	663.0 / 619.0	4.24	18686.53	26.215222	140.1	false
PFTrDA_2	663.0 / 169.0	4.21	1454.52	33.534525	37.0	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	3.58	410031.26	8515.158063	218.8	false
NMeFOSAA_2	570.0 / 512.0	3.57	4270.70	57.696079	121.6	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	J8445-FS-D(5)	**Injection Vial**	12
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:53:34	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	7424275.33	15526.324680	1994.9	false
PFBS_2	298.9 / 99.0	1.53	2250495.38	16027.792605	1864.6	false
PFHxA_1	313.0 / 269.0	1.85	13293202.60	44461.590853	311.5	false
PFHxA_2	313.0 / 119.0	1.85	865390.27	38842.528053	294.3	false
PFHpA_1	363.0 / 319.0	2.26	2849778.84	9916.700588	413.9	false
PFHpA_2	363.0 / 169.0	2.25	70163.05	11475.023789	521.5	false
PFHxS_1	399.0 / 80.0	2.28	61805295.47	160768.412478	1249.2	false
PFHxS_2	399.0 / 99.0	2.28	21237028.46	198140.498242	2076.7	false
PFOA_1	413.0 / 369.0	2.67	17578408.64	50451.811380	950.6	false
PFOA_2	413.0 / 169.0	2.66	977724.81	43209.857432	696.1	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.05	92158944.85	186204.651735	566.1	false
PFOS_2	499.0 / 99.0	3.06	17093628.27	198943.856751	1149.7	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	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	J8445-FS-D(7)	**Injection Vial**	13
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:04:26	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	1.84	2625989.03	9577.442538	125.6	false
PFHxA_2	313.0 / 119.0	1.85	170994.42	8352.386521	115.7	false
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	2.25	14872.05	2487.737558	225.3	false
PFHxS_1	399.0 / 80.0	2.28	14132270.27	36533.122778	1568.5	false
PFHxS_2	399.0 / 99.0	2.28	4149336.22	38469.128084	2061.6	false
PFOA_1	413.0 / 369.0	2.67	4060916.42	10767.929167	577.8	false
PFOA_2	413.0 / 169.0	2.66	214573.99	8759.214935	476.2	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.06	24576792.45	42134.284595	582.7	false
PFOS_2	499.0 / 99.0	3.06	4333173.53	42790.618650	1034.9	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8445-FS-D(9)	**Injection Vial**	14
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:15:17	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.28	6536397.20	19067.012978	1477.5	false
PFHxS_2	399.0 / 99.0	2.28	1838820.52	19234.266630	1932.2	false
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.06	12081561.80	22241.442850	544.6	false
PFOS_2	499.0 / 99.0	3.06	2128426.99	22569.280942	1233.0	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8446-FS(3)	**Injection Vial**	15
Sample ID	VC-MS09-SB03-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:26:09	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	5884935.63	15737.583374	887.2	false
PFBS_2	298.9 / 99.0	1.53	1779385.47	16204.900633	1289.1	false
PFHxA_1	313.0 / 269.0	1.84	15411445.51	86254.375881	368.1	false
PFHxA_2	313.0 / 119.0	1.85	1000670.03	75176.730240	309.0	false
PFHpA_1	363.0 / 319.0	2.26	1983363.88	10346.757397	436.2	false
PFHpA_2	363.0 / 169.0	2.22	66085.69	16238.662770	259.9	false
PFHxS_1	399.0 / 80.0	2.28	11962958.46	45716.455844	1192.7	false
PFHxS_2	399.0 / 99.0	2.28	3413701.06	46786.558062	1633.9	false
PFOA_1	413.0 / 369.0	2.67	11964276.52	44652.214781	1088.9	false
PFOA_2	413.0 / 169.0	2.66	534403.25	30708.075654	392.1	true
PFNA_1	463.0 / 419.0	3.07	28149.05	99.586229	78.1	false
PFNA_2	463.0 / 219.0	3.06	11073.92	139.770032	79.8	false
PFOS_1	499.0 / 80.0	3.07	48273710.49	116751.978616	817.1	false
PFOS_2	499.0 / 99.0	3.07	8632968.52	120269.371407	1209.8	false
PFDA_1	513.0 / 469.0	3.42	23472.80	41.848043	90.4	false
PFDA_2	513.0 / 219.0	3.42	988.10	40.972092	49.8	false
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.01	3083.43	< 0	28.4	false
PFDoA_2	613.0 / 319.0	4.02	302.92	< 0	12.4	true
PFTrDA_1	663.0 / 619.0	4.24	1017.70	< 0	34.1	false
PFTrDA_2	663.0 / 169.0	4.23	296.02	< 0	14.1	false
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	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	J8446-FS-D(5)	**Injection Vial**	16
Sample ID	VC-MS09-SB03-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:37:01	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	1.84	3301337.95	12626.037469	162.4	false
PFHxA_2	313.0 / 119.0	1.85	203439.73	10424.099057	125.4	false
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.28	2698723.53	8127.319492	956.8	false
PFHxS_2	399.0 / 99.0	2.28	749500.75	8090.637915	1304.1	false
PFOA_1	413.0 / 369.0	2.66	2781238.58	7762.212519	590.3	false
PFOA_2	413.0 / 169.0	2.66	112907.80	4847.433379	390.2	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.06	12527248.29	20968.660115	788.4	false
PFOS_2	499.0 / 99.0	3.06	2305126.16	22224.232775	2457.2	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8447-FS(3)	**Injection Vial**	17
Sample ID	VC-MS09-SS04-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:47:52	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	133145.24	377.917290	355.0	false
PFBS_2	298.9 / 99.0	1.53	42651.86	414.580529	230.3	false
PFHxA_1	313.0 / 269.0	1.84	181201.76	681.868904	30.8	false
PFHxA_2	313.0 / 119.0	1.85	10708.14	517.001914	20.8	false
PFHpA_1	363.0 / 319.0	2.26	29686.14	103.671827	39.0	false
PFHpA_2	363.0 / 169.0	2.25	1189.80	143.444498	25.2	false
PFHxS_1	399.0 / 80.0	2.28	600399.11	1643.486389	713.0	false
PFHxS_2	399.0 / 99.0	2.28	174549.58	1709.409012	879.8	false
PFOA_1	413.0 / 369.0	2.67	560149.48	1521.381308	308.8	false
PFOA_2	413.0 / 169.0	2.66	34123.55	1426.955691	216.9	true
PFNA_1	463.0 / 419.0	3.06	69008.74	206.985788	152.4	false
PFNA_2	463.0 / 219.0	3.06	20565.76	202.580836	157.5	false
PFOS_1	499.0 / 80.0	3.06	10140688.54	18010.282822	1449.1	false
PFOS_2	499.0 / 99.0	3.06	1933866.08	19782.966424	2235.9	false
PFDA_1	513.0 / 469.0	3.41	73108.57	155.964592	184.0	false
PFDA_2	513.0 / 219.0	3.41	3765.09	198.113544	88.2	false
PFUnA_1	563.0 / 519.0	3.73	109241.92	254.154871	196.8	false
PFUnA_2	563.0 / 269.0	3.57	6045.46	293.777628	101.2	false
PFDoA_1	613.0 / 569.0	3.98	81156.65	197.324898	214.1	false
PFDoA_2	613.0 / 319.0	4.01	6584.09	77.404653	69.5	true
PFTrDA_1	663.0 / 619.0	4.18	18596.67	24.822393	146.9	false
PFTrDA_2	663.0 / 169.0	4.16	3799.84	144.826343	96.8	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	J8448-FS(3)	**Injection Vial**	18
Sample ID	VC-MS09-SB04-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:58:43	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	1443535.06	3541.789346	1338.1	false
PFBS_2	298.9 / 99.0	1.53	438118.15	3662.301733	731.4	false
PFHxA_1	313.0 / 269.0	1.84	2324063.63	8760.472513	121.1	false
PFHxA_2	313.0 / 119.0	1.85	144696.61	7300.855962	107.9	false
PFHpA_1	363.0 / 319.0	2.26	293262.97	1012.379672	157.5	false
PFHpA_2	363.0 / 169.0	2.25	6435.97	980.819797	104.9	false
PFHxS_1	399.0 / 80.0	2.28	2537866.27	6326.020657	1235.0	false
PFHxS_2	399.0 / 99.0	2.28	690031.03	6163.592659	1300.3	false
PFOA_1	413.0 / 369.0	2.67	1052095.69	2527.971507	396.4	false
PFOA_2	413.0 / 169.0	2.66	55154.22	2038.515665	234.0	true
PFNA_1	463.0 / 419.0	3.06	469588.44	1638.628292	361.3	false
PFNA_2	463.0 / 219.0	3.06	145945.26	1654.236017	347.1	false
PFOS_1	499.0 / 80.0	3.06	47386791.73	86680.110463	2278.0	false
PFOS_2	499.0 / 99.0	3.06	9171655.58	96638.289892	5436.5	false
PFDA_1	513.0 / 469.0	3.42	114902.05	234.205339	237.8	false
PFDA_2	513.0 / 219.0	3.41	4091.33	197.253717	145.7	true
PFUnA_1	563.0 / 519.0	3.73	42121.96	79.009737	119.2	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.00	23729.08	28.206869	115.7	false
PFDoA_2	613.0 / 319.0	4.00	2742.90	1.915947	46.9	true
PFTrDA_1	663.0 / 619.0	4.22	6035.27	< 0	92.0	false
PFTrDA_2	663.0 / 169.0	4.18	816.06	< 0	36.8	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	J8448-FS-D(5)	**Injection Vial**	19
Sample ID	VC-MS09-SB04-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:09:33	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.06	5218132.71	8500.774878	947.4	false
PFOS_2	499.0 / 99.0	3.06	1022732.23	9595.730080	1543.9	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8449-FS(3)	**Injection Vial**	22
Sample ID	VC-MS09-SB04-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:42:10	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	451599.02	1281.535072	567.4	false
PFBS_2	298.9 / 99.0	1.53	137536.73	1331.047113	439.4	false
PFHxA_1	313.0 / 269.0	1.85	1082571.94	4409.873962	91.3	false
PFHxA_2	313.0 / 119.0	1.85	71572.87	3893.828070	90.5	false
PFHpA_1	363.0 / 319.0	2.26	260372.04	1024.316493	148.2	false
PFHpA_2	363.0 / 169.0	2.24	7777.91	1384.236096	121.1	false
PFHxS_1	399.0 / 80.0	2.28	5087053.12	13847.875769	1409.1	false
PFHxS_2	399.0 / 99.0	2.28	1420831.86	13867.658363	1771.7	false
PFOA_1	413.0 / 369.0	2.67	5967412.01	18324.823533	792.0	false
PFOA_2	413.0 / 169.0	2.66	354699.39	16771.947793	436.1	true
PFNA_1	463.0 / 419.0	3.07	67273.59	207.078278	146.2	false
PFNA_2	463.0 / 219.0	3.06	23567.79	243.319441	150.0	false
PFOS_1	499.0 / 80.0	3.06	17479519.93	31591.343057	716.4	false
PFOS_2	499.0 / 99.0	3.07	2711489.54	28227.632713	1119.5	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8449-FS-D(5)	**Injection Vial**	23
Sample ID	VC-MS09-SB04-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:53:03	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.05	8635495.96	17260.641231	698.9	false
PFOS_2	499.0 / 99.0	3.06	1406437.57	16192.057634	1061.5	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8450-FS(3)	**Injection Vial**	24
Sample ID	VC-MS09-SS05-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:03:55	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	48979.85	114.061038	158.3	false
PFBS_2	298.9 / 99.0	1.53	16748.08	135.568104	107.9	false
PFHxA_1	313.0 / 269.0	1.85	465179.34	1707.480155	63.8	false
PFHxA_2	313.0 / 119.0	1.85	33950.51	1655.516767	47.2	false
PFHpA_1	363.0 / 319.0	2.26	196180.82	700.689286	133.6	false
PFHpA_2	363.0 / 169.0	2.26	4033.60	610.295383	70.9	false
PFHxS_1	399.0 / 80.0	2.28	2240878.99	5961.517569	1289.3	false
PFHxS_2	399.0 / 99.0	2.28	626197.17	5970.070939	1891.1	false
PFOA_1	413.0 / 369.0	2.67	733297.99	1807.960192	418.2	false
PFOA_2	413.0 / 169.0	2.67	47587.19	1807.409464	290.7	false
PFNA_1	463.0 / 419.0	3.06	683772.33	3225.757185	408.0	false
PFNA_2	463.0 / 219.0	3.07	212660.31	3254.833260	446.1	false
PFOS_1	499.0 / 80.0	3.07	109059051.95	297370.172091	1878.2	false
PFOS_2	499.0 / 99.0	3.06	30071135.93	472312.930935	5229.6	false
PFDA_1	513.0 / 469.0	3.42	395122.22	867.319098	437.6	false
PFDA_2	513.0 / 219.0	3.42	17094.11	909.693846	314.9	true
PFUnA_1	563.0 / 519.0	3.71	869671.18	1849.149004	447.2	false
PFUnA_2	563.0 / 269.0	3.73	31563.61	1355.502301	297.9	false
PFDoA_1	613.0 / 569.0	4.01	184623.82	435.601521	355.3	false
PFDoA_2	613.0 / 319.0	4.01	21793.92	311.957635	193.1	true
PFTrDA_1	663.0 / 619.0	4.19	420554.19	1276.246330	623.1	false
PFTrDA_2	663.0 / 169.0	4.18	149173.80	7037.776030	780.4	false
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	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	J8450-FS-D(5)	**Injection Vial**	25
Sample ID	VC-MS09-SS05-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:14:47	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.06	15732640.72	24107.643126	2052.8	false
PFOS_2	499.0 / 99.0	3.06	3029490.98	26738.892959	3501.2	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8451-FS(3)	**Injection Vial**	26
Sample ID	VC-MS09-SB05-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:25:38	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	30050.11	82.671525	150.3	false
PFBS_2	298.9 / 99.0	1.53	9759.05	93.858966	84.7	false
PFHxA_1	313.0 / 269.0	1.85	326490.60	1464.866527	51.1	false
PFHxA_2	313.0 / 119.0	1.85	21467.45	1272.245438	33.3	false
PFHpA_1	363.0 / 319.0	2.26	184778.59	827.073837	110.8	false
PFHpA_2	363.0 / 169.0	2.26	3826.16	738.983359	103.5	false
PFHxS_1	399.0 / 80.0	2.29	1794528.93	5299.923174	912.2	false
PFHxS_2	399.0 / 99.0	2.28	493366.53	5220.809157	1013.3	false
PFOA_1	413.0 / 369.0	2.67	403711.44	1127.175283	346.8	false
PFOA_2	413.0 / 169.0	2.67	25813.30	1110.310825	275.9	false
PFNA_1	463.0 / 419.0	3.07	664676.28	3229.920744	433.1	false
PFNA_2	463.0 / 219.0	3.07	217964.56	3437.856152	479.5	false
PFOS_1	499.0 / 80.0	3.07	101707321.67	254612.646434	1942.6	false
PFOS_2	499.0 / 99.0	3.07	22296087.39	321514.419390	3581.8	false
PFDA_1	513.0 / 469.0	3.42	240703.46	599.572069	351.8	false
PFDA_2	513.0 / 219.0	3.42	13738.43	836.780236	203.3	false
PFUnA_1	563.0 / 519.0	3.65	1001227.63	2434.845615	558.3	false
PFUnA_2	563.0 / 269.0	3.74	9375.51	460.094405	140.5	false
PFDoA_1	613.0 / 569.0	3.99	73588.05	177.920215	166.8	false
PFDoA_2	613.0 / 319.0	4.01	6728.20	80.998494	93.7	true
PFTrDA_1	663.0 / 619.0	4.19	281648.09	901.629073	621.7	false
PFTrDA_2	663.0 / 169.0	4.19	101854.07	5113.227364	690.0	false
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	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	2913.42	34.462880	118.6	false
NEtFOSAA_2	584.0 / 483.0	3.69	204.26	< 0	39.7	false

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Summary Quant Report

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Sample Name	J8451-FS-D(5)	**Injection Vial**	27
Sample ID	VC-MS09-SB05-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:36:29	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.06	6747365.38	11241.899041	1322.5	false
PFOS_2	499.0 / 99.0	3.06	1270401.54	12190.954426	1223.1	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8452-FS(3)	**Injection Vial**	28
Sample ID	VC-MS09-SB05-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:47:20	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	158099.83	453.728185	358.1	false
PFBS_2	298.9 / 99.0	1.53	46916.13	460.379311	263.1	false
PFHxA_1	313.0 / 269.0	1.85	1045635.98	4280.914421	95.4	false
PFHxA_2	313.0 / 119.0	1.85	73879.35	4042.440785	66.8	false
PFHpA_1	363.0 / 319.0	2.26	431000.06	1703.150370	231.5	false
PFHpA_2	363.0 / 169.0	2.26	10996.16	1987.921651	184.3	false
PFHxS_1	399.0 / 80.0	2.28	5731490.85	16907.009539	1432.4	false
PFHxS_2	399.0 / 99.0	2.28	1649125.93	17443.953820	1854.0	false
PFOA_1	413.0 / 369.0	2.67	1115403.87	3260.970638	478.7	false
PFOA_2	413.0 / 169.0	2.67	78459.79	3534.198849	434.5	false
PFNA_1	463.0 / 419.0	3.07	553605.99	1908.923903	415.9	false
PFNA_2	463.0 / 219.0	3.07	174620.96	1955.569640	392.4	false
PFOS_1	499.0 / 80.0	3.06	37134123.71	76232.954079	858.0	false
PFOS_2	499.0 / 99.0	3.06	6382348.95	75472.497775	1350.8	false
PFDA_1	513.0 / 469.0	3.42	26916.31	38.728208	106.6	false
PFDA_2	513.0 / 219.0	3.42	1056.97	33.647011	48.2	false
PFUnA_1	563.0 / 519.0	3.65	31504.43	65.837571	108.5	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	4.19	3003.10	< 0	72.1	false
PFTrDA_2	663.0 / 169.0	4.19	636.71	< 0	42.3	false
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	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	J8452-FS-D(5)	**Injection Vial**	29
Sample ID	VC-MS09-SB05-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:58:12	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.07	8035668.00	13774.505863	703.8	false
PFOS_2	499.0 / 99.0	3.07	1415712.88	13977.561740	1090.6	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8453MS-FS(3)	**Injection Vial**	32
Sample ID	VC-MS09-SB04-0102-MS	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:30:47	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	7804804.70	21714.121925	2903.9	false
PFBS_2	298.9 / 99.0	1.53	2283311.56	21632.570895	1700.9	false
PFHxA_1	313.0 / 269.0	1.85	6336890.51	29561.680759	250.9	false
PFHxA_2	313.0 / 119.0	1.85	440830.79	27593.054438	201.4	false
PFHpA_1	363.0 / 319.0	2.26	3963908.22	18187.776111	556.1	false
PFHpA_2	363.0 / 169.0	2.26	84709.82	18304.223969	514.3	false
PFHxS_1	399.0 / 80.0	2.28	7930510.05	28926.966115	1595.8	false
PFHxS_2	399.0 / 99.0	2.28	2279531.23	29818.522129	1864.9	false
PFOA_1	413.0 / 369.0	2.67	5977632.62	22940.058356	914.2	false
PFOA_2	413.0 / 169.0	2.67	393689.00	23265.896407	731.6	false
PFNA_1	463.0 / 419.0	3.07	4283602.93	18731.510062	1076.6	false
PFNA_2	463.0 / 219.0	3.07	1287118.81	18240.203044	890.8	false
PFOS_1	499.0 / 80.0	3.06	58040804.63	152107.534221	1430.3	false
PFOS_2	499.0 / 99.0	3.06	11393490.79	171995.288218	2510.6	false
PFDA_1	513.0 / 469.0	3.42	5535497.60	16827.562121	973.2	false
PFDA_2	513.0 / 219.0	3.42	246817.02	18213.471877	1153.7	false
PFUnA_1	563.0 / 519.0	3.74	5832277.29	16268.111369	858.6	false
PFUnA_2	563.0 / 269.0	3.74	304329.39	17061.025982	775.6	false
PFDoA_1	613.0 / 569.0	4.01	5424539.19	16696.526327	1059.3	false
PFDoA_2	613.0 / 319.0	4.01	900102.83	17799.573342	1065.7	false
PFTrDA_1	663.0 / 619.0	4.25	4810551.66	17224.895295	1670.3	false
PFTrDA_2	663.0 / 169.0	4.25	328724.99	17919.353402	1183.8	false
PFTeDA_1	713.0 / 669.0	4.47	5121018.42	16190.195696	2227.5	false
PFTeDA_2	713.0 / 169.0	4.46	257380.25	16815.166120	1588.1	false
NMeFOSAA_1	570.0 / 419.0	3.57	914983.57	18297.554959	1140.3	false
NMeFOSAA_2	570.0 / 512.0	3.57	508387.54	18818.341183	948.4	false
NEtFOSAA_1	584.0 / 419.0	3.73	855668.74	19861.234342	1804.6	true
NEtFOSAA_2	584.0 / 483.0	3.73	51025.46	20327.305890	6023.8	false

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Summary Quant Report

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Sample Name	J8453MS-FS-D(5)	**Injection Vial**	33
Sample ID	VC-MS09-SB04-0102-MS	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:41:39	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	666765.97	1933.763938	890.5	false
PFBS_2	298.9 / 99.0	1.53	199287.11	1969.994166	656.7	false
PFHxA_1	313.0 / 269.0	1.85	607872.72	2449.621371	72.3	false
PFHxA_2	313.0 / 119.0	1.85	43939.88	2359.469088	60.4	false
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.28	880442.89	2402.865039	852.0	false
PFHxS_2	399.0 / 99.0	2.28	238429.46	2328.172501	915.5	false
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.06	7967786.56	13590.280718	1306.3	false
PFOS_2	499.0 / 99.0	3.06	1479583.64	14535.541666	1464.0	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8454MSD-FS(3)	**Injection Vial**	34
Sample ID	VC-MS09-SB04-0102-MSD	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:52:29	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	7429006.88	20006.744990	2194.1	false
PFBS_2	298.9 / 99.0	1.53	2239875.87	20541.771392	1503.2	false
PFHxA_1	313.0 / 269.0	1.85	5831020.98	28524.766371	222.9	false
PFHxA_2	313.0 / 119.0	1.85	411231.93	26992.276474	191.9	false
PFHpA_1	363.0 / 319.0	2.26	3738122.34	18347.694973	517.8	false
PFHpA_2	363.0 / 169.0	2.26	81544.06	18851.209446	520.6	false
PFHxS_1	399.0 / 80.0	2.28	7327085.67	24266.529003	1604.2	false
PFHxS_2	399.0 / 99.0	2.28	2138490.49	25398.983662	1790.3	false
PFOA_1	413.0 / 369.0	2.67	5854075.38	22007.983254	986.7	false
PFOA_2	413.0 / 169.0	2.67	389714.26	22561.771904	699.5	false
PFNA_1	463.0 / 419.0	3.07	4113145.21	18349.590582	969.2	false
PFNA_2	463.0 / 219.0	3.06	1291773.46	18677.468153	1048.0	false
PFOS_1	499.0 / 80.0	3.06	53674185.05	125267.409912	1576.2	false
PFOS_2	499.0 / 99.0	3.06	10117831.68	136019.663265	2221.9	false
PFDA_1	513.0 / 469.0	3.42	5382875.25	16071.823818	980.9	false
PFDA_2	513.0 / 219.0	3.42	227578.59	16493.100841	823.5	false
PFUnA_1	563.0 / 519.0	3.74	5962179.71	17047.385346	895.2	false
PFUnA_2	563.0 / 269.0	3.74	303366.67	17432.940731	836.7	false
PFDoA_1	613.0 / 569.0	4.01	5338331.39	15647.363505	1096.2	false
PFDoA_2	613.0 / 319.0	4.01	858849.23	16171.778358	1045.8	false
PFTrDA_1	663.0 / 619.0	4.25	4868867.73	16399.809490	1766.7	false
PFTrDA_2	663.0 / 169.0	4.25	327531.26	16794.743623	1219.0	false
PFTeDA_1	713.0 / 669.0	4.47	5266620.52	15663.234756	2312.0	false
PFTeDA_2	713.0 / 169.0	4.46	259417.76	15942.257140	1790.7	false
NMeFOSAA_1	570.0 / 419.0	3.57	950053.20	15813.751285	1191.8	false
NMeFOSAA_2	570.0 / 512.0	3.57	515313.86	15867.841882	988.6	false
NEtFOSAA_1	584.0 / 419.0	3.73	933741.77	17749.822903	1455.6	false
NEtFOSAA_2	584.0 / 483.0	3.73	59153.45	19297.567025	1993.3	false

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Summary Quant Report

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Sample Name	J8454MSD-FS-D(5)	**Injection Vial**	35
Sample ID	VC-MS09-SB04-0102-MSD	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:03:21	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	618149.12	1822.505302	899.0	false
PFBS_2	298.9 / 99.0	1.53	181900.21	1828.003473	528.7	false
PFHxA_1	313.0 / 269.0	1.85	537696.35	2257.423490	64.9	false
PFHxA_2	313.0 / 119.0	1.85	40446.20	2263.272022	52.4	false
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	2.28	736431.87	2328.770049	631.0	false
PFHxS_2	399.0 / 99.0	2.28	212857.06	2409.806053	889.1	false
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.06	6816654.87	11226.405248	1164.8	false
PFOS_2	499.0 / 99.0	3.06	1279898.38	12140.486932	1819.5	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8444-FS(5)	**Injection Vial**	38
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:35:56	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	22858218.19	50729.316900	2610.1	false
PFBS_2	298.9 / 99.0	1.53	6978600.45	52738.533084	1851.2	false
PFHxA_1	313.0 / 269.0	1.84	56463749.89	205835.945094	677.3	false
PFHxA_2	313.0 / 119.0	1.85	4392008.04	214961.922682	608.0	false
PFHpA_1	363.0 / 319.0	2.25	10195271.53	52019.277106	653.0	false
PFHpA_2	363.0 / 169.0	2.23	249785.99	60182.314644	737.2	false
PFHxS_1	399.0 / 80.0	2.24	123831414.49	600261.066055	424.2	false
PFHxS_2	399.0 / 99.0	2.28	94285373.42	1639332.891644	1297.3	false
PFOA_1	413.0 / 369.0	2.67	83172874.58	534615.524684	1045.5	false
PFOA_2	413.0 / 169.0	2.66	8467805.14	838144.677905	964.1	true
PFNA_1	463.0 / 419.0	3.06	2088457.92	34722.618358	377.0	false
PFNA_2	463.0 / 219.0	3.06	671104.64	36158.965954	459.2	false
PFOS_1	499.0 / 80.0	2.94	186415330.02	1832681.379692	53.7	true
PFOS_2	499.0 / 99.0	3.00	205435273.26	11633931.990217	1603.3	false
PFDA_1	513.0 / 469.0	3.41	1022748.86	2833.351818	360.3	false
PFDA_2	513.0 / 219.0	3.41	26202.75	1751.737316	138.2	true
PFUnA_1	563.0 / 519.0	3.69	147341.58	337.995163	176.9	false
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.00	94167.45	211.204744	226.4	false
PFDoA_2	613.0 / 319.0	4.00	8252.48	94.698449	33.3	true
PFTrDA_1	663.0 / 619.0	4.20	31564.51	60.459274	178.3	false
PFTrDA_2	663.0 / 169.0	4.19	8660.81	356.260905	231.1	false
PFTeDA_1	713.0 / 669.0	4.46	15261.08	< 0	125.8	false
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	3.58	41845.67	806.613225	103.3	true
NMeFOSAA_2	570.0 / 512.0	3.57	2929.32	4.231660	37.7	false
NEtFOSAA_1	584.0 / 419.0	3.73	12055.03	188.373082	138.0	true
NEtFOSAA_2	584.0 / 483.0	3.71	1047.04	238.256110	29.1	false

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Summary Quant Report

Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:02:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	250.085369	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	CR902PB-FS(3)	**Injection Vial**	35
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:43:47	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	101666.26	239.306905	1464.9	false
d3-MeFOSAA	573.0 / 419.0	3.56	17800.89	271.194641	208.7	false
d5-EtFOSAA	589.0 / 419.0	3.72	23210.99	323.891850	291.5	false
13C5-PFHxA	318.0 / 273.0	1.84	68336.59	260.034198	717.5	false
13C4-PFHpA	367.0 / 322.0	2.25	76726.74	256.624891	1088.8	false
13C8-PFOA	421.0 / 376.0	2.66	98468.70	270.738702	1353.5	false
13C9-PFNA	472.0 / 427.0	3.05	102219.52	246.139033	7277.5	false
13C6-PFDA	519.0 / 474.0	3.40	114787.38	268.184667	1167.8	false
13C7-PFUnA	570.0 / 525.0	3.72	107794.03	272.638308	953.7	false
13C2-PFTeDA	715.0 / 670.0	4.46	88662.31	258.488940	1377.1	false
13C3-PFBS	302.0 / 99.0	1.51	29965.66	260.533575	459.8	false
13C3-PFHxS	402.0 / 99.0	2.27	27985.09	268.512689	562.4	false
13C8-PFOS	507.0 / 99.0	3.05	29685.95	252.136319	266.0	false

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Summary Quant Report

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Printed: 25/10/2018 10:56:17 AM

Sample Name	CR903LCS-FS(3)	**Injection Vial**	36
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:54:39	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	107601.48	279.226538	1188.9	false
d3-MeFOSAA	573.0 / 419.0	3.56	18050.39	289.064858	161.7	false
d5-EtFOSAA	589.0 / 419.0	3.72	17007.43	249.467700	175.0	false
13C5-PFHxA	318.0 / 273.0	1.84	65236.11	273.537717	1009.7	false
13C4-PFHpA	367.0 / 322.0	2.25	71688.27	264.211750	1124.5	false
13C8-PFOA	421.0 / 376.0	2.66	85033.10	257.627446	1230.6	false
13C9-PFNA	472.0 / 427.0	3.05	89670.40	237.929212	4865027.8	false
13C6-PFDA	519.0 / 474.0	3.41	99492.88	256.266530	1041.8	false
13C7-PFUnA	570.0 / 525.0	3.72	99358.12	277.048394	783.4	false
13C2-PFTeDA	715.0 / 670.0	4.47	85405.77	274.504948	1938.5	false
13C3-PFBS	302.0 / 99.0	1.51	33782.84	308.748913	654.6	false
13C3-PFHxS	402.0 / 99.0	2.27	27884.96	281.240289	641.9	false
13C8-PFOS	507.0 / 99.0	3.05	26359.92	235.341154	297.9	false

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Summary Quant Report

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Sample Name	J8438-FS(3)	**Injection Vial**	37
Sample ID	VC-MS09-SS01-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:05:31	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	99581.97	243.036803	1443.5	false
d3-MeFOSAA	573.0 / 419.0	3.57	15630.35	291.800164	184.1	false
d5-EtFOSAA	589.0 / 419.0	3.72	19720.26	337.206928	247.2	false
13C5-PFHxA	318.0 / 273.0	1.84	67653.57	262.526684	703.3	false
13C4-PFHpA	367.0 / 322.0	2.25	78440.79	267.546701	779.3	false
13C8-PFOA	421.0 / 376.0	2.66	94250.73	264.266701	1299.9	false
13C9-PFNA	472.0 / 427.0	3.05	90827.56	223.033407	14909.3	false
13C6-PFDA	519.0 / 474.0	3.40	103720.02	251.255359	1069.5	false
13C7-PFUnA	570.0 / 525.0	3.72	103839.36	272.312208	1082.3	false
13C2-PFTeDA	715.0 / 670.0	4.46	83511.80	252.443221	1483.7	false
13C3-PFBS	302.0 / 99.0	1.51	31634.95	337.042353	457.4	false
13C3-PFHxS	402.0 / 99.0	2.27	25684.68	301.987963	640.7	false
13C8-PFOS	507.0 / 99.0	3.05	24840.16	258.533204	288.3	false

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Summary Quant Report

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Sample Name	J8438-FS-D(5)	**Injection Vial**	38
Sample ID	VC-MS09-SS01-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:16:25	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	103727.68	248.547649	968.0	false
d3-MeFOSAA	573.0 / 419.0	3.56	17057.24	249.429352	251.0	false
d5-EtFOSAA	589.0 / 419.0	3.72	19960.33	267.345939	248.1	false
13C5-PFHxA	318.0 / 273.0	1.84	72122.31	256.520055	807.5	false
13C4-PFHpA	367.0 / 322.0	2.25	74632.39	233.321038	892.8	false
13C8-PFOA	421.0 / 376.0	2.66	96028.56	246.789728	9649.0	false
13C9-PFNA	472.0 / 427.0	3.05	97776.73	220.067913	1554.3	false
13C6-PFDA	519.0 / 474.0	3.40	110457.14	262.706145	3850.9	false
13C7-PFUnA	570.0 / 525.0	3.72	106001.85	272.924325	932.0	false
13C2-PFTeDA	715.0 / 670.0	4.46	83873.05	248.921257	2204.3	false
13C3-PFBS	302.0 / 99.0	1.51	29574.52	246.806717	606.9	false
13C3-PFHxS	402.0 / 99.0	2.27	27595.49	254.141517	519.2	false
13C8-PFOS	507.0 / 99.0	3.05	27956.36	227.910601	288.5	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:56:31 AM

Sample Name	J8439-FS(3)	**Injection Vial**	39
Sample ID	VC-MS09-SB01-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:27:18	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	107258.87	263.614800	1209.4	false
d3-MeFOSAA	573.0 / 419.0	3.56	16473.84	285.143942	204.5	false
d5-EtFOSAA	589.0 / 419.0	3.73	20002.22	317.113433	291.3	false
13C5-PFHxA	318.0 / 273.0	1.84	65357.83	254.987955	893.9	false
13C4-PFHpA	367.0 / 322.0	2.25	70400.01	241.417996	719.4	false
13C8-PFOA	421.0 / 376.0	2.66	102789.40	289.764620	1743.7	false
13C9-PFNA	472.0 / 427.0	3.05	85622.10	211.386598	1101.5	false
13C6-PFDA	519.0 / 474.0	3.40	109145.02	266.257532	975.3	false
13C7-PFUnA	570.0 / 525.0	3.72	105742.26	279.253714	989.4	false
13C2-PFTeDA	715.0 / 670.0	4.46	78671.28	239.484443	1219.4	false
13C3-PFBS	302.0 / 99.0	1.52	30676.69	303.024962	658.3	false
13C3-PFHxS	402.0 / 99.0	2.27	25991.53	283.334780	480.6	false
13C8-PFOS	507.0 / 99.0	3.05	28233.14	272.441750	278.2	false

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Summary Quant Report

Created with Analyst Reporter
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Sample Name	J8439-FS-D(5)	**Injection Vial**	40
Sample ID	VC-MS09-SB01-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:38:11	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	116619.68	269.258358	1434.6	false
d3-MeFOSAA	573.0 / 419.0	3.56	17536.13	269.269786	241.0	false
d5-EtFOSAA	589.0 / 419.0	3.72	20539.31	288.872799	251.2	false
13C5-PFHxA	318.0 / 273.0	1.84	79011.73	278.892612	834.1	false
13C4-PFHpA	367.0 / 322.0	2.25	87932.44	272.815760	1531.3	false
13C8-PFOA	421.0 / 376.0	2.66	107450.61	274.049703	2366.4	false
13C9-PFNA	472.0 / 427.0	3.05	109057.70	243.596658	1004.3	false
13C6-PFDA	519.0 / 474.0	3.40	128539.50	294.574638	885.8	false
13C7-PFUnA	570.0 / 525.0	3.72	125693.40	311.834121	1015.0	false
13C2-PFTeDA	715.0 / 670.0	4.46	89143.83	254.925424	1331.2	false
13C3-PFBS	302.0 / 99.0	1.51	33581.10	294.272146	541.3	false
13C3-PFHxS	402.0 / 99.0	2.27	31907.17	308.560805	686.7	false
13C8-PFOS	507.0 / 99.0	3.05	32443.84	277.735277	420.4	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:56:40 AM

Sample Name	J8440-FS(3)	**Injection Vial**	41
Sample ID	VC-MS09-SB01-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:49:05	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	107446.00	291.360805	1407.5	false
d3-MeFOSAA	573.0 / 419.0	3.56	16245.33	360.260512	252.8	false
d5-EtFOSAA	589.0 / 419.0	3.72	18698.73	379.810825	289.9	true
13C5-PFHxA	318.0 / 273.0	1.84	71143.81	310.809090	724.6	false
13C4-PFHpA	367.0 / 322.0	2.25	79918.24	306.886213	789.8	false
13C8-PFOA	421.0 / 376.0	2.66	97496.61	307.766323	1009.9	false
13C9-PFNA	472.0 / 427.0	3.05	93734.15	259.133740	1264.0	false
13C6-PFDA	519.0 / 474.0	3.40	116528.40	313.641898	1638.4	false
13C7-PFUnA	570.0 / 525.0	3.72	114886.90	334.753544	1003.6	false
13C2-PFTeDA	715.0 / 670.0	4.46	86188.28	289.476697	1465.1	false
13C3-PFBS	302.0 / 99.0	1.52	34135.23	432.007684	877.9	false
13C3-PFHxS	402.0 / 99.0	2.27	28695.31	400.772371	544.9	false
13C8-PFOS	507.0 / 99.0	3.05	25872.28	319.865909	306.8	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:56:44 AM

Sample Name	J8440-FS-D(5)	**Injection Vial**	42
Sample ID	VC-MS09-SB01-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:59:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	103866.87	249.780004	816.5	false
d3-MeFOSAA	573.0 / 419.0	3.57	18002.78	271.341827	225.7	false
d5-EtFOSAA	589.0 / 419.0	3.72	20476.88	282.688259	220.1	false
13C5-PFHxA	318.0 / 273.0	1.84	69508.31	261.598627	941.6	false
13C4-PFHpA	367.0 / 322.0	2.25	76910.97	254.426226	828.2	false
13C8-PFOA	421.0 / 376.0	2.66	100856.88	274.270584	1783.4	false
13C9-PFNA	472.0 / 427.0	3.05	98512.82	234.617821	1107.3	false
13C6-PFDA	519.0 / 474.0	3.41	107533.91	256.677294	91326.5	false
13C7-PFUnA	570.0 / 525.0	3.72	112184.90	289.887047	669.4	false
13C2-PFTeDA	715.0 / 670.0	4.46	86256.69	256.920012	1913.8	false
13C3-PFBS	302.0 / 99.0	1.51	33237.15	285.891557	697.9	false
13C3-PFHxS	402.0 / 99.0	2.27	25376.81	240.886684	560.5	false
13C8-PFOS	507.0 / 99.0	3.05	30701.35	257.976217	335.7	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:56:49 AM

Sample Name	J8441-FS(3)	**Injection Vial**	45
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:32:35	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	107621.61	335.228957	996.7	false
d3-MeFOSAA	573.0 / 419.0	3.56	12753.10	566.264243	198.9	false
d5-EtFOSAA	589.0 / 419.0	3.72	17564.03	714.322790	191.4	false
13C5-PFHxA	318.0 / 273.0	1.84	71643.22	290.634055	689.7	false
13C4-PFHpA	367.0 / 322.0	2.24	60540.76	215.870904	904.8	false
13C8-PFOA	421.0 / 376.0	2.66	67927.45	199.109364	1218.7	false
13C9-PFNA	472.0 / 427.0	3.05	30250.68	77.656188	491.7	false
13C6-PFDA	519.0 / 474.0	3.40	84505.88	261.270494	826.3	false
13C7-PFUnA	570.0 / 525.0	3.72	110055.56	368.356045	936.3	false
13C2-PFTeDA	715.0 / 670.0	4.46	94782.85	365.675880	1196.1	false
13C3-PFBS	302.0 / 99.0	1.51	38145.84	966.609494	526.4	false
13C3-PFHxS	402.0 / 99.0	2.27	22856.28	639.157173	291.2	false
13C8-PFOS	507.0 / 99.0	3.05	9468.95	234.396029	117.0	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:56:53 AM

Sample Name	J8441-FS-D(5)	**Injection Vial**	46
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:43:28	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	110708.80	256.912402	1323.8	false
d3-MeFOSAA	573.0 / 419.0	3.56	16818.64	369.716182	220.1	true
d5-EtFOSAA	589.0 / 419.0	3.72	20176.67	406.250717	242.5	false
13C5-PFHxA	318.0 / 273.0	1.84	70965.10	266.257127	764.6	false
13C4-PFHpA	367.0 / 322.0	2.25	83711.98	276.069815	2633.5	false
13C8-PFOA	421.0 / 376.0	2.66	95121.41	257.875248	54394.8	false
13C9-PFNA	472.0 / 427.0	3.05	66288.49	157.385264	26406.1	false
13C6-PFDA	519.0 / 474.0	3.40	115253.18	265.471086	4282.1	false
13C7-PFUnA	570.0 / 525.0	3.72	116661.94	290.901468	971.9	false
13C2-PFTeDA	715.0 / 670.0	4.46	88383.80	254.038834	1593.7	false
13C3-PFBS	302.0 / 99.0	1.51	36841.31	462.182158	605.2	false
13C3-PFHxS	402.0 / 99.0	2.27	27619.84	382.382136	554.6	false
13C8-PFOS	507.0 / 99.0	3.05	19772.66	242.319165	222.2	false

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Summary Quant Report

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Printed: 25/10/2018 10:56:57 AM

Sample Name	J8441-FS-D(7)	**Injection Vial**	47
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:54:21	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	118593.99	268.124313	1386.3	false
d3-MeFOSAA	573.0 / 419.0	3.56	18079.43	314.597641	230.7	false
d5-EtFOSAA	589.0 / 419.0	3.72	23055.48	367.461388	299.4	false
13C5-PFHxA	318.0 / 273.0	1.83	75687.01	248.313439	828.0	false
13C4-PFHpA	367.0 / 322.0	2.25	87065.68	251.073429	1010.2	false
13C8-PFOA	421.0 / 376.0	2.66	106415.16	252.265192	5802.2	false
13C9-PFNA	472.0 / 427.0	3.05	97747.36	202.933352	1147.3	false
13C6-PFDA	519.0 / 474.0	3.40	123464.87	277.062863	1233.3	false
13C7-PFUnA	570.0 / 525.0	3.72	121327.87	294.745975	916.1	false
13C2-PFTeDA	715.0 / 670.0	4.46	96939.24	271.454869	1721.4	false
13C3-PFBS	302.0 / 99.0	1.51	33362.63	331.307664	807.8	false
13C3-PFHxS	402.0 / 99.0	2.27	29724.82	325.753088	810.3	false
13C8-PFOS	507.0 / 99.0	3.05	31336.62	303.995967	351.0	false

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Summary Quant Report

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Printed: 25/10/2018 10:57:01 AM

Sample Name	J8441-FS-D(9)	**Injection Vial**	48
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:05:14	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	105749.37	258.492248	1320.7	false
d3-MeFOSAA	573.0 / 419.0	3.56	16295.84	227.534240	211.1	false
d5-EtFOSAA	589.0 / 419.0	3.72	20536.39	262.640117	294.7	false
13C5-PFHxA	318.0 / 273.0	1.84	65031.61	254.732893	683.3	false
13C4-PFHpA	367.0 / 322.0	2.25	74438.10	256.289432	960.8	false
13C8-PFOA	421.0 / 376.0	2.66	97619.00	276.292994	1728.7	false
13C9-PFNA	472.0 / 427.0	3.05	97193.41	240.916677	1874.3	false
13C6-PFDA	519.0 / 474.0	3.40	102368.37	248.368747	1706.6	false
13C7-PFUnA	570.0 / 525.0	3.72	111981.08	294.122445	1251.6	false
13C2-PFTeDA	715.0 / 670.0	4.46	83830.22	253.801892	1528.6	false
13C3-PFBS	302.0 / 99.0	1.52	29806.64	237.510913	907.0	false
13C3-PFHxS	402.0 / 99.0	2.28	28006.61	246.280069	655.0	false
13C8-PFOS	507.0 / 99.0	3.05	27815.01	216.518179	344.4	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:57:06 AM

Sample Name	J8442-FS(3)	**Injection Vial**	49
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:48:44	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	106740.56	277.433025	970.3	false
d3-MeFOSAA	573.0 / 419.0	3.57	12916.55	689.514511	228.4	false
d5-EtFOSAA	589.0 / 419.0	3.72	16469.94	805.296442	205.2	false
13C5-PFHxA	318.0 / 273.0	1.84	68644.35	248.579951	603.5	false
13C4-PFHpA	367.0 / 322.0	2.24	62144.26	197.804970	911.9	false
13C8-PFOA	421.0 / 376.0	2.66	60365.09	157.950915	2235.1	false
13C9-PFNA	472.0 / 427.0	3.05	33025.34	75.679473	698.2	false
13C6-PFDA	519.0 / 474.0	3.40	99832.23	257.549593	812.7	false
13C7-PFUnA	570.0 / 525.0	3.72	104727.66	292.485202	598.5	false
13C2-PFTeDA	715.0 / 670.0	4.46	85143.57	274.097508	1232.1	false
13C3-PFBS	302.0 / 99.0	1.51	35035.42	1067.344342	613.7	false
13C3-PFHxS	402.0 / 99.0	2.27	20034.39	673.552608	487.6	false
13C8-PFOS	507.0 / 99.0	3.05	9486.94	282.337169	140.3	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:57:10 AM

Sample Name	J8442-FS-D(5)	**Injection Vial**	50
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:59:38	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	108319.34	255.923006	1271.9	false
d3-MeFOSAA	573.0 / 419.0	3.56	15852.28	376.733862	234.6	false
d5-EtFOSAA	589.0 / 419.0	3.72	18596.91	404.809522	253.2	false
13C5-PFHxA	318.0 / 273.0	1.84	69130.74	256.390174	831.9	false
13C4-PFHpA	367.0 / 322.0	2.25	76903.36	250.697697	889.9	false
13C8-PFOA	421.0 / 376.0	2.66	87517.19	234.530065	1383.6	false
13C9-PFNA	472.0 / 427.0	3.05	70355.88	165.120156	1450.0	false
13C6-PFDA	519.0 / 474.0	3.41	114313.94	268.079690	1016.9	false
13C7-PFUnA	570.0 / 525.0	3.72	107937.84	274.025398	881.2	false
13C2-PFTeDA	715.0 / 670.0	4.46	83395.27	244.044625	1348.3	false
13C3-PFBS	302.0 / 99.0	1.51	34373.46	466.194110	1747.2	false
13C3-PFHxS	402.0 / 99.0	2.27	24318.37	363.978866	606.0	false
13C8-PFOS	507.0 / 99.0	3.05	22457.49	297.542770	240.8	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:57:16 AM

Sample Name	J8442-FS-D(7)	**Injection Vial**	51
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:10:33	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	107010.05	266.612015	988.1	false
d3-MeFOSAA	573.0 / 419.0	3.56	16483.40	302.348230	260.5	false
d5-EtFOSAA	589.0 / 419.0	3.72	18567.96	311.954874	248.6	false
13C5-PFHxA	318.0 / 273.0	1.84	66029.95	251.383620	797.6	false
13C4-PFHpA	367.0 / 322.0	2.25	75848.26	253.814575	957.8	false
13C8-PFOA	421.0 / 376.0	2.66	91512.19	251.738678	8959.2	false
13C9-PFNA	472.0 / 427.0	3.05	88950.70	214.296406	13321.1	false
13C6-PFDA	519.0 / 474.0	3.41	115288.21	285.102782	1647.7	false
13C7-PFUnA	570.0 / 525.0	3.72	110062.99	294.652598	1009.0	false
13C2-PFTeDA	715.0 / 670.0	4.46	82244.12	253.795862	1637.5	false
13C3-PFBS	302.0 / 99.0	1.51	29348.96	307.223030	569.0	false
13C3-PFHxS	402.0 / 99.0	2.27	25002.79	288.833598	338.9	false
13C8-PFOS	507.0 / 99.0	3.05	25588.81	261.671101	283.6	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:57:20 AM

Sample Name	J8442-FS-D(9)	**Injection Vial**	52
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:21:26	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	104420.14	256.383750	1256.4	false
d3-MeFOSAA	573.0 / 419.0	3.56	16864.72	273.666451	237.2	false
d5-EtFOSAA	589.0 / 419.0	3.72	21357.99	317.446016	261.9	false
13C5-PFHxA	318.0 / 273.0	1.83	66580.88	247.697077	773.6	false
13C4-PFHpA	367.0 / 322.0	2.25	67207.76	219.768590	903.3	false
13C8-PFOA	421.0 / 376.0	2.66	93033.49	250.083858	297636.7	false
13C9-PFNA	472.0 / 427.0	3.05	93827.51	220.887450	1372.2	false
13C6-PFDA	519.0 / 474.0	3.40	100371.01	244.610954	910.0	false
13C7-PFUnA	570.0 / 525.0	3.72	101313.00	267.291523	889.2	false
13C2-PFTeDA	715.0 / 670.0	4.46	79767.59	242.581238	1310.4	false
13C3-PFBS	302.0 / 99.0	1.51	29722.67	275.252166	671.1	false
13C3-PFHxS	402.0 / 99.0	2.27	24571.64	251.116527	458.5	false
13C8-PFOS	507.0 / 99.0	3.05	31159.49	281.888819	277.9	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:57:24 AM

Sample Name	J8443-FS(3)	**Injection Vial**	1
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:54:05	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	89829.80	246.086247	1214.7	false
d3-MeFOSAA	573.0 / 419.0	3.56	13378.80	447.875815	241.0	false
d5-EtFOSAA	589.0 / 419.0	3.72	15457.12	473.953729	170.9	false
13C5-PFHxA	318.0 / 273.0	1.83	56922.38	275.142868	757.2	false
13C4-PFHpA	367.0 / 322.0	2.24	63453.28	269.590242	2431.2	false
13C8-PFOA	421.0 / 376.0	2.66	66232.02	231.322688	2555.0	false
13C9-PFNA	472.0 / 427.0	3.05	42636.11	130.413421	2650.4	false
13C6-PFDA	519.0 / 474.0	3.40	85228.36	231.746093	841.3	false
13C7-PFUnA	570.0 / 525.0	3.72	91695.72	269.916692	1982.8	false
13C2-PFTeDA	715.0 / 670.0	4.46	78075.36	264.914311	1641.5	false
13C3-PFBS	302.0 / 99.0	1.51	33401.49	638.126418	623.4	false
13C3-PFHxS	402.0 / 99.0	2.27	19787.25	417.181036	404.8	false
13C8-PFOS	507.0 / 99.0	3.05	11332.31	211.496815	173.7	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:57:28 AM

Sample Name	J8443-FS-D(5)	**Injection Vial**	2
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:04:56	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	116782.46	266.725784	761.2	false
d3-MeFOSAA	573.0 / 419.0	3.56	16299.74	329.523531	187.5	false
d5-EtFOSAA	589.0 / 419.0	3.72	20611.16	381.658775	269.0	true
13C5-PFHxA	318.0 / 273.0	1.83	69772.30	250.030635	883.5	false
13C4-PFHpA	367.0 / 322.0	2.24	81041.86	255.266895	1100.4	false
13C8-PFOA	421.0 / 376.0	2.65	99992.07	258.911137	1377.8	false
13C9-PFNA	472.0 / 427.0	3.05	76819.44	174.201074	1428.4	false
13C6-PFDA	519.0 / 474.0	3.40	112713.98	255.520979	1852.9	false
13C7-PFUnA	570.0 / 525.0	3.72	120777.97	296.407303	933.0	false
13C2-PFTeDA	715.0 / 670.0	4.46	92423.10	261.452286	1562.0	false
13C3-PFBS	302.0 / 99.0	1.51	33806.52	390.037916	520.8	false
13C3-PFHxS	402.0 / 99.0	2.27	27799.31	353.947315	469.9	false
13C8-PFOS	507.0 / 99.0	3.05	23669.45	266.771306	303.9	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:57:32 AM

Sample Name	J8443-FS-D(7)	**Injection Vial**	3
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:15:48	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	98381.18	240.684634	1020.9	false
d3-MeFOSAA	573.0 / 419.0	3.56	16624.15	301.577135	259.4	false
d5-EtFOSAA	589.0 / 419.0	3.72	18473.98	306.963180	282.9	false
13C5-PFHxA	318.0 / 273.0	1.83	63417.69	255.614231	958.0	false
13C4-PFHpA	367.0 / 322.0	2.24	69252.97	245.351050	1821.5	false
13C8-PFOA	421.0 / 376.0	2.66	90219.35	262.753983	474.8	false
13C9-PFNA	472.0 / 427.0	3.05	85999.86	219.352138	2666.2	false
13C6-PFDA	519.0 / 474.0	3.40	103923.86	252.355625	2406.4	false
13C7-PFUnA	570.0 / 525.0	3.72	100032.14	262.959997	1734.2	false
13C2-PFTeDA	715.0 / 670.0	4.46	80603.57	244.239059	1432.4	false
13C3-PFBS	302.0 / 99.0	1.51	28182.14	291.765111	641.5	false
13C3-PFHxS	402.0 / 99.0	2.27	25299.87	289.051877	444.2	false
13C8-PFOS	507.0 / 99.0	3.04	25812.74	261.058658	266.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:57:38 AM

Sample Name	J8444-FS-D(7)	**Injection Vial**	4
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:26:39	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	104927.00	273.572560	1235.3	false
d3-MeFOSAA	573.0 / 419.0	3.56	16229.28	880.341686	238.3	false
d5-EtFOSAA	589.0 / 419.0	3.72	19923.32	989.875892	231.9	false
13C5-PFHxA	318.0 / 273.0	1.83	66332.47	249.336615	751.4	false
13C4-PFHpA	367.0 / 322.0	2.24	72554.64	239.717627	801.0	false
13C8-PFOA	421.0 / 376.0	2.66	59767.64	162.330820	1373.7	false
13C9-PFNA	472.0 / 427.0	3.05	33134.57	78.815352	602.6	false
13C6-PFDA	519.0 / 474.0	3.40	97958.75	253.506962	769.5	false
13C7-PFUnA	570.0 / 525.0	3.72	104251.62	292.066574	1044.9	false
13C2-PFTeDA	715.0 / 670.0	4.46	85961.31	277.595730	1499.0	false
13C3-PFBS	302.0 / 99.0	1.51	36566.55	1131.974309	720.2	false
13C3-PFHxS	402.0 / 99.0	2.27	24008.62	820.196637	449.9	false
13C8-PFOS	507.0 / 99.0	3.05	8096.56	244.848500	110.1	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:57:42 AM

Sample Name	J8444-FS-D(9)	**Injection Vial**	5
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:37:32	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	107767.59	272.843383	1280.5	false
d3-MeFOSAA	573.0 / 419.0	3.56	16714.96	737.816075	220.4	false
d5-EtFOSAA	589.0 / 419.0	3.72	17514.17	708.107693	201.4	false
13C5-PFHxA	318.0 / 273.0	1.84	68428.01	284.525025	849.1	false
13C4-PFHpA	367.0 / 322.0	2.25	74508.16	272.311090	814.6	false
13C8-PFOA	421.0 / 376.0	2.66	68431.08	205.596162	1168.7	false
13C9-PFNA	472.0 / 427.0	3.05	39768.55	104.639553	734.2	false
13C6-PFDA	519.0 / 474.0	3.40	101335.62	254.652993	1116.0	false
13C7-PFUnA	570.0 / 525.0	3.72	101570.11	276.315320	928.4	false
13C2-PFTeDA	715.0 / 670.0	4.46	83741.48	262.597368	1670.5	false
13C3-PFBS	302.0 / 99.0	1.51	30644.46	771.960703	517.3	false
13C3-PFHxS	402.0 / 99.0	2.27	23863.33	663.395535	456.5	false
13C8-PFOS	507.0 / 99.0	3.05	11735.90	288.804598	184.9	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:57:46 AM

Sample Name	J8444-FS-D(11)	**Injection Vial**	6
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:48:24	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	110582.11	255.745061	1225.8	false
d3-MeFOSAA	573.0 / 419.0	3.56	17399.21	474.793102	257.0	false
d5-EtFOSAA	589.0 / 419.0	3.72	21327.27	533.061131	253.5	false
13C5-PFHxA	318.0 / 273.0	1.83	72130.40	282.544010	1018.0	false
13C4-PFHpA	367.0 / 322.0	2.25	81576.75	280.872409	759.3	false
13C8-PFOA	421.0 / 376.0	2.66	82366.47	233.127339	1693.8	false
13C9-PFNA	472.0 / 427.0	3.05	61580.46	152.644162	779.9	false
13C6-PFDA	519.0 / 474.0	3.40	108575.07	249.237799	2465.7	false
13C7-PFUnA	570.0 / 525.0	3.72	114610.15	284.812645	854.9	false
13C2-PFTeDA	715.0 / 670.0	4.46	88311.68	252.967673	1716.9	false
13C3-PFBS	302.0 / 99.0	1.51	32551.52	506.928267	630.8	false
13C3-PFHxS	402.0 / 99.0	2.27	26068.93	448.019293	440.5	false
13C8-PFOS	507.0 / 99.0	3.05	15689.23	238.682995	193.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:57:50 AM

Sample Name	J8444-FS-D(13)	**Injection Vial**	7
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:59:16	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	104877.16	274.676896	1507.2	false
d3-MeFOSAA	573.0 / 419.0	3.56	15075.36	310.708764	195.5	false
d5-EtFOSAA	589.0 / 419.0	3.72	17880.20	337.540007	259.9	false
13C5-PFHxA	318.0 / 273.0	1.83	63891.92	266.431048	613.6	false
13C4-PFHpA	367.0 / 322.0	2.25	73019.95	267.642663	913.2	false
13C8-PFOA	421.0 / 376.0	2.66	83466.96	251.494484	2016.0	false
13C9-PFNA	472.0 / 427.0	3.05	79001.75	208.470744	1594.6	false
13C6-PFDA	519.0 / 474.0	3.40	107535.97	279.547998	982.5	false
13C7-PFUnA	570.0 / 525.0	3.72	101178.99	284.737944	1177.1	false
13C2-PFTeDA	715.0 / 670.0	4.46	84707.78	274.782459	1489.9	false
13C3-PFBS	302.0 / 99.0	1.51	27771.32	326.650070	461.6	false
13C3-PFHxS	402.0 / 99.0	2.27	22395.10	290.695030	426.7	false
13C8-PFOS	507.0 / 99.0	3.06	25789.48	296.328482	271.8	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:57:54 AM

Sample Name	J8444-FS-D(15	**Injection Vial**	8
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:10:08	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	101974.51	251.085136	1042.1	false
d3-MeFOSAA	573.0 / 419.0	3.56	15611.87	247.334066	252.8	false
d5-EtFOSAA	589.0 / 419.0	3.72	17228.12	249.996463	198.5	false
13C5-PFHxA	318.0 / 273.0	1.83	60000.13	236.795538	1100.1	false
13C4-PFHpA	367.0 / 322.0	2.25	74811.87	259.517545	689.6	false
13C8-PFOA	421.0 / 376.0	2.66	91573.74	261.136317	10596.3	false
13C9-PFNA	472.0 / 427.0	3.05	93977.78	234.701600	1932.5	false
13C6-PFDA	519.0 / 474.0	3.40	101023.61	246.895792	858.7	false
13C7-PFUnA	570.0 / 525.0	3.72	112438.27	297.479691	1202.4	false
13C2-PFTeDA	715.0 / 670.0	4.46	79860.62	243.549143	1436.3	false
13C3-PFBS	302.0 / 99.0	1.51	26210.96	236.980351	535.8	false
13C3-PFHxS	402.0 / 99.0	2.27	26534.16	264.748179	443.8	false
13C8-PFOS	507.0 / 99.0	3.05	28434.39	251.141197	297.1	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:57:57 AM

Sample Name	J8445-FS(3)	**Injection Vial**	11
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:42:42	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	91927.06	249.196723	1426.5	false
d3-MeFOSAA	573.0 / 419.0	3.56	12512.26	657.038380	170.8	false
d5-EtFOSAA	589.0 / 419.0	3.72	17204.65	827.499480	175.5	false
13C5-PFHxA	318.0 / 273.0	1.83	52483.01	72.316544	354.2	false
13C4-PFHpA	367.0 / 322.0	2.24	42378.38	51.326091	512.7	false
13C8-PFOA	421.0 / 376.0	2.66	39093.29	38.922089	445.8	false
13C9-PFNA	472.0 / 427.0	3.05	26650.57	23.237796	525.3	false
13C6-PFDA	519.0 / 474.0	3.40	75919.07	204.273133	809.4	false
13C7-PFUnA	570.0 / 525.0	3.72	88688.88	258.334211	1053.9	false
13C2-PFTeDA	715.0 / 670.0	4.46	81687.47	274.270386	1907.2	false
13C3-PFBS	302.0 / 99.0	1.51	28407.36	851.307413	414.2	false
13C3-PFHxS	402.0 / 99.0	2.27	14063.66	465.106170	268.8	false
13C8-PFOS	507.0 / 99.0	3.05	6987.14	204.549877	102.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:58:02 AM

Sample Name	J8445-FS-D(5)	**Injection Vial**	12
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:53:34	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	109005.21	245.297677	1615.1	false
d3-MeFOSAA	573.0 / 419.0	3.56	16450.78	312.889001	228.9	false
d5-EtFOSAA	589.0 / 419.0	3.72	19635.58	342.069590	206.0	false
13C5-PFHxA	318.0 / 273.0	1.84	75825.39	275.692600	643.6	false
13C4-PFHpA	367.0 / 322.0	2.25	81740.02	261.228221	762.7	false
13C8-PFOA	421.0 / 376.0	2.66	86836.44	228.132661	4978.7	false
13C9-PFNA	472.0 / 427.0	3.05	80188.87	184.499018	22756.3	false
13C6-PFDA	519.0 / 474.0	3.40	115790.17	258.630217	1213.1	false
13C7-PFUnA	570.0 / 525.0	3.72	119609.25	289.217589	738.6	false
13C2-PFTeDA	715.0 / 670.0	4.46	88226.25	245.905640	1370.9	false
13C3-PFBS	302.0 / 99.0	1.51	38183.09	414.452983	742.8	false
13C3-PFHxS	402.0 / 99.0	2.27	27021.65	323.678872	591.4	false
13C8-PFOS	507.0 / 99.0	3.05	24111.47	255.665702	253.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:58:06 AM

Sample Name	J8445-FS-D(7)	**Injection Vial**	13
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:04:26	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	110545.90	239.869854	1621.3	false
d3-MeFOSAA	573.0 / 419.0	3.56	18325.42	256.527841	245.7	false
d5-EtFOSAA	589.0 / 419.0	3.72	20693.33	265.324882	237.8	false
13C5-PFHxA	318.0 / 273.0	1.83	69344.50	243.907551	1041.0	false
13C4-PFHpA	367.0 / 322.0	2.25	77745.06	240.359279	1616.8	false
13C8-PFOA	421.0 / 376.0	2.66	93888.11	238.615595	4985.0	false
13C9-PFNA	472.0 / 427.0	3.05	91410.50	203.459885	1461.5	false
13C6-PFDA	519.0 / 474.0	3.41	112001.72	241.223229	1317.7	false
13C7-PFUnA	570.0 / 525.0	3.72	114987.92	268.101379	710.5	false
13C2-PFTeDA	715.0 / 670.0	4.46	89201.76	239.734745	1157.1	false
13C3-PFBS	302.0 / 99.0	1.51	32711.63	261.326316	630.8	false
13C3-PFHxS	402.0 / 99.0	2.27	27301.39	240.693321	653.1	false
13C8-PFOS	507.0 / 99.0	3.05	29449.04	229.824760	259.9	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:58:10 AM

Sample Name	J8445-FS-D(9)	**Injection Vial**	14
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:15:17	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	100503.67	254.345921	1300.7	false
d3-MeFOSAA	573.0 / 419.0	3.56	16515.45	261.540373	237.7	false
d5-EtFOSAA	589.0 / 419.0	3.72	19302.31	279.978506	322.3	false
13C5-PFHxA	318.0 / 273.0	1.83	64833.03	249.723388	747.9	false
13C4-PFHpA	367.0 / 322.0	2.25	68234.43	231.015613	1109.0	false
13C8-PFOA	421.0 / 376.0	2.66	86098.41	239.625479	1718.9	false
13C9-PFNA	472.0 / 427.0	3.05	86750.61	211.448658	870.5	false
13C6-PFDA	519.0 / 474.0	3.40	98699.32	247.923919	833.9	false
13C7-PFUnA	570.0 / 525.0	3.72	106770.95	290.341912	1392.8	false
13C2-PFTeDA	715.0 / 670.0	4.45	78784.07	246.948136	1865.3	false
13C3-PFBS	302.0 / 99.0	1.51	30385.92	274.613186	735.8	false
13C3-PFHxS	402.0 / 99.0	2.27	24207.61	241.434353	590.4	false
13C8-PFOS	507.0 / 99.0	3.05	26595.75	234.804156	259.8	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:58:15 AM

Sample Name	J8446-FS(3)	**Injection Vial**	15
Sample ID	VC-MS09-SB03-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:26:09	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	85410.72	229.845659	1007.5	false
d3-MeFOSAA	573.0 / 419.0	3.57	11998.14	271.332206	206.3	false
d5-EtFOSAA	589.0 / 419.0	3.72	14329.16	296.807569	203.8	false
13C5-PFHxA	318.0 / 273.0	1.83	45330.69	181.414490	626.5	false
13C4-PFHpA	367.0 / 322.0	2.25	54528.55	191.813185	825.8	false
13C8-PFOA	421.0 / 376.0	2.66	66776.82	193.099147	3903.9	false
13C9-PFNA	472.0 / 427.0	3.06	64197.05	162.578919	14574.2	false
13C6-PFDA	519.0 / 474.0	3.41	88996.64	237.716300	16452.9	false
13C7-PFUnA	570.0 / 525.0	3.72	83737.58	242.135316	970.5	false
13C2-PFTeDA	715.0 / 670.0	4.46	70440.26	234.784504	1972.0	false
13C3-PFBS	302.0 / 99.0	1.51	29860.11	385.371242	538.8	false
13C3-PFHxS	402.0 / 99.0	2.27	18551.23	264.215752	329.9	false
13C8-PFOS	507.0 / 99.0	3.05	20124.06	253.716116	224.5	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:58:20 AM

Sample Name	J8446-FS-D(5)	**Injection Vial**	16
Sample ID	VC-MS09-SB03-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:37:01	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	102231.68	234.302687	1317.1	false
d3-MeFOSAA	573.0 / 419.0	3.56	14422.39	217.104715	261.6	false
d5-EtFOSAA	589.0 / 419.0	3.72	17527.03	241.661468	258.6	false
13C5-PFHxA	318.0 / 273.0	1.83	66185.21	259.774700	763.4	false
13C4-PFHpA	367.0 / 322.0	2.25	68705.16	237.028264	571.1	false
13C8-PFOA	421.0 / 376.0	2.66	89152.83	252.840144	1470.1	false
13C9-PFNA	472.0 / 427.0	3.05	94553.65	234.846299	1004.9	false
13C6-PFDA	519.0 / 474.0	3.40	104829.45	238.471514	1168.3	false
13C7-PFUnA	570.0 / 525.0	3.72	103129.82	253.974344	1024.0	false
13C2-PFTeDA	715.0 / 670.0	4.46	79623.52	226.025603	1711.8	false
13C3-PFBS	302.0 / 99.0	1.51	28696.37	246.524205	1017.9	false
13C3-PFHxS	402.0 / 99.0	2.27	23362.92	221.491923	677.7	false
13C8-PFOS	507.0 / 99.0	3.05	28914.46	242.656667	267.0	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:58:24 AM

Sample Name	J8447-FS(3)	**Injection Vial**	17
Sample ID	VC-MS09-SS04-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:47:52	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	99022.00	251.215955	1572.7	false
d3-MeFOSAA	573.0 / 419.0	3.56	12858.36	203.556987	205.1	false
d5-EtFOSAA	589.0 / 419.0	3.72	17250.20	250.127461	201.7	false
13C5-PFHxA	318.0 / 273.0	1.84	64257.91	262.324890	756.8	false
13C4-PFHpA	367.0 / 322.0	2.25	68819.02	246.942727	861.3	false
13C8-PFOA	421.0 / 376.0	2.66	90884.50	268.088192	1296.3	false
13C9-PFNA	472.0 / 427.0	3.05	86873.83	224.425072	1002.8	false
13C6-PFDA	519.0 / 474.0	3.40	99004.39	249.305209	1193.6	false
13C7-PFUnA	570.0 / 525.0	3.72	98563.01	268.684891	4070.5	false
13C2-PFTeDA	715.0 / 670.0	4.46	83225.53	261.514978	1648.4	false
13C3-PFBS	302.0 / 99.0	1.51	27734.42	250.564649	570.9	false
13C3-PFHxS	402.0 / 99.0	2.27	25364.25	252.883786	464.7	false
13C8-PFOS	507.0 / 99.0	3.05	27440.92	242.183234	247.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:58:30 AM

Sample Name	J8448-FS(3)	**Injection Vial**	18
Sample ID	VC-MS09-SB04-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:58:43	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	114316.25	276.265271	1015.4	false
d3-MeFOSAA	573.0 / 419.0	3.56	15561.38	291.572497	212.1	false
d5-EtFOSAA	589.0 / 419.0	3.72	18295.41	313.984148	279.6	false
13C5-PFHxA	318.0 / 273.0	1.83	67072.82	236.770414	920.8	false
13C4-PFHpA	367.0 / 322.0	2.25	81014.19	251.371957	739.5	false
13C8-PFOA	421.0 / 376.0	2.66	103137.45	263.070542	1895.8	false
13C9-PFNA	472.0 / 427.0	3.05	84790.55	189.407781	1118.6	false
13C6-PFDA	519.0 / 474.0	3.40	108001.39	259.065196	1169.9	false
13C7-PFUnA	570.0 / 525.0	3.72	112878.39	293.118305	880.2	false
13C2-PFTeDA	715.0 / 670.0	4.46	86836.19	259.922352	1771.0	false
13C3-PFBS	302.0 / 99.0	1.51	32506.02	347.586447	479.0	false
13C3-PFHxS	402.0 / 99.0	2.27	28225.18	333.068747	630.0	false
13C8-PFOS	507.0 / 99.0	3.05	26846.03	280.429418	307.9	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:58:33 AM

Sample Name	J8448-FS-D(5)	**Injection Vial**	19
Sample ID	VC-MS09-SB04-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:09:33	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	95448.57	229.412543	1390.3	false
d3-MeFOSAA	573.0 / 419.0	3.56	13869.94	202.119349	205.0	false
d5-EtFOSAA	589.0 / 419.0	3.72	19247.36	256.904423	199.6	false
13C5-PFHxA	318.0 / 273.0	1.84	60649.13	236.363641	796.2	false
13C4-PFHpA	367.0 / 322.0	2.25	68897.06	236.010691	2737.9	false
13C8-PFOA	421.0 / 376.0	2.66	90671.20	255.329170	1007.1	false
13C9-PFNA	472.0 / 427.0	3.05	93122.46	229.657196	2638.3	false
13C6-PFDA	519.0 / 474.0	3.40	109303.21	260.760652	1149.7	false
13C7-PFUnA	570.0 / 525.0	3.72	106430.36	274.869810	817.2	false
13C2-PFTeDA	715.0 / 670.0	4.46	77360.55	230.298849	1677.6	false
13C3-PFBS	302.0 / 99.0	1.51	26356.55	219.190846	611.3	false
13C3-PFHxS	402.0 / 99.0	2.27	26070.91	239.269978	506.8	false
13C8-PFOS	507.0 / 99.0	3.05	30127.62	244.761544	274.6	false

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Summary Quant Report

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Printed: 25/10/2018 10:58:37 AM

Sample Name	J8449-FS(3)	**Injection Vial**	22
Sample ID	VC-MS09-SB04-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:42:10	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	97885.41	243.187871	1400.4	false
d3-MeFOSAA	573.0 / 419.0	3.56	12896.37	239.456712	206.3	false
d5-EtFOSAA	589.0 / 419.0	3.72	17096.90	290.766253	203.2	false
13C5-PFHxA	318.0 / 273.0	1.84	61831.69	259.243542	941.4	false
13C4-PFHpA	367.0 / 322.0	2.25	71105.30	262.043665	862.4	false
13C8-PFOA	421.0 / 376.0	2.66	81117.92	245.747216	130054.2	false
13C9-PFNA	472.0 / 427.0	3.05	84656.83	224.609588	1119.2	false
13C6-PFDA	519.0 / 474.0	3.41	105173.33	259.352841	1186.2	false
13C7-PFUnA	570.0 / 525.0	3.72	101938.42	272.129510	947.2	false
13C2-PFTeDA	715.0 / 670.0	4.46	76005.53	233.880313	1326.7	false
13C3-PFBS	302.0 / 99.0	1.51	28027.30	296.989657	593.2	false
13C3-PFHxS	402.0 / 99.0	2.27	25808.39	301.800010	580.2	false
13C8-PFOS	507.0 / 99.0	3.05	27157.37	281.120369	236.7	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:58:41 AM

Sample Name	J8449-FS-D(5)	**Injection Vial**	23
Sample ID	VC-MS09-SB04-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:53:03	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	94791.43	272.905314	1031.8	false
d3-MeFOSAA	573.0 / 419.0	3.56	14716.80	252.976599	250.5	false
d5-EtFOSAA	589.0 / 419.0	3.72	19621.68	308.937173	222.2	false
13C5-PFHxA	318.0 / 273.0	1.84	56809.75	256.608723	626.9	false
13C4-PFHpA	367.0 / 322.0	2.25	64832.92	257.406192	563.9	false
13C8-PFOA	421.0 / 376.0	2.66	80645.85	263.211914	2198.6	false
13C9-PFNA	472.0 / 427.0	3.05	81920.00	234.157456	2527.6	false
13C6-PFDA	519.0 / 474.0	3.40	97200.35	277.761574	1086.6	false
13C7-PFUnA	570.0 / 525.0	3.72	95341.81	294.944358	1470.0	false
13C2-PFTeDA	715.0 / 670.0	4.46	71802.55	256.039674	1399.9	false
13C3-PFBS	302.0 / 99.0	1.52	25580.53	250.944157	601.5	false
13C3-PFHxS	402.0 / 99.0	2.27	24245.28	262.478018	676.7	false
13C8-PFOS	507.0 / 99.0	3.05	24617.90	235.919117	340.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:58:45 AM

Sample Name	J8450-FS(3)	**Injection Vial**	24
Sample ID	VC-MS09-SS05-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:03:55	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	109773.43	303.426103	1277.8	false
d3-MeFOSAA	573.0 / 419.0	3.56	13860.25	339.472500	149.3	false
d5-EtFOSAA	589.0 / 419.0	3.72	16466.93	369.413730	196.4	true
13C5-PFHxA	318.0 / 273.0	1.84	67801.97	286.143201	712.6	false
13C4-PFHpA	367.0 / 322.0	2.25	77657.92	288.072489	910.2	false
13C8-PFOA	421.0 / 376.0	2.66	100275.60	305.781610	1528.8	false
13C9-PFNA	472.0 / 427.0	3.05	63328.12	169.124777	72975.3	false
13C6-PFDA	519.0 / 474.0	3.40	106863.57	293.188416	919.1	false
13C7-PFUnA	570.0 / 525.0	3.72	111447.10	331.007832	606.2	false
13C2-PFTeDA	715.0 / 670.0	4.46	84248.08	288.429873	1368.3	false
13C3-PFBS	302.0 / 99.0	1.51	32705.79	457.149833	594.1	false
13C3-PFHxS	402.0 / 99.0	2.27	26444.49	407.912820	446.7	false
13C8-PFOS	507.0 / 99.0	3.05	17690.32	241.553974	182.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:58:49 AM

Sample Name	J8450-FS-D(5)	**Injection Vial**	25
Sample ID	VC-MS09-SS05-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:14:47	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	112343.99	248.094161	1415.0	false
d3-MeFOSAA	573.0 / 419.0	3.56	18710.96	308.255371	233.3	false
d5-EtFOSAA	589.0 / 419.0	3.72	21028.68	317.317086	278.2	false
13C5-PFHxA	318.0 / 273.0	1.83	72294.95	247.976751	927.7	false
13C4-PFHpA	367.0 / 322.0	2.25	81641.84	246.144782	924.1	false
13C8-PFOA	421.0 / 376.0	2.66	106819.88	264.746386	2142.2	false
13C9-PFNA	472.0 / 427.0	3.05	99648.29	216.292937	1595.0	false
13C6-PFDA	519.0 / 474.0	3.40	118980.27	260.797277	1002.7	false
13C7-PFUnA	570.0 / 525.0	3.72	119079.67	282.564834	836.8	false
13C2-PFTeDA	715.0 / 670.0	4.46	91695.46	250.806639	1451.9	false
13C3-PFBS	302.0 / 99.0	1.51	30462.57	286.405607	569.5	false
13C3-PFHxS	402.0 / 99.0	2.27	28477.52	295.471350	674.1	false
13C8-PFOS	507.0 / 99.0	3.05	32051.39	294.378768	336.2	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:58:53 AM

Sample Name	J8451-FS(3)	**Injection Vial**	26
Sample ID	VC-MS09-SB05-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:25:38	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	98201.22	273.669596	912.4	false
d3-MeFOSAA	573.0 / 419.0	3.57	14246.10	355.668409	185.4	false
d5-EtFOSAA	589.0 / 419.0	3.72	16842.29	385.138721	282.9	true
13C5-PFHxA	318.0 / 273.0	1.84	55291.02	250.556419	902.8	false
13C4-PFHpA	367.0 / 322.0	2.25	62221.64	247.837642	1218.0	false
13C8-PFOA	421.0 / 376.0	2.66	88106.46	288.491914	1183.8	false
13C9-PFNA	472.0 / 427.0	3.06	61480.97	176.303578	14944.6	false
13C6-PFDA	519.0 / 474.0	3.41	93162.20	257.697847	770.5	false
13C7-PFUnA	570.0 / 525.0	3.72	97567.04	292.163909	1685.7	false
13C2-PFTeDA	715.0 / 670.0	4.46	79016.54	272.742111	1417.9	false
13C3-PFBS	302.0 / 99.0	1.52	27203.67	387.594069	620.2	false
13C3-PFHxS	402.0 / 99.0	2.28	23883.00	375.523143	547.5	false
13C8-PFOS	507.0 / 99.0	3.05	19443.93	270.631435	233.5	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:58:57 AM

Sample Name	J8451-FS-D(5)	**Injection Vial**	27
Sample ID	VC-MS09-SB05-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:36:29	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	96199.31	241.721311	1801.8	false
d3-MeFOSAA	573.0 / 419.0	3.57	15577.67	274.313563	204.3	false
d5-EtFOSAA	589.0 / 419.0	3.72	19572.27	315.684390	298.5	false
13C5-PFHxA	318.0 / 273.0	1.84	59186.70	229.900840	596.0	false
13C4-PFHpA	367.0 / 322.0	2.25	64893.60	221.560950	746.9	false
13C8-PFOA	421.0 / 376.0	2.66	96646.96	271.256172	2656.1	false
13C9-PFNA	472.0 / 427.0	3.05	92891.45	228.329338	1135.6	false
13C6-PFDA	519.0 / 474.0	3.41	98656.04	246.052688	1335.0	false
13C7-PFUnA	570.0 / 525.0	3.72	102341.99	276.318926	966.2	false
13C2-PFTeDA	715.0 / 670.0	4.46	77808.49	242.155592	1792.3	false
13C3-PFBS	302.0 / 99.0	1.52	25531.48	256.579099	774.5	false
13C3-PFHxS	402.0 / 99.0	2.28	26718.03	296.311173	625.9	false
13C8-PFOS	507.0 / 99.0	3.05	29609.04	290.679364	310.0	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:59:00 AM

Sample Name	J5452-FS((3)	**Injection Vial**	28
Sample ID	VC-MS09-SB05-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:47:20	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	96139.11	240.145703	1304.7	false
d3-MeFOSAA	573.0 / 419.0	3.56	14480.12	275.080433	195.8	false
d5-EtFOSAA	589.0 / 419.0	3.72	17169.20	298.747630	250.3	false
13C5-PFHxA	318.0 / 273.0	1.84	61507.05	251.029088	638.8	false
13C4-PFHpA	367.0 / 322.0	2.25	71313.75	255.827556	1088.8	false
13C8-PFOA	421.0 / 376.0	2.66	84879.11	250.308133	1596.4	false
13C9-PFNA	472.0 / 427.0	3.05	86045.67	222.227421	1050.3	false
13C6-PFDA	519.0 / 474.0	3.40	107333.88	266.117202	854.1	false
13C7-PFUnA	570.0 / 525.0	3.72	99110.68	266.016716	937.1	false
13C2-PFTeDA	715.0 / 670.0	4.46	77730.46	240.486354	1470.9	false
13C3-PFBS	302.0 / 99.0	1.51	27496.70	298.104462	436.2	false
13C3-PFHxS	402.0 / 99.0	2.27	23867.68	285.559341	580.8	false
13C8-PFOS	507.0 / 99.0	3.05	24108.28	255.328188	327.1	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:59:05 AM

Sample Name	J8452-FS-D(5)	**Injection Vial**	29
Sample ID	VC-MS09-SB05-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:58:12	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	98477.79	248.400406	1546.8	false
d3-MeFOSAA	573.0 / 419.0	3.57	15302.01	225.143603	234.8	false
d5-EtFOSAA	589.0 / 419.0	3.72	18888.27	254.548370	246.1	false
13C5-PFHxA	318.0 / 273.0	1.84	61271.75	241.433546	853.2	false
13C4-PFHpA	367.0 / 322.0	2.25	66708.80	231.044341	953.7	false
13C8-PFOA	421.0 / 376.0	2.66	92682.28	263.881545	18263.2	false
13C9-PFNA	472.0 / 427.0	3.05	84427.16	210.517886	34118.9	false
13C6-PFDA	519.0 / 474.0	3.41	95336.52	238.690270	851.6	false
13C7-PFUnA	570.0 / 525.0	3.72	102336.69	277.369801	811.4	false
13C2-PFTeDA	715.0 / 670.0	4.46	75243.52	235.075638	1207.3	false
13C3-PFBS	302.0 / 99.0	1.51	26723.63	224.391780	706.4	false
13C3-PFHxS	402.0 / 99.0	2.28	24683.28	228.724535	682.6	false
13C8-PFOS	507.0 / 99.0	3.05	28912.88	237.163340	260.7	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:59:09 AM

Sample Name	J8453MS-FS(3)	**Injection Vial**	32
Sample ID	VC-MS09-SB04-0102-MS	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:30:47	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	89621.44	243.700823	972.3	false
d3-MeFOSAA	573.0 / 419.0	3.57	13371.29	332.542315	113.5	false
d5-EtFOSAA	589.0 / 419.0	3.73	11668.83	265.807871	186.1	false
13C5-PFHxA	318.0 / 273.0	1.84	54343.88	258.255069	617.3	false
13C4-PFHpA	367.0 / 322.0	2.25	62046.58	259.173711	743.1	false
13C8-PFOA	421.0 / 376.0	2.66	64919.85	222.920852	2669.2	false
13C9-PFNA	472.0 / 427.0	3.05	68893.87	207.180225	1205.6	false
13C6-PFDA	519.0 / 474.0	3.40	78980.42	213.169920	1017.5	false
13C7-PFUnA	570.0 / 525.0	3.72	85357.02	249.400959	882.6	false
13C2-PFTeDA	715.0 / 670.0	4.46	73150.56	246.369683	1417.8	false
13C3-PFBS	302.0 / 99.0	1.51	28704.49	407.402691	745.7	false
13C3-PFHxS	402.0 / 99.0	2.27	19333.87	302.824503	488.9	false
13C8-PFOS	507.0 / 99.0	3.05	18123.58	251.282700	220.3	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:59:13 AM

Sample Name	J8453MS-FS-D(5)	**Injection Vial**	33
Sample ID	VC-MS09-SB04-0102-MS	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:41:39	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	100404.16	257.208720	1166.5	false
d3-MeFOSAA	573.0 / 419.0	3.56	14245.37	235.660188	200.7	false
d5-EtFOSAA	589.0 / 419.0	3.72	17566.12	266.167578	243.4	false
13C5-PFHxA	318.0 / 273.0	1.84	62123.48	257.411609	1027.3	false
13C4-PFHpA	367.0 / 322.0	2.25	71986.08	262.177743	621.5	false
13C8-PFOA	421.0 / 376.0	2.66	93011.91	278.474814	1335.6	false
13C9-PFNA	472.0 / 427.0	3.05	91526.80	239.988354	1719.7	false
13C6-PFDA	519.0 / 474.0	3.40	104318.61	265.251092	938.3	false
13C7-PFUnA	570.0 / 525.0	3.72	97368.09	268.018285	18455.0	false
13C2-PFTeDA	715.0 / 670.0	4.46	79370.06	251.834482	2051.1	false
13C3-PFBS	302.0 / 99.0	1.51	27463.94	259.284010	701.2	false
13C3-PFHxS	402.0 / 99.0	2.27	25636.56	267.098200	609.1	false
13C8-PFOS	507.0 / 99.0	3.05	29112.69	268.497240	347.5	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:59:17 AM

Sample Name	J8454MSD-FS(3)	**Injection Vial**	34
Sample ID	VC-MS09-SB04-0102-MSD	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:52:29	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	94099.82	257.624954	1127.3	false
d3-MeFOSAA	573.0 / 419.0	3.56	15731.27	320.496250	137.2	false
d5-EtFOSAA	589.0 / 419.0	3.72	14348.95	267.760434	266.6	false
13C5-PFHxA	318.0 / 273.0	1.84	51821.27	215.984891	599.6	false
13C4-PFHpA	367.0 / 322.0	2.25	58002.92	212.490786	823.2	false
13C8-PFOA	421.0 / 376.0	2.66	66268.74	199.571743	1888.2	false
13C9-PFNA	472.0 / 427.0	3.05	67526.79	178.098768	867.7	false
13C6-PFDA	519.0 / 474.0	3.40	80409.43	218.508096	1031.3	false
13C7-PFUnA	570.0 / 525.0	3.72	83271.73	244.968639	976.4	false
13C2-PFTeDA	715.0 / 670.0	4.46	77754.54	263.663118	1173.3	false
13C3-PFBS	302.0 / 99.0	1.51	29653.43	344.774073	572.0	false
13C3-PFHxS	402.0 / 99.0	2.27	21285.14	273.107999	350.8	false
13C8-PFOS	507.0 / 99.0	3.05	20901.94	237.405556	211.0	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:59:21 AM

Sample Name	J8454MSD-FS-D(5)	**Injection Vial**	35
Sample ID	VC-MS09-SB04-0102-MSD	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:03:21	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	96297.23	249.028406	1205.5	false
d3-MeFOSAA	573.0 / 419.0	3.57	15248.58	249.629052	195.9	false
d5-EtFOSAA	589.0 / 419.0	3.73	18649.63	279.642337	285.5	false
13C5-PFHxA	318.0 / 273.0	1.84	59561.08	242.490141	874.7	false
13C4-PFHpA	367.0 / 322.0	2.25	67822.75	242.706725	796.7	false
13C8-PFOA	421.0 / 376.0	2.66	84037.92	247.218987	1722.1	false
13C9-PFNA	472.0 / 427.0	3.05	89170.61	229.732672	1315.1	false
13C6-PFDA	519.0 / 474.0	3.41	92257.91	236.810037	999.4	false
13C7-PFUnA	570.0 / 525.0	3.72	101183.89	281.164338	912.3	false
13C2-PFTeDA	715.0 / 670.0	4.46	75196.53	240.855971	1354.2	false
13C3-PFBS	302.0 / 99.0	1.51	27011.03	252.352350	478.0	false
13C3-PFHxS	402.0 / 99.0	2.28	22131.51	228.178878	555.6	false
13C8-PFOS	507.0 / 99.0	3.05	29678.13	270.861528	296.3	false

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Summary Quant Report

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Sample Name	J8444-FS(5)	**Injection Vial**	38
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:35:56	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	108262.01	343.154948	849.0	false
d3-MeFOSAA	573.0 / 419.0	3.56	13062.47	1315.236025	180.1	false
d5-EtFOSAA	589.0 / 419.0	3.72	17179.11	1584.332330	182.8	false
13C5-PFHxA	318.0 / 273.0	1.84	69610.95	151.951313	544.9	false
13C4-PFHpA	367.0 / 322.0	2.24	55835.10	107.129508	1354.9	false
13C8-PFOA	421.0 / 376.0	2.66	38784.44	61.172950	695.0	false
13C9-PFNA	472.0 / 427.0	3.04	18134.54	25.049727	334.1	false
13C6-PFDA	519.0 / 474.0	3.40	86122.50	270.951893	564.7	false
13C7-PFUnA	570.0 / 525.0	3.72	100900.13	343.652635	525.4	false
13C2-PFTeDA	715.0 / 670.0	4.46	87864.87	344.948255	2174.1	false
13C3-PFBS	302.0 / 99.0	1.51	35989.61	2068.026475	515.2	false
13C3-PFHxS	402.0 / 99.0	2.27	14605.73	926.191011	272.9	false
13C8-PFOS	507.0 / 99.0	3.04	4624.11	259.568514	50.9	false

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:31:11 AM

Sample Name	KB80 IB	**Injection Vial**	2
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T18:27:43	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	true
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	true
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Sample Name	J8440-FS-D(7)	**Injection Vial**	23
Sample ID	VC-MS09-SB01-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T22:48:35	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.08	2094359.28	4082.529105	332.8	false
PFOS_2	499.0 / 99.0	3.08	387277.83	4347.059989	862.9	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:31:19 AM

Sample Name	J8443-FS-D(9)	**Injection Vial**	24
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T22:59:28	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.08	1272797.87	2706.328449	403.2	false
PFOS_2	499.0 / 99.0	3.08	236605.22	2896.428552	756.6	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

Created with Analyst Reporter
Printed: 25/10/2018 10:31:23 AM

Sample Name	J8445-FS-D(11)	**Injection Vial**	25
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:10:20	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.08	1000063.88	2089.283709	193.3	false
PFOS_2	499.0 / 99.0	3.08	183369.20	2205.194280	681.0	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Printed: 25/10/2018 10:31:28 AM

Sample Name	J8446-FS-D(7)	**Injection Vial**	26
Sample ID	VC-MS09-SB03-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:21:12	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.08	1080961.98	2221.669729	275.1	false
PFOS_2	499.0 / 99.0	3.08	204070.71	2414.438225	664.7	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	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

Created with Analyst Reporter
Printed: 25/10/2018 10:31:32 AM

Sample Name	J8450-FS-D(7)	**Injection Vial**	27
Sample ID	VC-MS09-SS05-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:32:04	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.08	685517.68	1449.338419	289.0	false
PFOS_2	499.0 / 99.0	3.08	144375.75	1756.512599	761.1	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Quant Report

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Printed: 25/10/2018 10:31:36 AM

Sample Name	J8444-FS-D(17)	**Injection Vial**	28
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:42:56	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.03	1098853.09	2750.341141	197.5	false
PFOS_2	499.0 / 99.0	3.08	172001.81	2478.630441	385.9	true
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true

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Summary Ion Ratio Report

Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:02:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	0.410	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

Sample Name	CR902PB-FS(3)	**Injection Vial**	35
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:43:47	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.330	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.040	0.065	ü
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	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.190	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	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	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	CR903LCS-FS(3)	**Injection Vial**	36
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:54:39	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	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	0.280	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	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.310	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	3.42	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	0.070	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	0.530	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

Sample Name	J8438-FS(3)	**Injection Vial**	37
Sample ID	VC-MS09-SS01-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:05:31	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.060	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	2.67	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.300	0.306	ü
PFOS_1	499.0 / 80.0	3.06	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	3.42	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.74	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	4.02	PFDoA	0.130	0.160	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.22	PFTrDA	0.130	0.066	
PFTeDA_1	713.0 / 669.0	4.43	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.030	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	J8438-FS-D(5)	**Injection Vial**	38
Sample ID	VC-MS09-SS01-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:16:25	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.190	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	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	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

Sample Name	J8439-FS(3)	**Injection Vial**	39
Sample ID	VC-MS09-SB01-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:27:18	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	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	0.280	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	0.310	0.306	ü
PFOS_1	499.0 / 80.0	3.06	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	3.44	PFDA	0.050	0.041	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.69	PFUnA	0.070	0.049	ü
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.03	PFDoA	0.210	0.160	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.20	PFTrDA	0.080	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

Sample Name	J8439-FS-D(5)	**Injection Vial**	40
Sample ID	VC-MS09-SB01-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:38:11	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	N/A	PFNA	N/A	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	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	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

Sample Name	J8440-FS(3)	**Injection Vial**	41
Sample ID	VC-MS09-SB01-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:49:05	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	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	0.280	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	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.320	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	0.030	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	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	4.22	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

Sample Name	J8440-FS-D(5)	**Injection Vial**	42
Sample ID	VC-MS09-SB01-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:59:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	N/A	PFNA	N/A	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	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	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	J8441-FS(3)	**Injection Vial**	45
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:32:35	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.310	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.510	0.282	
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.320	0.306	ü
PFOS_1	499.0 / 80.0	2.97	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.500	0.174	
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	PFUnA	0.030	0.049	ü
PFDoA_1	613.0 / 569.0	4.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.00	PFDoA	0.090	0.160	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.21	PFTrDA	0.080	0.066	ü
PFTeDA_1	713.0 / 669.0	4.46	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.46	PFTeDA	0.040	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.56	NMeFOSAA	0.140	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

Sample Name	J8441-FS-D(5)	**Injection Vial**	46
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:43:28	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	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	0.300	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.060	0.065	ü
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	3.07	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.280	0.174	
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	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

Sample Name	J8441-FS-D(7)	**Injection Vial**	47
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:54:21	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	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	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.200	0.174	ü
PFDA_1	513.0 / 469.0	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	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	J8441-FS-D(9)	**Injection Vial**	48
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:05:14	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.200	0.174	ü
PFDA_1	513.0 / 469.0	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	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	J8442-FS(3)	**Injection Vial**	49
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:48:44	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.320	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.25	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.620	0.282	
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.070	0.065	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.330	0.306	ü
PFOS_1	499.0 / 80.0	2.96	PFOS			
PFOS_2	499.0 / 99.0	N/A	PFOS	N/A	0.174	
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.020	0.041	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	PFUnA	0.050	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	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.060	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	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.56	NMeFOSAA	0.220	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

Sample Name	J8442-FS-D(5)	**Injection Vial**	50
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:59:38	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.060	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	0.320	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.060	0.065	ü
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	3.02	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.200	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	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

Sample Name	J8442-FS-D(7)	**Injection Vial**	51
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:10:33	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	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	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.060	0.065	ü
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	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.170	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	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	J8442-FS-D(9)	**Injection Vial**	52
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:21:26	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	N/A	PFOA			
PFOA_2	413.0 / 169.0	2.66	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	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.180	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	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

Sample Name	J8443-FS(3)	**Injection Vial**	1
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:54:05	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.300	0.282	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	2.99	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.310	0.174	
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.030	0.041	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.00	PFDoA	0.110	0.160	ü
PFTrDA_1	663.0 / 619.0	4.22	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.19	PFTrDA	0.110	0.066	
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.590	0.551	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.050	0.062	ü

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Summary Ion Ratio Report

Sample Name	J8443-FS-D(5)	**Injection Vial**	2
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:04:56	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.070	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	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	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	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.200	0.174	ü
PFDA_1	513.0 / 469.0	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	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

Sample Name	J8443-FS-D(7)	**Injection Vial**	3
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:15:48	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	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	N/A	PFNA	N/A	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	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	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	J8444-FS-D(7)	**Injection Vial**	4
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:26:39	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.490	0.282	
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	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	2.93	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.620	0.174	
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	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	J8444-FS-D(9)	**Injection Vial**	5
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:37:32	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.060	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	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.390	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.060	0.065	ü
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	2.98	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.450	0.174	
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	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	J8444-FS-D(11)	**Injection Vial**	6
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:48:24	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	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	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.310	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.060	0.065	ü
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	2.99	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.260	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	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

Sample Name	J8444-FS-D(13)	**Injection Vial**	7
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:59:16	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	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	0.060	0.065	ü
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	2.99	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.170	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	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

Sample Name	J8444-FS-D(15)	**Injection Vial**	8
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:10:08	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	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	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	3.01	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.160	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	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

Sample Name	J8445-FS(3)	**Injection Vial**	11
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:42:42	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.460	0.292	
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.170	0.077	
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.22	PFHpA	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.24	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.920	0.282	
PFOA_1	413.0 / 369.0	2.64	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.120	0.065	
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.01	PFNA	0.400	0.306	ü
PFOS_1	499.0 / 80.0	2.92	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.550	0.174	
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.030	0.041	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	PFUnA	0.030	0.049	ü
PFDoA_1	613.0 / 569.0	4.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.110	0.160	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.21	PFTrDA	0.080	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	3.58	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.010	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

Sample Name	J8445-FS-D(5)	**Injection Vial**	12
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:53:34	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.340	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.060	0.065	ü
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	3.05	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.190	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	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	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

Sample Name	J8445-FS-D(7)	**Injection Vial**	13
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:04:26	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	N/A	0.025	
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	0.050	0.065	ü
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	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.180	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	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

Sample Name	J8445-FS-D(9)	**Injection Vial**	14
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:15:17	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	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	N/A	PFNA	N/A	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	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	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	J8446-FS(3)	**Injection Vial**	15
Sample ID	VC-MS09-SB03-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:26:09	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.22	PFHpA	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.290	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.040	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.390	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	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	4.02	PFDoA	0.100	0.160	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.23	PFTrDA	0.290	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	J8446-FS-D(5)	**Injection Vial**	16
Sample ID	VC-MS09-SB03-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:37:01	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.060	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	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.040	0.065	ü
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	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.180	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	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

Sample Name	J8447-FS(3)	**Injection Vial**	17
Sample ID	VC-MS09-SS04-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:47:52	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.320	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.040	0.025	
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	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.300	0.306	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.190	0.174	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.050	0.041	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.57	PFUnA	0.060	0.049	ü
PFDoA_1	613.0 / 569.0	3.98	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.080	0.160	ü
PFTrDA_1	663.0 / 619.0	4.18	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.16	PFTrDA	0.200	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

Sample Name	J8448-FS(3)	**Injection Vial**	18
Sample ID	VC-MS09-SB04-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:58:43	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.060	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	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	2.66	PFOA	0.050	0.065	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	3.06	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	3.41	PFDA	0.040	0.041	ü
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	4.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.00	PFDoA	0.120	0.160	ü
PFTrDA_1	663.0 / 619.0	4.22	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.18	PFTrDA	0.140	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

Sample Name	J8448-FS-D(5)	**Injection Vial**	19
Sample ID	VC-MS09-SB04-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:09:33	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.200	0.174	ü
PFDA_1	513.0 / 469.0	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	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

Sample Name	J8449-FS(3)	**Injection Vial**	22
Sample ID	VC-MS09-SB04-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:42:10	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	PFHpA	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.060	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.350	0.306	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.07	PFOS	0.160	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	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

Sample Name	J8449-FS-D(5)	**Injection Vial**	23
Sample ID	VC-MS09-SB04-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:53:03	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	3.05	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.160	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	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

Sample Name	J8450-FS(3)	**Injection Vial**	24
Sample ID	VC-MS09-SS05-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:03:55	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.340	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	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.280	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	3.06	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	3.06	PFOS	0.280	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	3.71	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.040	0.049	ü
PFDoA_1	613.0 / 569.0	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.120	0.160	ü
PFTrDA_1	663.0 / 619.0	4.19	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.18	PFTrDA	0.350	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

Sample Name	J8450-FS-D(5)	**Injection Vial**	25
Sample ID	VC-MS09-SS05-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:14:47	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.190	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	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	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	J8451-FS(3)	**Injection Vial**	26
Sample ID	VC-MS09-SB05-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:25:38	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.320	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.29	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	0.060	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	0.220	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.060	0.041	ü
PFUnA_1	563.0 / 519.0	3.65	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.010	0.049	
PFDoA_1	613.0 / 569.0	3.99	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.090	0.160	ü
PFTrDA_1	663.0 / 619.0	4.19	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.19	PFTrDA	0.360	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	3.74	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.69	NEtFOSAA	0.070	0.062	ü

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Summary Ion Ratio Report

Sample Name	J8451-FS-D(5)	**Injection Vial**	27
Sample ID	VC-MS09-SB05-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:36:29	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.190	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	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	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

Sample Name	J8452-FS(3)	**Injection Vial**	28
Sample ID	VC-MS09-SB05-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:47:20	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.030	0.025	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.290	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	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.320	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	3.42	PFDA	0.040	0.041	ü
PFUnA_1	563.0 / 519.0	3.65	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	4.19	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.19	PFTrDA	0.210	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

Sample Name	J8452-FS-D(5)	**Injection Vial**	29
Sample ID	VC-MS09-SB05-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:58:12	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	N/A	PFNA	N/A	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	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	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

Sample Name	J8453MS-FS(3)	**Injection Vial**	32
Sample ID	VC-MS09-SB04-0102-MS	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:30:47	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	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	2.67	PFOA	0.070	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.300	0.306	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.200	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.040	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	0.170	0.160	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.46	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.560	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	J8453MS-FS-D(5)	**Injection Vial**	33
Sample ID	VC-MS09-SB04-0102-MS	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:41:39	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	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	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.270	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	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.190	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	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	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

Sample Name	J8454MSD-FS(3)	**Injection Vial**	34
Sample ID	VC-MS09-SB04-0102-MSD	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:52:29	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.300	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.070	0.077	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	2.67	PFOA	0.070	0.065	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.310	0.306	ü
PFOS_1	499.0 / 80.0	3.06	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	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	4.01	PFDoA			
PFDoA_2	613.0 / 319.0	4.01	PFDoA	0.160	0.160	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.070	0.066	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.46	PFTeDA	0.050	0.049	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.540	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

Sample Name	J8454MSD-FS-D(5)	**Injection Vial**	35
Sample ID	VC-MS09-SB04-0102-MSD	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:03:21	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.290	0.292	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.080	0.077	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	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.290	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	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.190	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.041	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	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

Sample Name	J8444-FS(5)	**Injection Vial**	38
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:35:56	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.53	PFBS			
PFBS_2	298.9 / 99.0	1.53	PFBS	0.310	0.292	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.080	0.077	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.23	PFHpA	0.020	0.025	ü
PFHxS_1	399.0 / 80.0	2.24	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.760	0.282	
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.100	0.065	
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.320	0.306	ü
PFOS_1	499.0 / 80.0	2.94	PFOS			
PFOS_2	499.0 / 99.0	3.00	PFOS	1.100	0.174	
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.030	0.041	ü
PFUnA_1	563.0 / 519.0	3.69	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.049	
PFDoA_1	613.0 / 569.0	4.00	PFDoA			
PFDoA_2	613.0 / 319.0	4.00	PFDoA	0.090	0.160	ü
PFTrDA_1	663.0 / 619.0	4.20	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.19	PFTrDA	0.270	0.066	
PFTeDA_1	713.0 / 669.0	4.46	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.049	
NMeFOSAA_1	570.0 / 419.0	3.58	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.070	0.551	
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	NEtFOSAA	0.090	0.062	ü

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Summary Ion Ratio Report

Sample Name	KB80 IB	**Injection Vial**	2
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T18:27:43	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	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	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	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

Sample Name	J8440-FS-D(7)	**Injection Vial**	23
Sample ID	VC-MS09-SB01-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T22:48:35	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	N/A	PFNA	N/A	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	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	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

Sample Name	J8443-FS-D(9)	**Injection Vial**	24
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T22:59:28	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	N/A	PFNA	N/A	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	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	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

Sample Name	J8445-FS-D(11)	**Injection Vial**	25
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:10:20	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	N/A	PFNA	N/A	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	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	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

Sample Name	J8446-FS-D(7)	**Injection Vial**	26
Sample ID	VC-MS09-SB03-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:21:12	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	N/A	PFNA	N/A	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	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	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

Sample Name	J8450-FS-D(7)	**Injection Vial**	27
Sample ID	VC-MS09-SS05-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:32:04	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	3.08	PFOS			
PFOS_2	499.0 / 99.0	3.08	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	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

Sample Name	J8444-FS-D(17)	**Injection Vial**	28
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:42:56	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.292	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.077	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	N/A	PFNA	N/A	0.306	ü
PFOS_1	499.0 / 80.0	3.03	PFOS			
PFOS_2	499.0 / 99.0	3.08	PFOS	0.160	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	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 Internal Standard Report

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Printed: 25/10/2018 11:47:30 AM

Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:02:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	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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Printed: 26/10/2018 12:20:36 PM

Sample Name	J8443-FS-D(7)	**Injection Vial**	3
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:15:48	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	28182.14	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	28182.14	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	63417.69	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	63417.69	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	69252.97	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	69252.97	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	24713.23	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	24713.23	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	90219.35	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	90219.35	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	85999.86	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	85999.86	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	26397.89	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	26397.89	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	103923.86	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	103923.86	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	100032.14	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	100032.14	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	98381.18	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	98381.18	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	80603.57	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	80603.57	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	80603.57	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	80603.57	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16880.64	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16880.64	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18240.24	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18240.24	250.00

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Summary Internal Standard Report

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Sample Name	CR902PB-FS(3)	**Injection Vial**	35
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:43:47	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	29965.66	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	29965.66	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	68336.59	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	68336.59	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	76726.74	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	76726.74	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	27310.76	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	27310.76	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	98468.70	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	98468.70	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	102219.52	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	102219.52	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	30284.35	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	30284.35	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	114787.38	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	114787.38	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	107794.03	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	107794.03	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	101666.26	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	101666.26	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	88662.31	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	88662.31	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	88662.31	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	88662.31	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	18047.22	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	18047.22	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	22478.09	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	22478.09	250.00

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Summary Internal Standard Report

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Sample Name	CR903LCS-FS(3)	**Injection Vial**	36
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:54:39	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	33782.84	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	33782.84	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	65236.11	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	65236.11	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	71688.27	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	71688.27	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	27504.71	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	27504.71	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	85033.10	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	85033.10	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	89670.40	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	89670.40	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	26757.61	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	26757.61	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	99492.88	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	99492.88	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	99358.12	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	99358.12	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	107601.48	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	107601.48	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	85405.77	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	85405.77	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	85405.77	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	85405.77	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	18289.75	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	18289.75	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	16900.86	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	16900.86	250.00

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Summary Internal Standard Report

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Sample Name	J8438-FS(3)	**Injection Vial**	37
Sample ID	VC-MS09-SS01-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:05:31	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	31634.95	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	31634.95	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	67653.57	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	67653.57	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	78440.79	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	78440.79	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	25373.88	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	25373.88	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	94250.73	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	94250.73	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	90827.56	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	90827.56	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	25352.61	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	25352.61	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	103720.02	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	103720.02	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	103839.36	250.00
PFUnA_2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	103839.36	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	99581.97	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	99581.97	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	83511.80	250.00
PFTrDA_2	663.0 / 169.0	4.22	13C2-PFTeDA	715.0 / 670.0	83511.80	250.00
PFTeDA_1	713.0 / 669.0	4.43	13C2-PFTeDA	715.0 / 670.0	83511.80	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	83511.80	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	15865.28	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	15865.28	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	19991.62	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	19991.62	250.00

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Summary Internal Standard Report

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Sample Name	J8438-FS-D(5)	**Injection Vial**	38
Sample ID	VC-MS09-SS01-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:16:25	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	29574.52	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	29574.52	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	72122.31	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	72122.31	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	74632.39	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	74632.39	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	27121.80	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	27121.80	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	96028.56	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	96028.56	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	97776.73	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	97776.73	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	28116.53	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	28116.53	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	110457.14	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	110457.14	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	106001.85	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	106001.85	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	103727.68	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	103727.68	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	83873.05	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	83873.05	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	83873.05	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	83873.05	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16809.93	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16809.93	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20052.37	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20052.37	250.00

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Summary Internal Standard Report

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Sample Name	J8439-FS(3)	**Injection Vial**	39
Sample ID	VC-MS09-SB01-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:27:18	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	30676.69	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	30676.69	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	65357.83	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	65357.83	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	70400.01	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	70400.01	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	25883.46	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	25883.46	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	102789.40	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	102789.40	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	85622.10	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	85622.10	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	28860.16	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	28860.16	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	109145.02	250.00
PFDA_2	513.0 / 219.0	3.44	13C6-PFDA	519.0 / 474.0	109145.02	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	105742.26	250.00
PFUnA_2	563.0 / 269.0	3.69	13C7-PFUnA	570.0 / 525.0	105742.26	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	107258.87	250.00
PFDoA_2	613.0 / 319.0	4.03	13C2-PFDoA	615.0 / 570.0	107258.87	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	78671.28	250.00
PFTrDA_2	663.0 / 169.0	4.20	13C2-PFTeDA	715.0 / 670.0	78671.28	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	78671.28	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	78671.28	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16718.85	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16718.85	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	19954.68	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	19954.68	250.00

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Summary Internal Standard Report

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Sample Name	J8439-FS-D(5)	**Injection Vial**	40
Sample ID	VC-MS09-SB01-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:38:11	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	33581.10	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	33581.10	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	79011.73	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	79011.73	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	87932.44	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	87932.44	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	31429.84	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	31429.84	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	107450.61	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	107450.61	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	109057.70	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	109057.70	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	32749.38	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	32749.38	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	128539.50	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	128539.50	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	125693.40	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	125693.40	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	116619.68	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	116619.68	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	89143.83	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89143.83	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	89143.83	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89143.83	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	17811.88	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	17811.88	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20507.72	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20507.72	250.00

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Sample Name	J8440-FS(3)	**Injection Vial**	41
Sample ID	VC-MS09-SB01-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:49:05	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	34135.23	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	34135.23	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	71143.81	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	71143.81	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	79918.24	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	79918.24	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	28357.37	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	28357.37	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	97496.61	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	97496.61	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	93734.15	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	93734.15	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	26146.64	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	26146.64	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	116528.40	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	116528.40	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	114886.90	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	114886.90	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	107446.00	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	107446.00	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	86188.28	250.00
PFTrDA_2	663.0 / 169.0	4.22	13C2-PFTeDA	715.0 / 670.0	86188.28	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	86188.28	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	86188.28	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16317.40	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16317.40	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	19273.52	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	19273.52	250.00

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Summary Internal Standard Report

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Sample Name	J8440-FS-D(5)	**Injection Vial**	42
Sample ID	VC-MS09-SB01-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:59:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	33237.15	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	33237.15	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	69508.31	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	69508.31	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	76910.97	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	76910.97	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	24989.32	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	24989.32	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	100856.88	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	100856.88	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	98512.82	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	98512.82	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	31216.74	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	31216.74	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	107533.91	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	107533.91	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	112184.90	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	112184.90	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	103866.87	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	103866.87	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	86256.69	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	86256.69	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	86256.69	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	86256.69	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	18206.82	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	18206.82	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20196.29	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20196.29	250.00

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Sample Name	J8441-FS(3)	**Injection Vial**	45
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:32:35	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	38145.84	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	38145.84	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	71643.22	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	71643.22	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	60540.76	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	60540.76	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	22465.94	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	22465.94	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	67927.45	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	67927.45	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	30250.68	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	30250.68	250.00
PFOS_1	499.0 / 80.0	2.97	13C8-PFOS	507.0 / 99.0	9492.63	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	9492.63	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	84505.88	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	84505.88	250.00
PFUnA_1	563.0 / 519.0	3.72	13C7-PFUnA	570.0 / 525.0	110055.56	250.00
PFUnA_2	563.0 / 269.0	3.72	13C7-PFUnA	570.0 / 525.0	110055.56	250.00
PFDoA_1	613.0 / 569.0	4.00	13C2-PFDoA	615.0 / 570.0	107621.61	250.00
PFDoA_2	613.0 / 319.0	4.00	13C2-PFDoA	615.0 / 570.0	107621.61	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	94782.85	250.00
PFTrDA_2	663.0 / 169.0	4.21	13C2-PFTeDA	715.0 / 670.0	94782.85	250.00
PFTeDA_1	713.0 / 669.0	4.46	13C2-PFTeDA	715.0 / 670.0	94782.85	250.00
PFTeDA_2	713.0 / 169.0	4.46	13C2-PFTeDA	715.0 / 670.0	94782.85	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	12920.39	250.00
NMeFOSAA_2	570.0 / 512.0	3.56	d3-MeFOSAA	573.0 / 419.0	12920.39	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17656.39	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17656.39	250.00

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Summary Internal Standard Report

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Sample Name	J8441-FS-D(5)	**Injection Vial**	46
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:43:28	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	36841.31	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	36841.31	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	70965.10	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	70965.10	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	83711.98	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	83711.98	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	27195.11	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	27195.11	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	95121.41	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	95121.41	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	66288.49	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	66288.49	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	20106.89	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	20106.89	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	115253.18	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	115253.18	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	116661.94	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	116661.94	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	110708.80	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	110708.80	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	88383.80	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	88383.80	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	88383.80	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	88383.80	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	17540.73	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	17540.73	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20102.01	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20102.01	250.00

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Summary Internal Standard Report

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Sample Name	J8441-FS-D(7)	**Injection Vial**	47
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:54:21	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	33362.63	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	33362.63	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	75687.01	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	75687.01	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	87065.68	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	87065.68	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	29297.29	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	29297.29	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	106415.16	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	106415.16	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	97747.36	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	97747.36	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	31610.49	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	31610.49	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	123464.87	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	123464.87	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	121327.87	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	121327.87	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	118593.99	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	118593.99	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	96939.24	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	96939.24	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	96939.24	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	96939.24	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	18198.51	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	18198.51	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	22244.10	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	22244.10	250.00

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Sample Name	J8441-FS-D(9)	**Injection Vial**	48
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:05:14	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	29806.64	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	29806.64	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	65031.61	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	65031.61	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	74438.10	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	74438.10	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	27586.31	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	27586.31	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	97619.00	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	97619.00	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	97193.41	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	97193.41	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	28215.02	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	28215.02	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	102368.37	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	102368.37	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	111981.08	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	111981.08	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	105749.37	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	105749.37	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	83830.22	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	83830.22	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	83830.22	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	83830.22	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16540.18	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16540.18	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20340.78	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20340.78	250.00

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Sample Name	J8442-FS(3)	**Injection Vial**	49
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:48:44	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	35035.42	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	35035.42	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	68644.35	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	68644.35	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	62144.26	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	62144.26	250.00
PFHxS_1	399.0 / 80.0	2.25	13C3-PFHxS	402.0 / 99.0	19793.03	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	19793.03	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	60365.09	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	60365.09	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	33025.34	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	33025.34	250.00
PFOS_1	499.0 / 80.0	2.96	13C8-PFOS	507.0 / 99.0	9648.49	239.25
PFOS_2	499.0 / 99.0	N/A	13C8-PFOS	507.0 / 99.0	9648.49	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	99832.23	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	99832.23	250.00
PFUnA_1	563.0 / 519.0	3.72	13C7-PFUnA	570.0 / 525.0	104727.66	250.00
PFUnA_2	563.0 / 269.0	3.72	13C7-PFUnA	570.0 / 525.0	104727.66	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	106740.56	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	106740.56	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	85143.57	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	85143.57	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	85143.57	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	85143.57	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	13338.34	250.00
NMeFOSAA_2	570.0 / 512.0	3.56	d3-MeFOSAA	573.0 / 419.0	13338.34	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	16087.96	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	16087.96	250.00

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Summary Internal Standard Report

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Sample Name	J8442-FS-D(5)	**Injection Vial**	50
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:59:38	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	34373.46	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	34373.46	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	69130.74	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	69130.74	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	76903.36	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	76903.36	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	24005.80	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	24005.80	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	87517.19	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	87517.19	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	70355.88	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	70355.88	250.00
PFOS_1	499.0 / 80.0	3.02	13C8-PFOS	507.0 / 99.0	22872.40	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	22872.40	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	114313.94	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	114313.94	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	107937.84	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	107937.84	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	108319.34	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	108319.34	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	83395.27	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	83395.27	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	83395.27	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	83395.27	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16162.77	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16162.77	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18579.21	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18579.21	250.00

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Summary Internal Standard Report

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Sample Name	J8442-FS-D(7)	**Injection Vial**	51
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:10:33	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	29348.96	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	29348.96	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	66029.95	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	66029.95	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	75848.26	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	75848.26	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	24628.47	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	24628.47	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	91512.19	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	91512.19	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	88950.70	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	88950.70	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	26119.55	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	26119.55	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	115288.21	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	115288.21	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	110062.99	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	110062.99	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	107010.05	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	107010.05	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	82244.12	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	82244.12	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	82244.12	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	82244.12	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16478.94	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16478.94	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18583.50	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18583.50	250.00

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Summary Internal Standard Report

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Sample Name	J8442-FS-D(9)	**Injection Vial**	52
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:21:26	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	29722.67	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	29722.67	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	66580.88	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	66580.88	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	67207.76	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	67207.76	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	24120.84	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	24120.84	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	93033.49	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	93033.49	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	93827.51	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	93827.51	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	32129.19	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	32129.19	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	100371.01	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	100371.01	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	101313.00	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	101313.00	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	104420.14	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	104420.14	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	79767.59	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	79767.59	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	79767.59	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	79767.59	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	17206.37	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	17206.37	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	21130.27	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	21130.27	250.00

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Sample Name	J8443-FS(3)	**Injection Vial**	1
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:54:05	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	33401.49	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	33401.49	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	56922.38	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	56922.38	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	63453.28	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	63453.28	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	19568.87	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	19568.87	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	66232.02	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	66232.02	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	42636.11	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	42636.11	250.00
PFOS_1	499.0 / 80.0	2.99	13C8-PFOS	507.0 / 99.0	11601.72	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	11601.72	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	85228.36	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	85228.36	250.00
PFUnA_1	563.0 / 519.0	3.72	13C7-PFUnA	570.0 / 525.0	91695.72	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	91695.72	250.00
PFDoA_1	613.0 / 569.0	4.00	13C2-PFDoA	615.0 / 570.0	89829.80	250.00
PFDoA_2	613.0 / 319.0	4.00	13C2-PFDoA	615.0 / 570.0	89829.80	250.00
PFTrDA_1	663.0 / 619.0	4.22	13C2-PFTeDA	715.0 / 670.0	78075.36	250.00
PFTrDA_2	663.0 / 169.0	4.19	13C2-PFTeDA	715.0 / 670.0	78075.36	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	78075.36	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	78075.36	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	13213.96	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	13213.96	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	15503.21	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	15503.21	250.00

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Sample Name	J8443-FS-D(5)	**Injection Vial**	2
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:04:56	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	33806.52	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	33806.52	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	69772.30	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	69772.30	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	81041.86	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	81041.86	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	27465.48	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	27465.48	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	99992.07	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	99992.07	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	76819.44	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	76819.44	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	24076.38	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	24076.38	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	112713.98	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	112713.98	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	120777.97	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	120777.97	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	116782.46	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	116782.46	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	92423.10	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	92423.10	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	92423.10	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	92423.10	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16506.44	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16506.44	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20657.25	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20657.25	250.00

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Sample Name	J8443-FS-D(7)	**Injection Vial**	3
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:15:48	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	28182.14	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	28182.14	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	63417.69	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	63417.69	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	69252.97	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	69252.97	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	24713.23	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	24713.23	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	90219.35	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	90219.35	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	85999.86	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	85999.86	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	26397.89	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	26397.89	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	103923.86	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	103923.86	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	100032.14	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	100032.14	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	98381.18	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	98381.18	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	80603.57	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	80603.57	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	80603.57	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	80603.57	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16880.64	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16880.64	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18240.24	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18240.24	250.00

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Sample Name	J8444-FS-D(7)	**Injection Vial**	4
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:26:39	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	36566.55	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	36566.55	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	66332.47	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	66332.47	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	72554.64	250.00
PFHpA_2	363.0 / 169.0	2.24	13C4-PFHpA	367.0 / 322.0	72554.64	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	23905.92	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	23905.92	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	59767.64	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	59767.64	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	33134.57	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	33134.57	250.00
PFOS_1	499.0 / 80.0	2.93	13C8-PFOS	507.0 / 99.0	8315.03	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	8315.03	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	97958.75	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	97958.75	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	104251.62	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	104251.62	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	104927.00	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	104927.00	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	85961.31	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	85961.31	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	85961.31	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	85961.31	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16046.74	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16046.74	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18992.60	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18992.60	250.00

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Summary Internal Standard Report

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Sample Name	J8444-FS-D(9)	**Injection Vial**	5
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:37:32	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	30644.46	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	30644.46	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	68428.01	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	68428.01	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	74508.16	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	74508.16	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	23656.86	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	23656.86	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	68431.08	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	68431.08	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	39768.55	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	39768.55	250.00
PFOS_1	499.0 / 80.0	2.98	13C8-PFOS	507.0 / 99.0	11972.98	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	11972.98	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	101335.62	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	101335.62	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	101570.11	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	101570.11	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	107767.59	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	107767.59	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	83741.48	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	83741.48	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	83741.48	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	83741.48	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16510.19	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16510.19	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17627.86	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17627.86	250.00

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Summary Internal Standard Report

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Sample Name	J8444-FS-D(11)	**Injection Vial**	6
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:48:24	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	32551.52	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	32551.52	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	72130.40	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	72130.40	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	81576.75	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	81576.75	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	25833.89	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	25833.89	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	82366.47	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	82366.47	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	61580.46	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	61580.46	250.00
PFOS_1	499.0 / 80.0	2.99	13C8-PFOS	507.0 / 99.0	16016.83	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	16016.83	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	108575.07	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	108575.07	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	114610.15	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	114610.15	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	110582.11	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	110582.11	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	88311.68	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	88311.68	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	88311.68	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	88311.68	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	17425.47	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	17425.47	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	21245.21	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	21245.21	250.00

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Sample Name	J8444-FS-D(13)	**Injection Vial**	7
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:59:16	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	27771.32	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	27771.32	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	63891.92	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	63891.92	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	73019.95	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	73019.95	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	22106.21	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	22106.21	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	83466.96	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	83466.96	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	79001.75	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	79001.75	250.00
PFOS_1	499.0 / 80.0	2.99	13C8-PFOS	507.0 / 99.0	26386.34	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	26386.34	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	107535.97	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	107535.97	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	101178.99	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	101178.99	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	104877.16	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	104877.16	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	84707.78	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	84707.78	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	84707.78	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	84707.78	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	15139.05	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	15139.05	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17759.49	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17759.49	250.00

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Sample Name	J8444-FS-D(15)	**Injection Vial**	8
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:10:08	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	26210.96	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	26210.96	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	60000.13	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	60000.13	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	74811.87	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	74811.87	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	26177.59	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	26177.59	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	91573.74	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	91573.74	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	93977.78	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	93977.78	250.00
PFOS_1	499.0 / 80.0	3.01	13C8-PFOS	507.0 / 99.0	28654.72	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	28654.72	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	101023.61	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	101023.61	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	112438.27	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	112438.27	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	101974.51	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	101974.51	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	79860.62	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	79860.62	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	79860.62	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	79860.62	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	15910.59	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	15910.59	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17299.30	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17299.30	250.00

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Summary Internal Standard Report

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Sample Name	J8445-FS(3)	**Injection Vial**	11
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:42:42	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	28407.36	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	28407.36	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	52483.01	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	52483.01	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	42378.38	250.00
PFHpA_2	363.0 / 169.0	2.22	13C4-PFHpA	367.0 / 322.0	42378.38	250.00
PFHxS_1	399.0 / 80.0	2.24	13C3-PFHxS	402.0 / 99.0	14312.08	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	14312.08	236.50
PFOA_1	413.0 / 369.0	2.64	13C8-PFOA	421.0 / 376.0	39093.29	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	39093.29	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	26650.57	250.00
PFNA_2	463.0 / 219.0	3.01	13C9-PFNA	472.0 / 427.0	26650.57	250.00
PFOS_1	499.0 / 80.0	2.92	13C8-PFOS	507.0 / 99.0	7184.76	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	7184.76	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	75919.07	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	75919.07	250.00
PFUnA_1	563.0 / 519.0	3.72	13C7-PFUnA	570.0 / 525.0	88688.88	250.00
PFUnA_2	563.0 / 269.0	3.72	13C7-PFUnA	570.0 / 525.0	88688.88	250.00
PFDoA_1	613.0 / 569.0	4.00	13C2-PFDoA	615.0 / 570.0	91927.06	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	91927.06	250.00
PFTrDA_1	663.0 / 619.0	4.24	13C2-PFTeDA	715.0 / 670.0	81687.47	250.00
PFTrDA_2	663.0 / 169.0	4.21	13C2-PFTeDA	715.0 / 670.0	81687.47	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	81687.47	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	81687.47	250.00
NMeFOSAA_1	570.0 / 419.0	3.58	d3-MeFOSAA	573.0 / 419.0	12792.93	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	12792.93	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17484.30	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17484.30	250.00

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Summary Internal Standard Report

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Sample Name	J8445-FS-D(5)	**Injection Vial**	12
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:53:34	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	38183.09	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	38183.09	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	75825.39	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	75825.39	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	81740.02	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	81740.02	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	26702.81	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	26702.81	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	86836.44	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	86836.44	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	80188.87	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	80188.87	250.00
PFOS_1	499.0 / 80.0	3.05	13C8-PFOS	507.0 / 99.0	24716.05	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	24716.05	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	115790.17	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	115790.17	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	119609.25	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	119609.25	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	109005.21	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	109005.21	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	88226.25	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	88226.25	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	88226.25	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	88226.25	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16704.22	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16704.22	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	19616.37	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	19616.37	250.00

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Summary Internal Standard Report

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Sample Name	J8445-FS-D(7)	**Injection Vial**	13
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:04:26	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	32711.63	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	32711.63	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	69344.50	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	69344.50	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	77745.06	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	77745.06	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	26857.93	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	26857.93	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	93888.11	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	93888.11	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	91410.50	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	91410.50	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	29129.70	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	29129.70	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	112001.72	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	112001.72	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	114987.92	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	114987.92	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	110545.90	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	110545.90	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	89201.76	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89201.76	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	89201.76	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	89201.76	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	18664.08	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	18664.08	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20772.77	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20772.77	250.00

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Summary Internal Standard Report

Sample Name	J8445-FS-D(9)	**Injection Vial**	14
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:15:17	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	30385.92	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	30385.92	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	64833.03	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	64833.03	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	68234.43	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	68234.43	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	23789.45	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	23789.45	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	86098.41	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	86098.41	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	86750.61	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	86750.61	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	27128.33	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	27128.33	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	98699.32	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	98699.32	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	106770.95	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	106770.95	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	100503.67	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	100503.67	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	78784.07	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	78784.07	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	78784.07	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	78784.07	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	16704.12	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	16704.12	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	19303.57	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	19303.57	250.00

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Sample Name	J8446-FS(3)	**Injection Vial**	15
Sample ID	VC-MS09-SB03-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:26:09	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	29860.11	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	29860.11	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	45330.69	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	45330.69	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	54528.55	250.00
PFHpA_2	363.0 / 169.0	2.22	13C4-PFHpA	367.0 / 322.0	54528.55	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	18170.27	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	18170.27	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	66776.82	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	66776.82	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	64197.05	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	64197.05	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	20648.14	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	20648.14	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	88996.64	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	88996.64	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	83737.58	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	83737.58	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	85410.72	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	85410.72	250.00
PFTrDA_1	663.0 / 619.0	4.24	13C2-PFTeDA	715.0 / 670.0	70440.26	250.00
PFTrDA_2	663.0 / 169.0	4.23	13C2-PFTeDA	715.0 / 670.0	70440.26	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	70440.26	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	70440.26	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	12195.22	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	12195.22	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	14579.13	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	14579.13	250.00

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Sample Name	J8446-FS-D(5)	**Injection Vial**	16
Sample ID	VC-MS09-SB03-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:37:01	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	28696.37	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	28696.37	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	66185.21	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	66185.21	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	68705.16	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	68705.16	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	23010.41	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	23010.41	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	89152.83	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	89152.83	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	94553.65	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	94553.65	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	29836.65	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	29836.65	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	104829.45	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	104829.45	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	103129.82	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	103129.82	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	102231.68	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	102231.68	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	79623.52	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	79623.52	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	79623.52	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	79623.52	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	14637.77	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	14637.77	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17383.40	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17383.40	250.00

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Sample Name	J8447-FS(3)	**Injection Vial**	17
Sample ID	VC-MS09-SS04-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:47:52	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	27734.42	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	27734.42	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	64257.91	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	64257.91	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	68819.02	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	68819.02	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	25071.45	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	25071.45	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	90884.50	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	90884.50	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	86873.83	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	86873.83	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	28120.17	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	28120.17	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	99004.39	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	99004.39	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	98563.01	250.00
PFUnA_2	563.0 / 269.0	3.57	13C7-PFUnA	570.0 / 525.0	98563.01	250.00
PFDoA_1	613.0 / 569.0	3.98	13C2-PFDoA	615.0 / 570.0	99022.00	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	99022.00	250.00
PFTrDA_1	663.0 / 619.0	4.18	13C2-PFTeDA	715.0 / 670.0	83225.53	250.00
PFTrDA_2	663.0 / 169.0	4.16	13C2-PFTeDA	715.0 / 670.0	83225.53	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	83225.53	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	83225.53	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	13057.18	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	13057.18	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17331.73	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17331.73	250.00

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Summary Internal Standard Report

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Sample Name	J8448-FS(3)	**Injection Vial**	18
Sample ID	VC-MS09-SB04-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:58:43	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	32506.02	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	32506.02	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	67072.82	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	67072.82	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	81014.19	250.00
PFHpA_2	363.0 / 169.0	2.25	13C4-PFHpA	367.0 / 322.0	81014.19	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	27780.90	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	27780.90	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	103137.45	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	103137.45	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	84790.55	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	84790.55	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	27300.76	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	27300.76	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	108001.39	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	108001.39	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	112878.39	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	112878.39	250.00
PFDoA_1	613.0 / 569.0	4.00	13C2-PFDoA	615.0 / 570.0	114316.25	250.00
PFDoA_2	613.0 / 319.0	4.00	13C2-PFDoA	615.0 / 570.0	114316.25	250.00
PFTrDA_1	663.0 / 619.0	4.22	13C2-PFTeDA	715.0 / 670.0	86836.19	250.00
PFTrDA_2	663.0 / 169.0	4.18	13C2-PFTeDA	715.0 / 670.0	86836.19	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	86836.19	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	86836.19	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	15749.51	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	15749.51	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18265.67	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18265.67	250.00

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Summary Internal Standard Report

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Sample Name	J8448-FS-D(5)	**Injection Vial**	19
Sample ID	VC-MS09-SB04-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:09:33	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	26356.55	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	26356.55	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	60649.13	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	60649.13	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	68897.06	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	68897.06	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	25672.45	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	25672.45	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	90671.20	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	90671.20	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	93122.46	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	93122.46	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	30660.27	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	30660.27	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	109303.21	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	109303.21	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	106430.36	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	106430.36	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	95448.57	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	95448.57	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	77360.55	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	77360.55	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	77360.55	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	77360.55	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	13906.90	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	13906.90	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18860.95	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18860.95	250.00

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Summary Internal Standard Report

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Sample Name	J8449-FS(3)	**Injection Vial**	22
Sample ID	VC-MS09-SB04-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:42:10	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	28027.30	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	28027.30	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	61831.69	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	61831.69	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	71105.30	250.00
PFHpA_2	363.0 / 169.0	2.24	13C4-PFHpA	367.0 / 322.0	71105.30	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	25482.34	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	25482.34	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	81117.92	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	81117.92	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	84656.83	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	84656.83	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	27632.10	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	27632.10	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	105173.33	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	105173.33	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	101938.42	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	101938.42	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	97885.41	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	97885.41	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	76005.53	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	76005.53	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	76005.53	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	76005.53	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	13183.25	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	13183.25	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17020.28	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17020.28	250.00

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Summary Internal Standard Report

Sample Name	J8449-FS-D(5)	**Injection Vial**	23
Sample ID	VC-MS09-SB04-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:53:03	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	25580.53	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	25580.53	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	56809.75	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	56809.75	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	64832.92	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	64832.92	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	23443.73	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	23443.73	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	80645.85	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	80645.85	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	81920.00	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	81920.00	250.00
PFOS_1	499.0 / 80.0	3.05	13C8-PFOS	507.0 / 99.0	24986.38	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	24986.38	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	97200.35	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	97200.35	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	95341.81	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	95341.81	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	94791.43	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	94791.43	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	71802.55	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	71802.55	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	71802.55	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	71802.55	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	14941.53	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	14941.53	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	19594.77	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	19594.77	250.00

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Summary Internal Standard Report

Sample Name	J8450-FS(3)	**Injection Vial**	24
Sample ID	VC-MS09-SS05-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:03:55	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	32705.79	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	32705.79	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	67801.97	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	67801.97	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	77657.92	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	77657.92	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	26024.69	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	26024.69	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	100275.60	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	100275.60	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	63328.12	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	63328.12	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	18314.49	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	18314.49	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	106863.57	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	106863.57	250.00
PFUnA_1	563.0 / 519.0	3.71	13C7-PFUnA	570.0 / 525.0	111447.10	250.00
PFUnA_2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	111447.10	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	109773.43	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	109773.43	250.00
PFTrDA_1	663.0 / 619.0	4.19	13C2-PFTeDA	715.0 / 670.0	84248.08	250.00
PFTrDA_2	663.0 / 169.0	4.18	13C2-PFTeDA	715.0 / 670.0	84248.08	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	84248.08	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	84248.08	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	14265.16	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	14265.16	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17312.28	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17312.28	250.00

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Summary Internal Standard Report

Sample Name	J8450-FS-D(5)	**Injection Vial**	25
Sample ID	VC-MS09-SS05-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:14:47	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	30462.57	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	30462.57	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	72294.95	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	72294.95	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	81641.84	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	81641.84	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	28157.98	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	28157.98	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	106819.88	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	106819.88	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	99648.29	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	99648.29	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	32591.70	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	32591.70	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	118980.27	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	118980.27	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	119079.67	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	119079.67	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	112343.99	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	112343.99	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	91695.46	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	91695.46	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	91695.46	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	91695.46	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	18928.10	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	18928.10	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	20690.36	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	20690.36	250.00

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Summary Internal Standard Report

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Sample Name	J8451-FS(3)	**Injection Vial**	26
Sample ID	VC-MS09-SB05-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:25:38	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	27203.67	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	27203.67	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	55291.02	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	55291.02	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	62221.64	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	62221.64	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	23432.72	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	23432.72	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	88106.46	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	88106.46	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	61480.97	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	61480.97	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	19948.18	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	19948.18	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	93162.20	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	93162.20	250.00
PFUnA_1	563.0 / 519.0	3.65	13C7-PFUnA	570.0 / 525.0	97567.04	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	97567.04	250.00
PFDoA_1	613.0 / 569.0	3.99	13C2-PFDoA	615.0 / 570.0	98201.22	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	98201.22	250.00
PFTrDA_1	663.0 / 619.0	4.19	13C2-PFTeDA	715.0 / 670.0	79016.54	250.00
PFTrDA_2	663.0 / 169.0	4.19	13C2-PFTeDA	715.0 / 670.0	79016.54	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	79016.54	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	79016.54	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	14522.71	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	14522.71	250.00
NEtFOSAA_1	584.0 / 419.0	3.74	d5-EtFOSAA	589.0 / 419.0	16874.29	250.00
NEtFOSAA_2	584.0 / 483.0	3.69	d5-EtFOSAA	589.0 / 419.0	16874.29	250.00

Sample Name	J8451-FS-D(5)	**Injection Vial**	27
Sample ID	VC-MS09-SB05-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:36:29	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	25531.48	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	25531.48	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	59186.70	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	59186.70	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	64893.60	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	64893.60	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	26247.80	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	26247.80	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	96646.96	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	96646.96	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	92891.45	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	92891.45	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	29977.24	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	29977.24	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	98656.04	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	98656.04	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	102341.99	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	102341.99	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	96199.31	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	96199.31	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	77808.49	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	77808.49	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	77808.49	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	77808.49	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	15736.82	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	15736.82	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	19426.31	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	19426.31	250.00

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Sample Name	J8452-FS(3)	**Injection Vial**	28
Sample ID	VC-MS09-SB05-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:47:20	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	27496.70	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	27496.70	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	61507.05	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	61507.05	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	71313.75	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	71313.75	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	23521.82	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	23521.82	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	84879.11	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	84879.11	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	86045.67	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	86045.67	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	24325.88	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	24325.88	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	107333.88	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	107333.88	250.00
PFUnA_1	563.0 / 519.0	3.65	13C7-PFUnA	570.0 / 525.0	99110.68	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	99110.68	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	96139.11	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	96139.11	250.00
PFTrDA_1	663.0 / 619.0	4.19	13C2-PFTeDA	715.0 / 670.0	77730.46	250.00
PFTrDA_2	663.0 / 169.0	4.19	13C2-PFTeDA	715.0 / 670.0	77730.46	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	77730.46	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	77730.46	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	14826.53	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	14826.53	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17092.88	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17092.88	250.00

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Summary Internal Standard Report

Sample Name	J8452-FS-D(5)	**Injection Vial**	29
Sample ID	VC-MS09-SB05-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:58:12	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	26723.63	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	26723.63	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	61271.75	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	61271.75	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	66708.80	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	66708.80	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	23867.96	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	23867.96	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	92682.28	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	92682.28	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	84427.16	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	84427.16	250.00
PFOS_1	499.0 / 80.0	3.07	13C8-PFOS	507.0 / 99.0	29136.03	239.25
PFOS_2	499.0 / 99.0	3.07	13C8-PFOS	507.0 / 99.0	29136.03	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	95336.52	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	95336.52	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	102336.69	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	102336.69	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	98477.79	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	98477.79	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	75243.52	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	75243.52	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	75243.52	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	75243.52	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	15662.01	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	15662.01	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18835.55	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18835.55	250.00

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Summary Internal Standard Report

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Sample Name	J8453MS-FS(3)	**Injection Vial**	32
Sample ID	VC-MS09-SB04-0102-MS	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:30:47	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	28704.49	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	28704.49	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	54343.88	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	54343.88	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	62046.58	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	62046.58	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	19031.93	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	19031.93	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	64919.85	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	64919.85	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	68893.87	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	68893.87	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	19055.30	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	19055.30	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	78980.42	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	78980.42	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	85357.02	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	85357.02	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	89621.44	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	89621.44	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	73150.56	250.00
PFTrDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	73150.56	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	73150.56	250.00
PFTeDA_2	713.0 / 169.0	4.46	13C2-PFTeDA	715.0 / 670.0	73150.56	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	13332.80	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	13332.80	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	11936.90	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	11936.90	250.00

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Summary Internal Standard Report

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Sample Name	J8453MS-FS-D(5)	**Injection Vial**	33
Sample ID	VC-MS09-SB04-0102-MS	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:41:39	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	27463.94	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	27463.94	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	62123.48	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	62123.48	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	71986.08	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	71986.08	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	25242.90	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	25242.90	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	93011.91	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	93011.91	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	91526.80	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	91526.80	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	29281.57	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	29281.57	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	104318.61	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	104318.61	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	97368.09	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	97368.09	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	100404.16	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	100404.16	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	79370.06	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	79370.06	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	79370.06	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	79370.06	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	14205.12	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	14205.12	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	17470.88	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	17470.88	250.00

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Summary Internal Standard Report

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Sample Name	J8454MSD-FS(3)	**Injection Vial**	34
Sample ID	VC-MS09-SB04-0102-MSD	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:52:29	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	29653.43	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	29653.43	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	51821.27	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	51821.27	250.00
PFHpA_1	363.0 / 319.0	2.26	13C4-PFHpA	367.0 / 322.0	58002.92	250.00
PFHpA_2	363.0 / 169.0	2.26	13C4-PFHpA	367.0 / 322.0	58002.92	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	20958.02	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	20958.02	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	66268.74	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	66268.74	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	67526.79	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	67526.79	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	21397.42	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	21397.42	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	80409.43	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	80409.43	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	83271.73	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	83271.73	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	94099.82	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	94099.82	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	77754.54	250.00
PFTrDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	77754.54	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	77754.54	250.00
PFTeDA_2	713.0 / 169.0	4.46	13C2-PFTeDA	715.0 / 670.0	77754.54	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	16010.36	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	16010.36	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	14574.38	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	14574.38	250.00

Sample Name	J8454MSD-FS-D(5)	**Injection Vial**	35
Sample ID	VC-MS09-SB04-0102-MSD	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:03:21	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	27011.03	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	27011.03	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	59561.08	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	59561.08	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	67822.75	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	67822.75	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	21780.05	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	21780.05	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	84037.92	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	84037.92	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	89170.61	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	89170.61	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	30326.88	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	30326.88	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	92257.91	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	92257.91	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	101183.89	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	101183.89	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	96297.23	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	96297.23	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	75196.53	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	75196.53	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	75196.53	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	75196.53	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	15612.92	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	15612.92	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18487.42	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18487.42	250.00

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Summary Internal Standard Report

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Sample Name	J8444-FS(5)	**Injection Vial**	38
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:35:56	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.53	13C3-PFBS	302.0 / 99.0	35989.61	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	35989.61	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	69610.95	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	69610.95	250.00
PFHpA_1	363.0 / 319.0	2.25	13C4-PFHpA	367.0 / 322.0	55835.10	250.00
PFHpA_2	363.0 / 169.0	2.23	13C4-PFHpA	367.0 / 322.0	55835.10	250.00
PFHxS_1	399.0 / 80.0	2.24	13C3-PFHxS	402.0 / 99.0	14330.53	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	14330.53	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	38784.44	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	38784.44	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	18134.54	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	18134.54	250.00
PFOS_1	499.0 / 80.0	2.94	13C8-PFOS	507.0 / 99.0	5079.52	239.25
PFOS_2	499.0 / 99.0	3.00	13C8-PFOS	507.0 / 99.0	5079.52	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	86122.50	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	86122.50	250.00
PFUnA_1	563.0 / 519.0	3.69	13C7-PFUnA	570.0 / 525.0	100900.13	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	100900.13	250.00
PFDoA_1	613.0 / 569.0	4.00	13C2-PFDoA	615.0 / 570.0	108262.01	250.00
PFDoA_2	613.0 / 319.0	4.00	13C2-PFDoA	615.0 / 570.0	108262.01	250.00
PFTrDA_1	663.0 / 619.0	4.20	13C2-PFTeDA	715.0 / 670.0	87864.87	250.00
PFTrDA_2	663.0 / 169.0	4.19	13C2-PFTeDA	715.0 / 670.0	87864.87	250.00
PFTeDA_1	713.0 / 669.0	4.46	13C2-PFTeDA	715.0 / 670.0	87864.87	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	87864.87	250.00
NMeFOSAA_1	570.0 / 419.0	3.58	d3-MeFOSAA	573.0 / 419.0	12954.79	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	12954.79	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	16564.38	250.00
NEtFOSAA_2	584.0 / 483.0	3.71	d5-EtFOSAA	589.0 / 419.0	16564.38	250.00

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Summary Internal Standard Report

Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Quality Control	**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**	18-0590_18-0588_18-0589_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	CR902PB-FS(3)	**Injection Vial**	35
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:43:47	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	108926.71	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	29573.64	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	29573.64	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	88790.58	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	88790.58	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	88790.58	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	88790.58	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	108926.71	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	108926.71	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	108926.71	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	29573.64	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	29573.64	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	29573.64	239.25

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Summary Internal Standard Report

Sample Name	CR903LCS-FS(3)	**Injection Vial**	36
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:54:39	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	98803.95	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	28134.25	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	28134.25	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	80577.71	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	80577.71	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	80577.71	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	80577.71	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	98803.95	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	98803.95	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	98803.95	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	28134.25	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	28134.25	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	28134.25	239.25

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Summary Internal Standard Report

Sample Name	J8438-FS(3)	**Injection Vial**	37
Sample ID	VC-MS09-SS01-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:05:31	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	105056.15	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	24133.88	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	24133.88	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	87068.55	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	87068.55	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	87068.55	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	87068.55	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	105056.15	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	105056.15	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	105056.15	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	24133.88	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	24133.88	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	24133.88	239.25

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Summary Internal Standard Report

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Sample Name	J8438-FS-D(5)	**Injection Vial**	38
Sample ID	VC-MS09-SS01-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:16:25	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	107003.45	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	30810.96	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	30810.96	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	94993.16	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	94993.16	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	94993.16	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	94993.16	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	107003.45	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	107003.45	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	107003.45	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	30810.96	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	30810.96	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	30810.96	239.25

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Summary Internal Standard Report

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Sample Name	J8439-FS(3)	**Injection Vial**	39
Sample ID	VC-MS09-SB01-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:27:18	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	104322.07	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	26030.03	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	26030.03	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	86600.82	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	86600.82	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	86600.82	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	86600.82	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	104322.07	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	104322.07	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	104322.07	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	26030.03	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	26030.03	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	26030.03	239.25

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Summary Internal Standard Report

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Sample Name	J8439-FS-D(5)	**Injection Vial**	40
Sample ID	VC-MS09-SB01-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:38:11	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	111049.20	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	29342.04	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	29342.04	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	95719.09	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	95719.09	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	95719.09	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	95719.09	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	111049.20	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	111049.20	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	111049.20	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	29342.04	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	29342.04	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	29342.04	239.25

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Summary Internal Standard Report

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Sample Name	J8440-FS(3)	**Injection Vial**	41
Sample ID	VC-MS09-SB01-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:49:05	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	94552.26	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	20316.83	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	20316.83	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	77337.02	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	77337.02	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	77337.02	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	77337.02	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	94552.26	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	94552.26	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	94552.26	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	20316.83	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	20316.83	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	20316.83	239.25

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Summary Internal Standard Report

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Sample Name	J8440-FS-D(5)	**Injection Vial**	42
Sample ID	VC-MS09-SB01-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:59:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	106618.40	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	29892.83	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	29892.83	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	89772.92	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	89772.92	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	89772.92	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	89772.92	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	106618.40	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	106618.40	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	106618.40	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	29892.83	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	29892.83	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	29892.83	239.25

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Summary Internal Standard Report

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Sample Name	J8441-FS(3)	**Injection Vial**	45
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:32:35	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	82313.44	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	10147.07	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	10147.07	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	83286.12	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	83286.12	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	83286.12	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	83286.12	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	82313.44	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	82313.44	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	82313.44	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	10147.07	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	10147.07	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	10147.07	239.25

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Summary Internal Standard Report

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Sample Name	J8441-FS-D(5)	**Injection Vial**	46
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:43:28	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	110486.67	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	20495.87	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	20495.87	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	90050.81	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	90050.81	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	90050.81	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	90050.81	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	110486.67	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	110486.67	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	110486.67	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	20495.87	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	20495.87	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	20495.87	239.25

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Summary Internal Standard Report

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Sample Name	J8441-FS-D(7)	**Injection Vial**	47
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:54:21	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	113406.85	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	25892.47	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	25892.47	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	102982.92	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	102982.92	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	102982.92	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	102982.92	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	113406.85	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	113406.85	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	113406.85	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	25892.47	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	25892.47	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	25892.47	239.25

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Summary Internal Standard Report

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Sample Name	J8441-FS-D(9)	**Injection Vial**	48
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:05:14	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	104892.17	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	32268.14	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	32268.14	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	86254.85	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	86254.85	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	86254.85	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	86254.85	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	104892.17	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	104892.17	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	104892.17	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	32268.14	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	32268.14	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	32268.14	239.25

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Summary Internal Standard Report

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Sample Name	J8442-FS(3)	**Injection Vial**	49
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:48:44	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	98647.05	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	8440.10	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	8440.10	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	93300.23	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	93300.23	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	93300.23	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	93300.23	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	98647.05	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	98647.05	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	98647.05	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	8440.10	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	8440.10	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	8440.10	239.25

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Summary Internal Standard Report

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Sample Name	J8442-FS-D(5)	**Injection Vial**	50
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:59:38	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	108519.92	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	18958.37	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	18958.37	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	91099.06	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	91099.06	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	91099.06	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	91099.06	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	108519.92	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	108519.92	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	108519.92	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	18958.37	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	18958.37	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	18958.37	239.25

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Summary Internal Standard Report

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Sample Name	J8442-FS-D(7)	**Injection Vial**	51
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:10:33	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	102910.01	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	24563.12	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	24563.12	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	88745.84	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	88745.84	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	88745.84	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	88745.84	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	102910.01	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	102910.01	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	102910.01	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	24563.12	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	24563.12	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	24563.12	239.25

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Sample Name	J8442-FS-D(9)	**Injection Vial**	52
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:21:26	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	104425.50	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	27765.25	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	27765.25	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	90818.16	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	90818.16	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	90818.16	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	90818.16	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	104425.50	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	104425.50	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	104425.50	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	27765.25	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	27765.25	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	27765.25	239.25

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Sample Name	J8443-FS(3)	**Injection Vial**	1
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:54:05	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	93593.55	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	13458.72	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	13458.72	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	69898.66	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	69898.66	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	69898.66	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	69898.66	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	93593.55	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	93593.55	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	93593.55	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	13458.72	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	13458.72	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	13458.72	239.25

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Sample Name	J8443-FS-D(5)	**Injection Vial**	2
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:04:56	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	112260.10	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	22286.31	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	22286.31	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	94283.10	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	94283.10	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	94283.10	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	94283.10	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	112260.10	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	112260.10	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	112260.10	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	22286.31	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	22286.31	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	22286.31	239.25

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Summary Internal Standard Report

Sample Name	J8443-FS-D(7)	**Injection Vial**	3
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:15:48	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	104803.66	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	24836.20	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	24836.20	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	83824.20	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	83824.20	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	83824.20	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	83824.20	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	104803.66	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	104803.66	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	104803.66	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	24836.20	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	24836.20	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	24836.20	239.25

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Sample Name	J8444-FS-D(7)	**Injection Vial**	4
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:26:39	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	98339.40	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	8306.00	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	8306.00	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	89884.36	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	89884.36	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	89884.36	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	89884.36	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	98339.40	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	98339.40	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	98339.40	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	8306.00	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	8306.00	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	8306.00	239.25

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Sample Name	J8444-FS-D(9)	**Injection Vial**	5
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:37:32	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	101271.57	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	10207.08	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	10207.08	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	81256.38	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	81256.38	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	81256.38	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	81256.38	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	101271.57	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	101271.57	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	101271.57	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	10207.08	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	10207.08	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	10207.08	239.25

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Summary Internal Standard Report

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Sample Name	J8444-FS-D(11)	**Injection Vial**	6
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:48:24	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	110863.97	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	16510.84	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	16510.84	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	86253.41	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	86253.41	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	86253.41	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	86253.41	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	110863.97	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	110863.97	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	110863.97	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	16510.84	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	16510.84	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	16510.84	239.25

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Sample Name	J8444-FS-D(13)	**Injection Vial**	7
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:59:16	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	97897.50	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	21860.41	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	21860.41	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	81022.41	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	81022.41	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	81022.41	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	81022.41	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	97897.50	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	97897.50	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	97897.50	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	21860.41	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	21860.41	239.25
13C8-PFOS	507.0 / 99.0	3.06	13C4-PFOS	503.0 / 99.0	21860.41	239.25

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Sample Name	J8444-FS-D(15	**Injection Vial**	8
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:10:08	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	104131.81	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	28439.05	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	28439.05	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	85609.65	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	85609.65	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	85609.65	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	85609.65	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	104131.81	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	104131.81	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	104131.81	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	28439.05	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	28439.05	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	28439.05	239.25

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Summary Internal Standard Report

Sample Name	J8445-FS(3)	**Injection Vial**	11
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:42:42	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	94583.17	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	8580.03	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	8580.03	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	245202.63	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	245202.63	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	245202.63	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	245202.63	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	94583.17	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	94583.17	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	94583.17	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	8580.03	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	8580.03	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	8580.03	239.25

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Sample Name	J8445-FS-D(5)	**Injection Vial**	12
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:53:34	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	113937.49	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	23688.65	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	23688.65	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	92925.22	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	92925.22	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	92925.22	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	92925.22	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	113937.49	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	113937.49	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	113937.49	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	23688.65	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	23688.65	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	23688.65	239.25

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Summary Internal Standard Report

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Sample Name	J8445-FS-D(7)	**Injection Vial**	13
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:04:26	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	118162.53	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	32185.74	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	32185.74	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	96057.40	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	96057.40	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	96057.40	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	96057.40	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	118162.53	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	118162.53	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	118162.53	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	32185.74	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	32185.74	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	32185.74	239.25

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Summary Internal Standard Report

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Sample Name	J8445-FS-D(9)	**Injection Vial**	14
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:15:17	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	101314.11	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	28450.87	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	28450.87	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	87716.47	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	87716.47	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	87716.47	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	87716.47	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	101314.11	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	101314.11	250.00
13C2-PFTeDA	715.0 / 670.0	4.45	13C2-PFDA	515.0 / 470.0	101314.11	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	28450.87	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	28450.87	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	28450.87	239.25

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Summary Internal Standard Report

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Sample Name	J8446-FS(3)	**Injection Vial**	15
Sample ID	VC-MS09-SB03-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:26:09	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	95277.17	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	19923.09	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	19923.09	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	84423.70	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	84423.70	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	84423.70	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	84423.70	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	95277.17	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	95277.17	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	95277.17	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	19923.09	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	19923.09	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	19923.09	239.25

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Summary Internal Standard Report

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Sample Name	J8446-FS-D(5)	**Injection Vial**	16
Sample ID	VC-MS09-SB03-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:37:01	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	111871.90	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	29930.36	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	29930.36	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	86081.16	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	86081.16	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	86081.16	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	86081.16	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	111871.90	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	111871.90	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	111871.90	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	29930.36	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	29930.36	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	29930.36	239.25

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Summary Internal Standard Report

Sample Name	J8447-FS(3)	**Injection Vial**	17
Sample ID	VC-MS09-SS04-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:47:52	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	101064.19	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	28460.58	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	28460.58	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	82762.04	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	82762.04	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	82762.04	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	82762.04	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	101064.19	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	101064.19	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	101064.19	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	28460.58	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	28460.58	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	28460.58	239.25

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Summary Internal Standard Report

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Sample Name	J8448-FS(3)	**Injection Vial**	18
Sample ID	VC-MS09-SB04-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:58:43	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	106094.89	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	24046.15	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	24046.15	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	95711.30	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	95711.30	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	95711.30	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	95711.30	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	106094.89	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	106094.89	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	106094.89	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	24046.15	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	24046.15	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	24046.15	239.25

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Summary Internal Standard Report

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Sample Name	J8448-FS-D(5)	**Injection Vial**	19
Sample ID	VC-MS09-SB04-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:09:33	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	106675.59	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	30917.95	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	30917.95	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	86693.78	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	86693.78	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	86693.78	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	86693.78	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	106675.59	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	106675.59	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	106675.59	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	30917.95	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	30917.95	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	30917.95	239.25

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Summary Internal Standard Report

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Sample Name	J8449-FS(3)	**Injection Vial**	22
Sample ID	VC-MS09-SB04-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:42:10	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	103202.17	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	24265.23	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	24265.23	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	80583.71	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	80583.71	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	80583.71	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	80583.71	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	103202.17	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	103202.17	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	103202.17	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	24265.23	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	24265.23	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	24265.23	239.25

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Summary Internal Standard Report

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Sample Name	J8449-FS-D(5)	**Injection Vial**	23
Sample ID	VC-MS09-SB04-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:53:03	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	89057.37	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	26210.61	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	26210.61	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	74798.95	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	74798.95	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	74798.95	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	74798.95	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	89057.37	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	89057.37	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	89057.37	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	26210.61	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	26210.61	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	26210.61	239.25

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Summary Internal Standard Report

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Sample Name	J8450-FS(3)	**Injection Vial**	24
Sample ID	VC-MS09-SS05-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:03:55	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	92759.22	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	18395.46	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	18395.46	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	80057.67	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	80057.67	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	80057.67	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	80057.67	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	92759.22	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	92759.22	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	92759.22	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	18395.46	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	18395.46	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	18395.46	239.25

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Summary Internal Standard Report

Sample Name	J8450-FS-D(5)	**Injection Vial**	25
Sample ID	VC-MS09-SS05-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:14:47	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	116103.71	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	27348.25	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	27348.25	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	98501.09	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	98501.09	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	98501.09	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	98501.09	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	116103.71	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	116103.71	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	116103.71	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	27348.25	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	27348.25	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	27348.25	239.25

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Summary Internal Standard Report

Sample Name	J8451-FS(3)	**Injection Vial**	26
Sample ID	VC-MS09-SB05-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:25:38	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	92003.24	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	18046.58	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	18046.58	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	74557.81	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	74557.81	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	74557.81	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	74557.81	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	92003.24	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	92003.24	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	92003.24	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	18046.58	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	18046.58	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	18046.58	239.25

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Sample Name	J8451-FS-D(5)	**Injection Vial**	27
Sample ID	VC-MS09-SB05-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:36:29	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	102039.85	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	25585.81	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	25585.81	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	86981.64	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	86981.64	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	86981.64	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	86981.64	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	102039.85	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	102039.85	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	102039.85	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	25585.81	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	25585.81	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	25585.81	239.25

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Sample Name	J5452-FS((3)	**Injection Vial**	28
Sample ID	VC-MS09-SB05-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:47:20	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	102645.07	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	23716.83	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	23716.83	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	82783.71	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	82783.71	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	82783.71	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	82783.71	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	102645.07	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	102645.07	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	102645.07	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	23716.83	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	23716.83	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	23716.83	239.25

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Sample Name	J8452-FS-D(5)	**Injection Vial**	29
Sample ID	VC-MS09-SB05-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:58:12	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	101647.99	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	30621.96	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	30621.96	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	85744.59	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	85744.59	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	85744.59	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	85744.59	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	101647.99	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	101647.99	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	101647.99	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	30621.96	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	30621.96	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	30621.96	239.25

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Summary Internal Standard Report

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Sample Name	J8453MS-FS(3)	**Injection Vial**	32
Sample ID	VC-MS09-SB04-0102-MS	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:30:47	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	94290.45	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	18116.34	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	18116.34	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	71096.11	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	71096.11	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	71096.11	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	71096.11	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	94290.45	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	94290.45	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	94290.45	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	18116.34	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	18116.34	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	18116.34	239.25

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Sample Name	J8453MS-FS-D(5)	**Injection Vial**	33
Sample ID	VC-MS09-SB04-0102-MS	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:41:39	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	100087.27	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	27235.27	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	27235.27	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	81540.18	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	81540.18	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	81540.18	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	81540.18	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	100087.27	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	100087.27	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	100087.27	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	27235.27	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	27235.27	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	27235.27	239.25

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Summary Internal Standard Report

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Sample Name	J8454MSD-FS(3)	**Injection Vial**	34
Sample ID	VC-MS09-SB04-0102-MSD	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:52:29	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	93651.27	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	22114.89	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	22114.89	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	81064.13	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	81064.13	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	81064.13	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	81064.13	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	93651.27	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	93651.27	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	93651.27	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	22114.89	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	22114.89	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	22114.89	239.25

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Sample Name	J8454MSD-FS-D(5)	**Injection Vial**	35
Sample ID	VC-MS09-SB04-0102-MSD	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:03:21	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	99146.57	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	27521.90	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	27521.90	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	82987.47	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	82987.47	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	82987.47	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	82987.47	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	99146.57	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	99146.57	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	99146.57	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	27521.90	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	27521.90	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	27521.90	239.25

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Summary Internal Standard Report

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Sample Name	J8444-FS(5)	**Injection Vial**	38
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:35:56	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_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	80890.70	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	4474.72	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	4474.72	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	154780.82	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	154780.82	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	154780.82	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	154780.82	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	80890.70	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	80890.70	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	80890.70	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	4474.72	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	4474.72	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	4474.72	239.25

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Summary Internal Standard Report

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Sample Name	KB80 IB	**Injection Vial**	2
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T18:27:43	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
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	22650.61	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	22650.61	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	53978.91	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	53978.91	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	59454.32	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	59454.32	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	20402.34	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	20402.34	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	73559.14	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	73559.14	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	82966.73	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	82966.73	250.00
PFOS_1	499.0 / 80.0	N/A	13C8-PFOS	507.0 / 99.0	27675.45	239.25
PFOS_2	499.0 / 99.0	N/A	13C8-PFOS	507.0 / 99.0	27675.45	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	81246.25	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	81246.25	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	77126.81	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	77126.81	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	83378.86	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	83378.86	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	68651.72	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	68651.72	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	68651.72	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	68651.72	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	9065.50	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	9065.50	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	11404.63	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	11404.63	250.00

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Summary Internal Standard Report

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Sample Name	J8440-FS-D(7)	**Injection Vial**	23
Sample ID	VC-MS09-SB01-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T22:48:35	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
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	26802.74	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	26802.74	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	59606.28	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	59606.28	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	70880.34	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	70880.34	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	25108.90	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	25108.90	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	87973.89	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	87973.89	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	90311.01	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	90311.01	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	25629.51	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	25629.51	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	95203.67	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	95203.67	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	87328.59	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	87328.59	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	89047.77	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	89047.77	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	74856.64	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	74856.64	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	74856.64	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	74856.64	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	11437.46	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	11437.46	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	13868.73	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	13868.73	250.00

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Summary Internal Standard Report

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Sample Name	J8443-FS-D(9)	**Injection Vial**	24
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T22:59:28	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
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	22737.17	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	22737.17	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	51035.48	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	51035.48	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	63050.33	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	63050.33	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	21141.47	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	21141.47	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	77541.99	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	77541.99	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	78651.50	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	78651.50	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	23501.42	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	23501.42	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	85427.35	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	85427.35	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	70105.56	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	70105.56	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	77546.86	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	77546.86	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	69063.81	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	69063.81	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	69063.81	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	69063.81	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	9779.12	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	9779.12	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	11625.67	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	11625.67	250.00

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Summary Internal Standard Report

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Sample Name	J8445-FS-D(11)	**Injection Vial**	25
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:10:20	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
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	23205.41	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	23205.41	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	51380.75	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	51380.75	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	55940.43	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	55940.43	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	21378.51	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	21378.51	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	76713.59	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	76713.59	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	73464.73	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	73464.73	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	23923.81	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	23923.81	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	78338.46	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	78338.46	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	79314.88	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	79314.88	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	84070.87	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	84070.87	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	69865.90	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	69865.90	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	69865.90	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	69865.90	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	10269.52	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	10269.52	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	10274.69	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	10274.69	250.00

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Summary Internal Standard Report

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Sample Name	J8446-FS-D(7)	**Injection Vial**	26
Sample ID	VC-MS09-SB03-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:21:12	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
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	25654.21	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	25654.21	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	53367.47	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	53367.47	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	64789.51	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	64789.51	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	21960.85	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	21960.85	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	81744.05	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	81744.05	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	77893.15	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	77893.15	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	24316.93	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	24316.93	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	89753.41	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	89753.41	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	81325.32	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	81325.32	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	81898.36	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	81898.36	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	68507.31	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	68507.31	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	68507.31	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	68507.31	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	10885.17	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	10885.17	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	12294.49	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	12294.49	250.00

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Summary Internal Standard Report

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Printed: 25/10/2018 10:33:48 AM

Sample Name	J8450-FS-D(7)	**Injection Vial**	27
Sample ID	VC-MS09-SS05-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:32:04	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
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	22560.72	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	22560.72	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	47832.37	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	47832.37	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	54439.49	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	54439.49	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	17789.09	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	17789.09	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	67898.64	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	67898.64	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	69707.70	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	69707.70	250.00
PFOS_1	499.0 / 80.0	3.08	13C8-PFOS	507.0 / 99.0	23649.03	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	23649.03	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	79341.16	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	79341.16	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	71690.97	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	71690.97	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	78129.62	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	78129.62	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	64528.21	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	64528.21	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	64528.21	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	64528.21	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	9568.56	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	9568.56	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	11176.83	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	11176.83	250.00

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Summary Internal Standard Report

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Printed: 25/10/2018 10:33:52 AM

Sample Name	J8444-FS-D(17)	**Injection Vial**	28
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:42:56	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
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	21710.49	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	21710.49	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	48854.06	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	48854.06	250.00
PFHpA_1	363.0 / 319.0	N/A	13C4-PFHpA	367.0 / 322.0	54302.86	250.00
PFHpA_2	363.0 / 169.0	N/A	13C4-PFHpA	367.0 / 322.0	54302.86	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	19617.70	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	19617.70	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	68523.94	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	68523.94	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	67717.05	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	67717.05	250.00
PFOS_1	499.0 / 80.0	3.03	13C8-PFOS	507.0 / 99.0	19964.74	239.25
PFOS_2	499.0 / 99.0	3.08	13C8-PFOS	507.0 / 99.0	19964.74	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	71963.73	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	71963.73	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	68630.70	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	68630.70	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	74147.16	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	74147.16	250.00
PFTrDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	60652.05	250.00
PFTrDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	60652.05	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	60652.05	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	60652.05	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	9437.26	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	9437.26	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	9829.55	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	9829.55	250.00

Chromatograms

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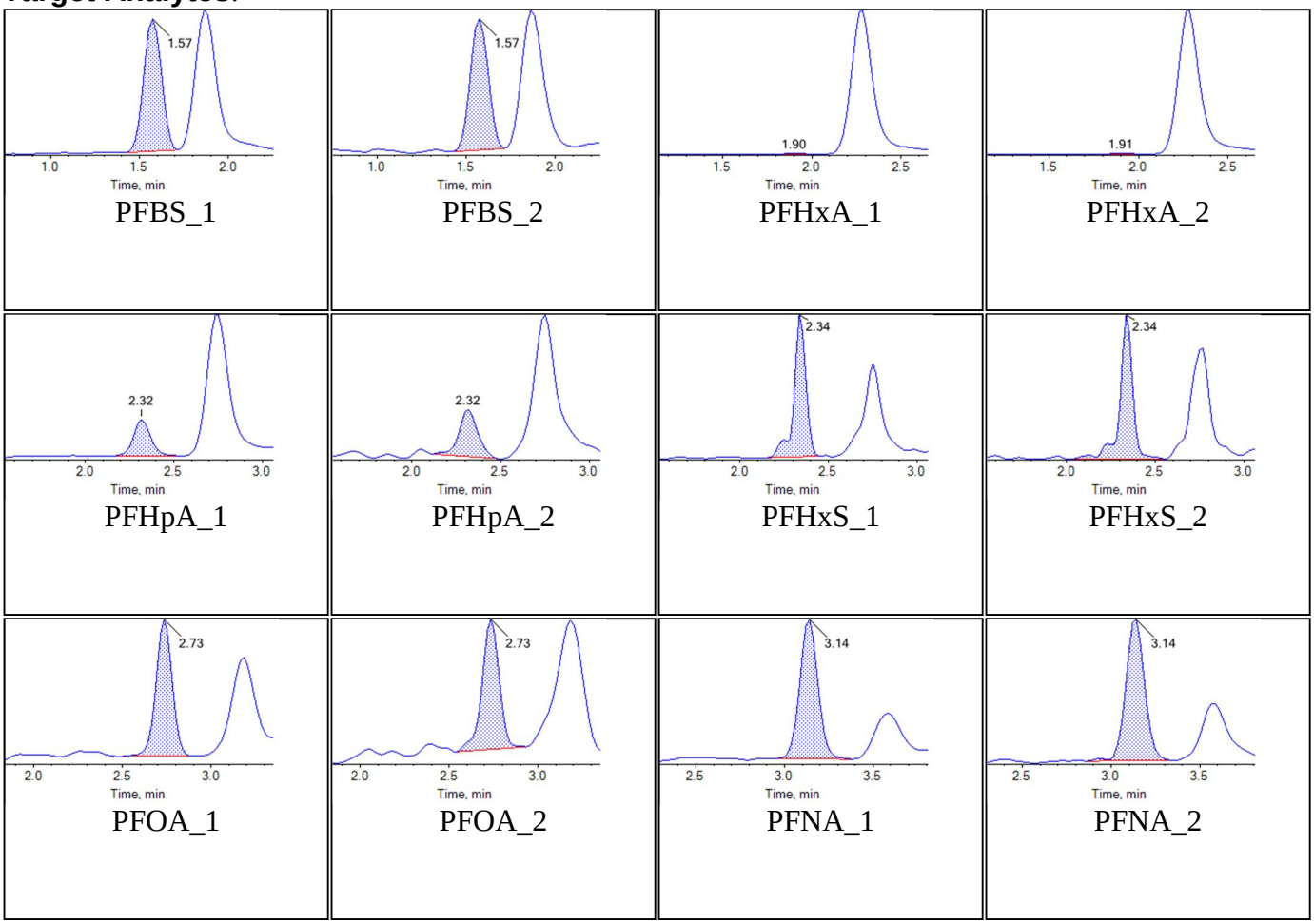
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 11:16:15 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**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

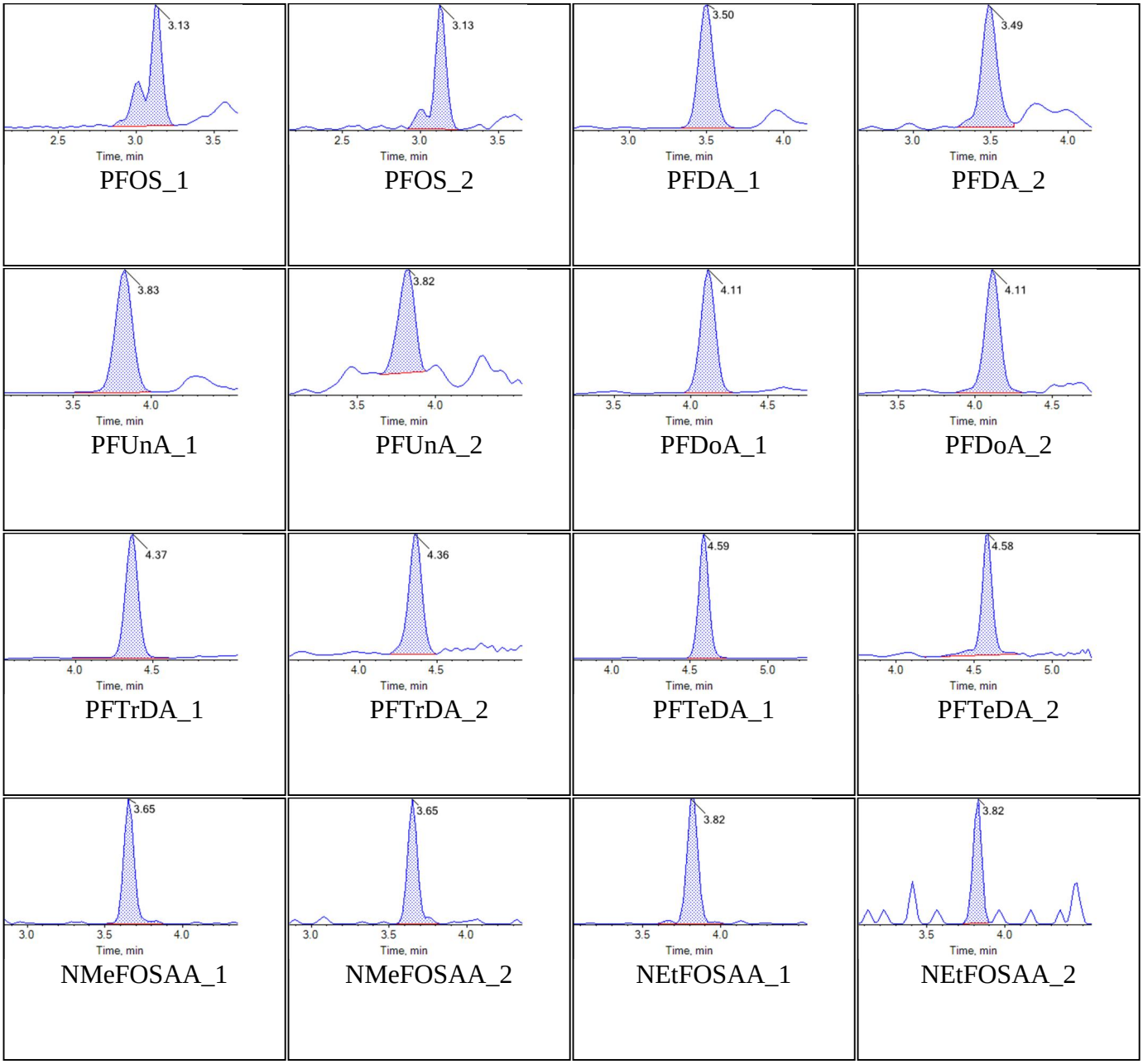
Target Analytes:



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Chromatogram Report

Created with Analyst Reporter
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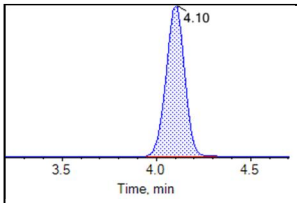


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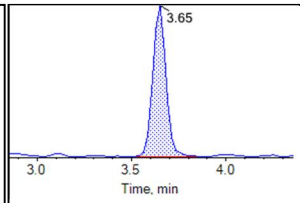
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Chromatogram Report

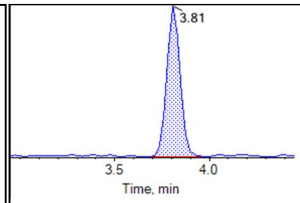
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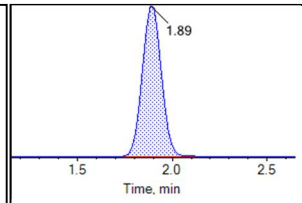
13C2-PFDoA



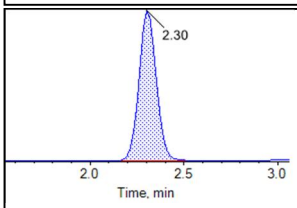
d3-MeFOSAA



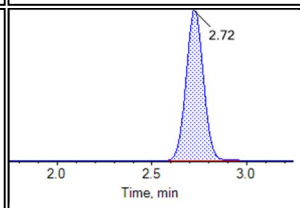
d5-EtFOSAA



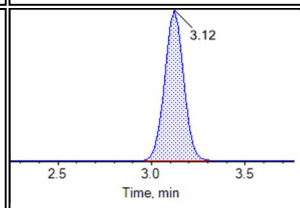
13C5-PFHxA



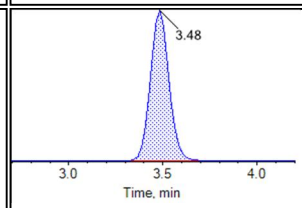
13C4-PFHpA



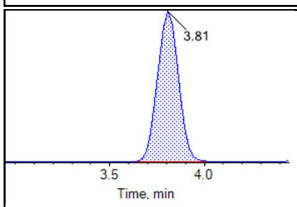
13C8-PFOA



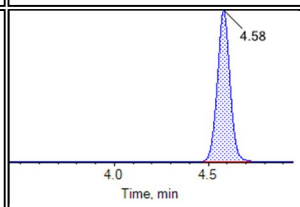
13C9-PFNA



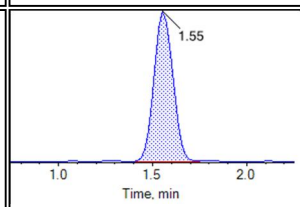
13C6-PFDA



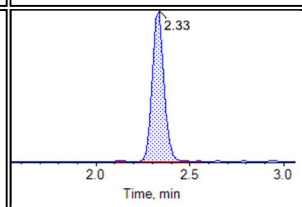
13C7-PFUnA



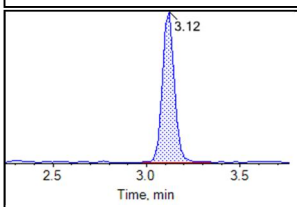
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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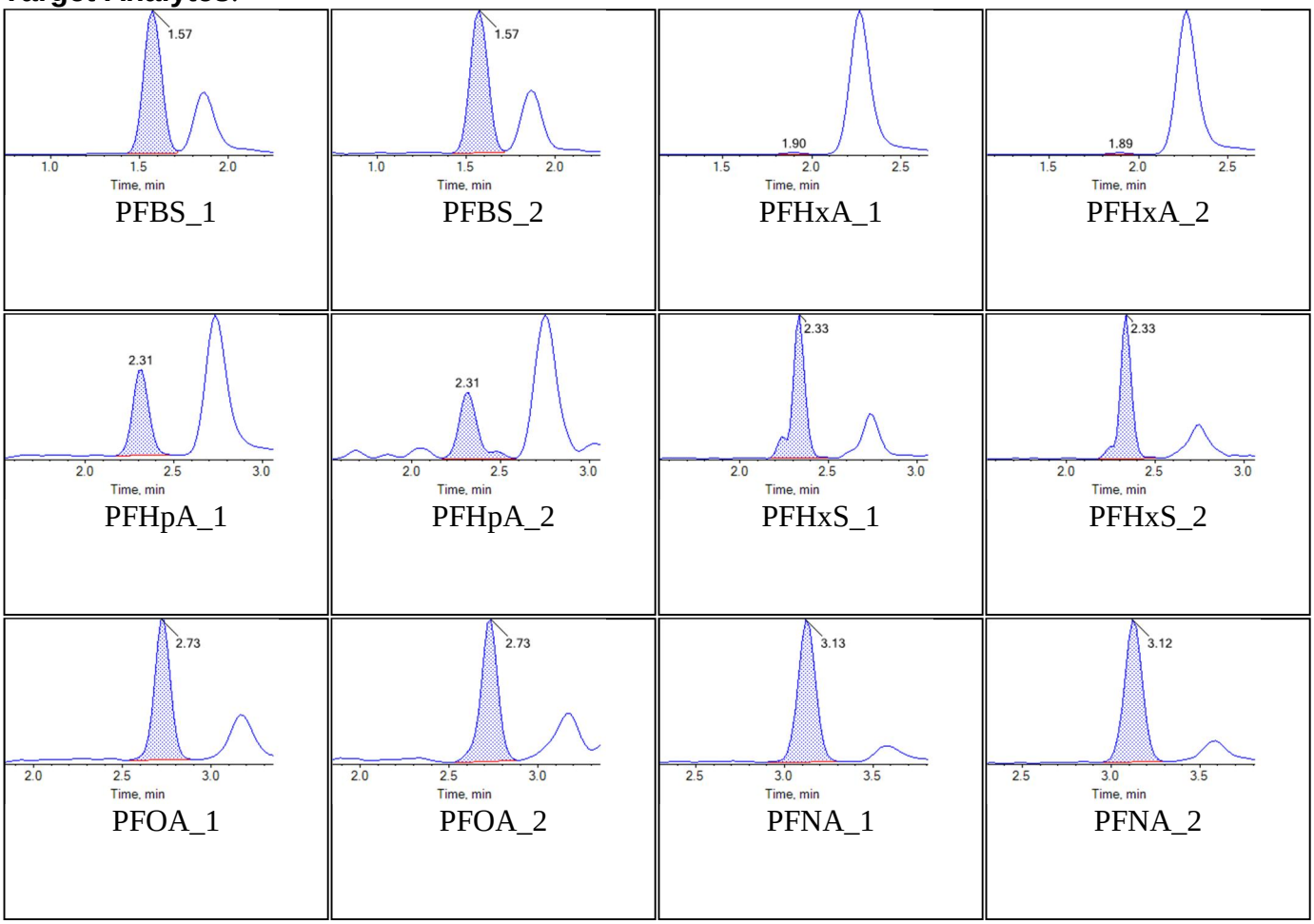
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 11:16:38 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**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

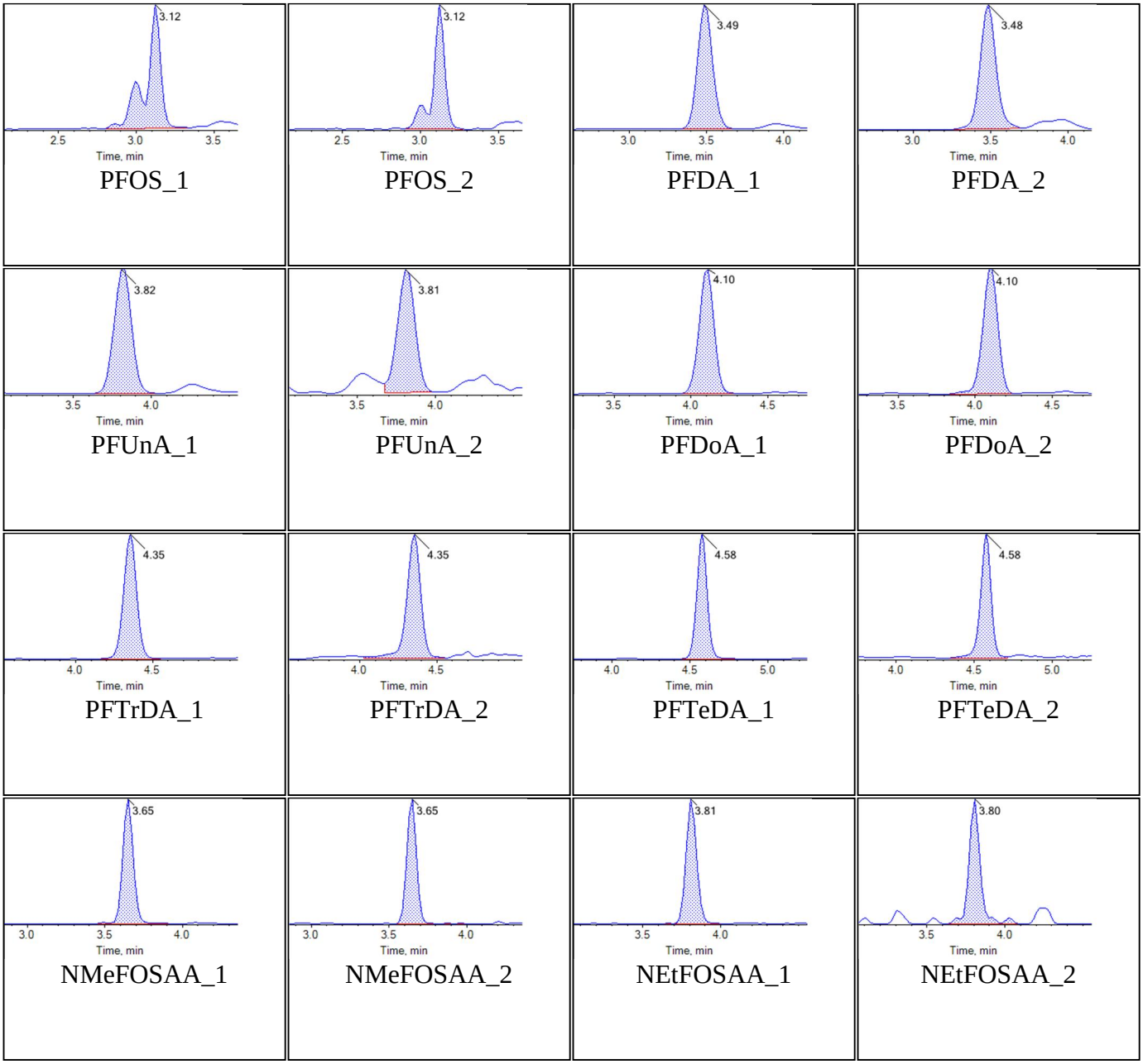
Target Analytes:



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Chromatogram Report

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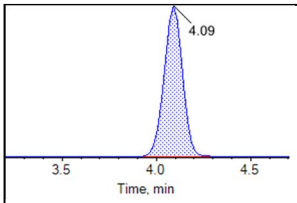


Internal Standards:

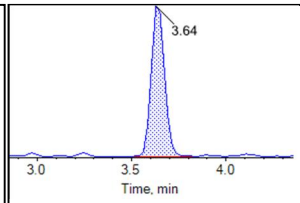
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Chromatogram Report

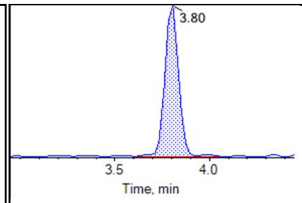
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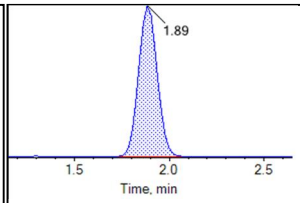
13C2-PFDoA



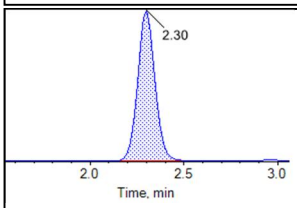
d3-MeFOSAA



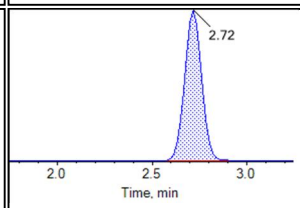
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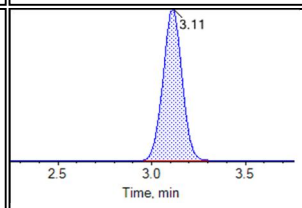
13C5-PFHxA



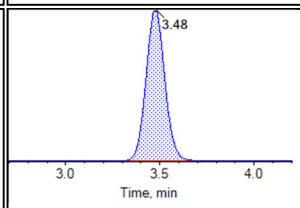
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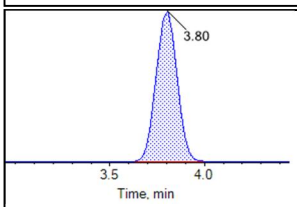
13C8-PFOA



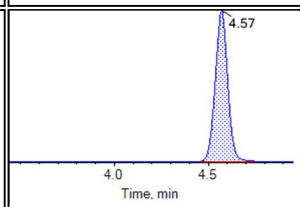
13C9-PFNA



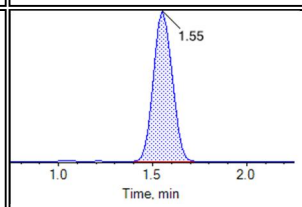
13C6-PFDA



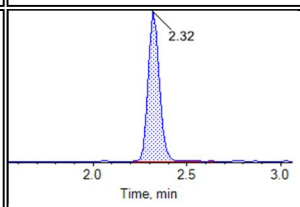
13C7-PFUnA



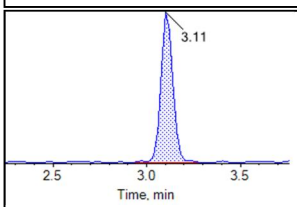
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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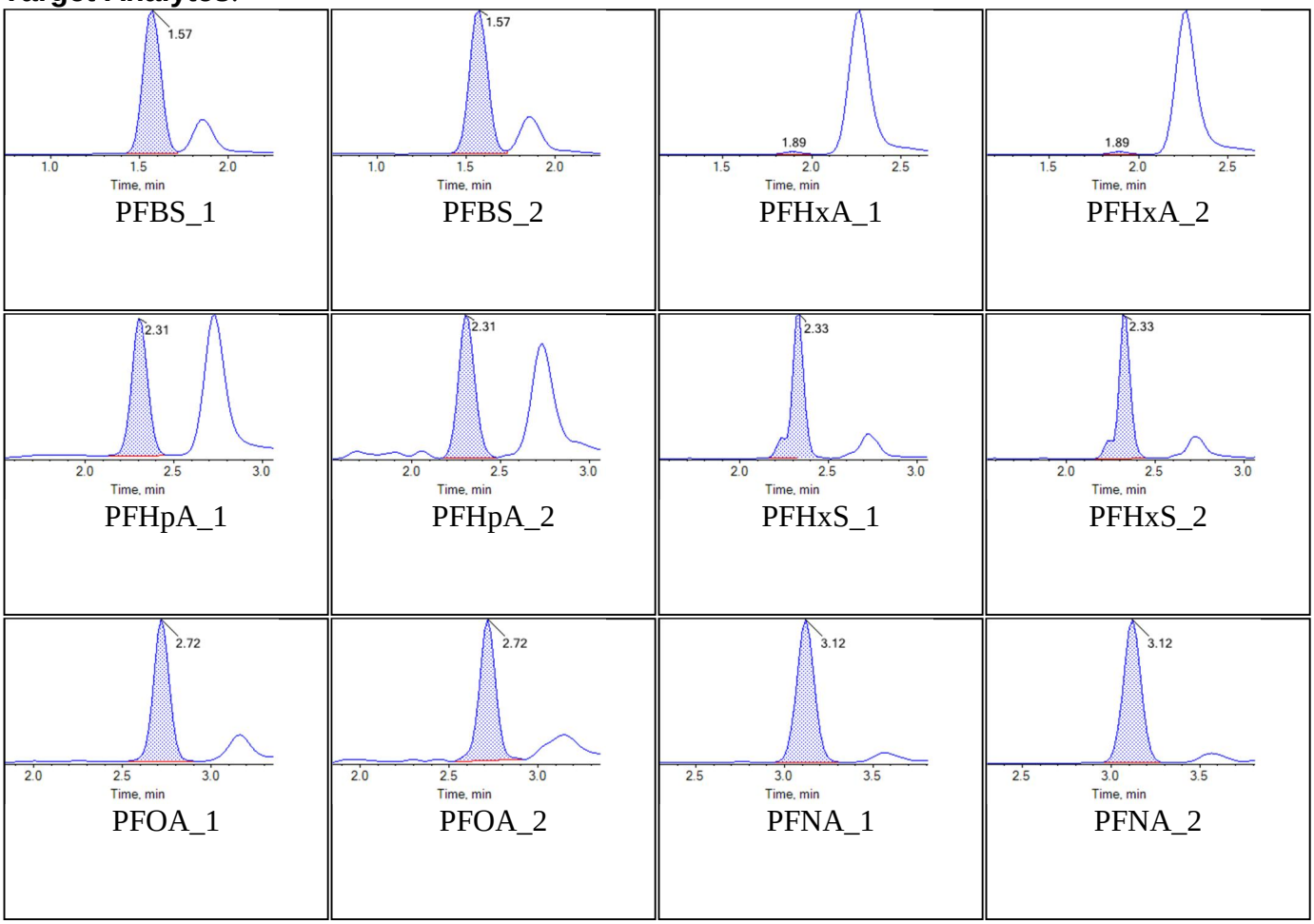
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 11:16:44 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**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

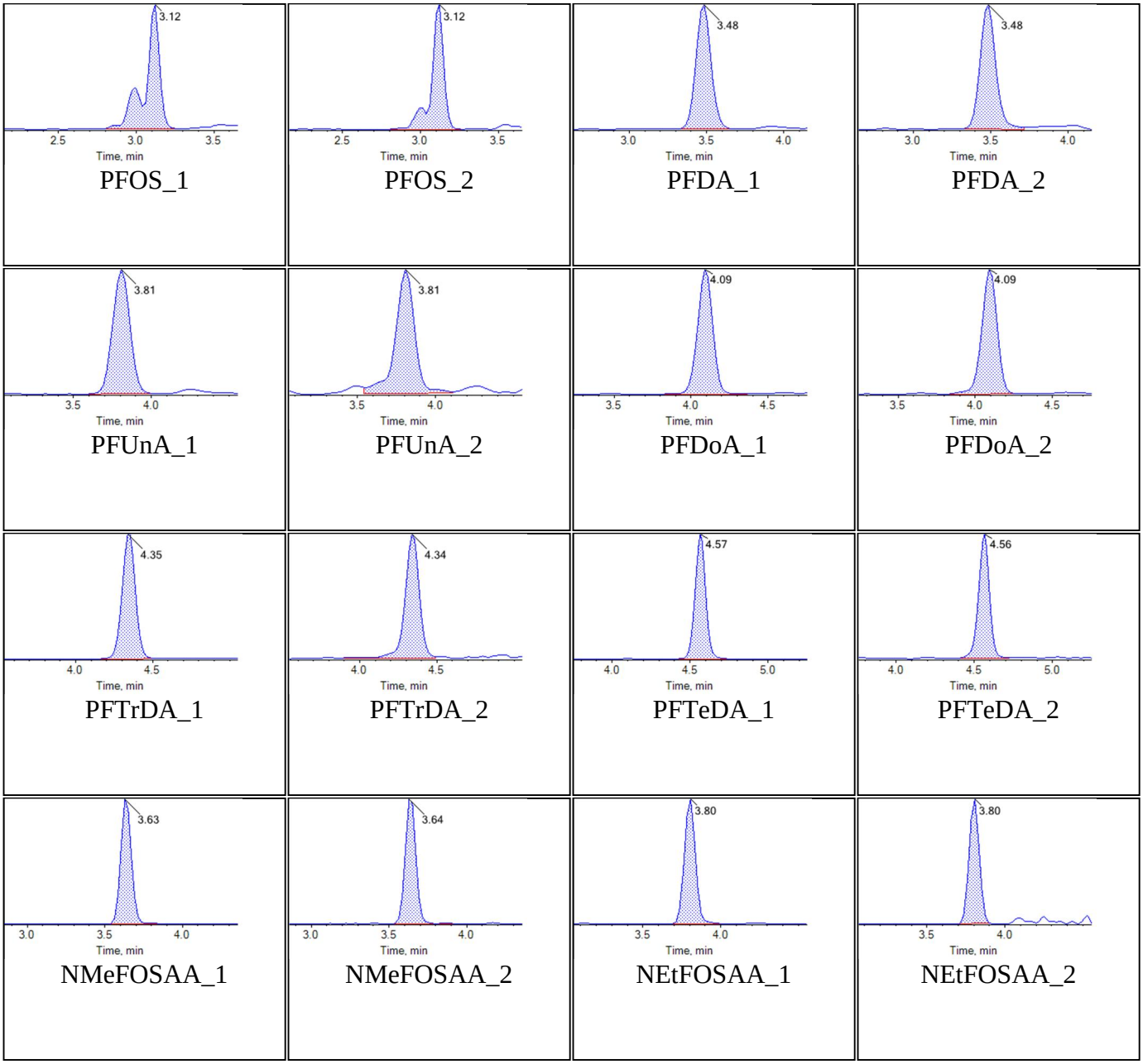
Target Analytes:



BATTELLE

Chromatogram Report

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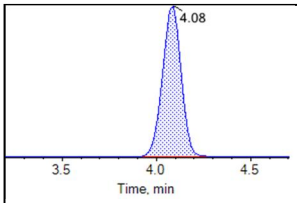


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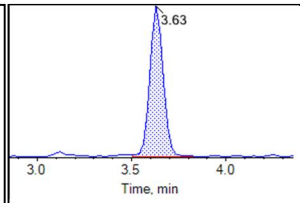
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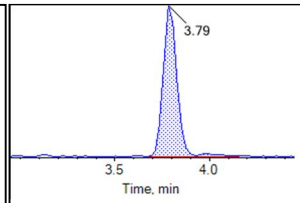
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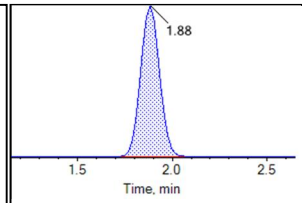
13C2-PFDoA



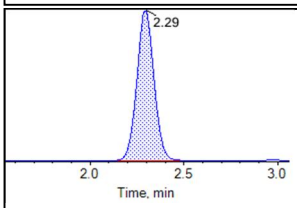
d3-MeFOSAA



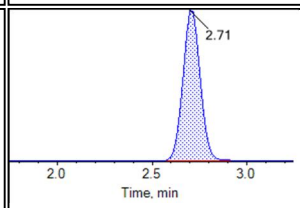
d5-EtFOSAA



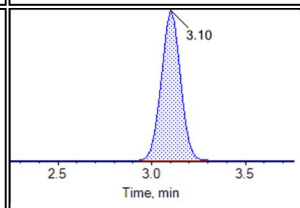
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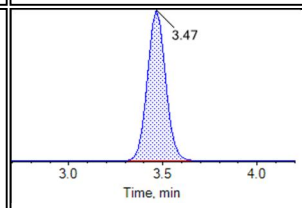
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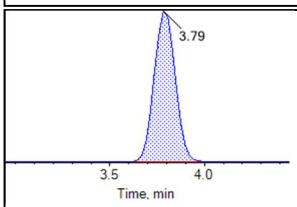
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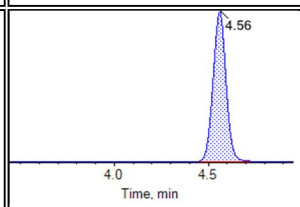
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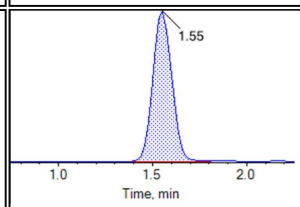
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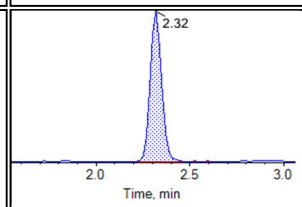
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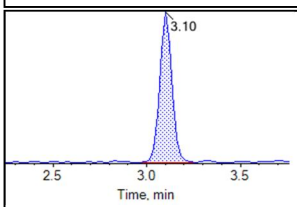
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

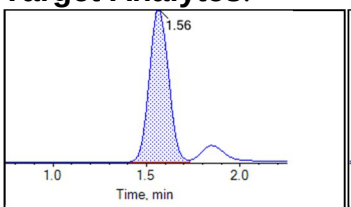
Chromatogram Report

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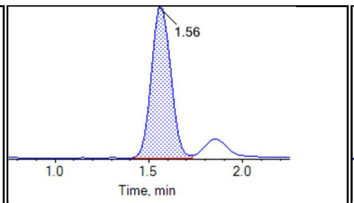
Sample Name	KB76	**Injection Vial**	5
Sample ID	L4	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T20:19:32	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

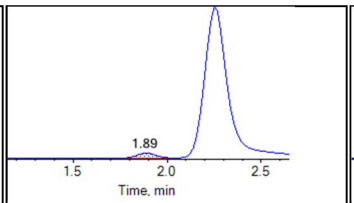
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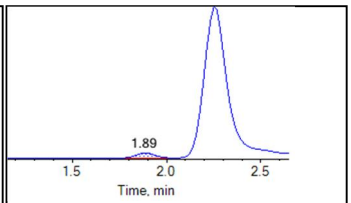
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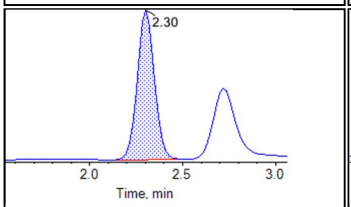
PFBS_2



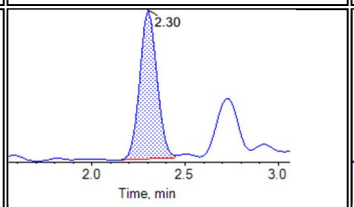
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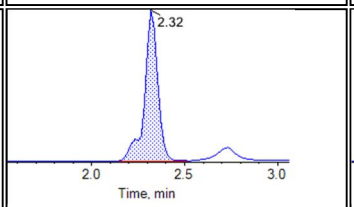
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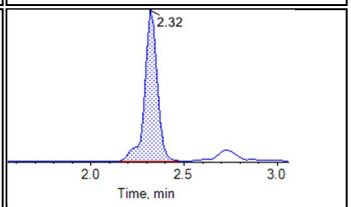
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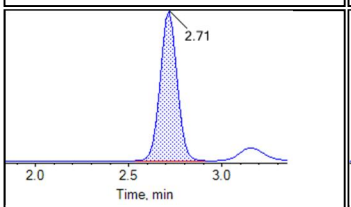
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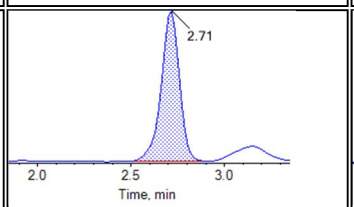
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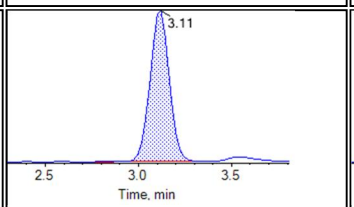
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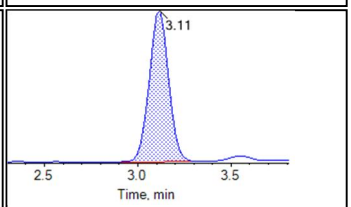
PFOA_1



PFOA_2



PFNA_1

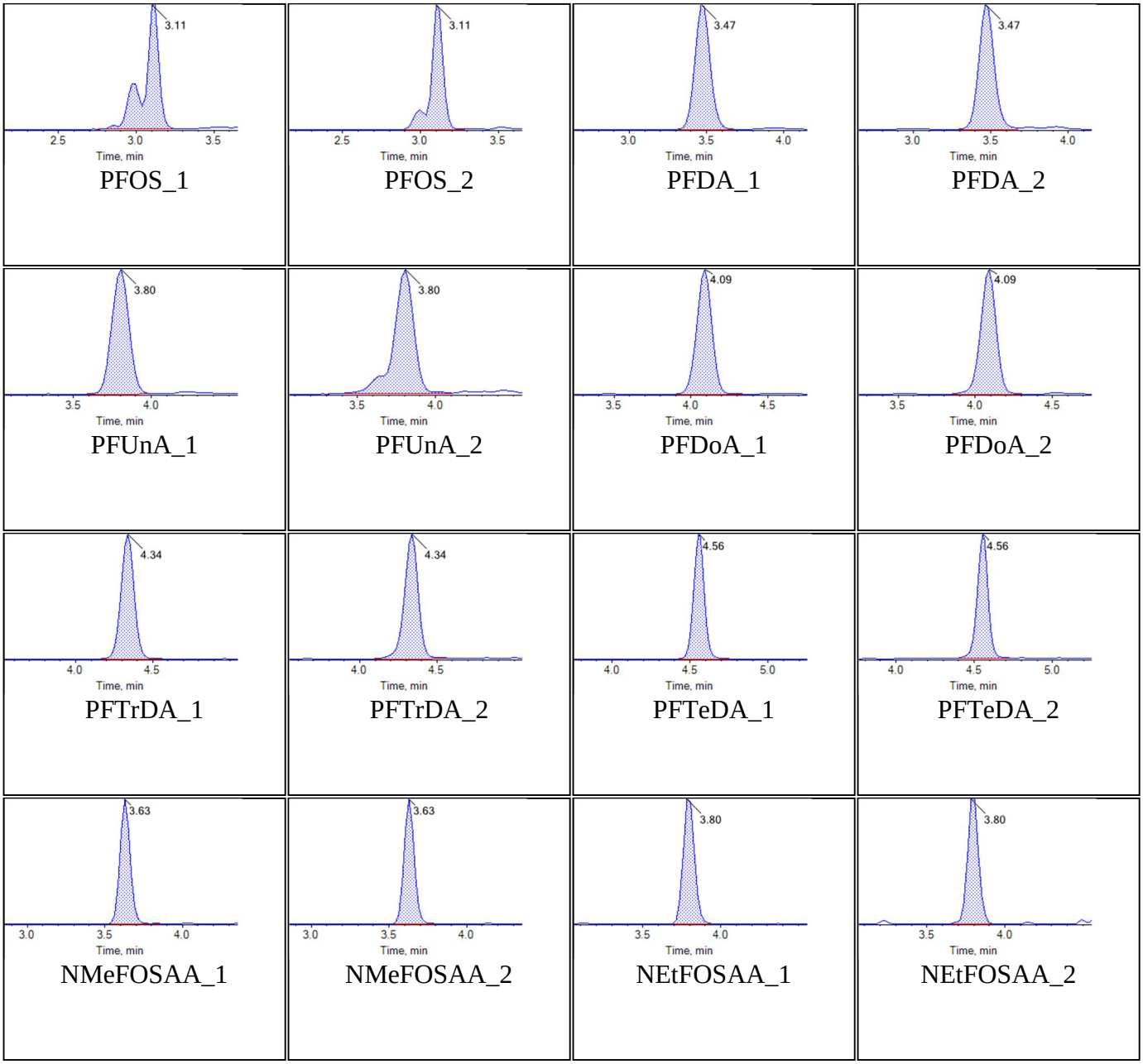


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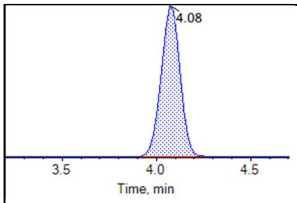


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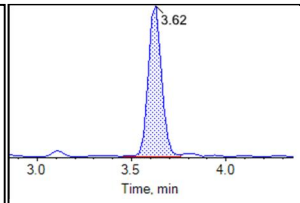
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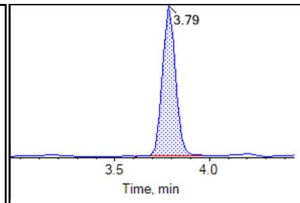
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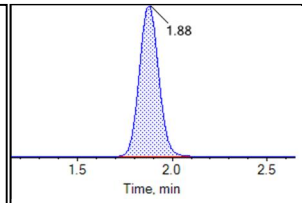
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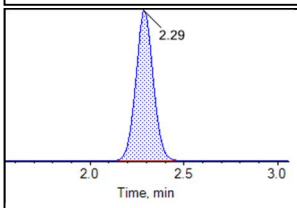
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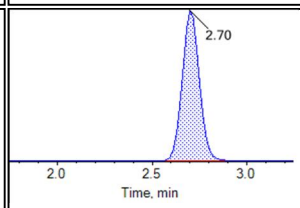
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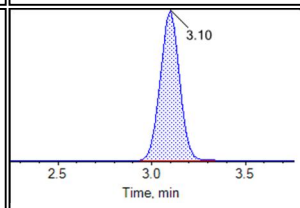
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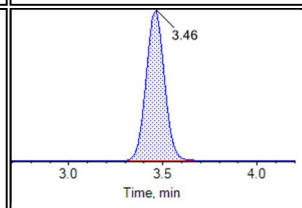
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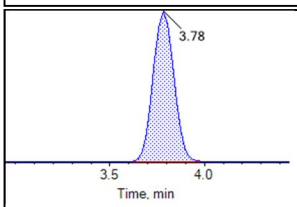
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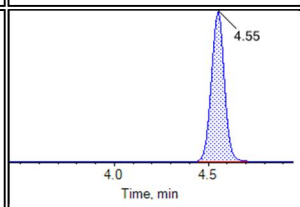
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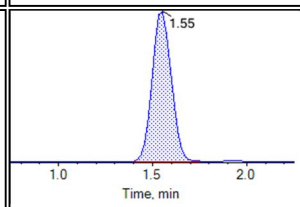
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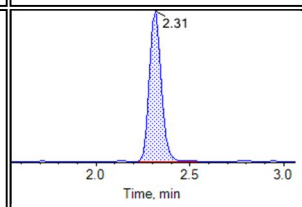
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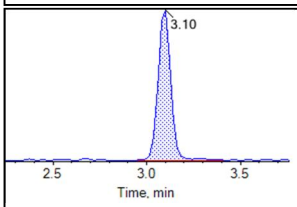
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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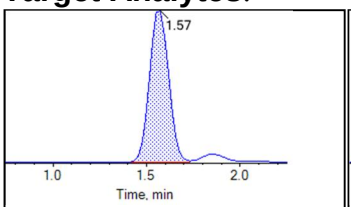
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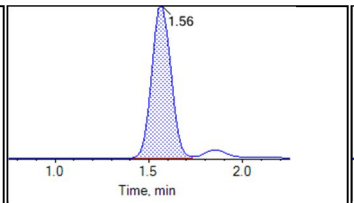
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Sample ID	L5	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T20:30:23	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

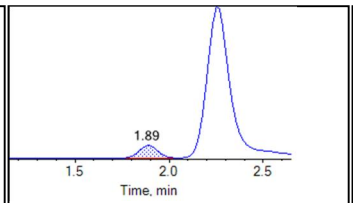
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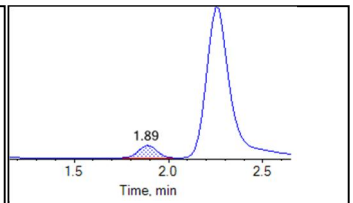
PFBS_1



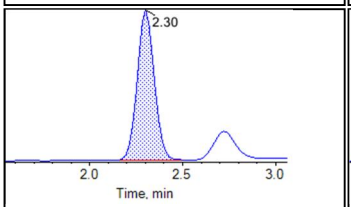
PFBS_2



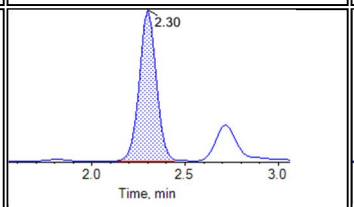
PFHxA_1



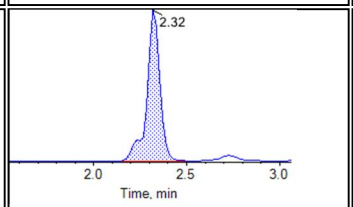
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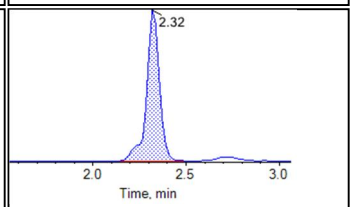
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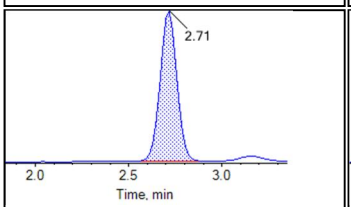
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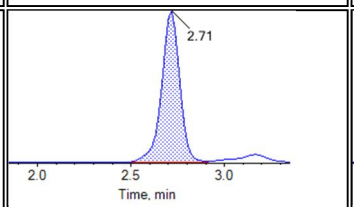
PFHxS_1



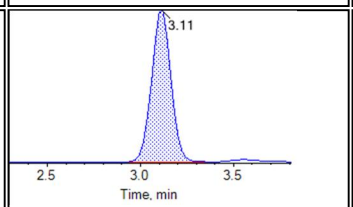
PFHxS_2



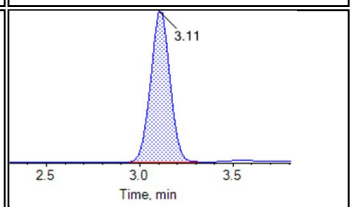
PFOA_1



PFOA_2



PFNA_1

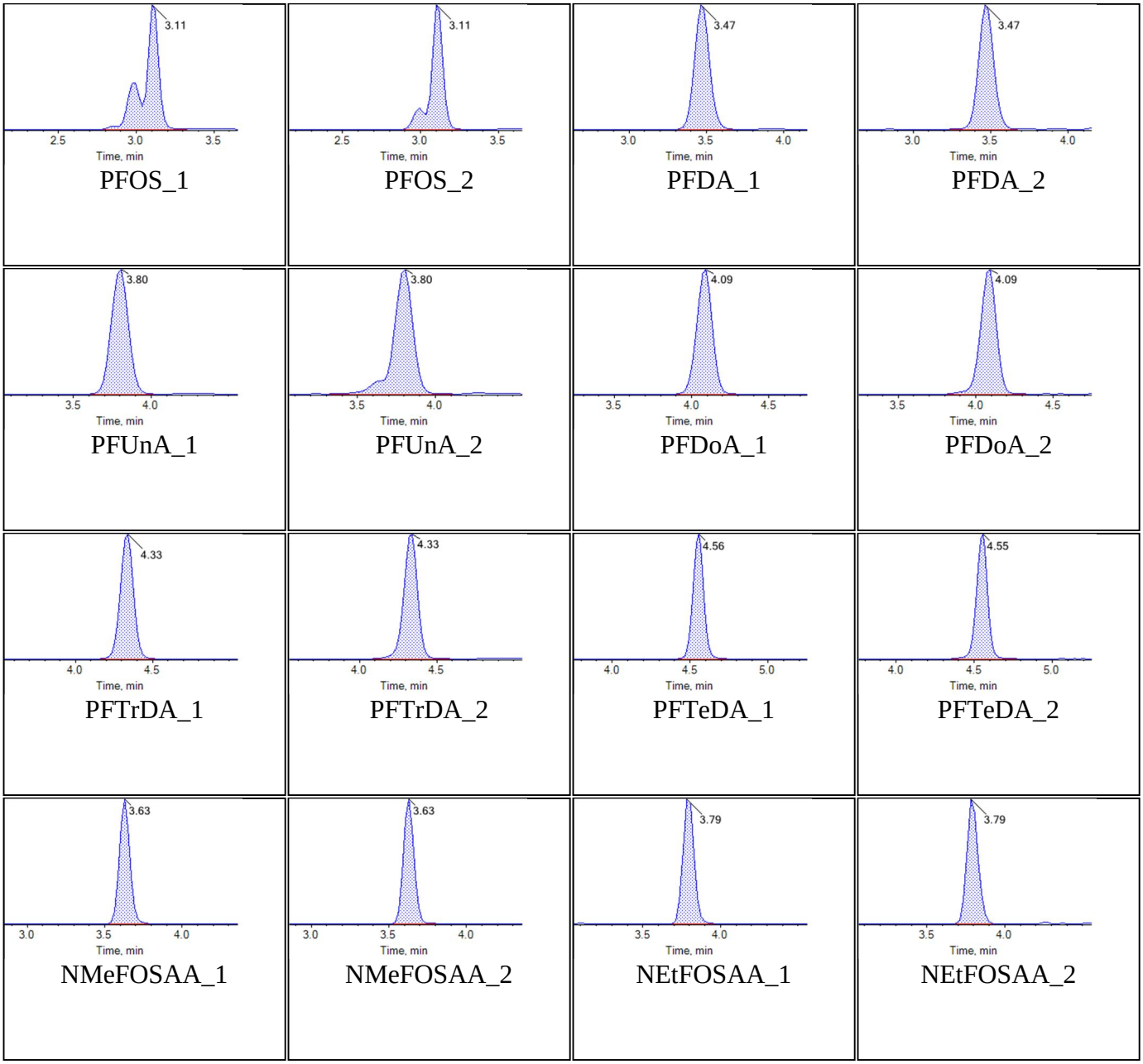


PFNA_2

BATTELLE

Chromatogram Report

Created with Analyst Reporter
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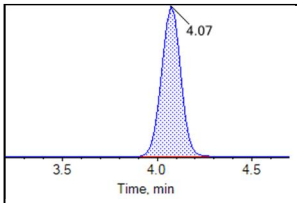


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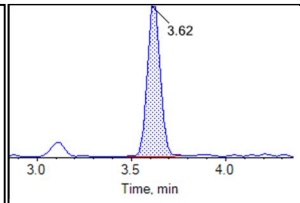
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Chromatogram Report

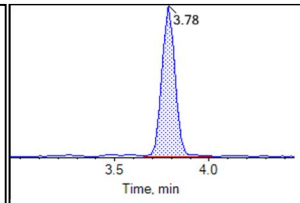
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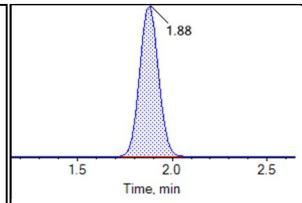
13C2-PFDoA



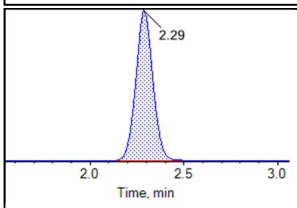
d3-MeFOSAA



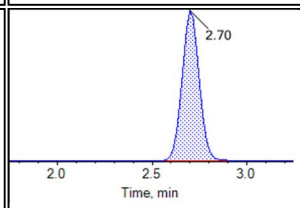
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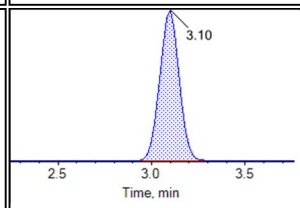
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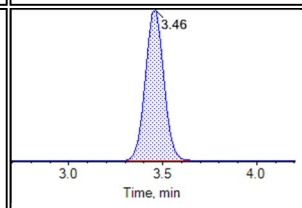
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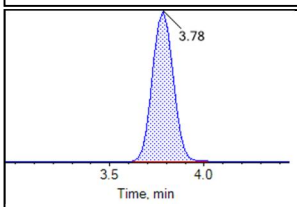
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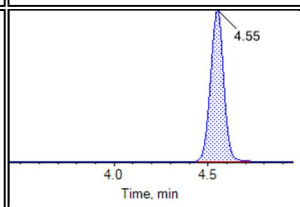
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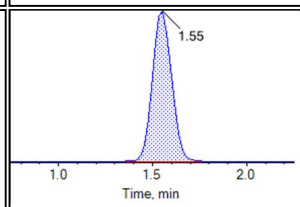
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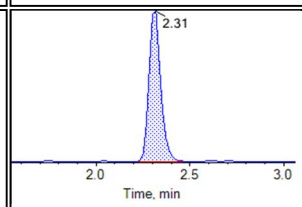
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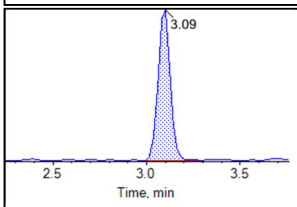
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

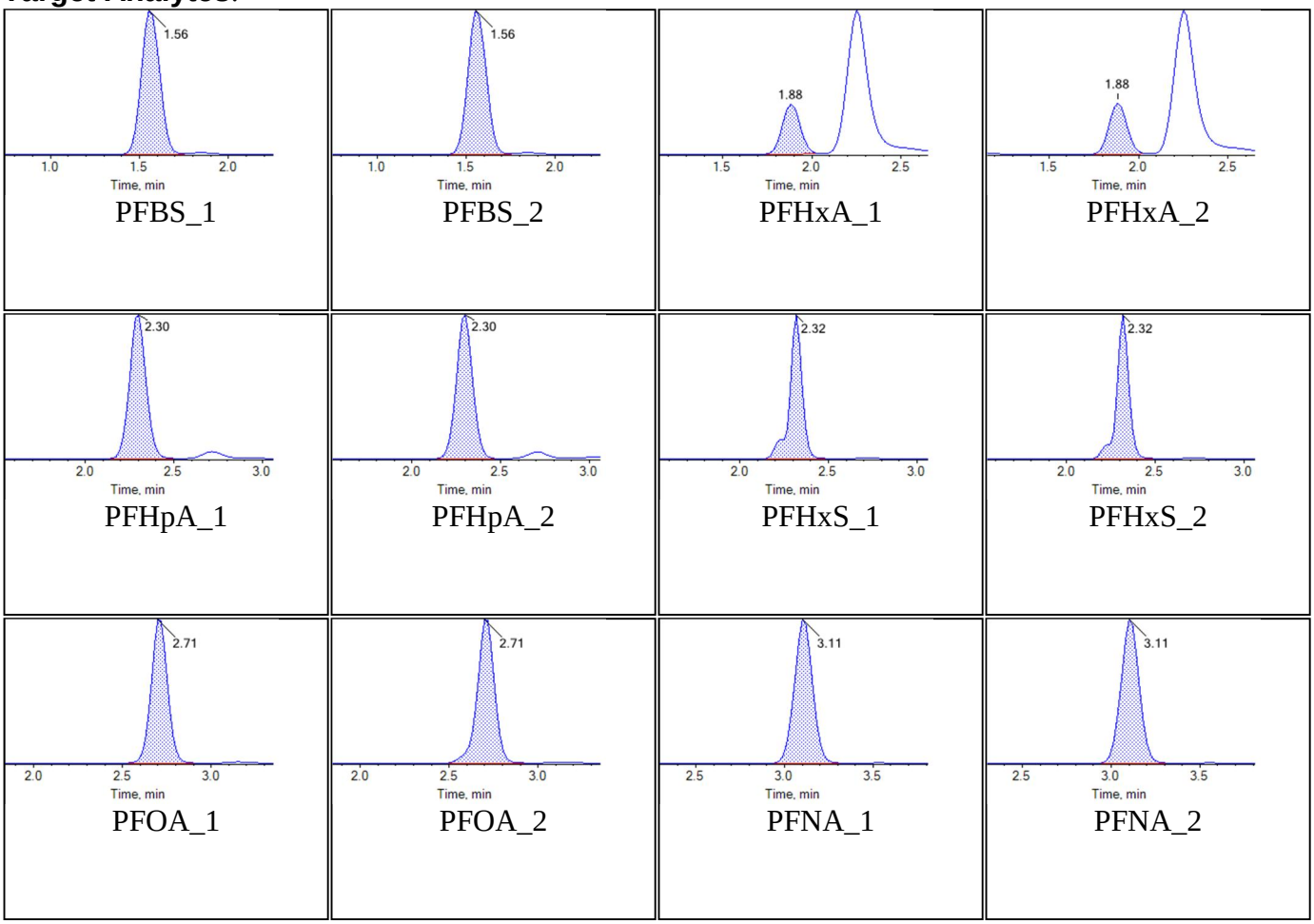
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 11:17:00 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**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

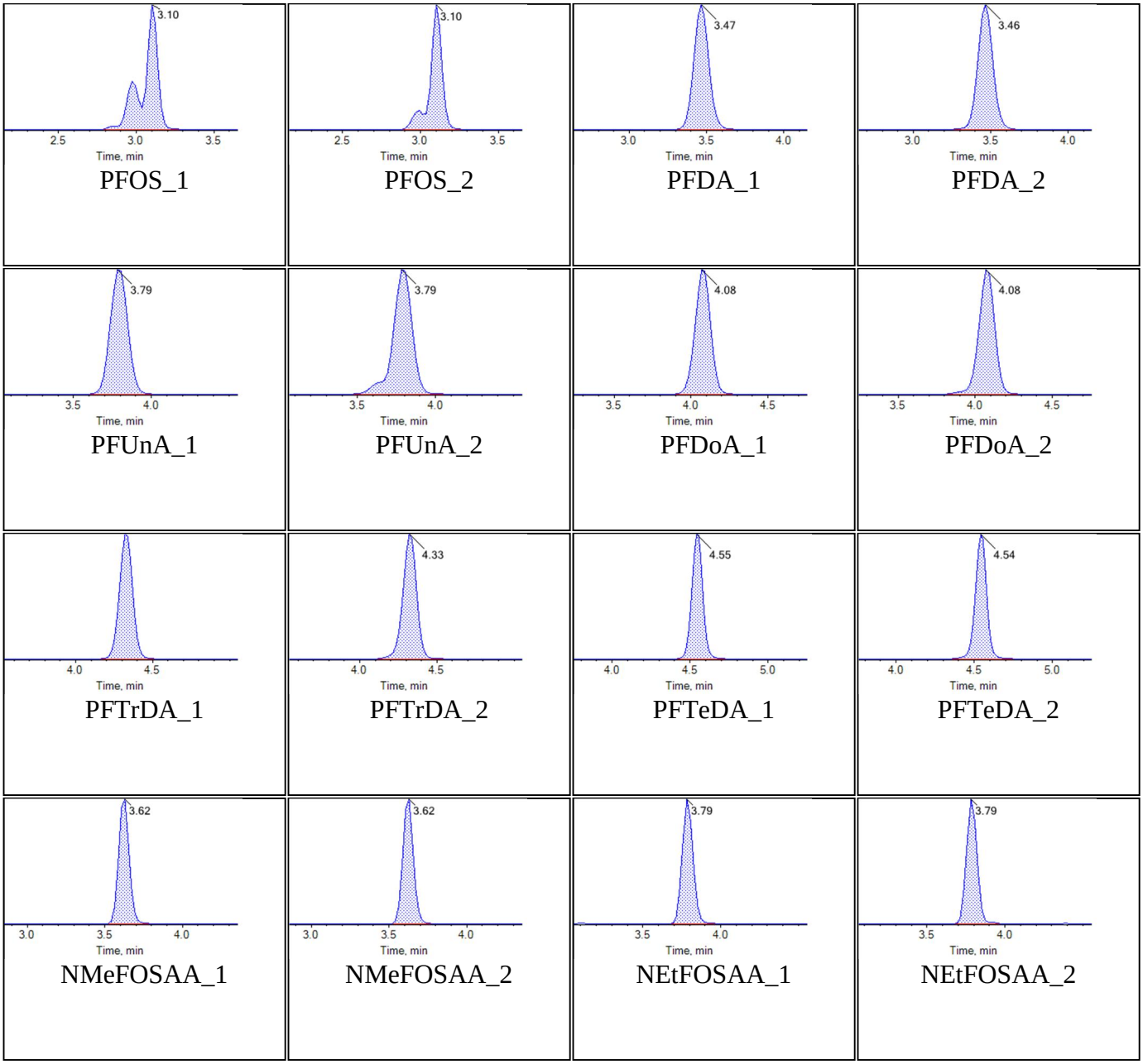
Target Analytes:



BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 11:17:00 AM

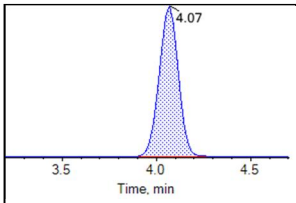


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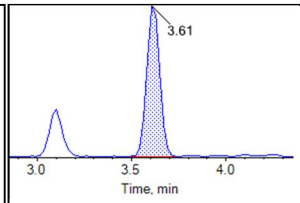
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Chromatogram Report

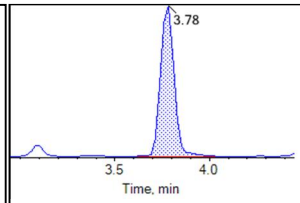
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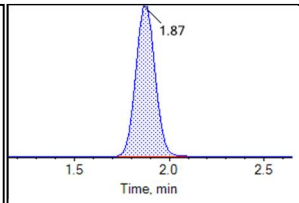
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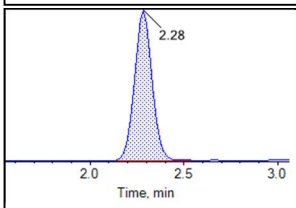
d3-MeFOSAA



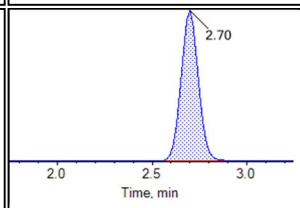
d5-EtFOSAA



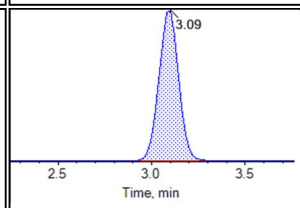
13C5-PFHxA



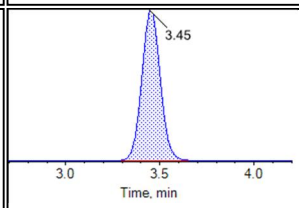
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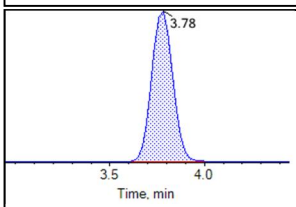
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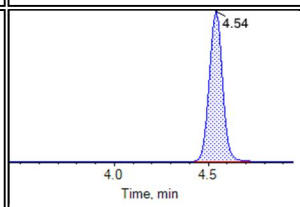
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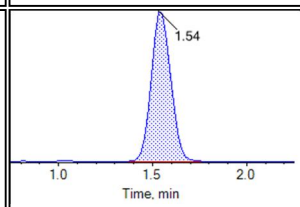
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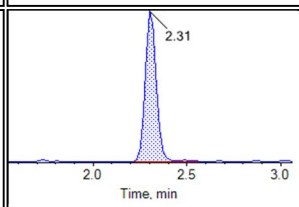
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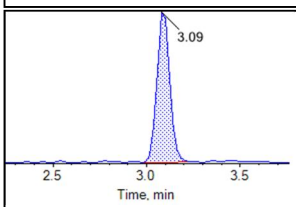
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

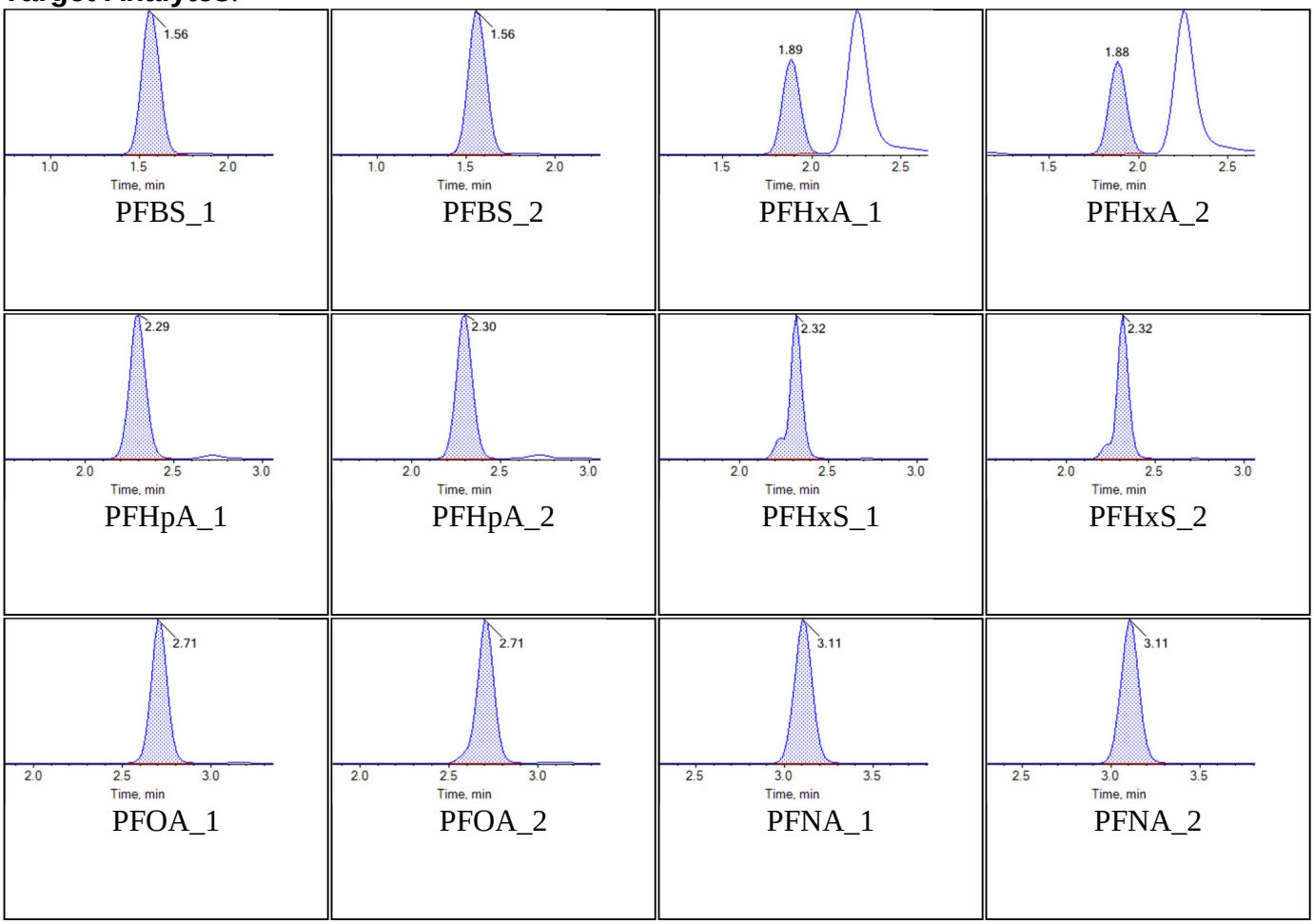
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 11:17:05 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**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

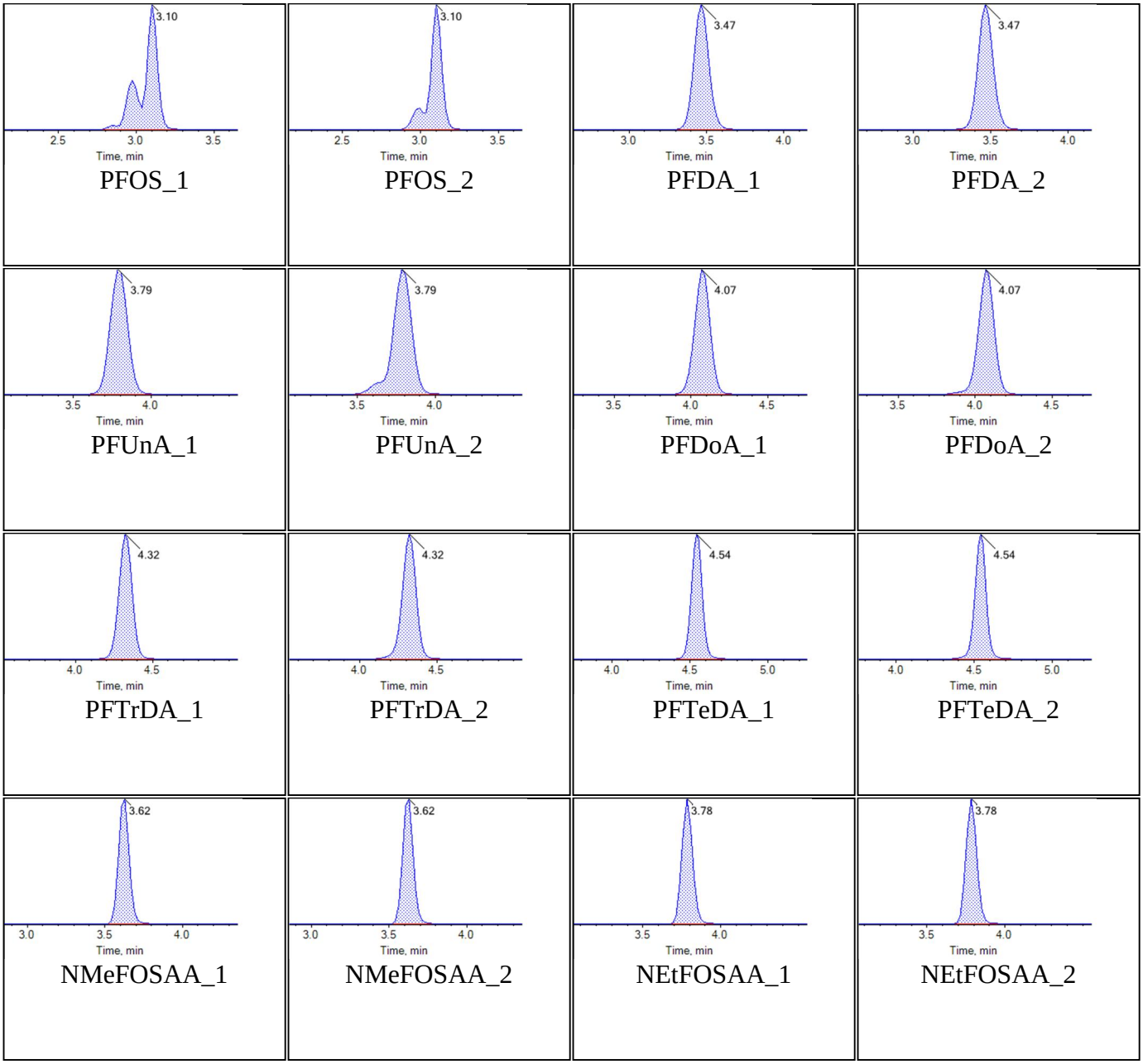
Target Analytes:



BATTELLE

Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 11:17:05 AM

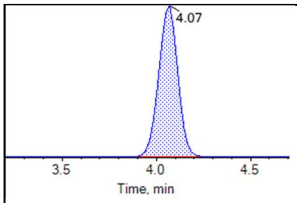


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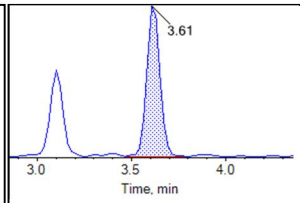
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Chromatogram Report

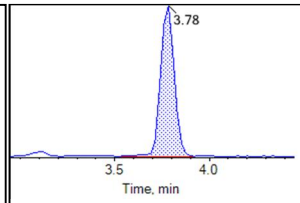
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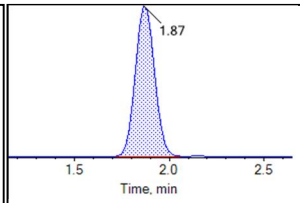
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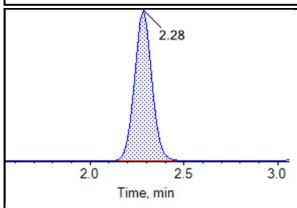
d3-MeFOSAA



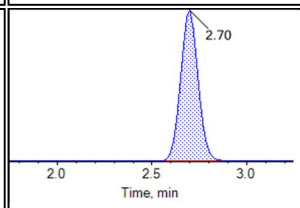
d5-EtFOSAA



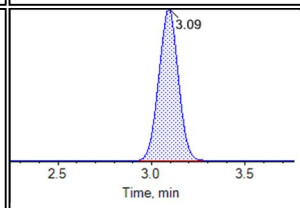
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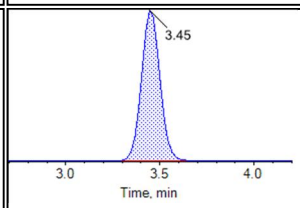
13C4-PFHpA



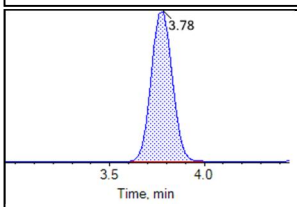
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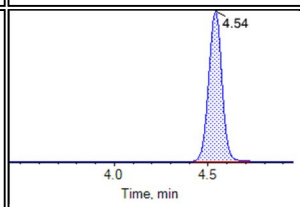
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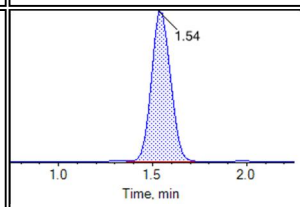
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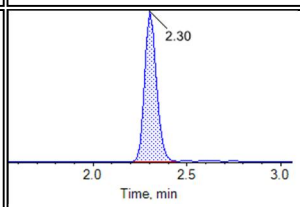
13C7-PFUnA



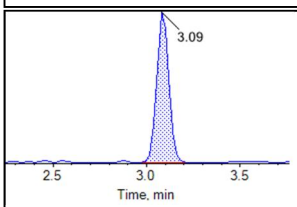
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

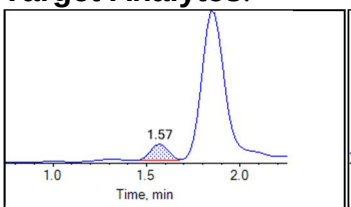
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 11:17:11 AM

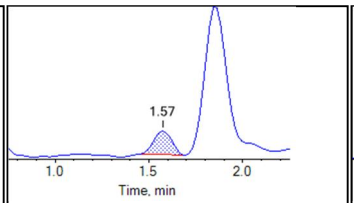
Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:02:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

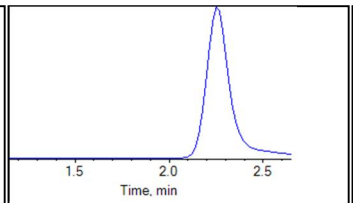
Target Analytes:



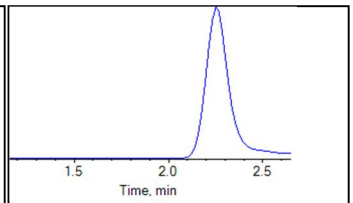
PFBS_1



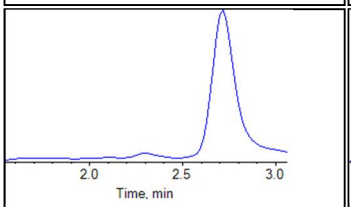
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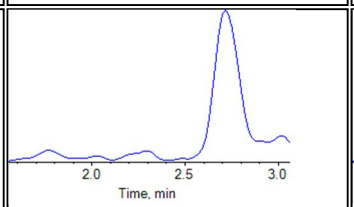
PFHxA_1



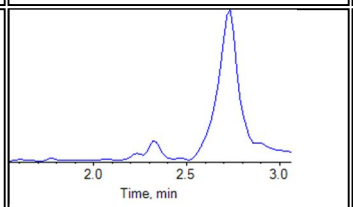
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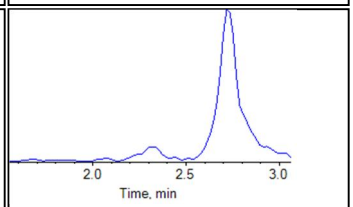
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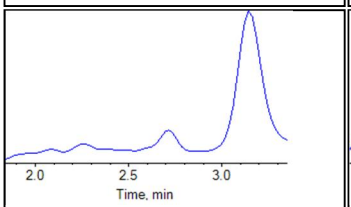
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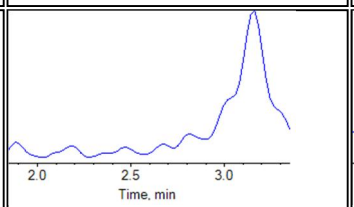
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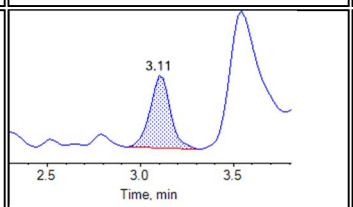
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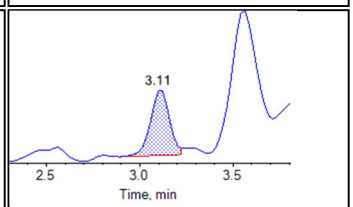
PFOA_1



PFOA_2



PFNA_1

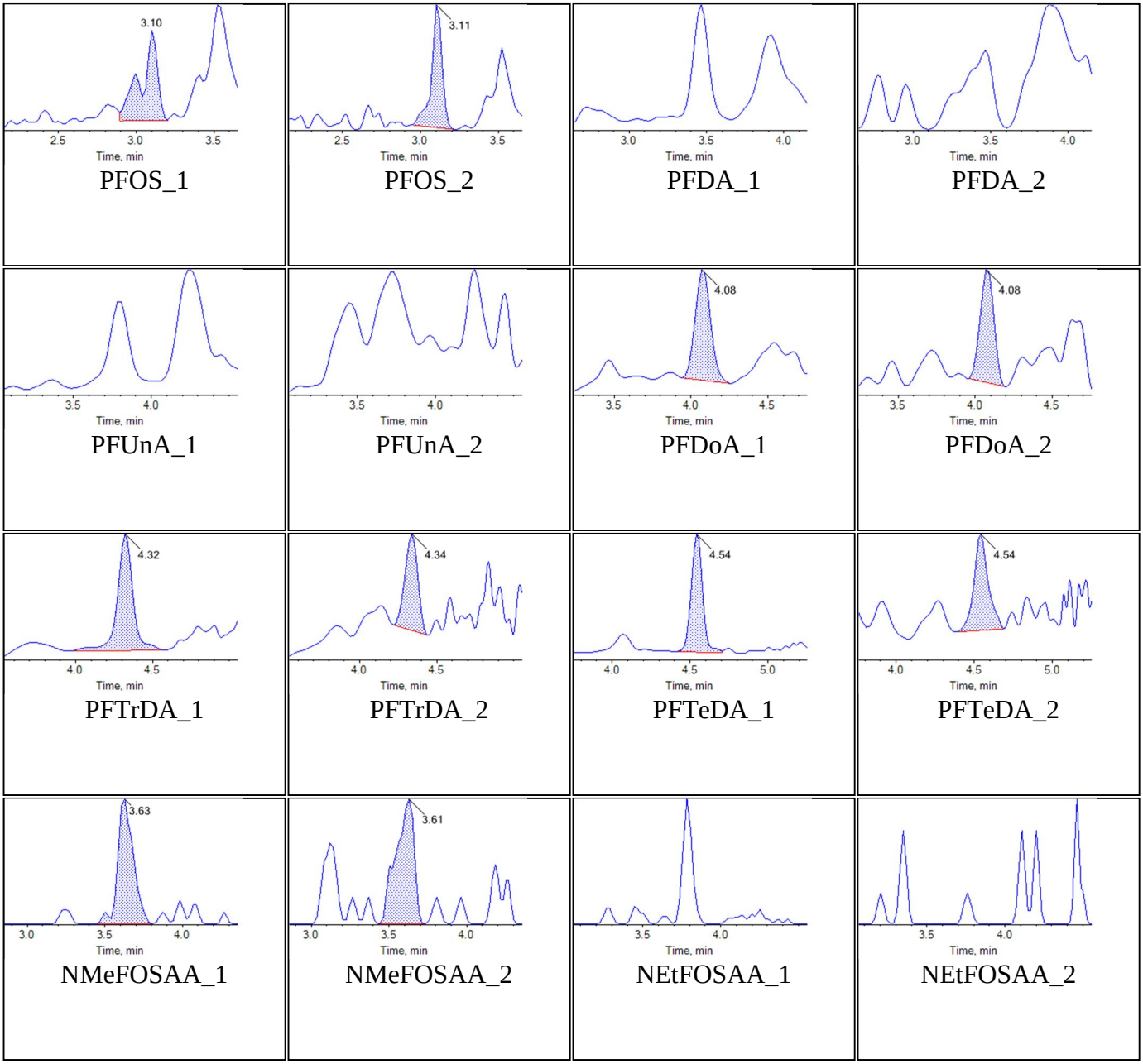


PFNA_2

BATTELLE

Chromatogram Report

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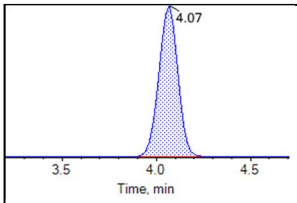


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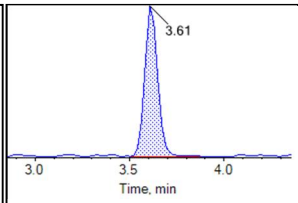
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Chromatogram Report

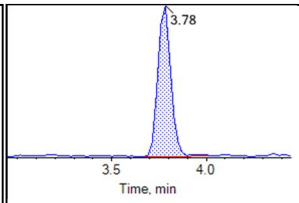
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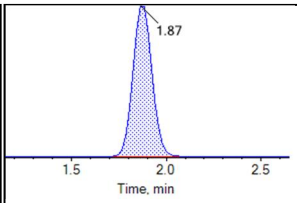
13C2-PFDoA



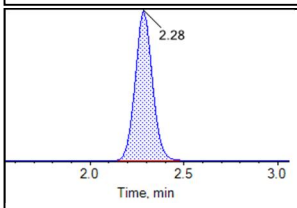
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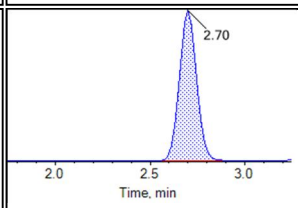
d5-EtFOSAA



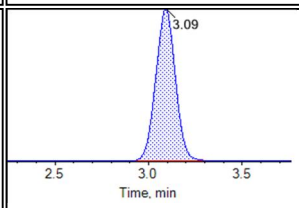
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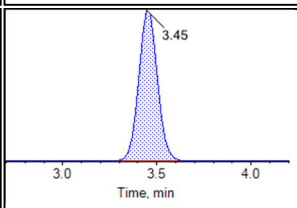
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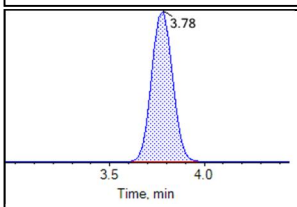
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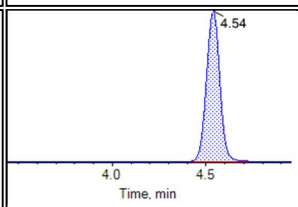
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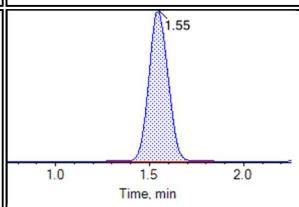
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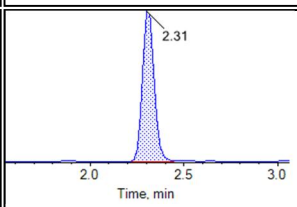
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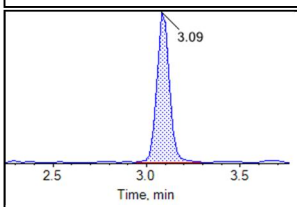
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

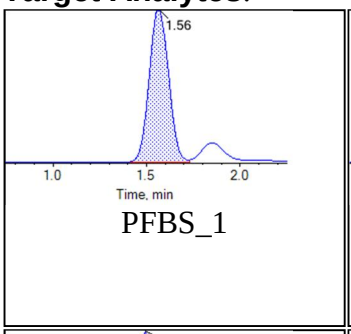
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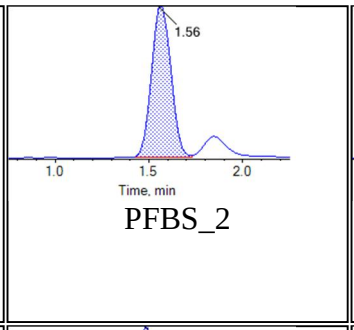
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Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:13:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

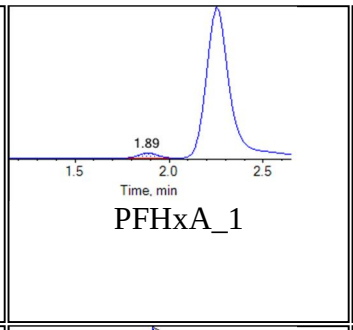
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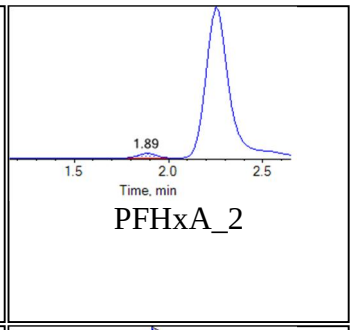
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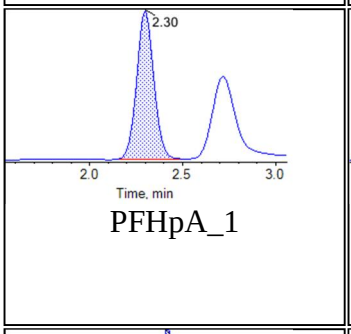
PFBS_2



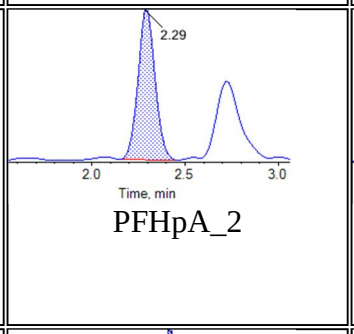
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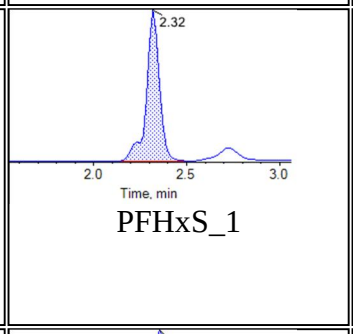
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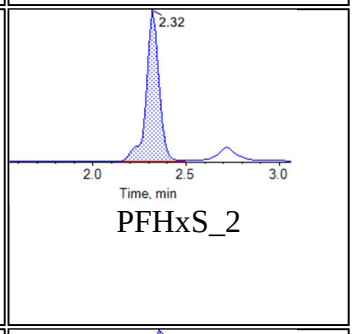
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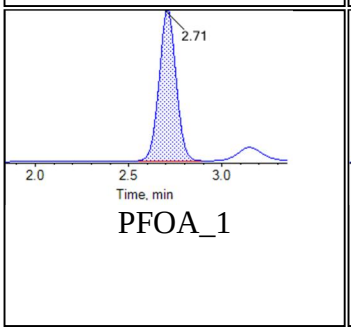
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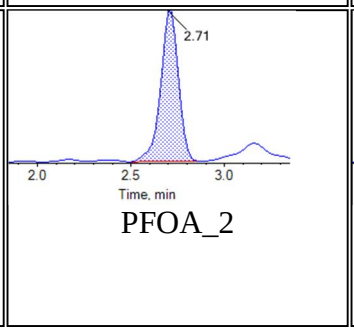
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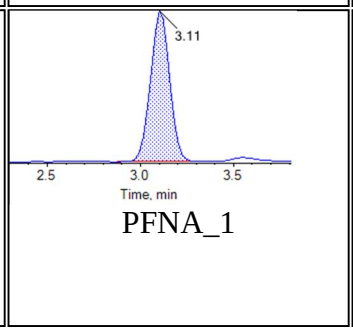
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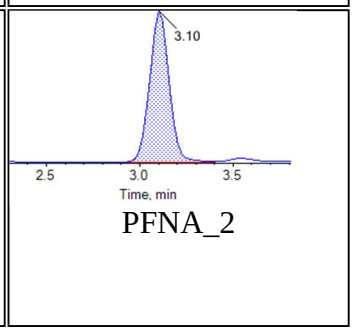
PFOA_1



PFOA_2



PFNA_1

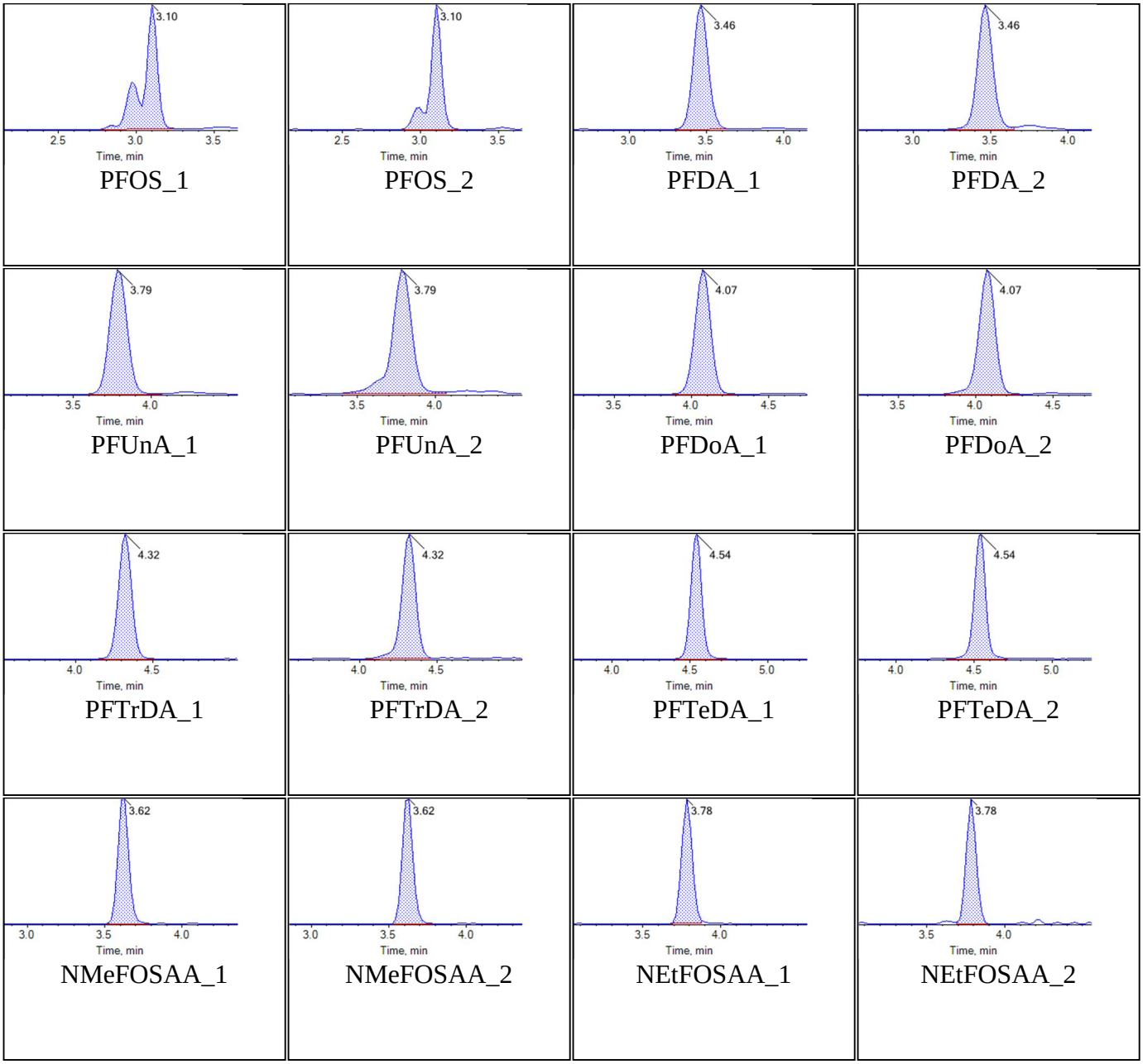


PFNA_2

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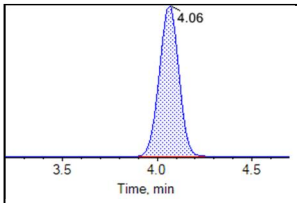


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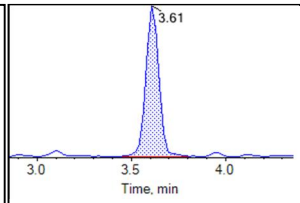
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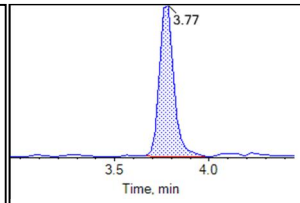
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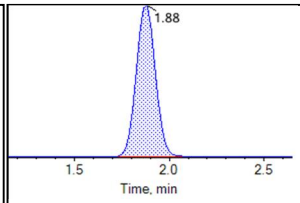
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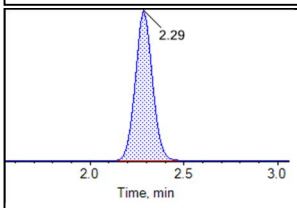
d3-MeFOSAA



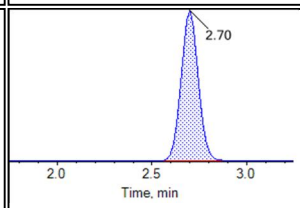
d5-EtFOSAA



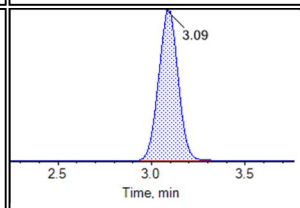
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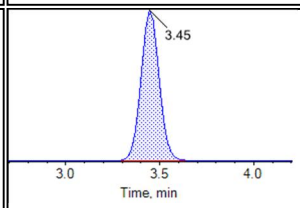
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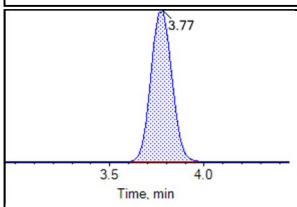
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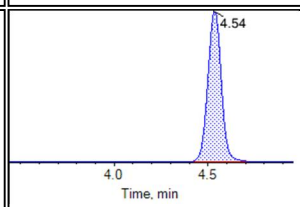
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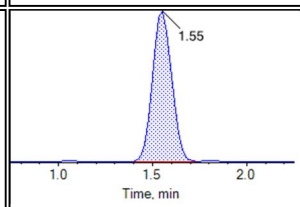
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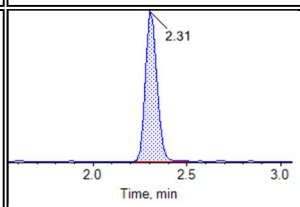
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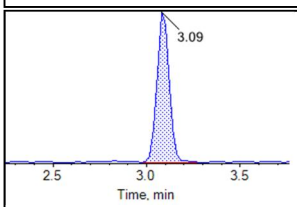
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

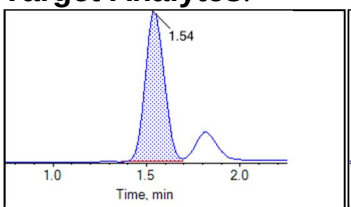
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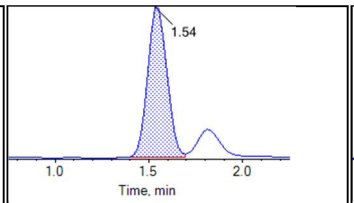
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Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:22:00	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

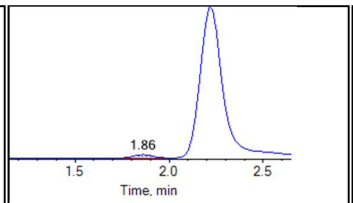
Target Analytes:



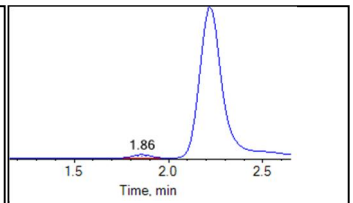
PFBS_1



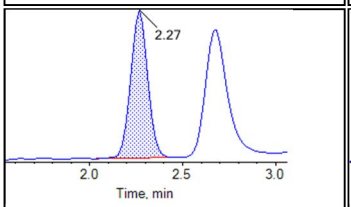
PFBS_2



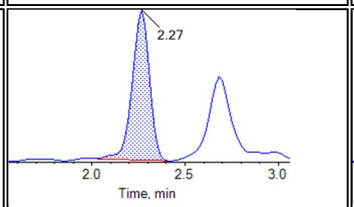
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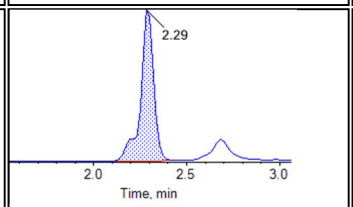
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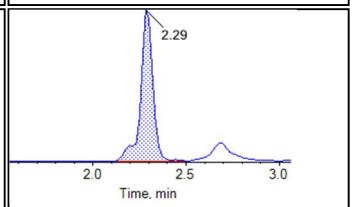
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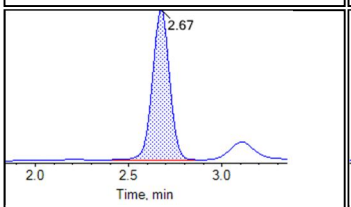
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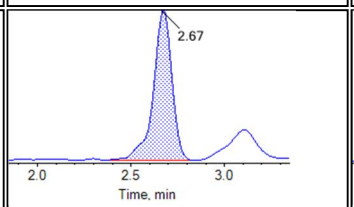
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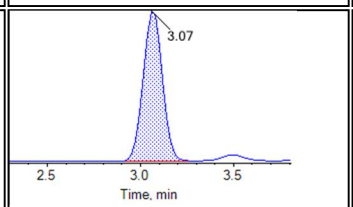
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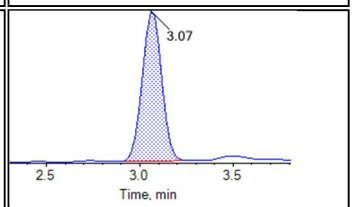
PFOA_1



PFOA_2



PFNA_1

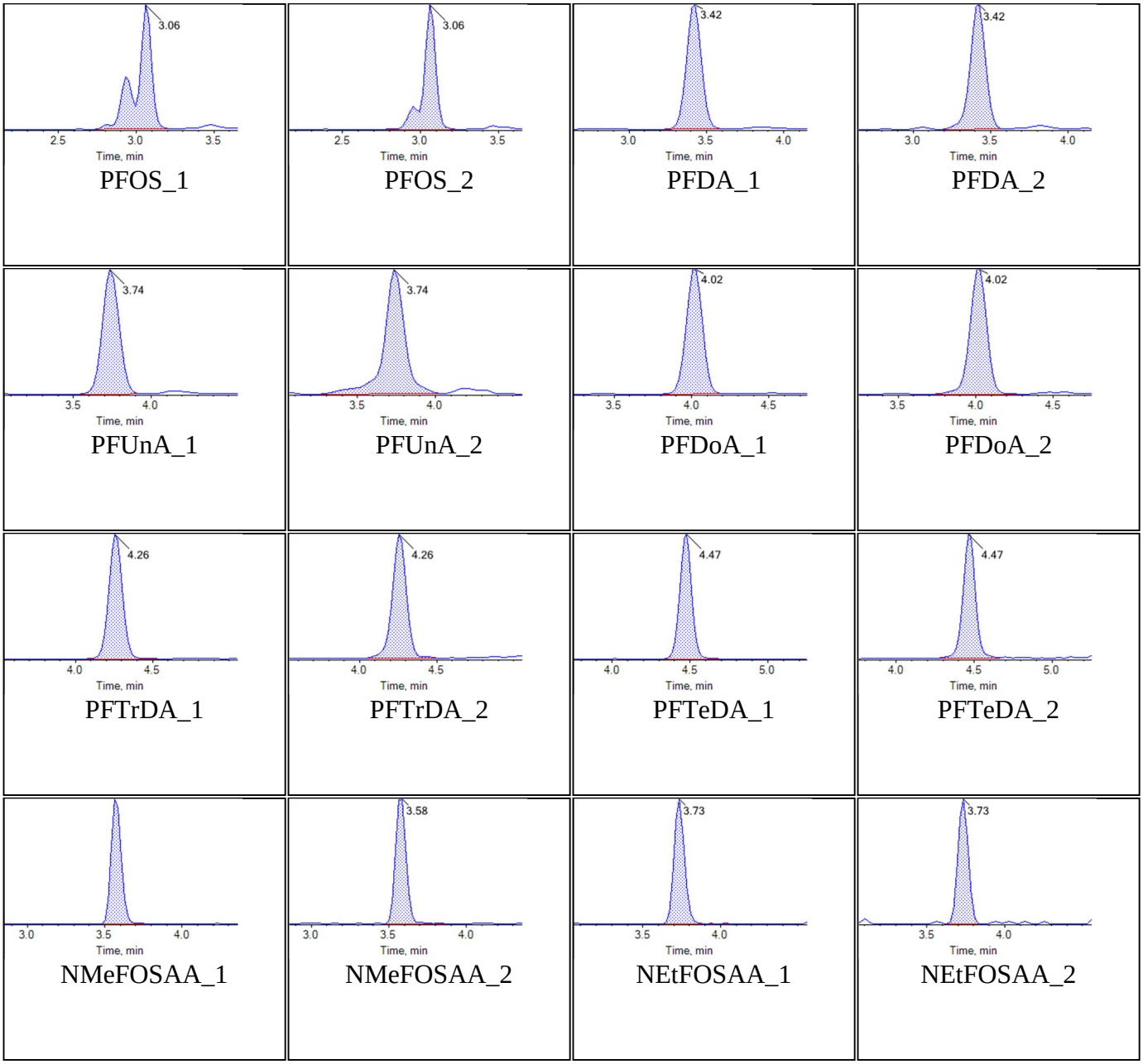


PFNA_2

BATTELLE

Chromatogram Report

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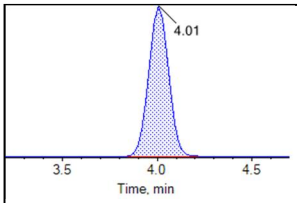


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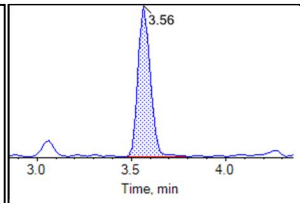
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Chromatogram Report

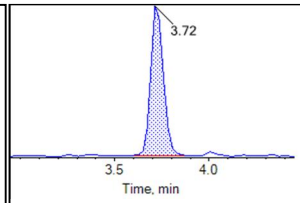
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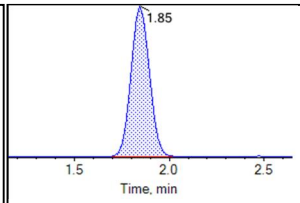
13C2-PFDoA



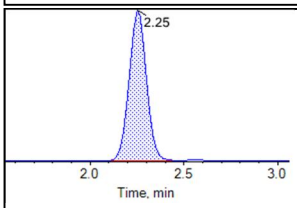
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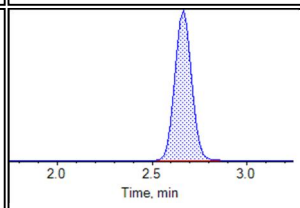
d5-EtFOSAA



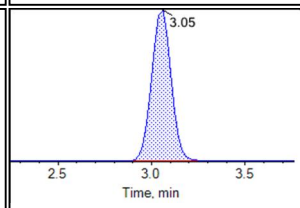
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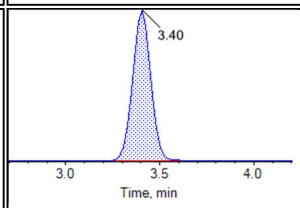
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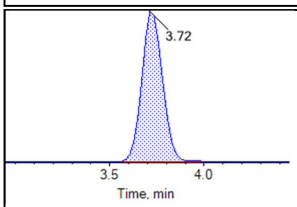
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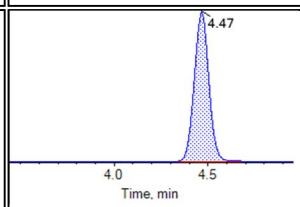
13C9-PFNA



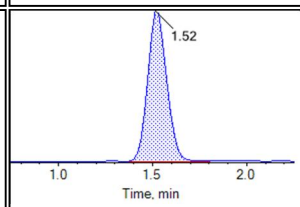
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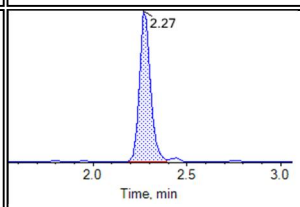
13C7-PFUnA



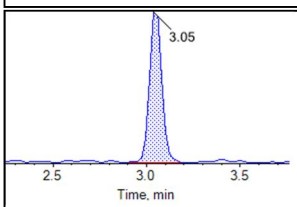
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

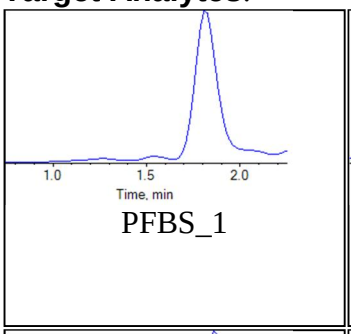
Chromatogram Report

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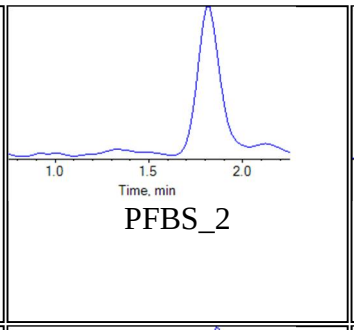
Sample Name	CR902PB-FS(3)	**Injection Vial**	35
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:43:47	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

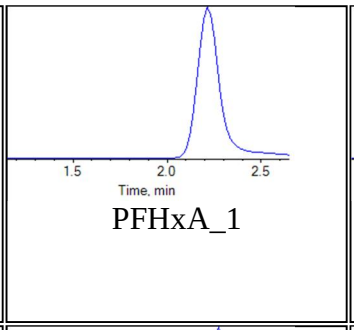
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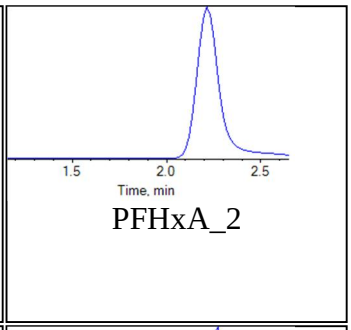
PFBS_1



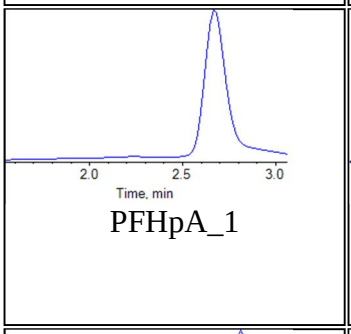
PFBS_2



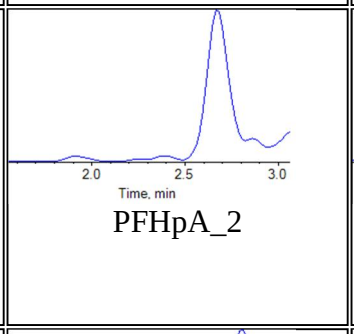
PFHxA_1



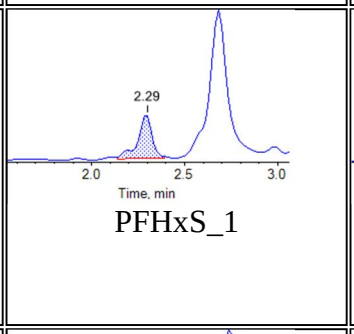
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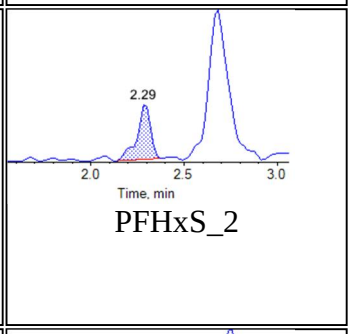
PFHpA_1



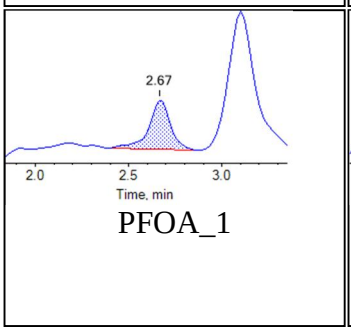
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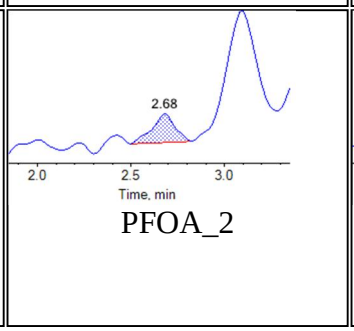
PFHxS_1



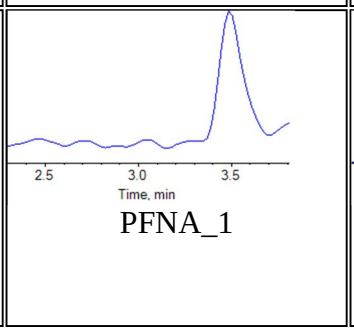
PFHxS_2



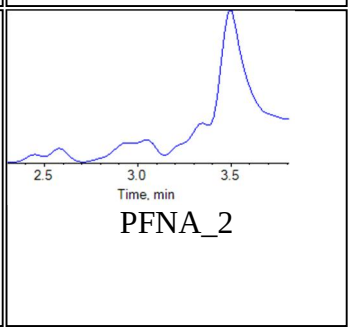
PFOA_1



PFOA_2



PFNA_1

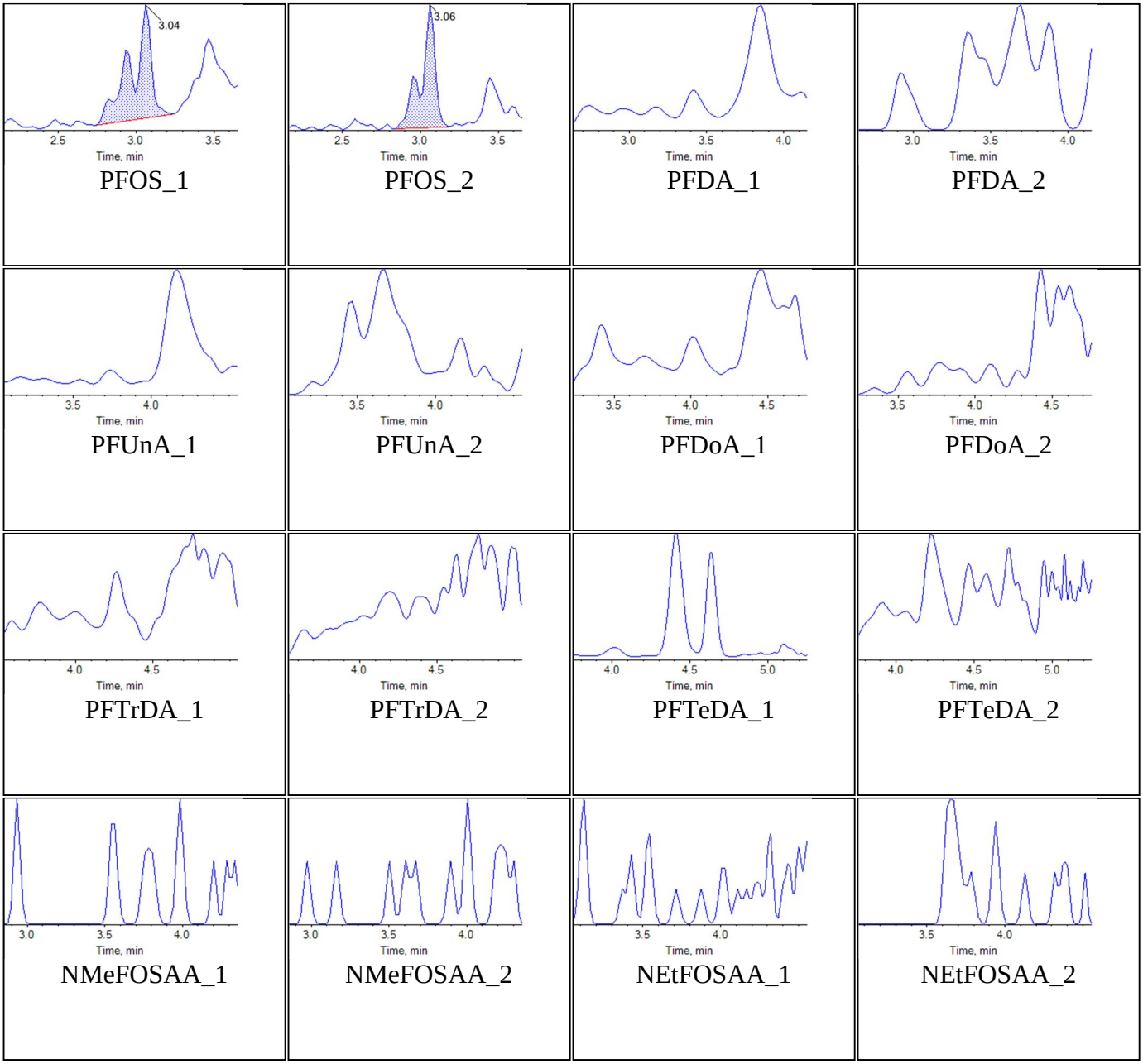


PFNA_2

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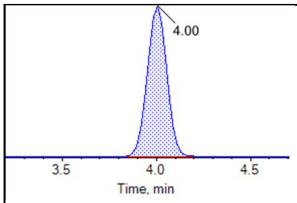


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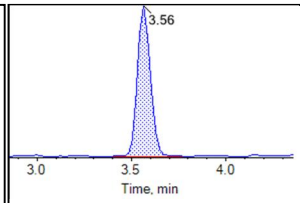
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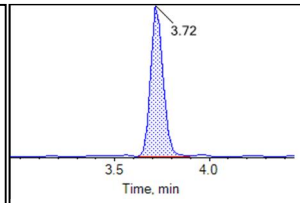
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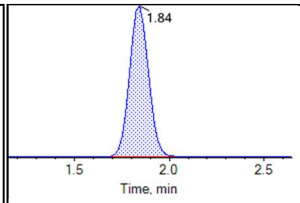
13C2-PFDoA



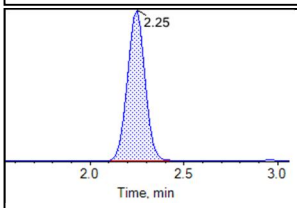
d3-MeFOSAA



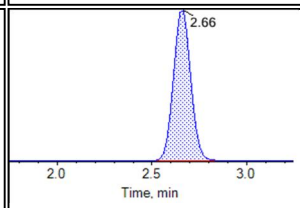
d5-EtFOSAA



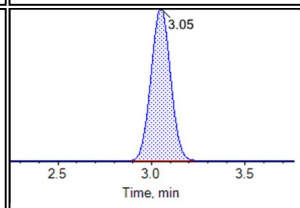
13C5-PFHxA



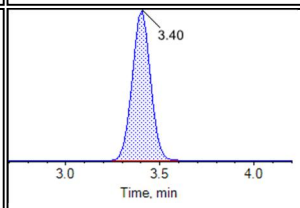
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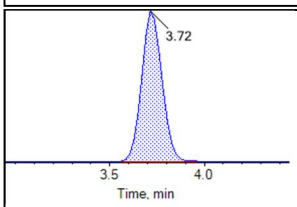
13C8-PFOA



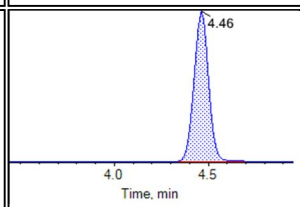
13C9-PFNA



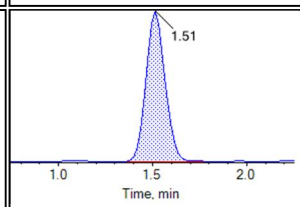
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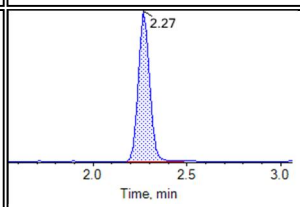
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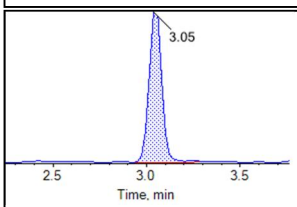
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

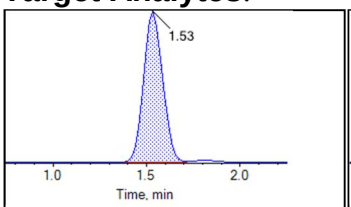
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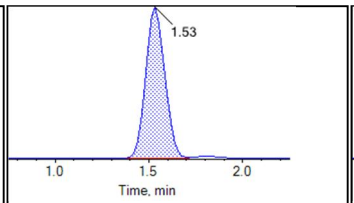
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Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:54:39	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

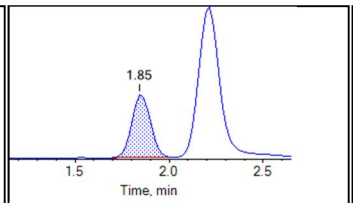
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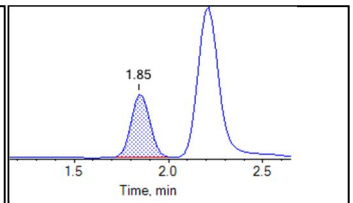
PFBS_1



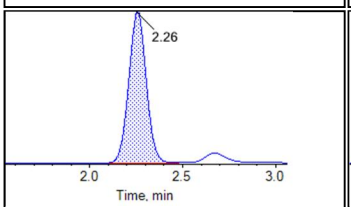
PFBS_2



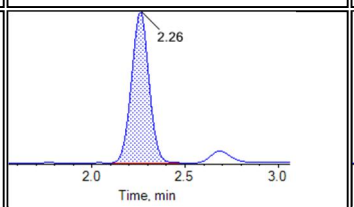
PFHxA_1



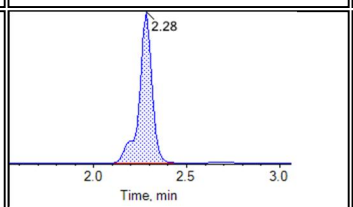
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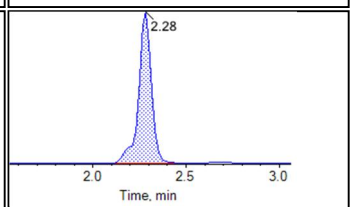
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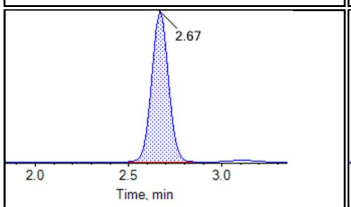
PFHpA_2



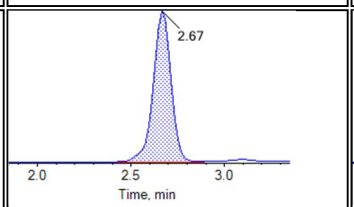
PFHxS_1



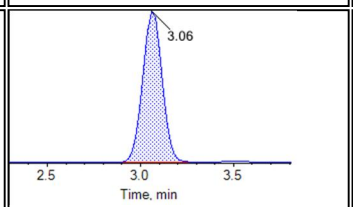
PFHxS_2



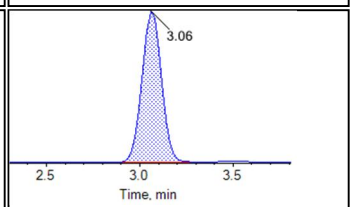
PFOA_1



PFOA_2



PFNA_1

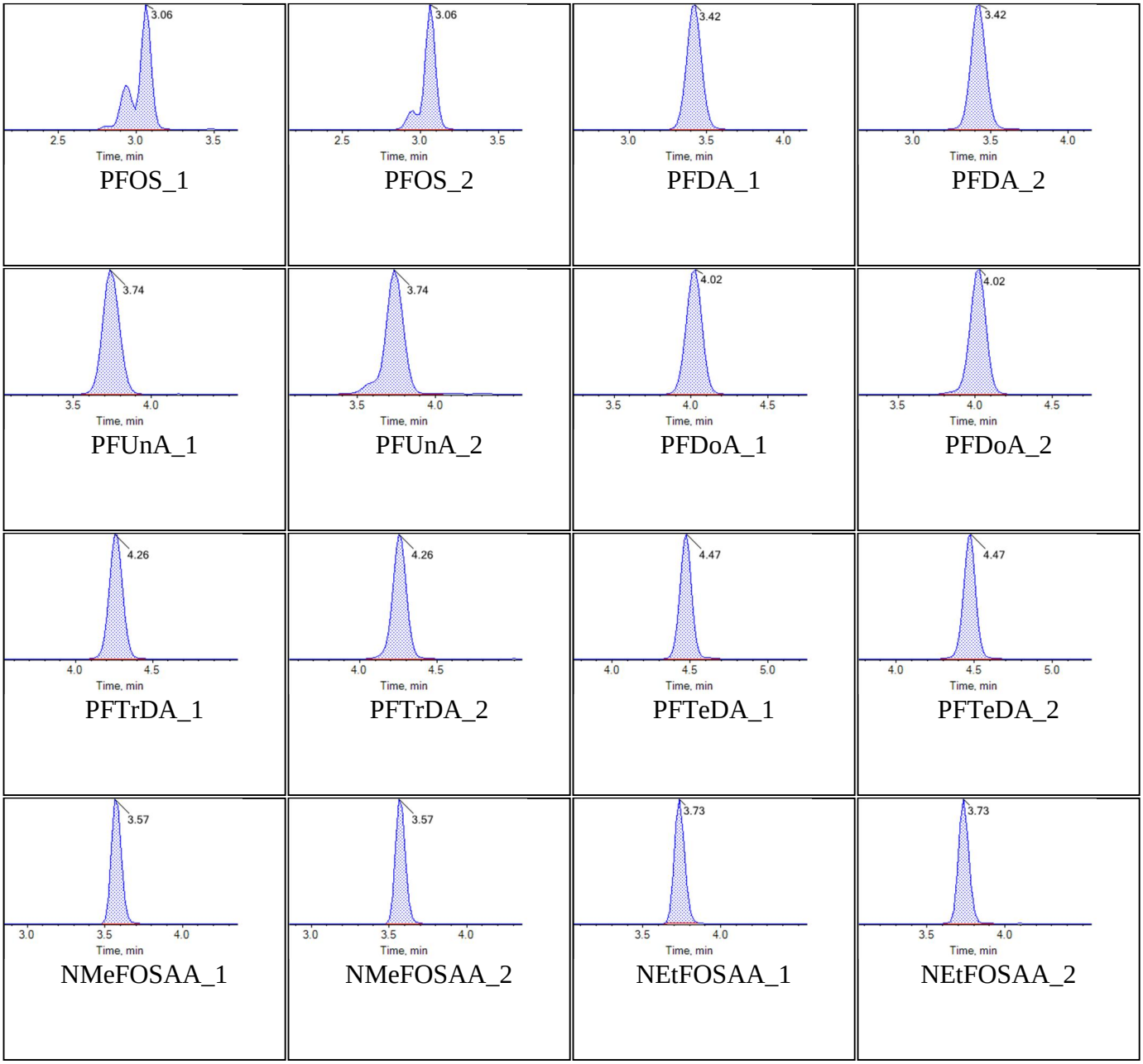


PFNA_2

BATTELLE

Chromatogram Report

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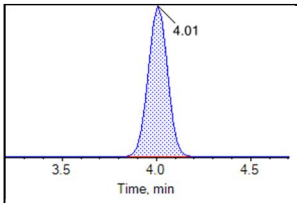


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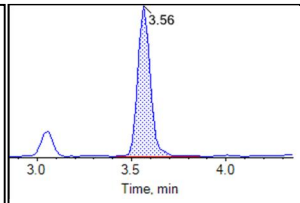
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Chromatogram Report

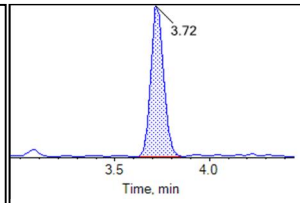
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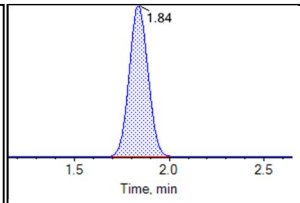
13C2-PFDoA



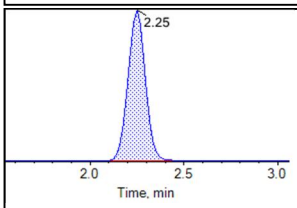
d3-MeFOSAA



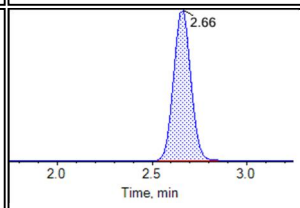
d5-EtFOSAA



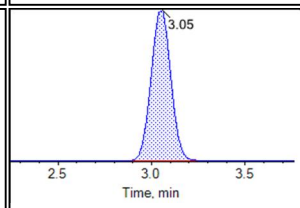
13C5-PFHxA



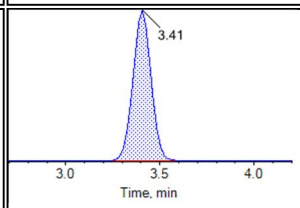
13C4-PFHpA



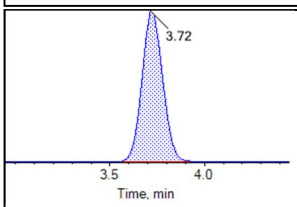
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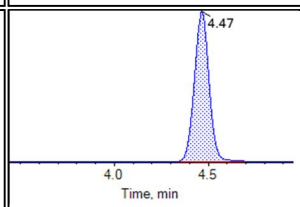
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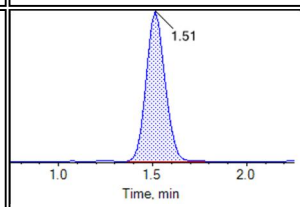
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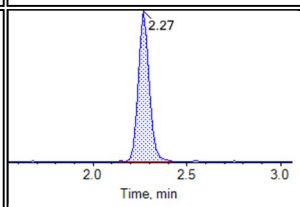
13C7-PFUnA



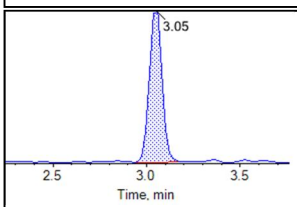
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

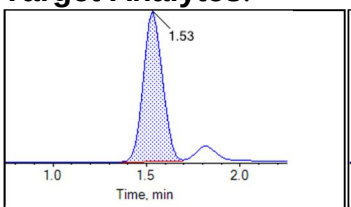
Chromatogram Report

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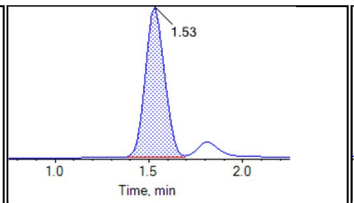
Sample Name	J8438-FS(3)	**Injection Vial**	37
Sample ID	VC-MS09-SS01-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:05:31	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

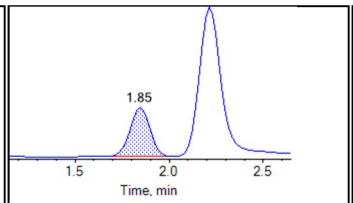
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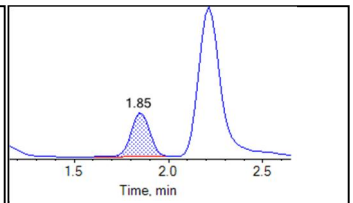
PFBS_1



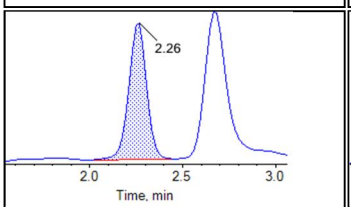
PFBS_2



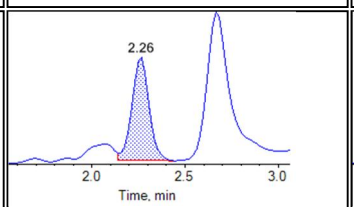
PFHxA_1



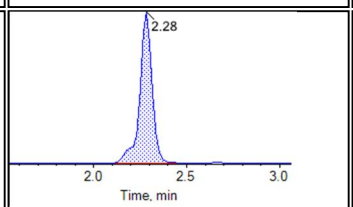
PFHxA_2



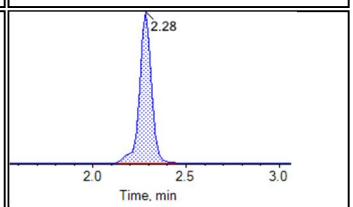
PFHpA_1



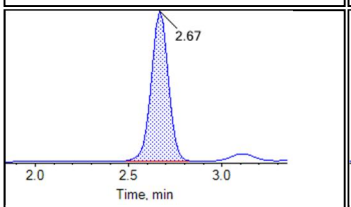
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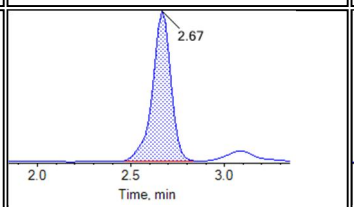
PFHxS_1



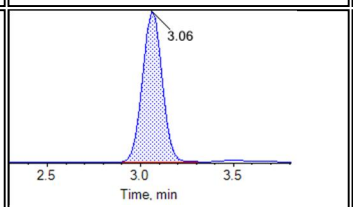
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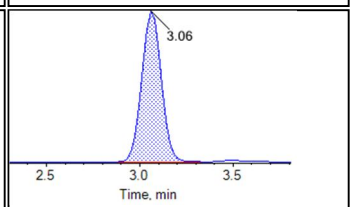
PFOA_1



PFOA_2



PFNA_1

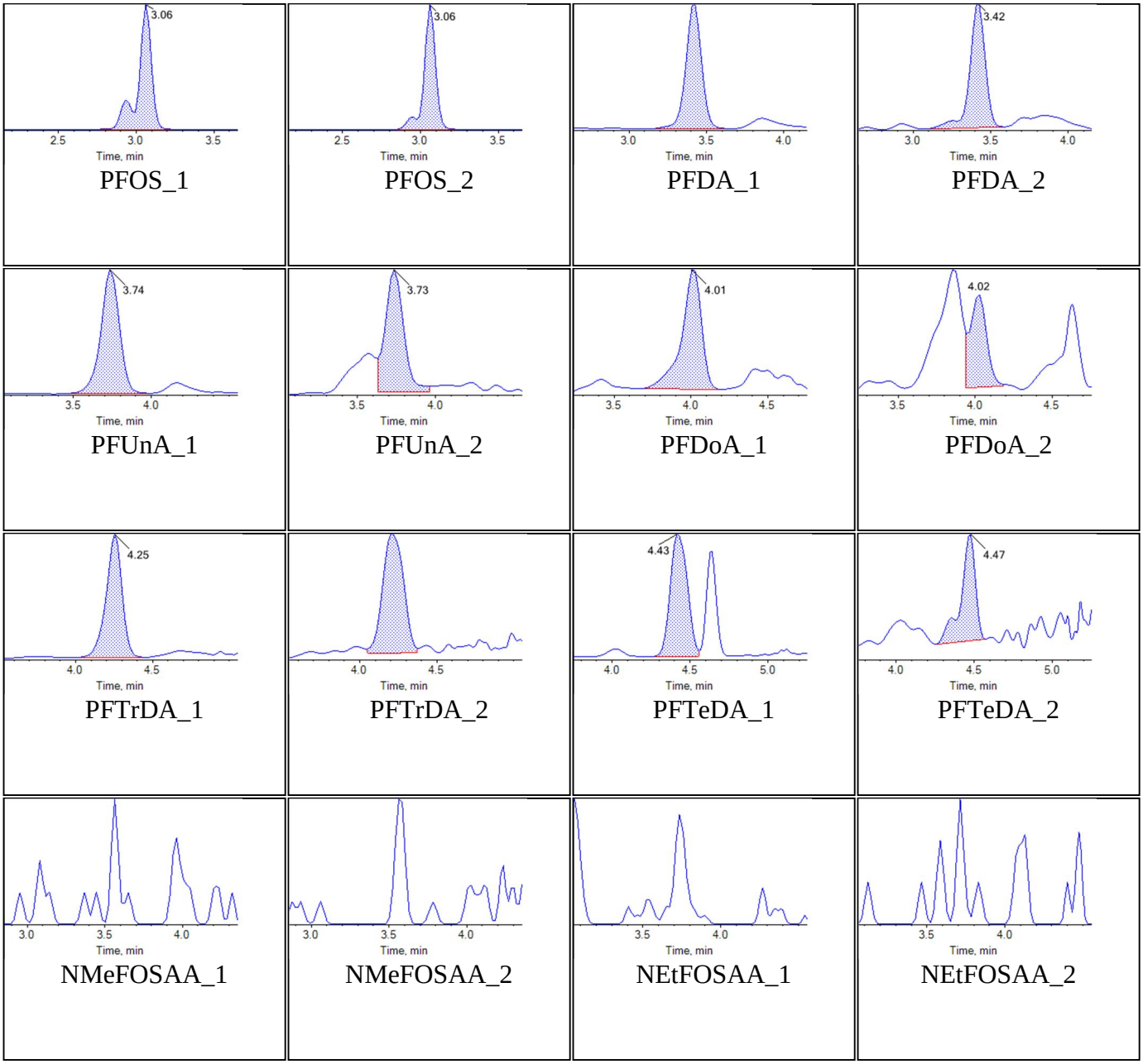


PFNA_2

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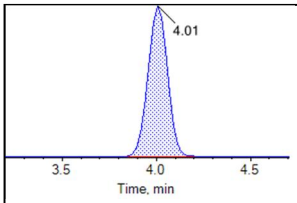


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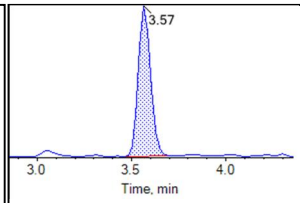
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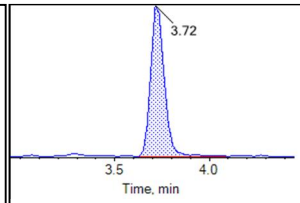
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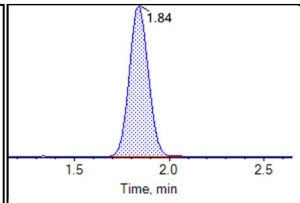
13C2-PFDoA



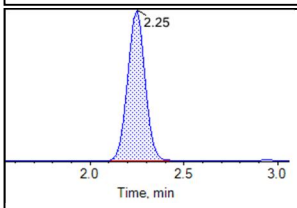
d3-MeFOSAA



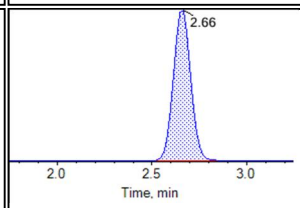
d5-EtFOSAA



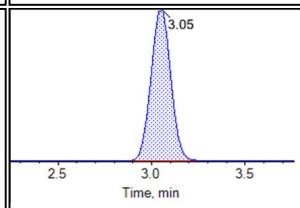
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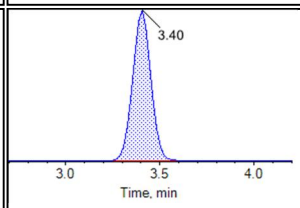
13C4-PFHpA



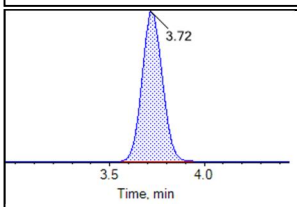
13C8-PFOA



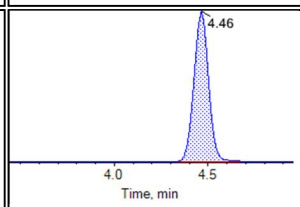
13C9-PFNA



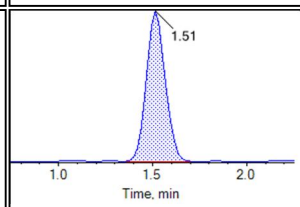
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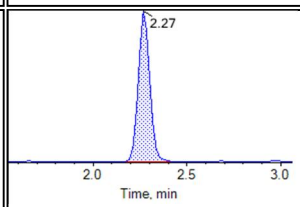
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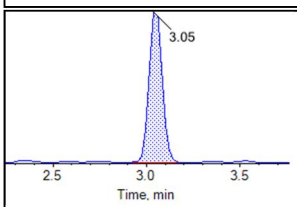
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

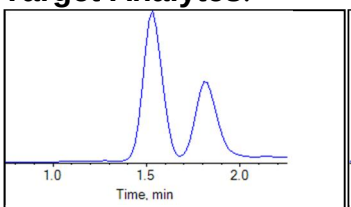
Chromatogram Report

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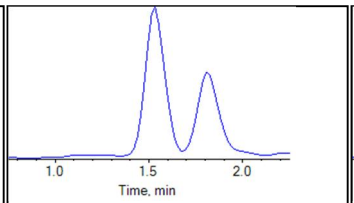
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Sample ID	VC-MS09-SS01-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:16:25	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

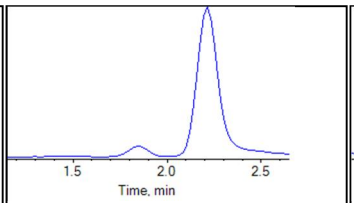
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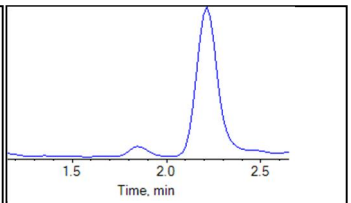
PFBS_1



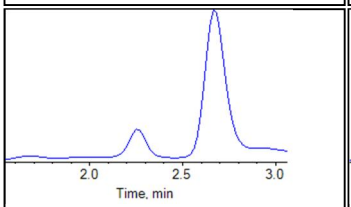
PFBS_2



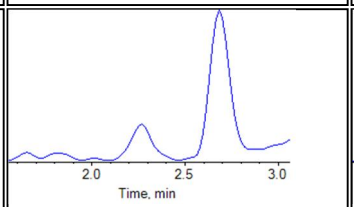
PFHxA_1



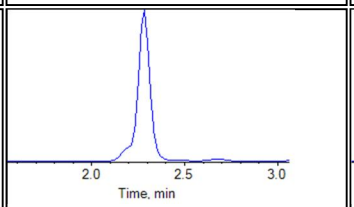
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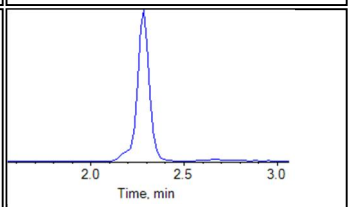
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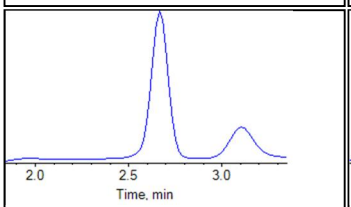
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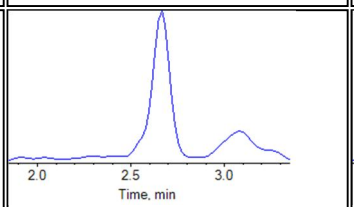
PFHxS_1



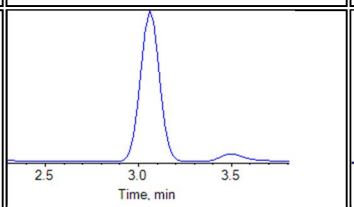
PFHxS_2



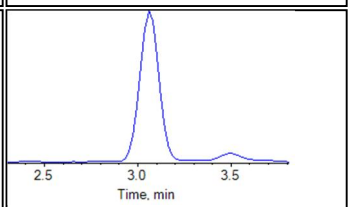
PFOA_1



PFOA_2



PFNA_1

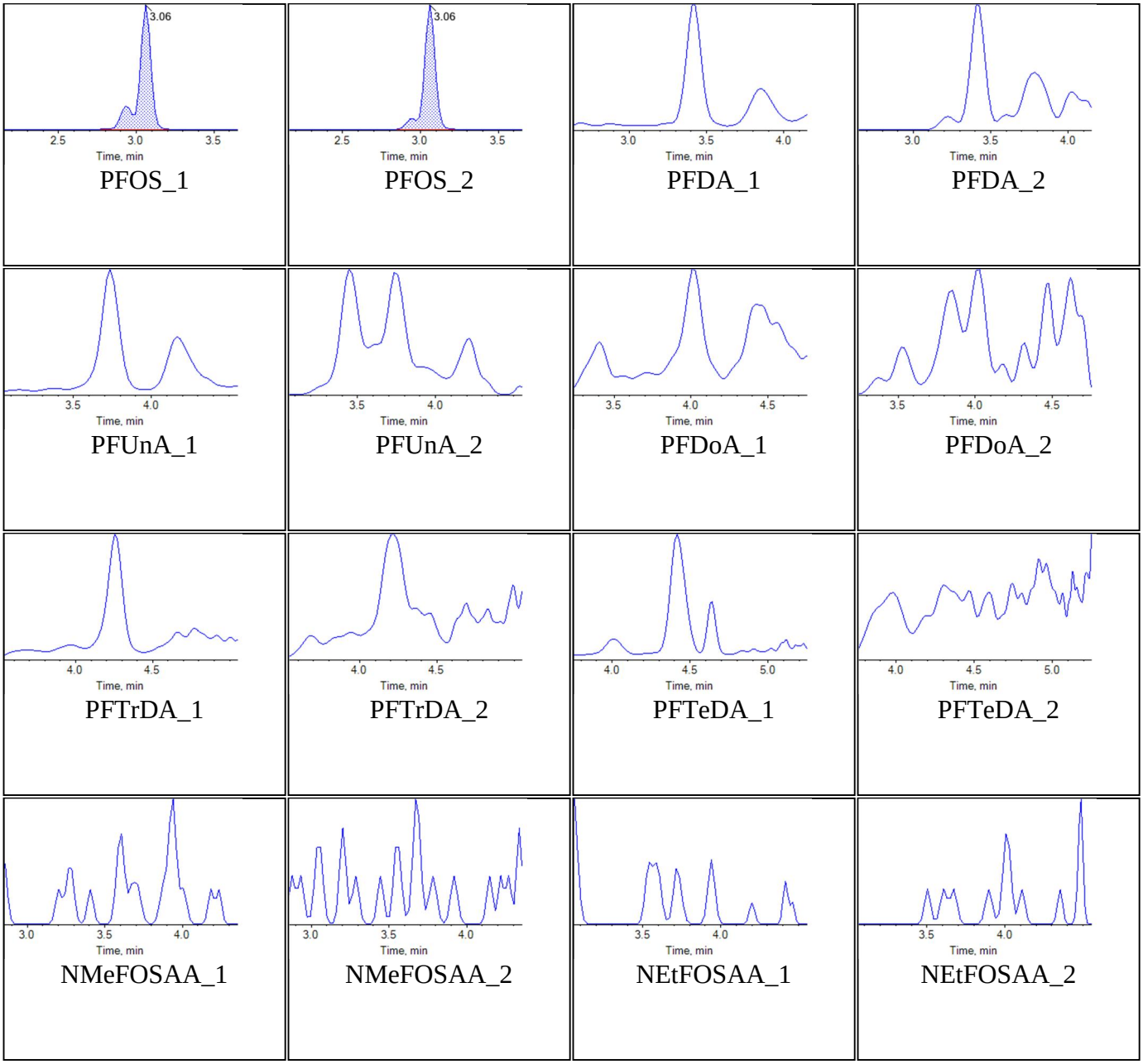


PFNA_2

BATTELLE

Chromatogram Report

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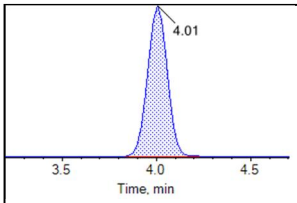


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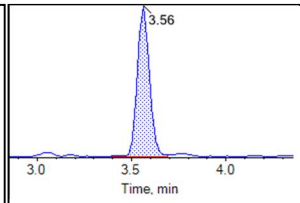
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Chromatogram Report

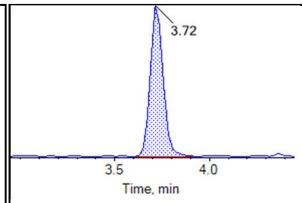
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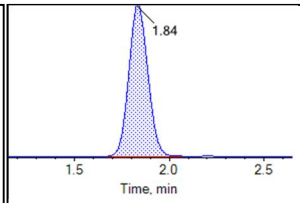
13C2-PFDoA



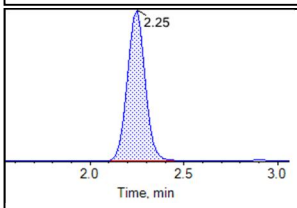
d3-MeFOSAA



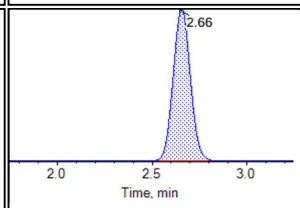
d5-EtFOSAA



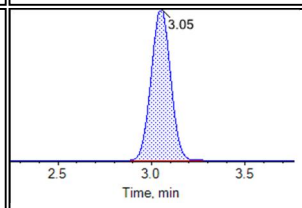
13C5-PFHxA



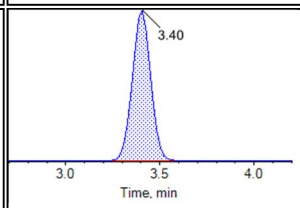
13C4-PFHpA



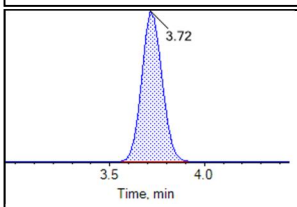
13C8-PFOA



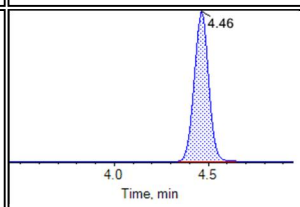
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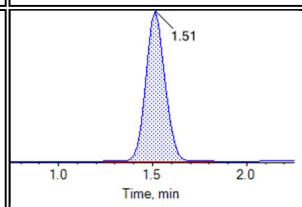
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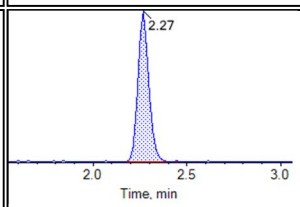
13C7-PFUnA



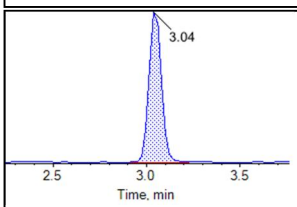
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

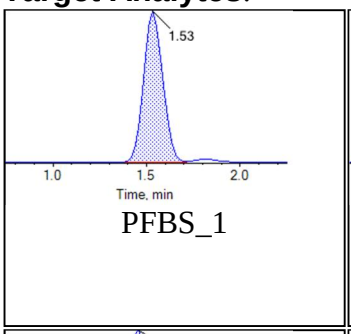
Chromatogram Report

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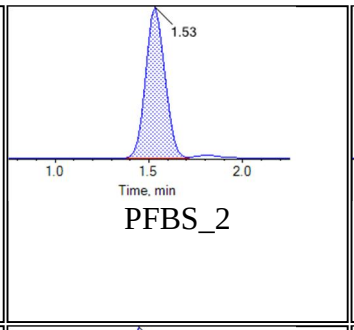
Sample Name	J8439-FS(3)	**Injection Vial**	39
Sample ID	VC-MS09-SB01-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:27:18	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

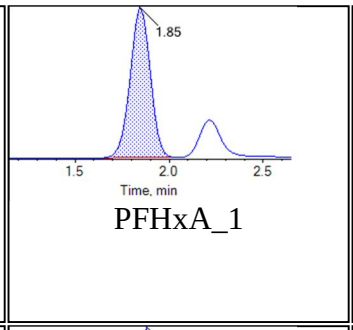
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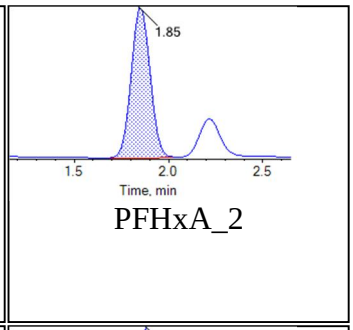
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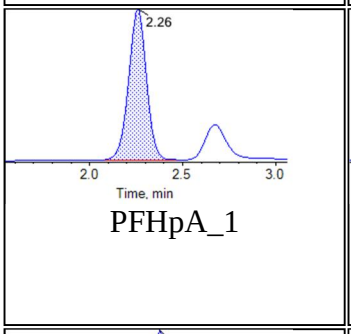
PFBS_2



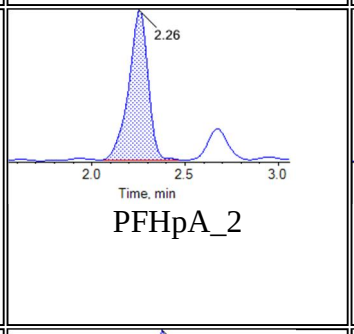
PFHxA_1



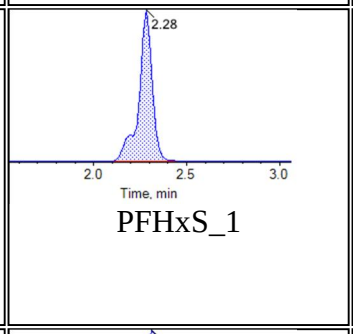
PFHxA_2



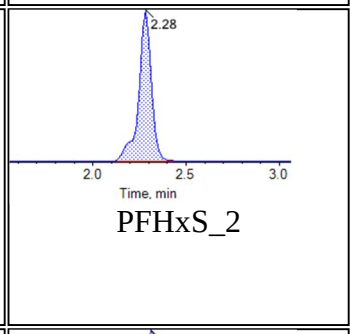
PFHpA_1



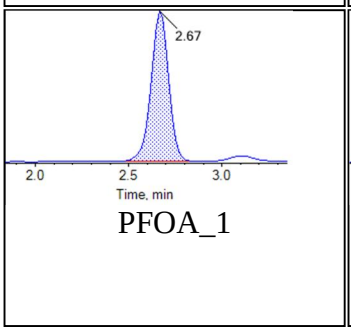
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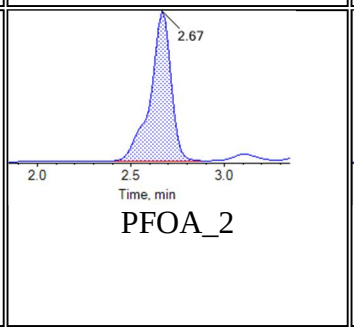
PFHxS_1



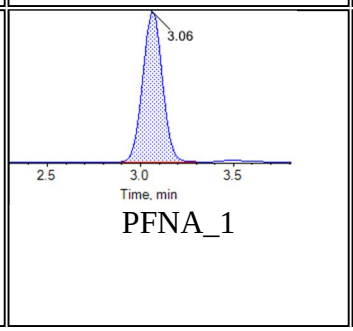
PFHxS_2



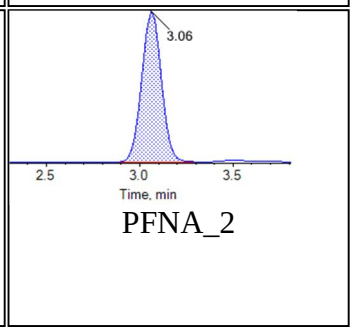
PFOA_1



PFOA_2



PFNA_1

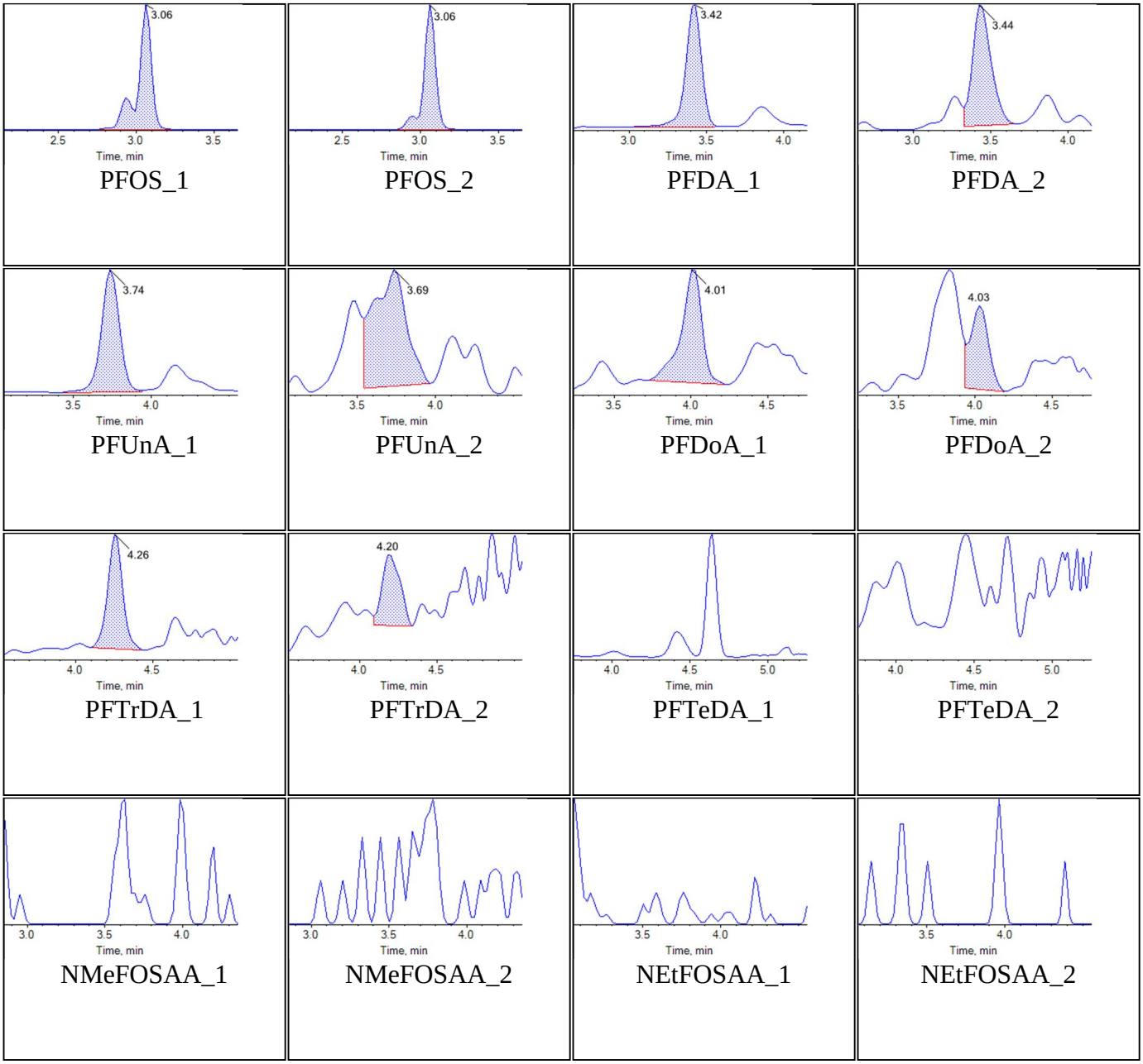


PFNA_2

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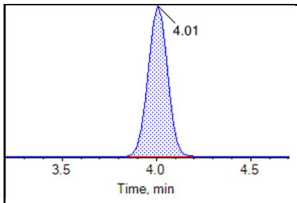


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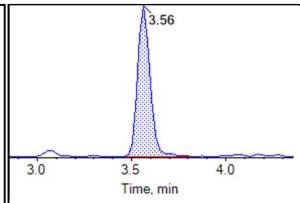
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Chromatogram Report

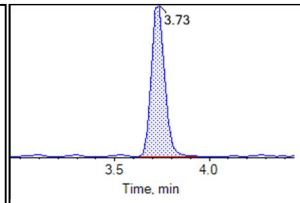
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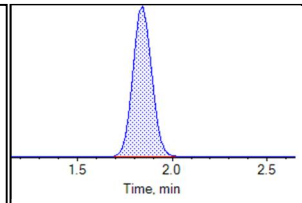
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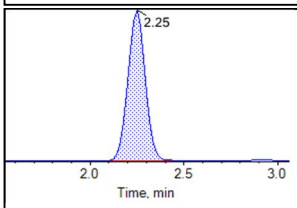
d3-MeFOSAA



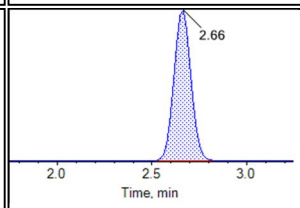
d5-EtFOSAA



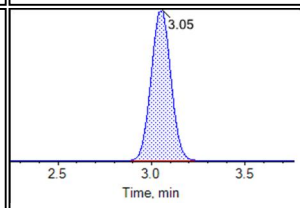
13C5-PFHxA



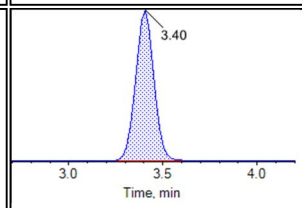
13C4-PFHpA



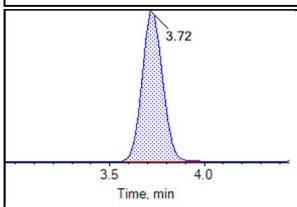
13C8-PFOA



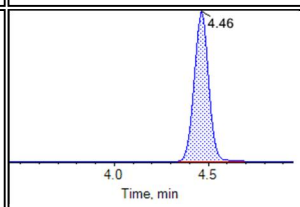
13C9-PFNA



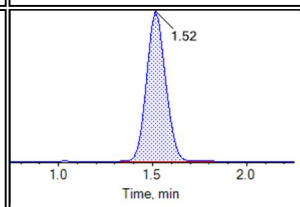
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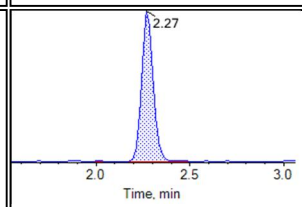
13C7-PFUnA



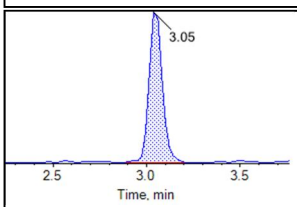
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

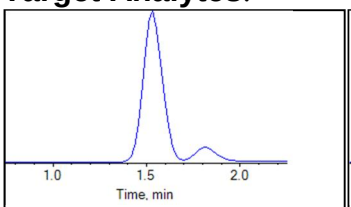
Chromatogram Report

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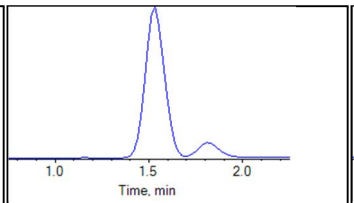
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Sample ID	VC-MS09-SB01-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:38:11	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

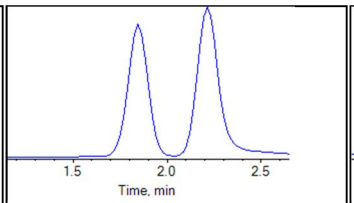
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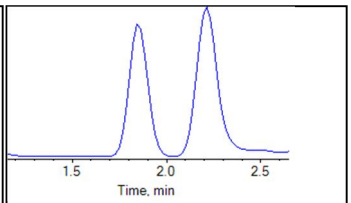
PFBS_1



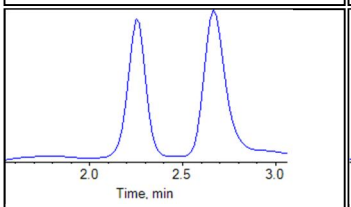
PFBS_2



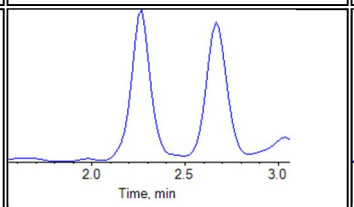
PFHxA_1



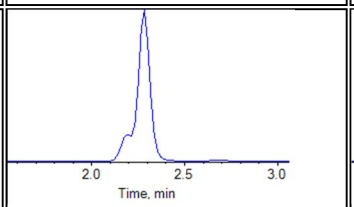
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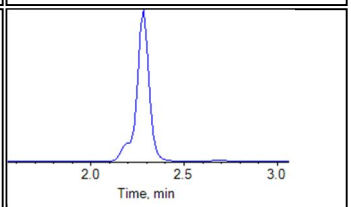
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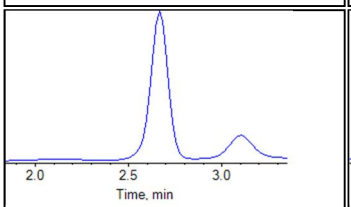
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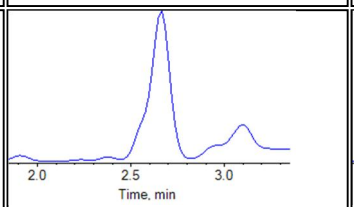
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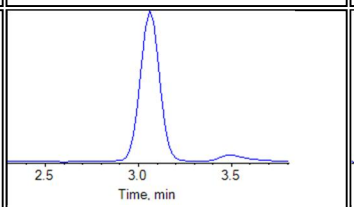
PFHxS_2



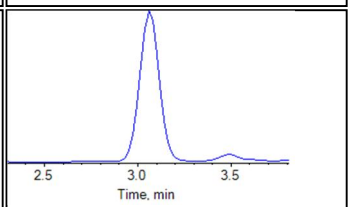
PFOA_1



PFOA_2



PFNA_1

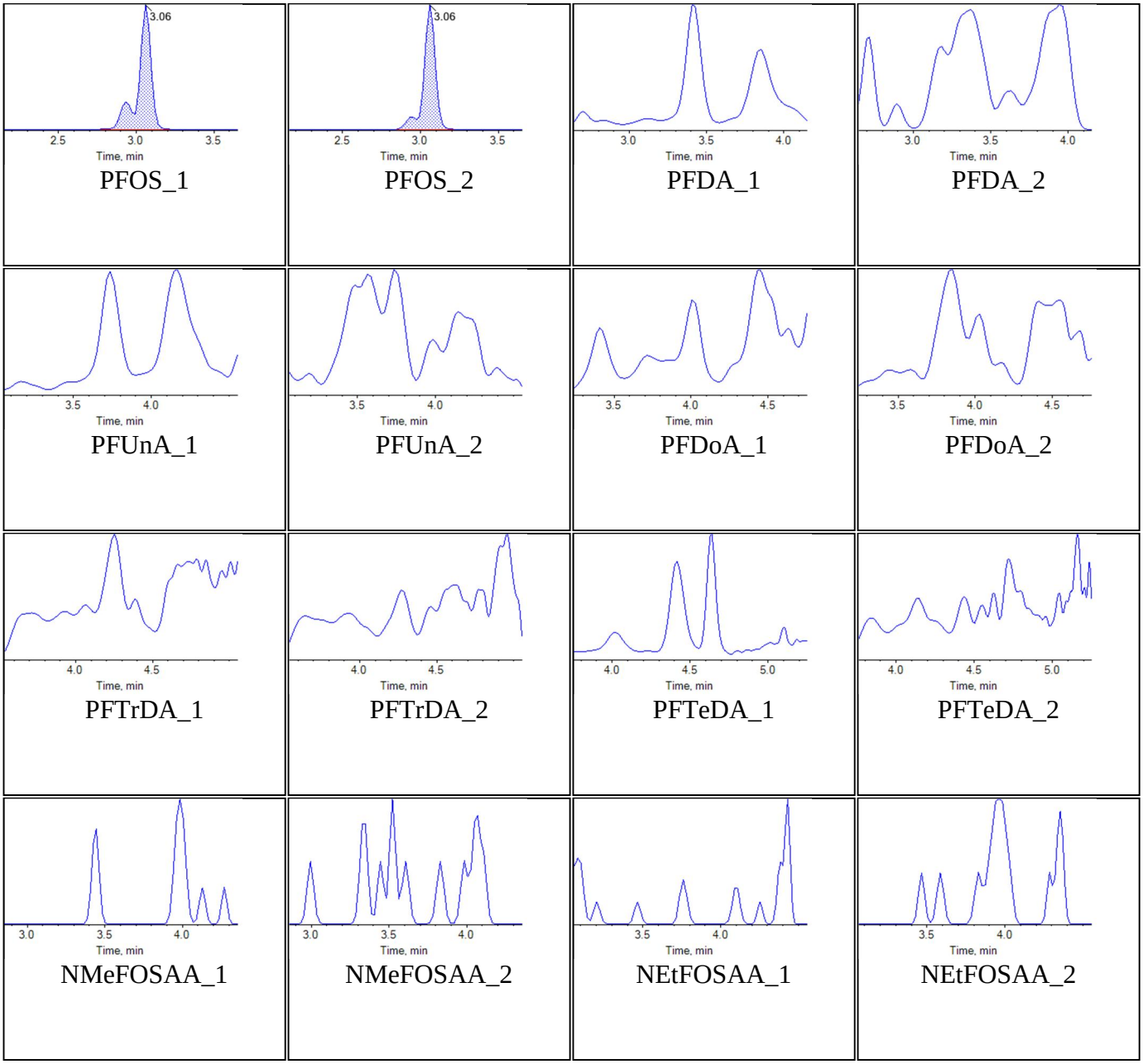


PFNA_2

BATTELLE

Chromatogram Report

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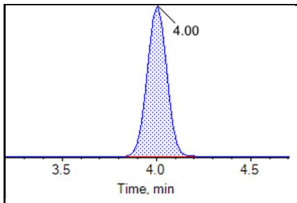


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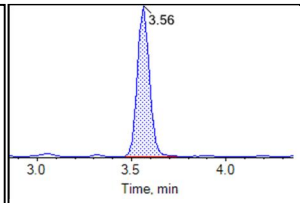
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Chromatogram Report

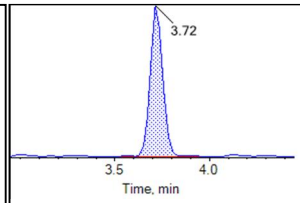
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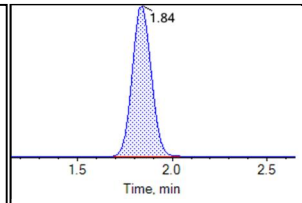
13C2-PFDoA



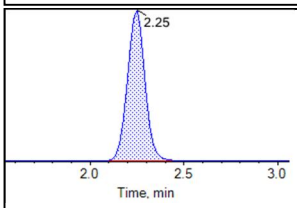
d3-MeFOSAA



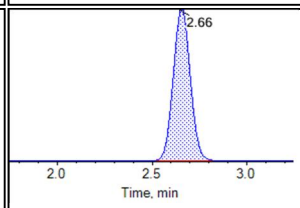
d5-EtFOSAA



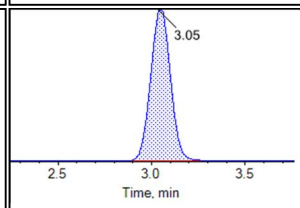
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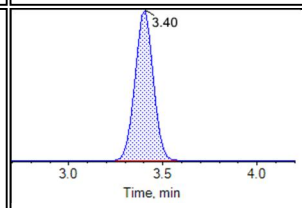
13C4-PFHpA



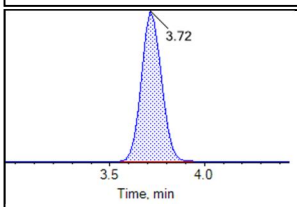
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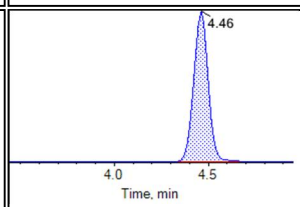
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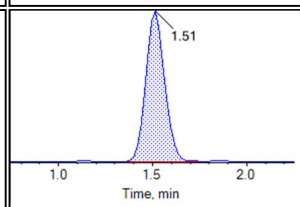
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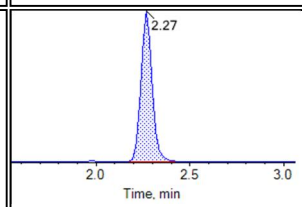
13C7-PFUnA



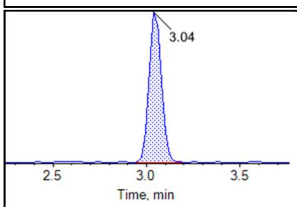
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

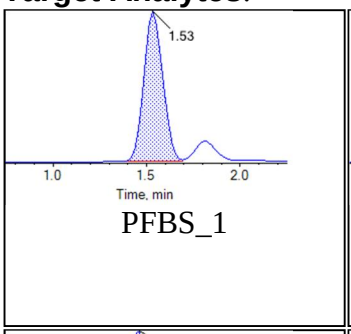
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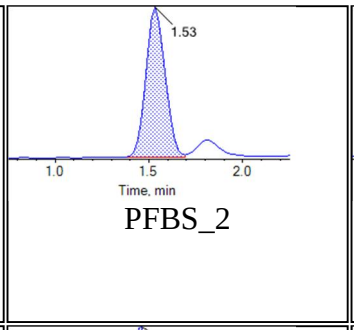
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Sample ID	VC-MS09-SB01-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:49:05	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

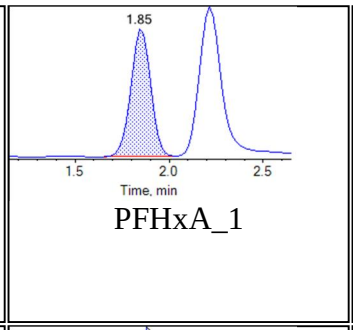
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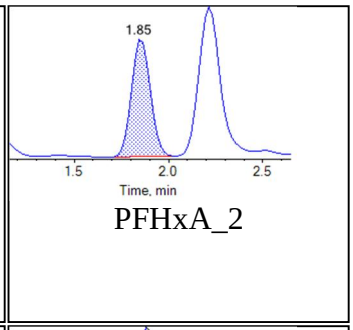
PFBS_1



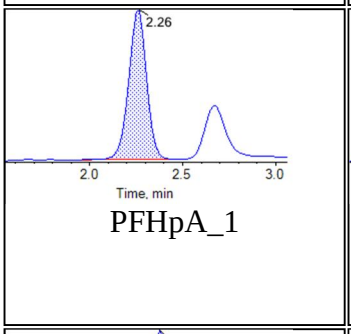
PFBS_2



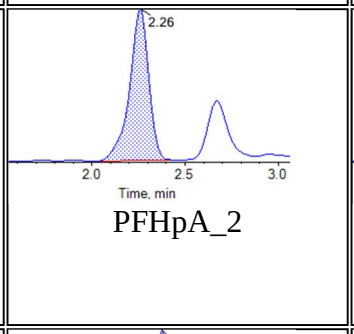
PFHxA_1



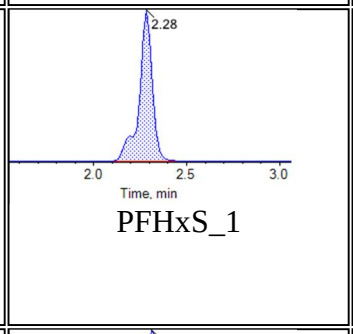
PFHxA_2



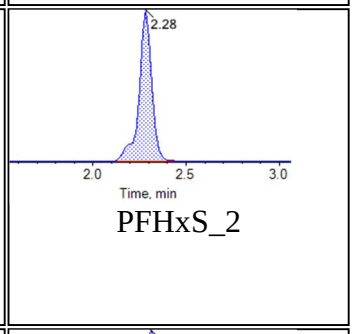
PFHpA_1



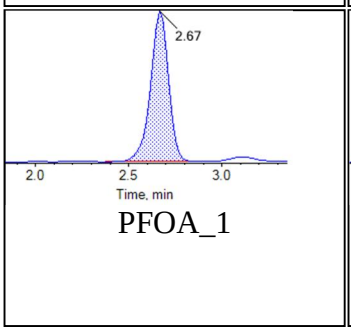
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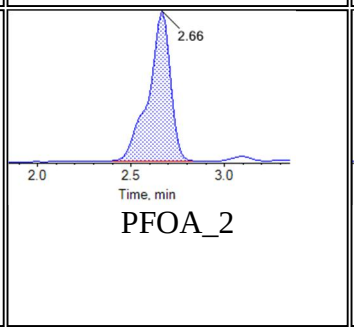
PFHxS_1



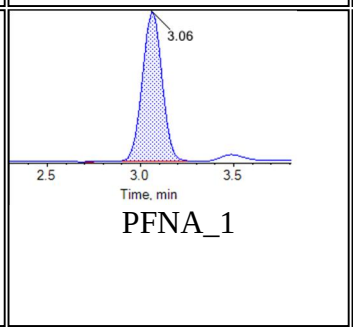
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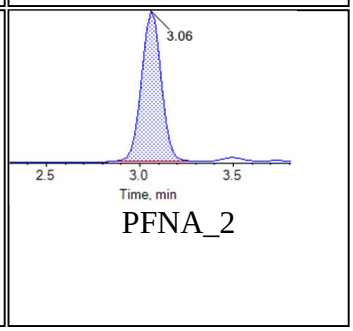
PFOA_1



PFOA_2



PFNA_1

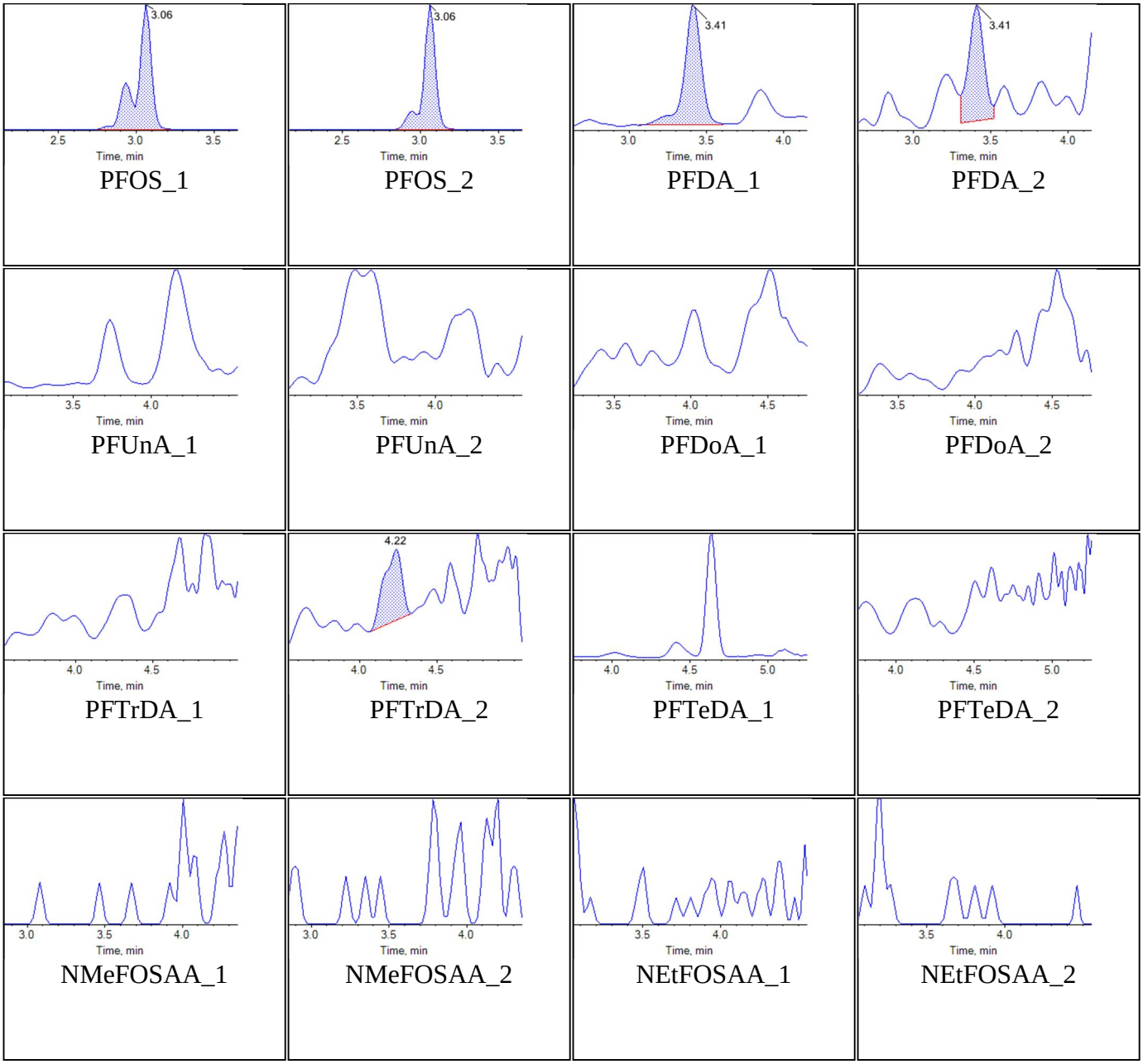


PFNA_2

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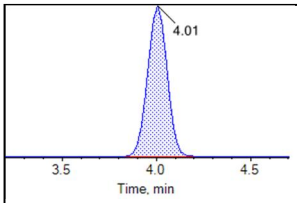


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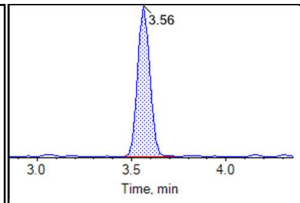
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Chromatogram Report

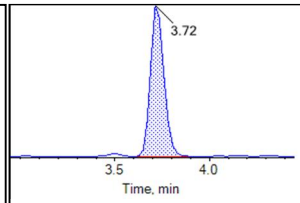
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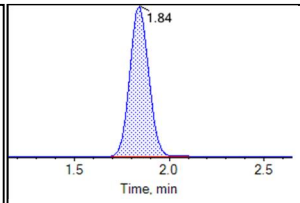
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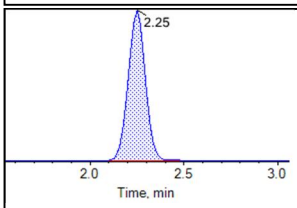
d3-MeFOSAA



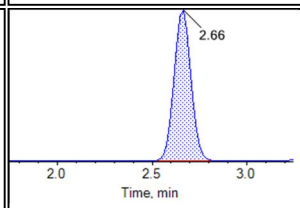
d5-EtFOSAA



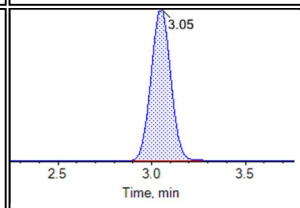
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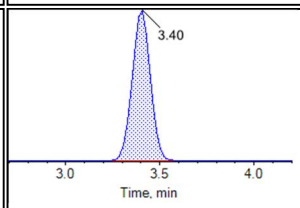
13C4-PFHpA



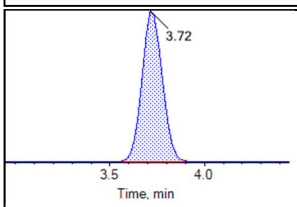
13C8-PFOA



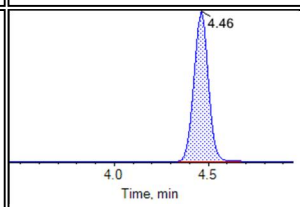
13C9-PFNA



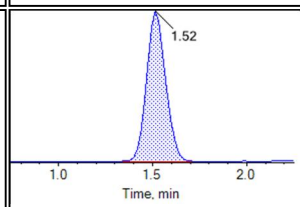
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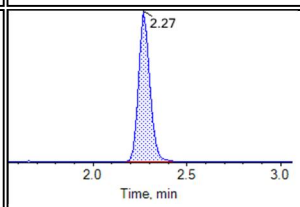
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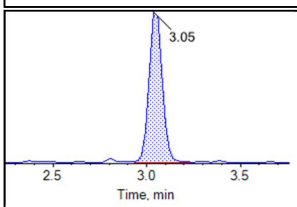
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

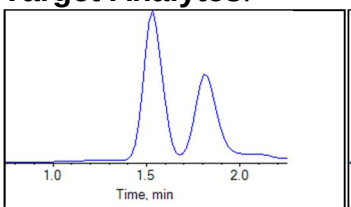
Chromatogram Report

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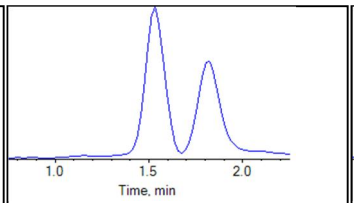
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Sample ID	VC-MS09-SB01-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:59:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

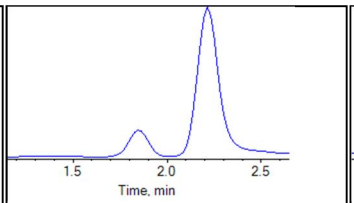
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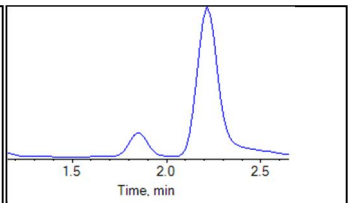
PFBS_1



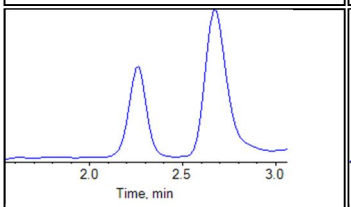
PFBS_2



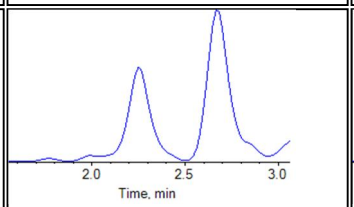
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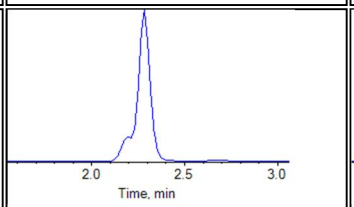
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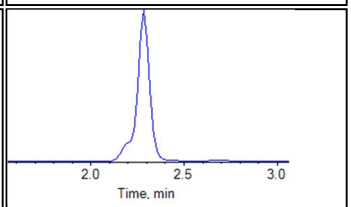
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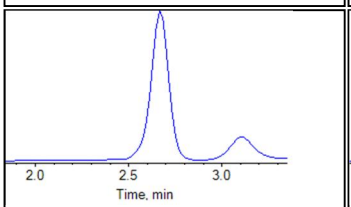
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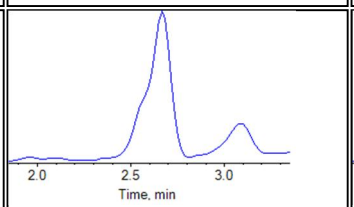
PFHxS_1



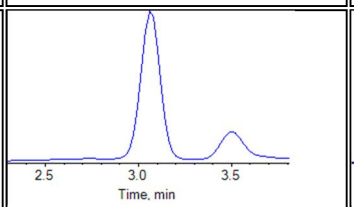
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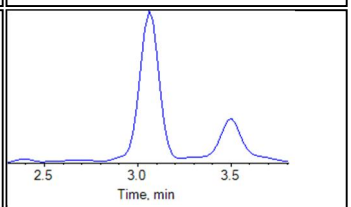
PFOA_1



PFOA_2



PFNA_1

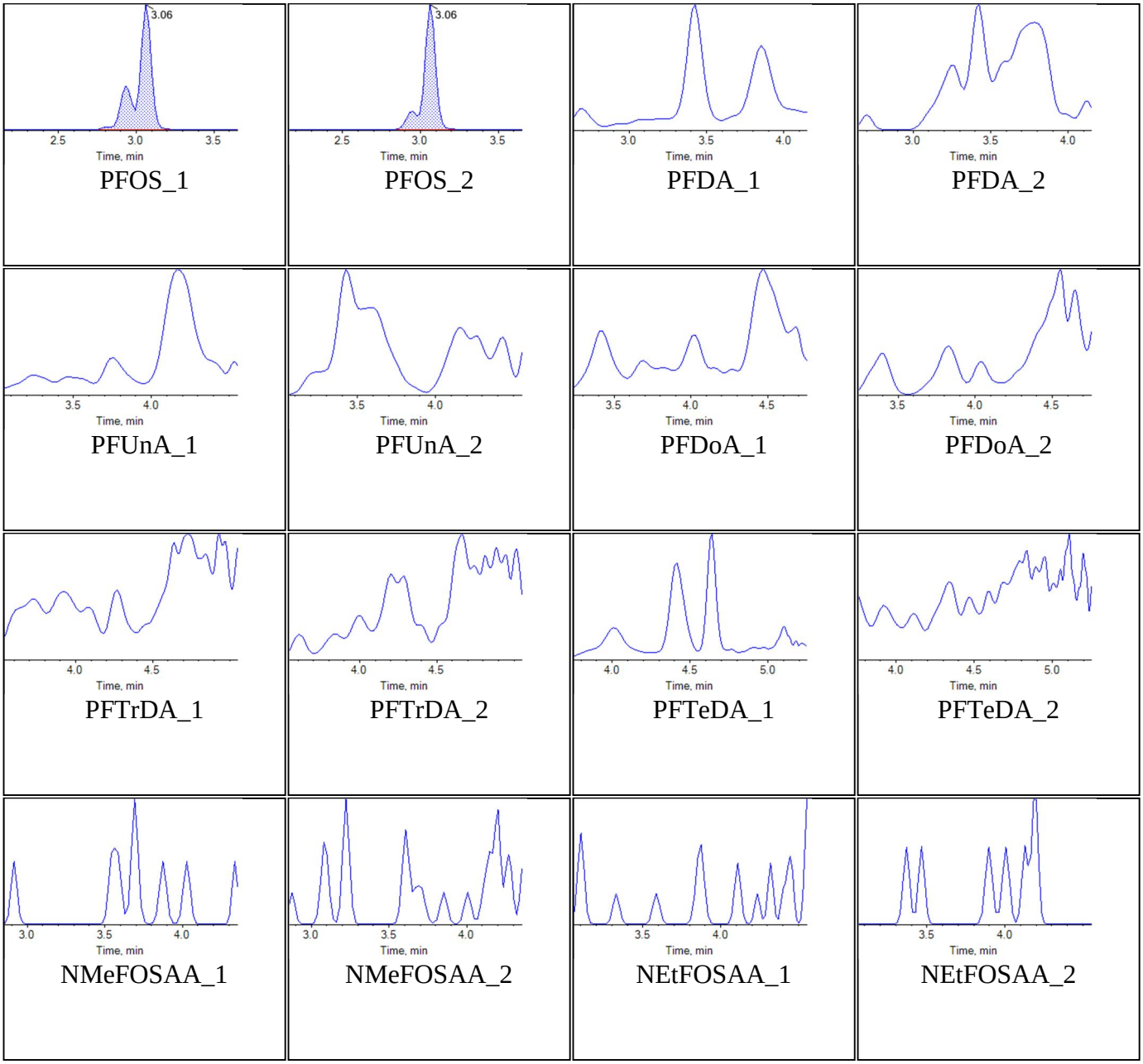


PFNA_2

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Chromatogram Report

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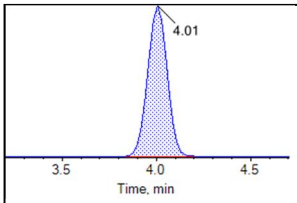


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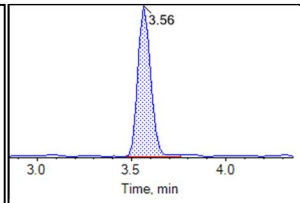
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Chromatogram Report

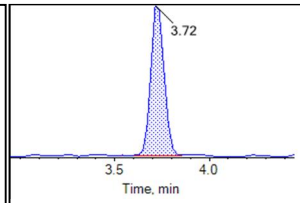
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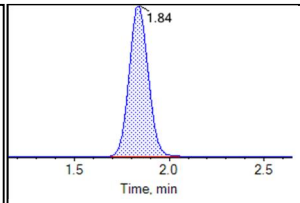
13C2-PFDoA



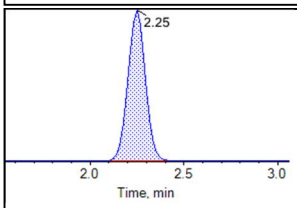
d3-MeFOSAA



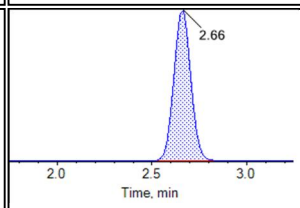
d5-EtFOSAA



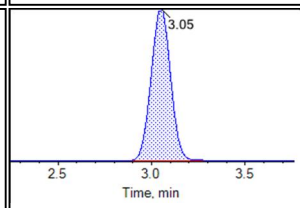
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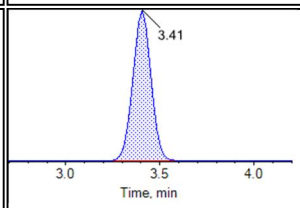
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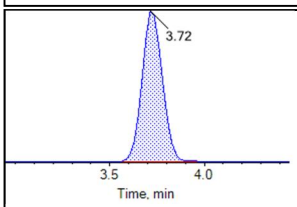
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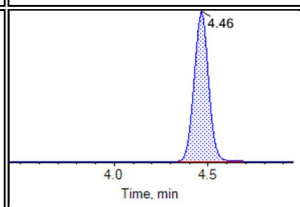
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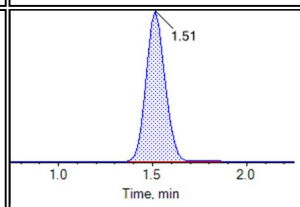
13C6-PFDA



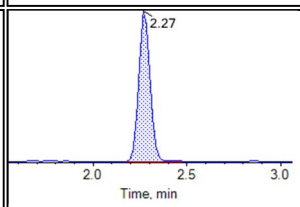
13C7-PFUnA



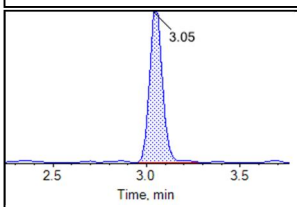
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

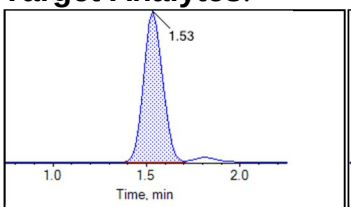
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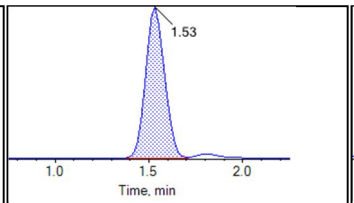
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Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:10:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

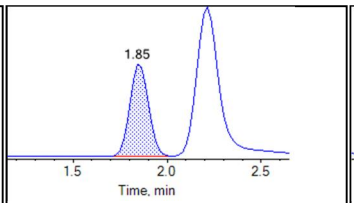
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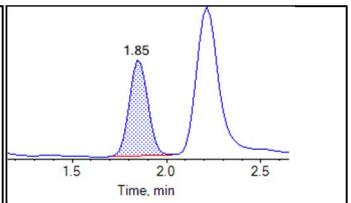
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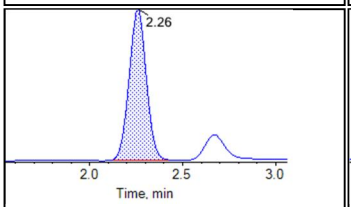
PFBS_2



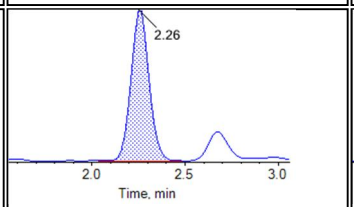
PFHxA_1



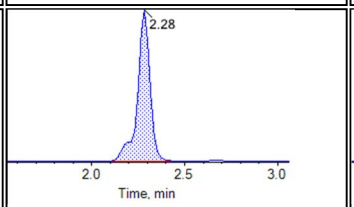
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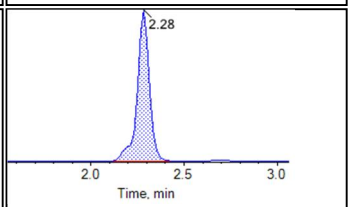
PFHpA_1



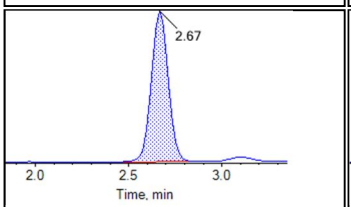
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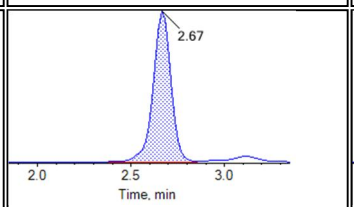
PFHxS_1



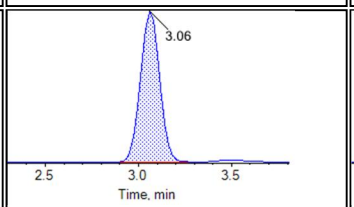
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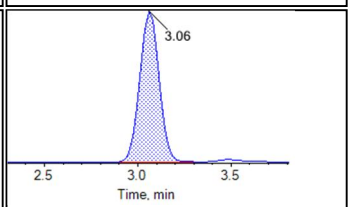
PFOA_1



PFOA_2



PFNA_1

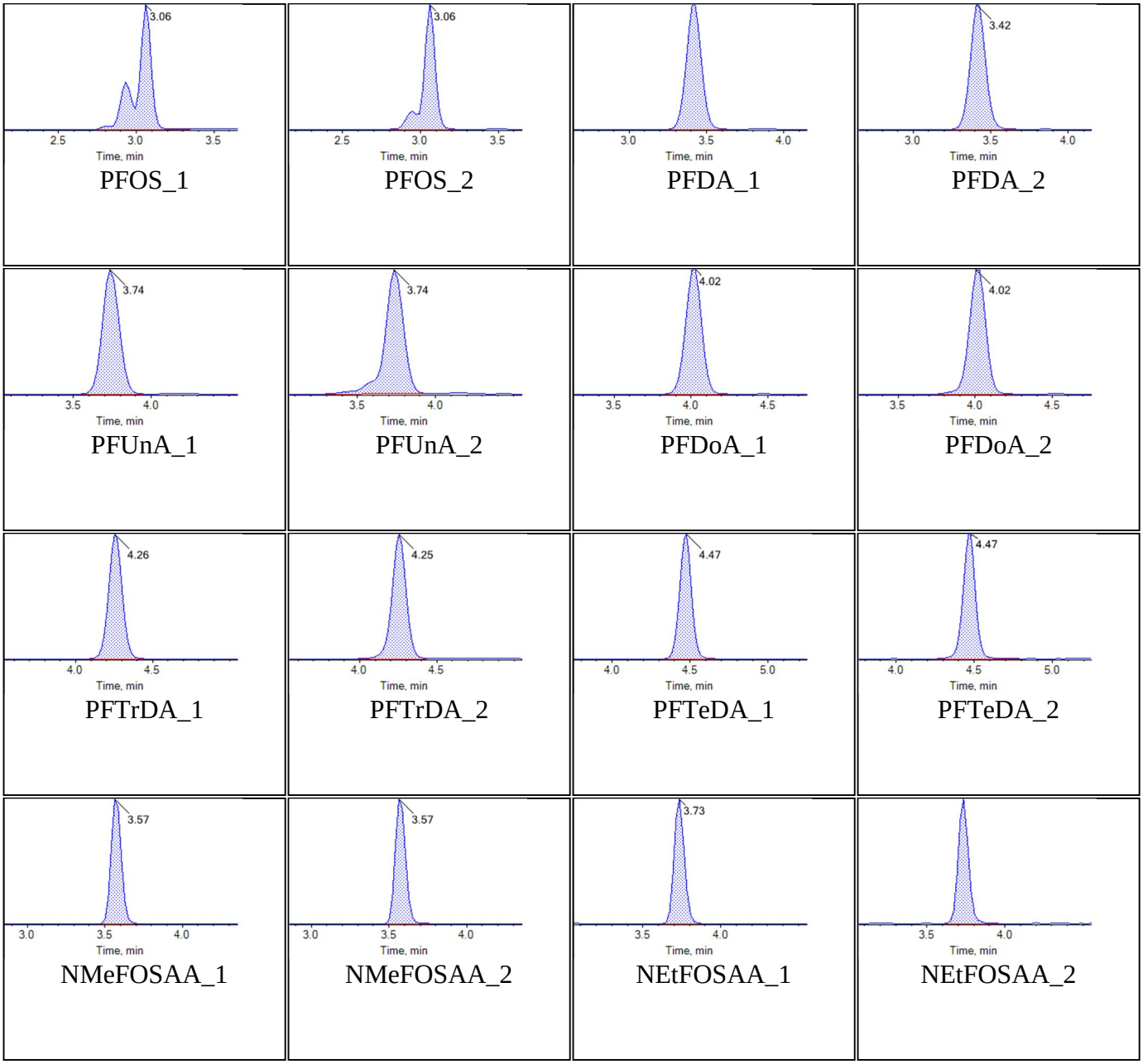


PFNA_2

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Chromatogram Report

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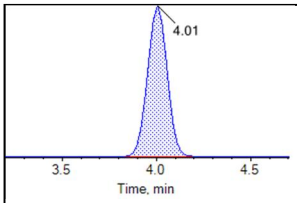


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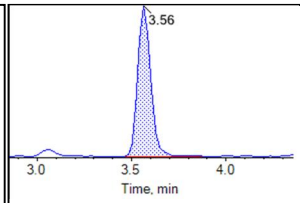
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Chromatogram Report

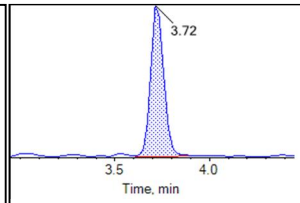
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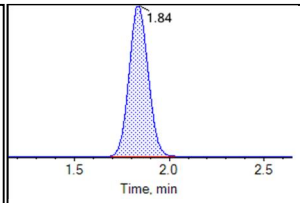
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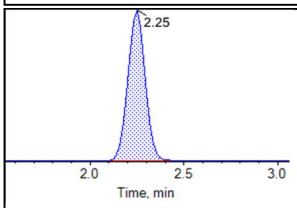
d3-MeFOSAA



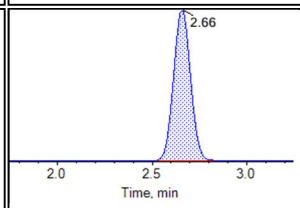
d5-EtFOSAA



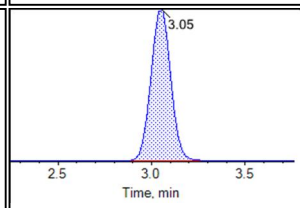
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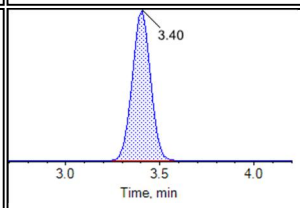
13C4-PFHpA



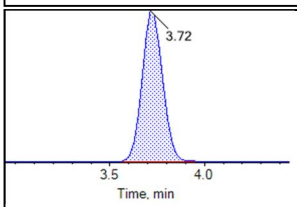
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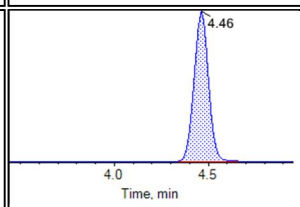
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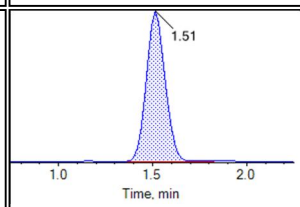
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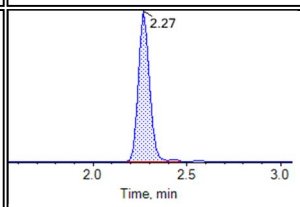
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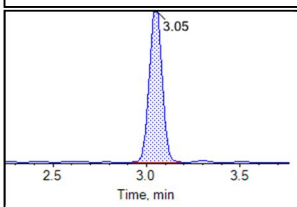
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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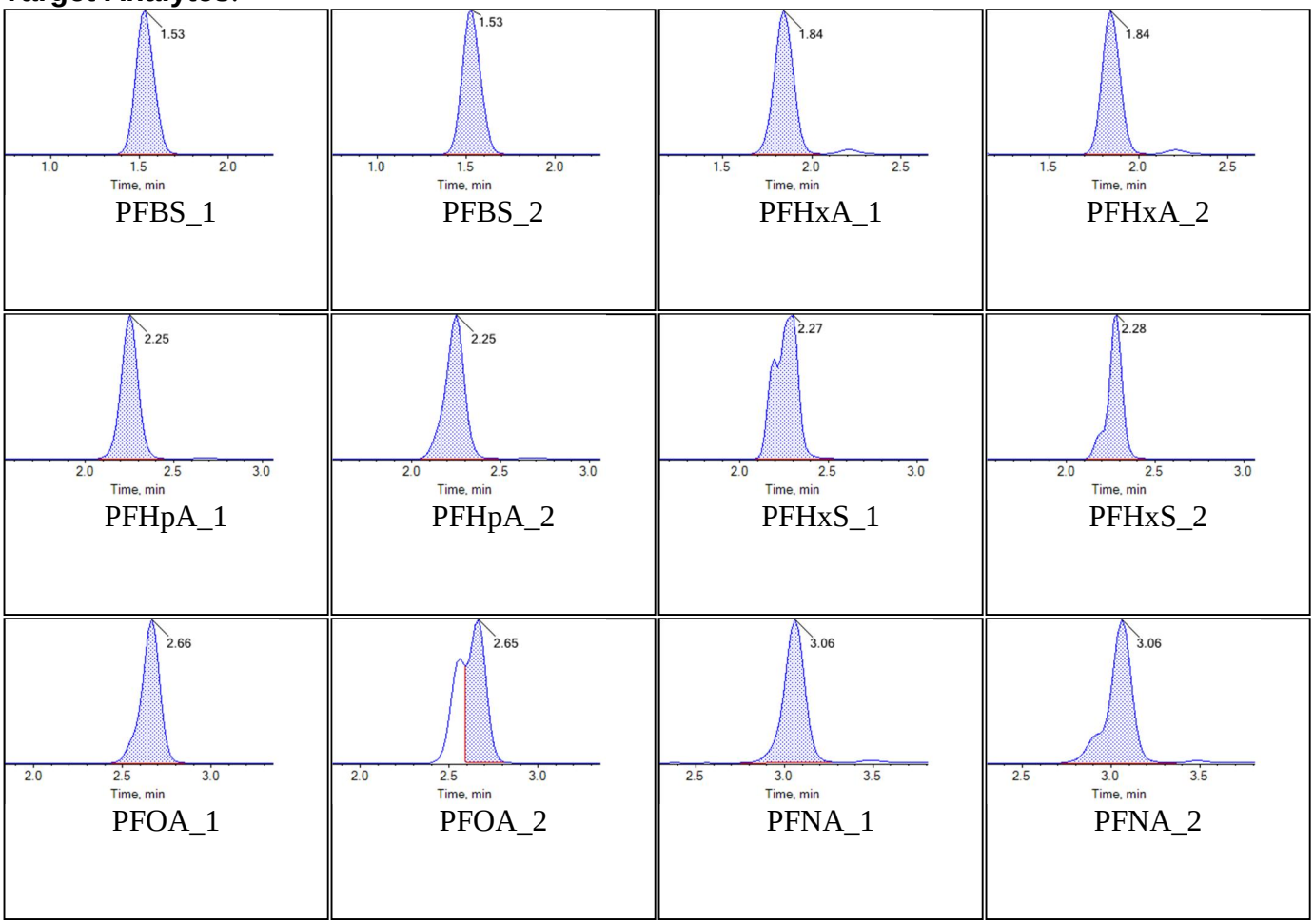
Chromatogram Report

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Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:32:35	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

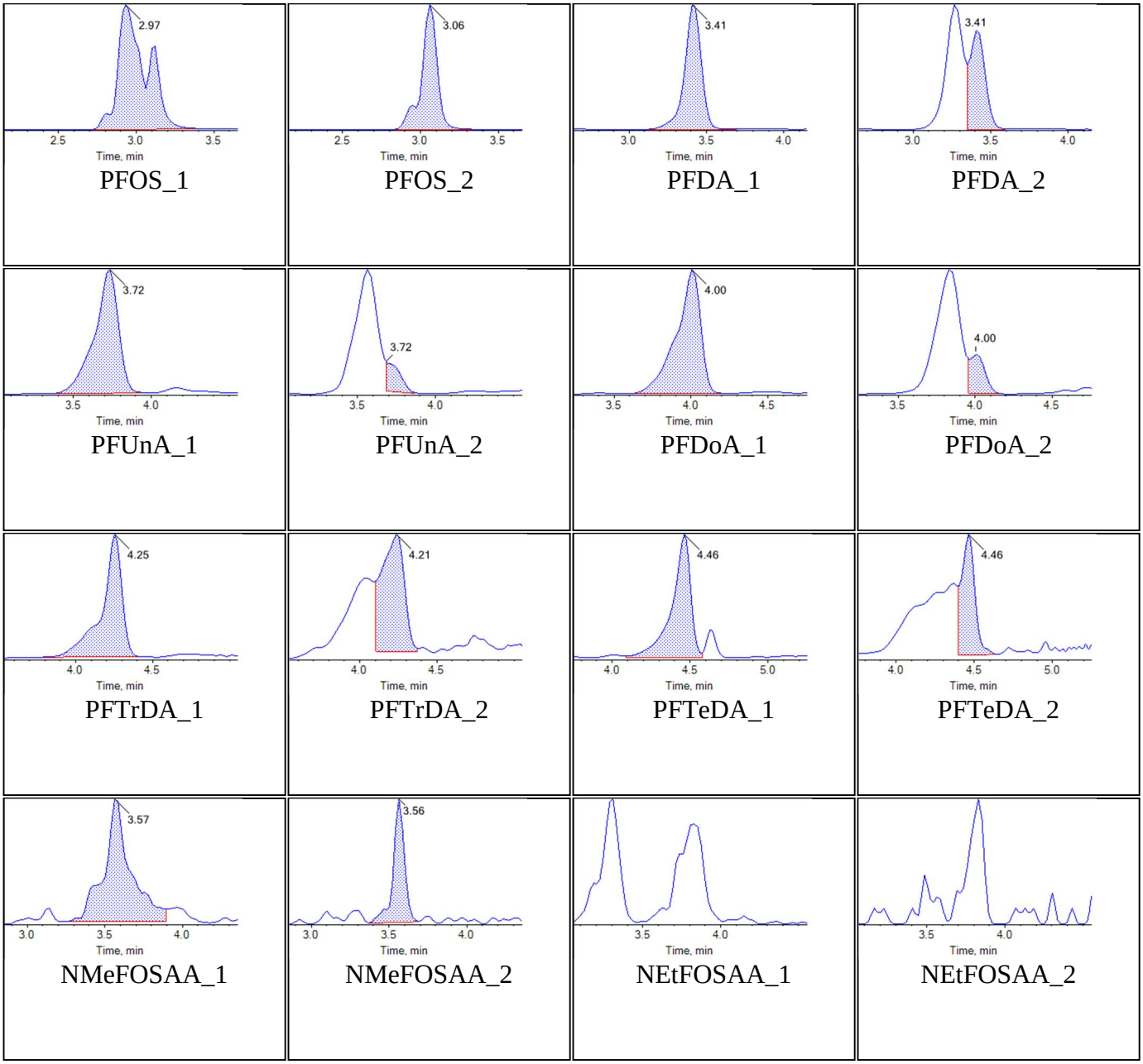
Target Analytes:



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Chromatogram Report

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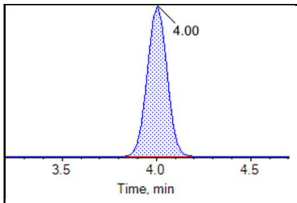


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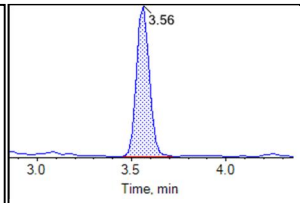
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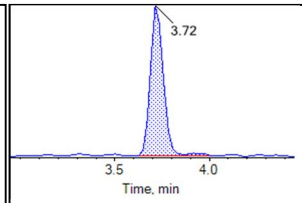
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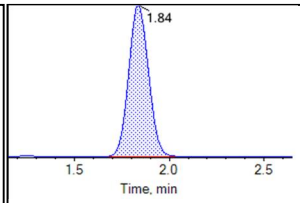
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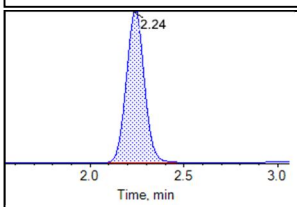
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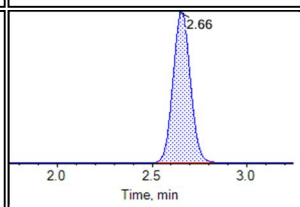
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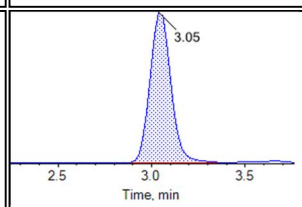
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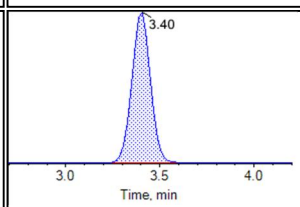
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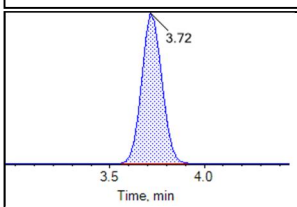
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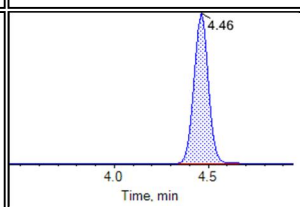
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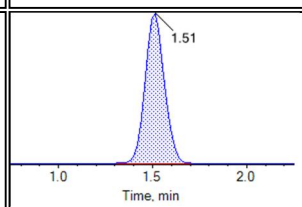
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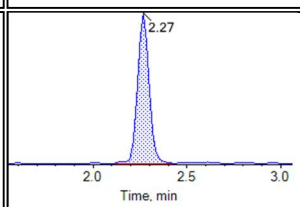
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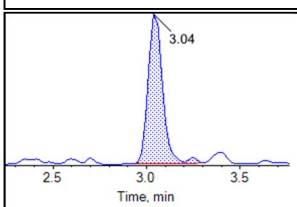
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13C3-PFBS



13C3-PFHxS



13C8-PFOS

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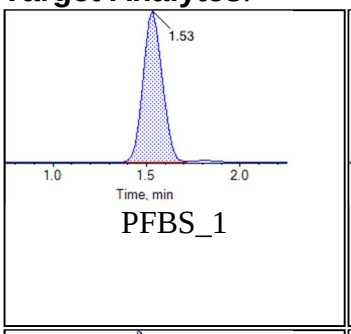
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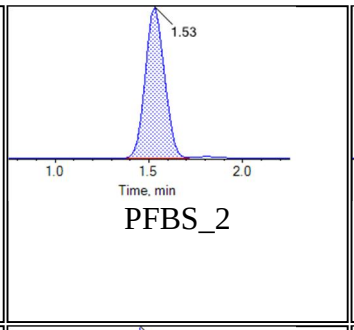
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Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:43:28	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

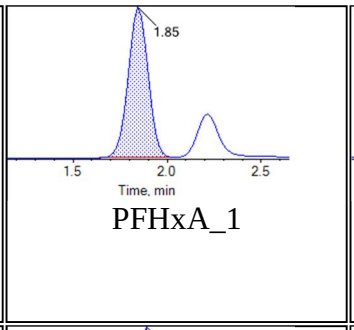
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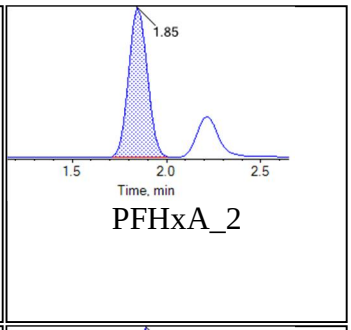
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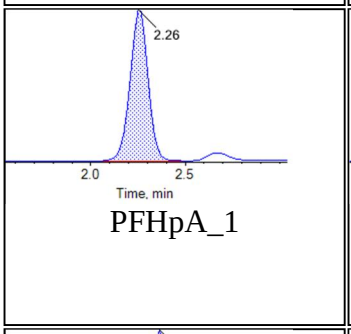
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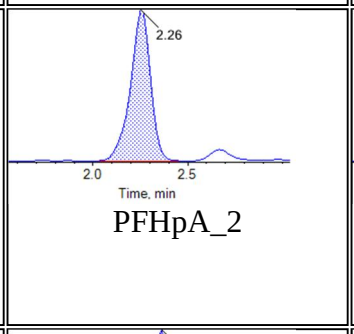
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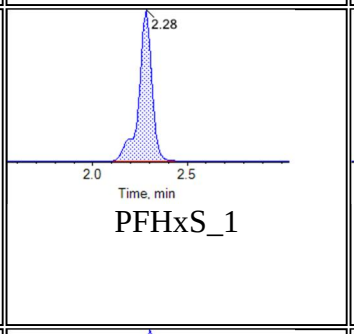
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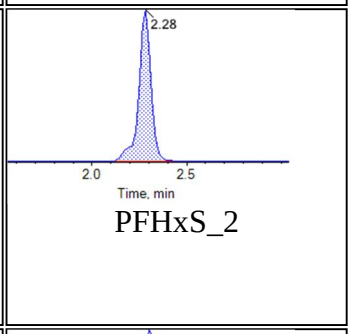
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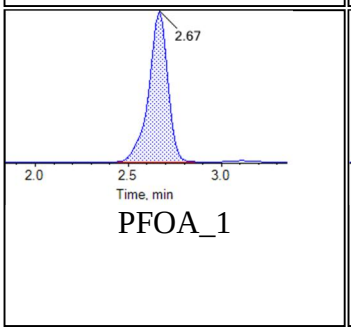
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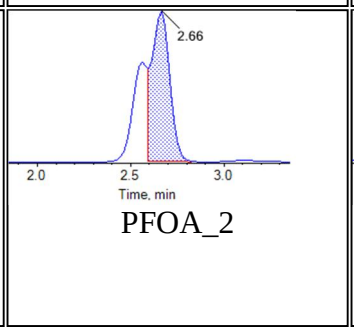
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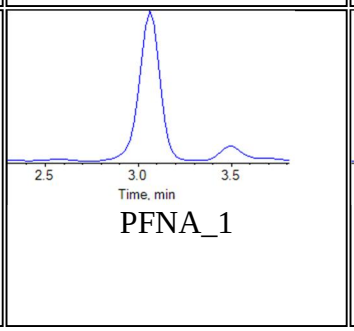
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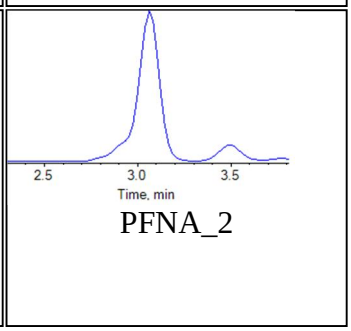
PFOA_1



PFOA_2



PFNA_1

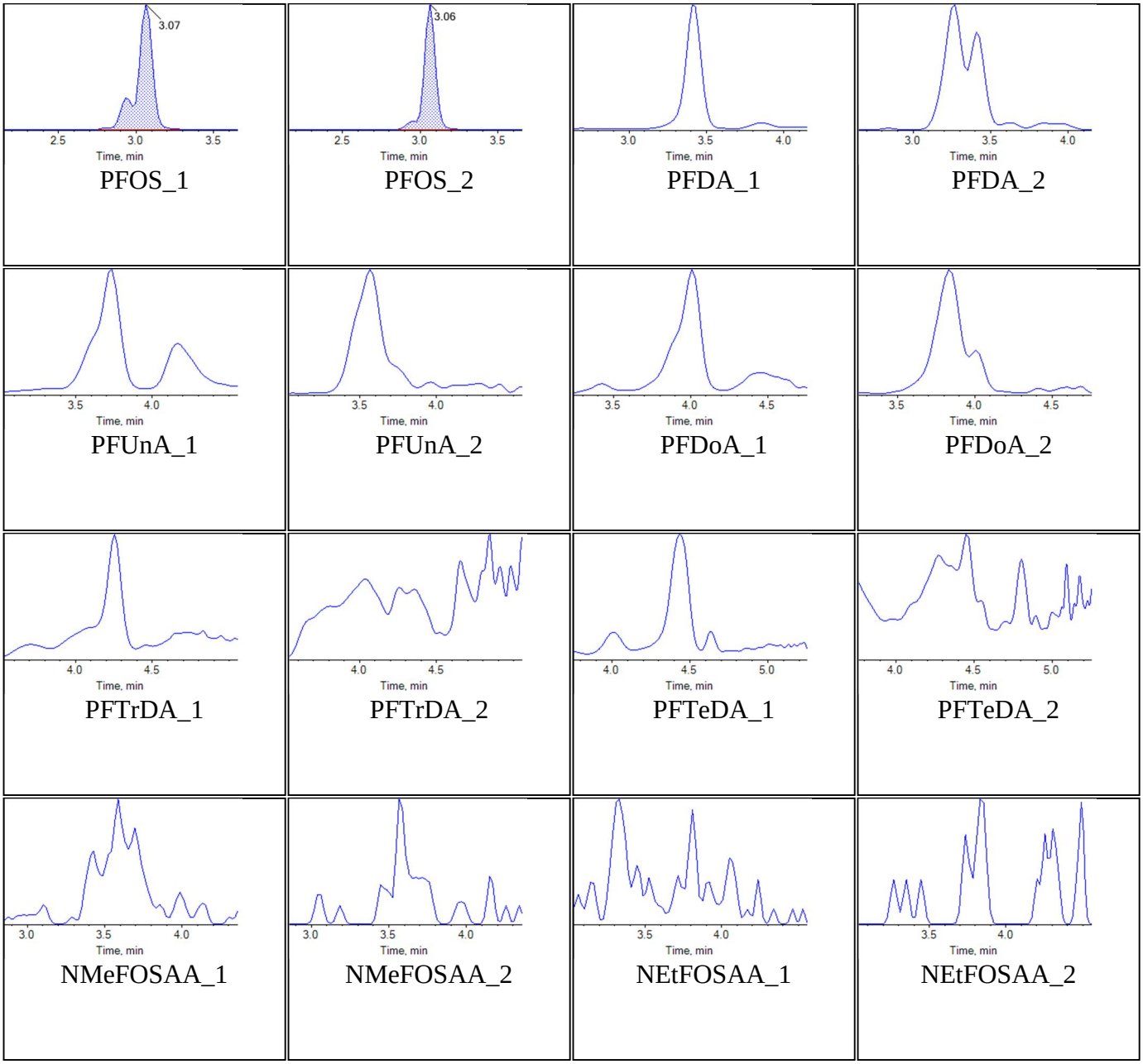


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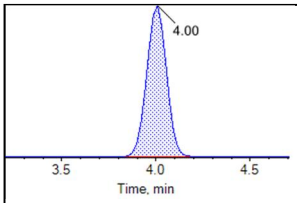


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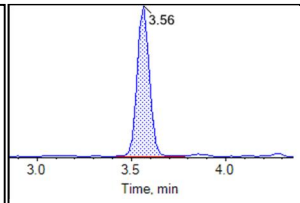
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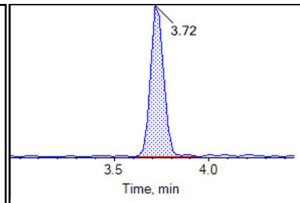
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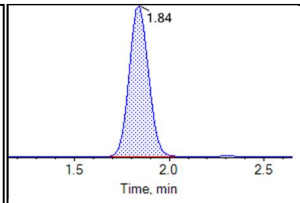
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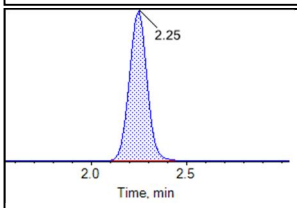
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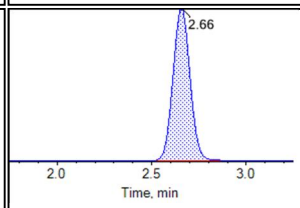
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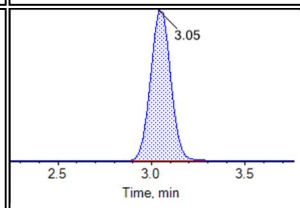
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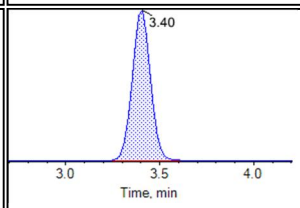
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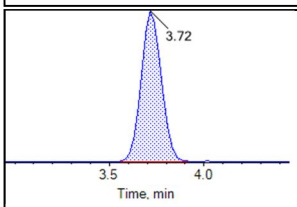
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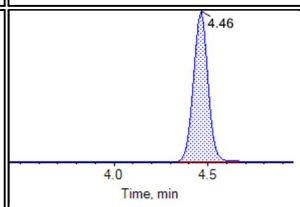
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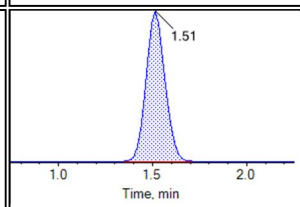
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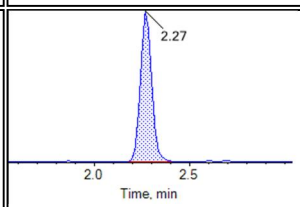
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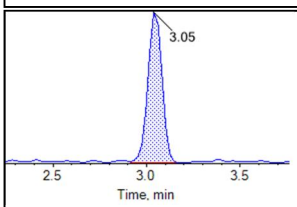
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13C3-PFBS



13C3-PFHxS



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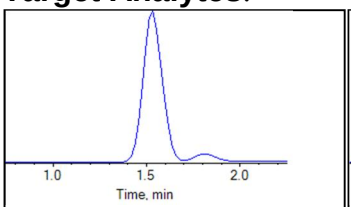
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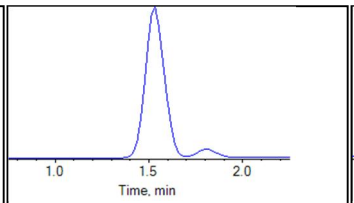
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Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:54:21	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

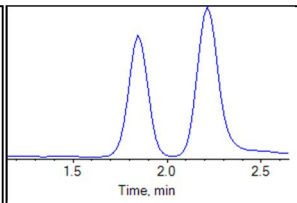
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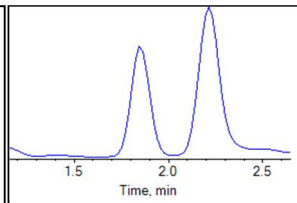
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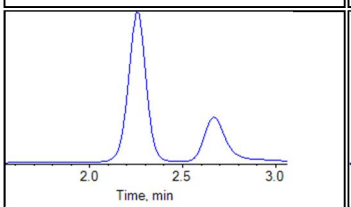
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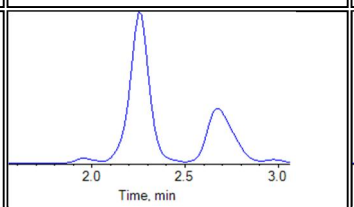
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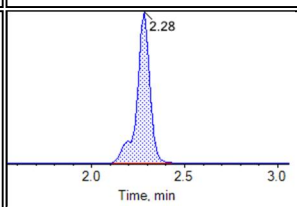
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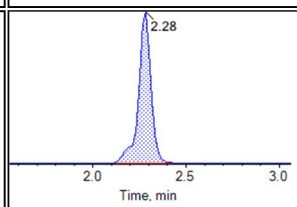
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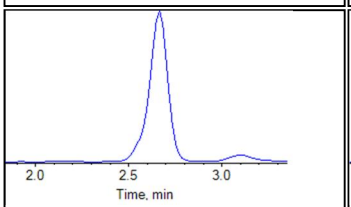
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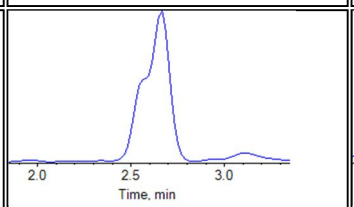
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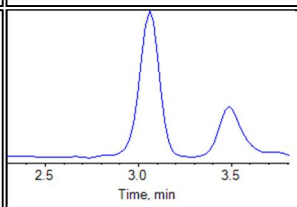
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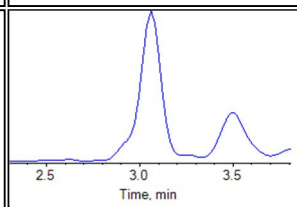
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PFOA_2



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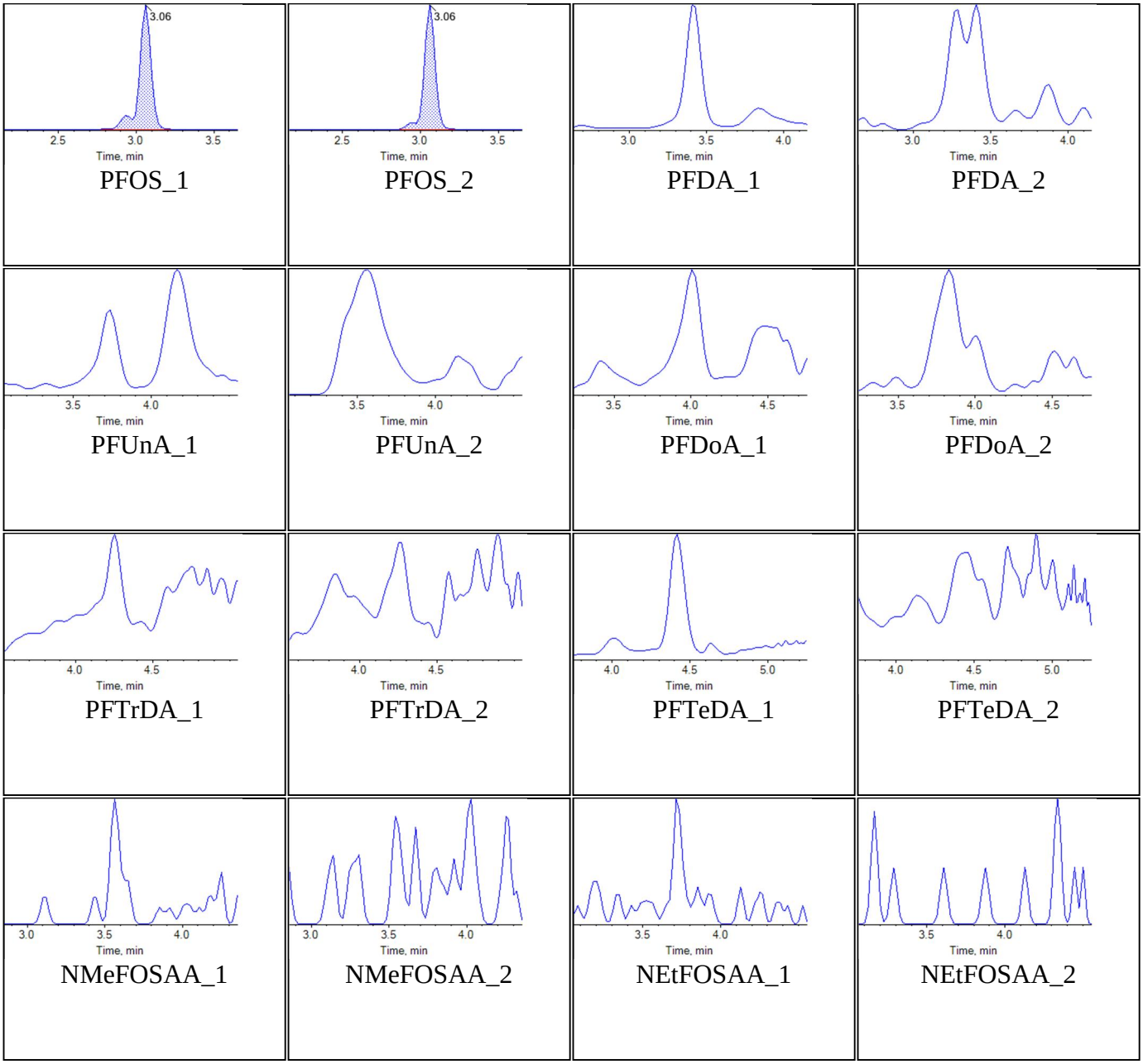


PFNA_2

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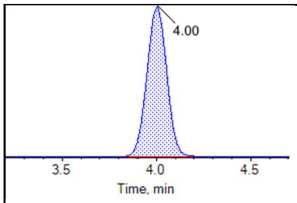


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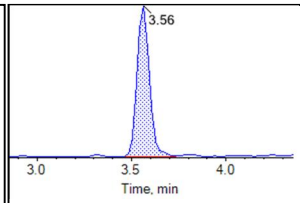
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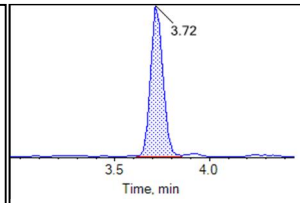
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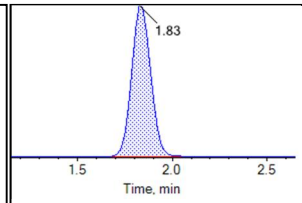
13C2-PFDoA



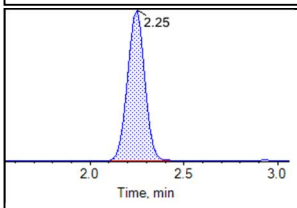
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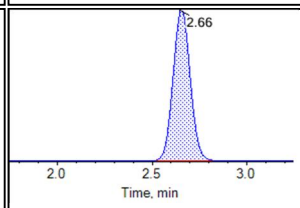
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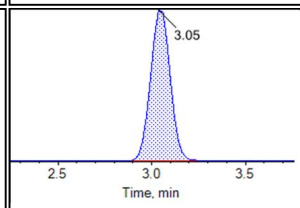
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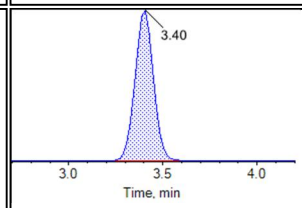
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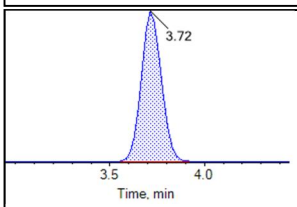
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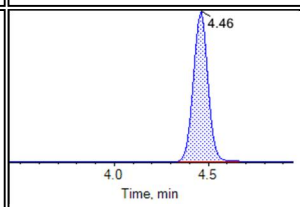
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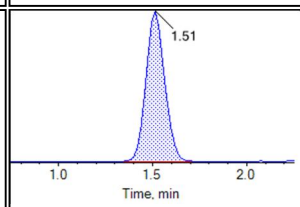
13C6-PFDA



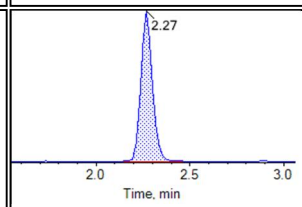
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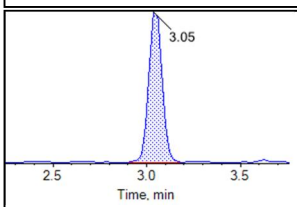
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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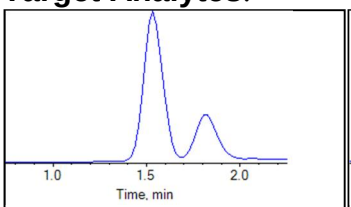
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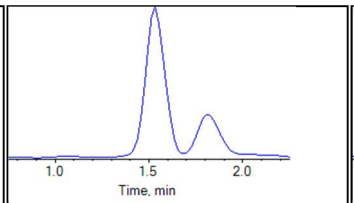
Sample Name	J8441-FS-D(9)	**Injection Vial**	48
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:05:14	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

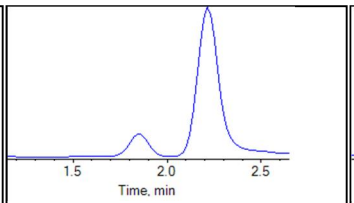
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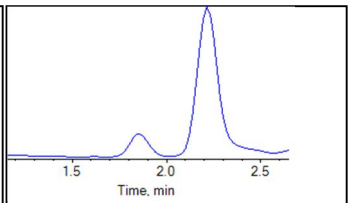
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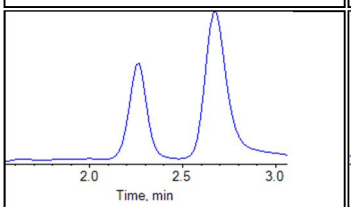
PFBS_2



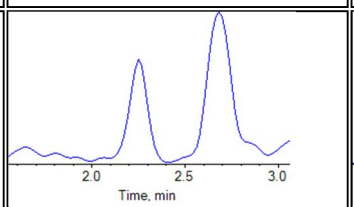
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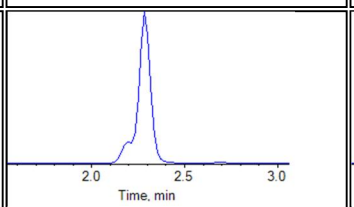
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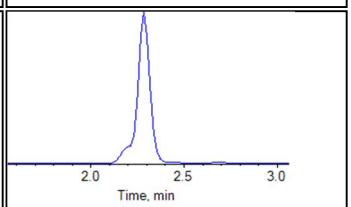
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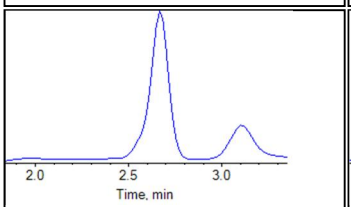
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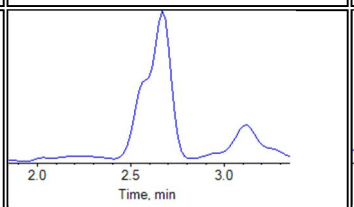
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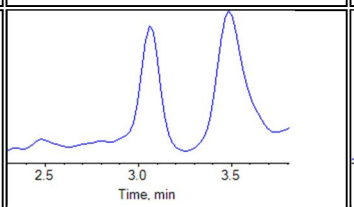
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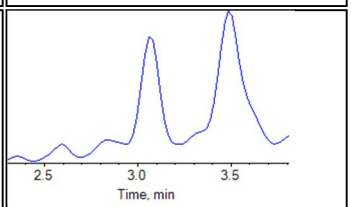
PFOA_1



PFOA_2



PFNA_1

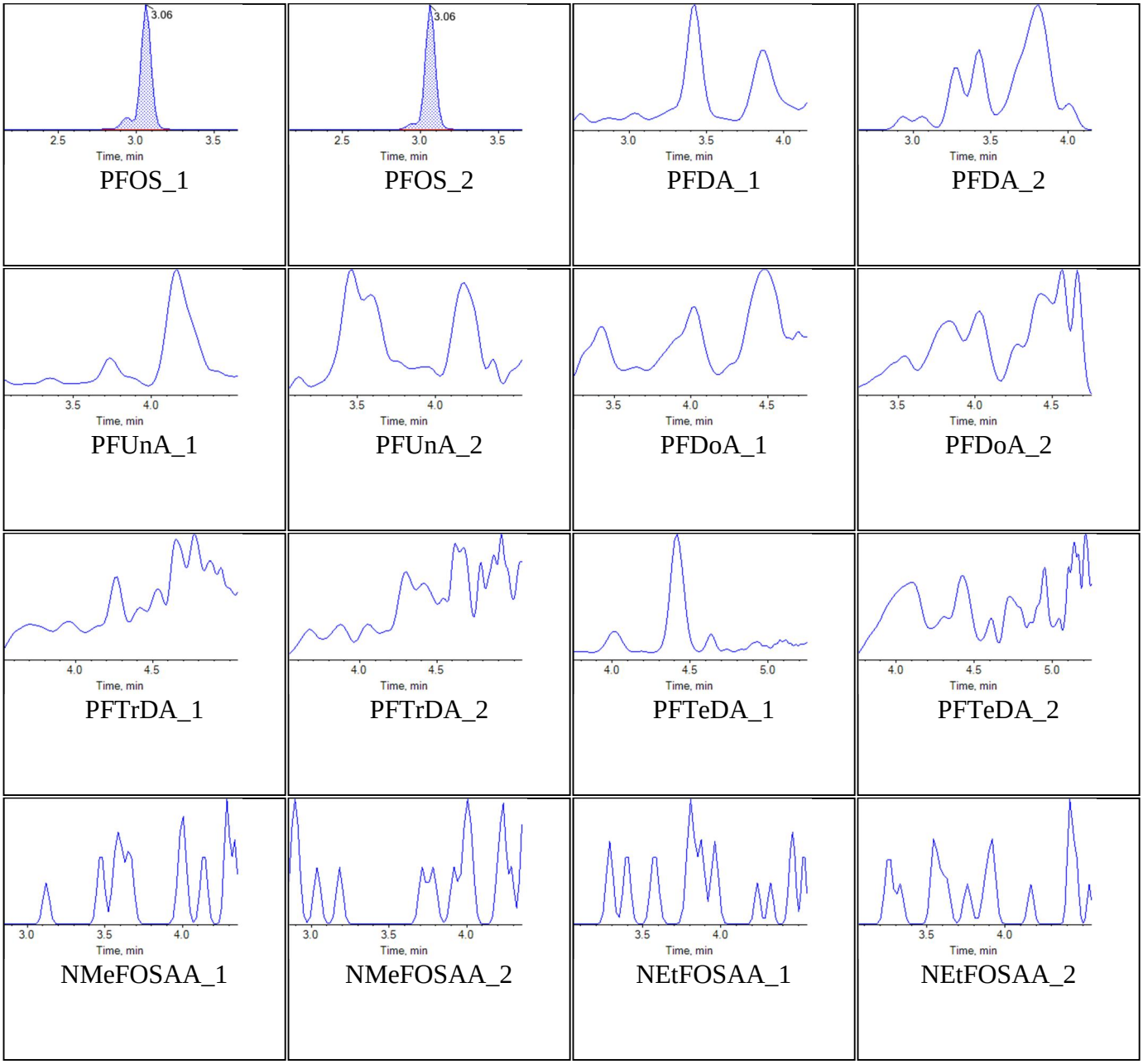


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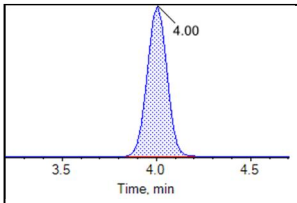


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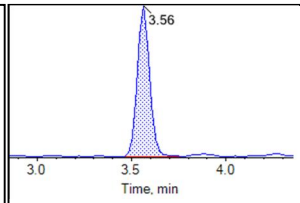
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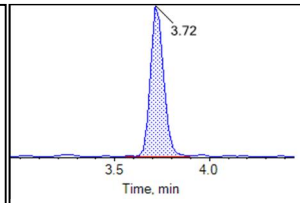
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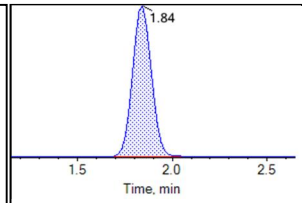
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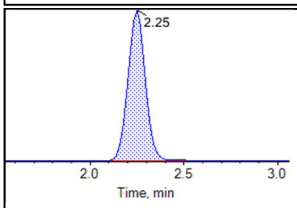
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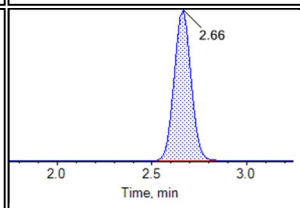
d5-EtFOSAA



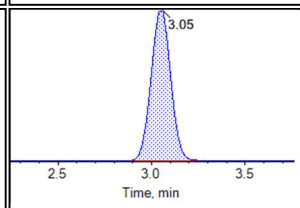
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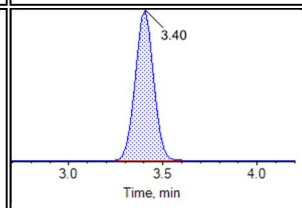
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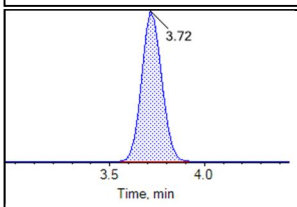
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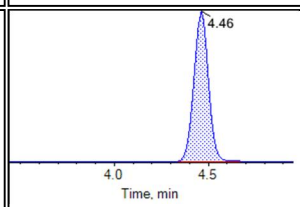
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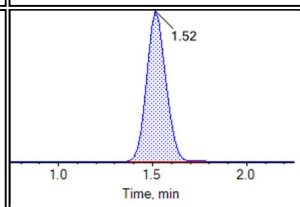
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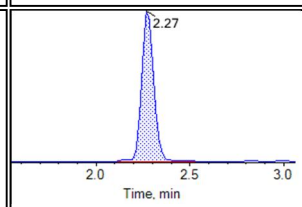
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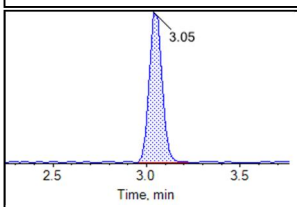
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13C3-PFBS



13C3-PFHxS



13C8-PFOS

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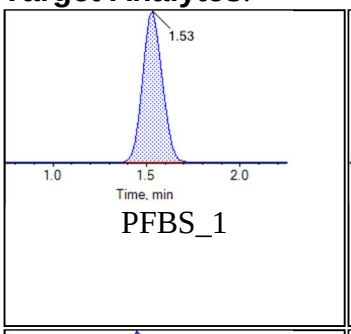
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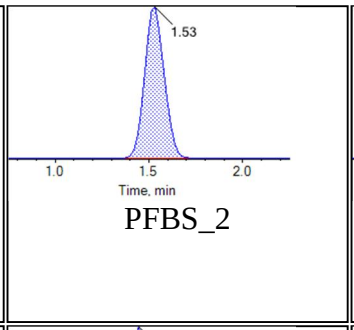
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Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:48:44	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

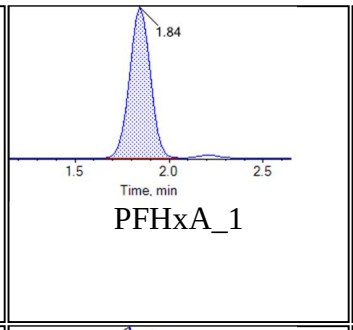
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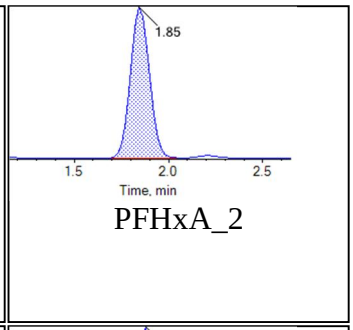
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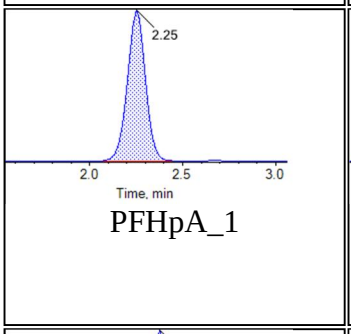
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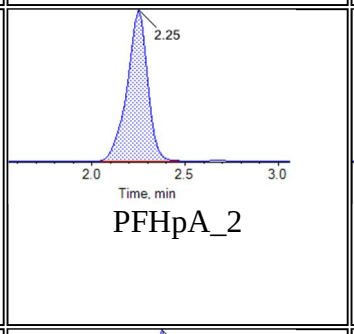
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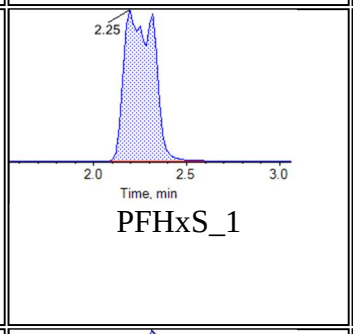
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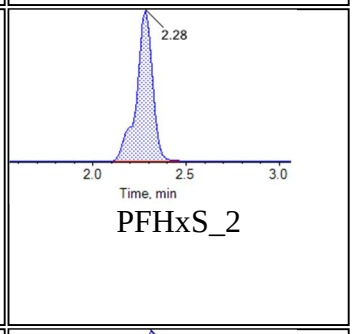
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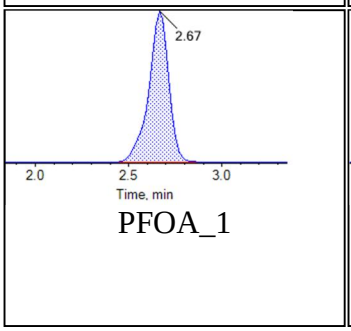
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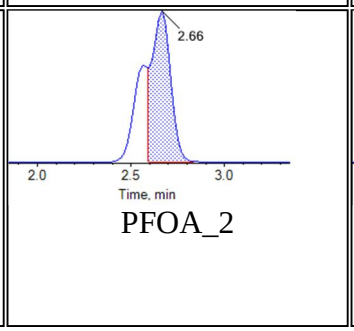
PFHxS_1



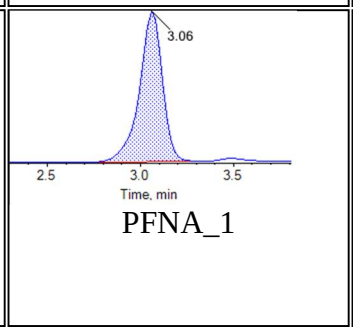
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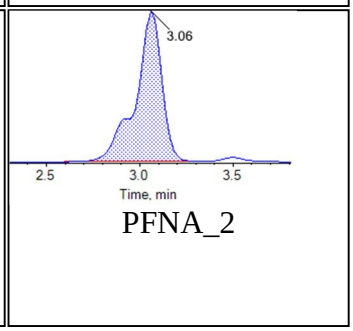
PFOA_1



PFOA_2



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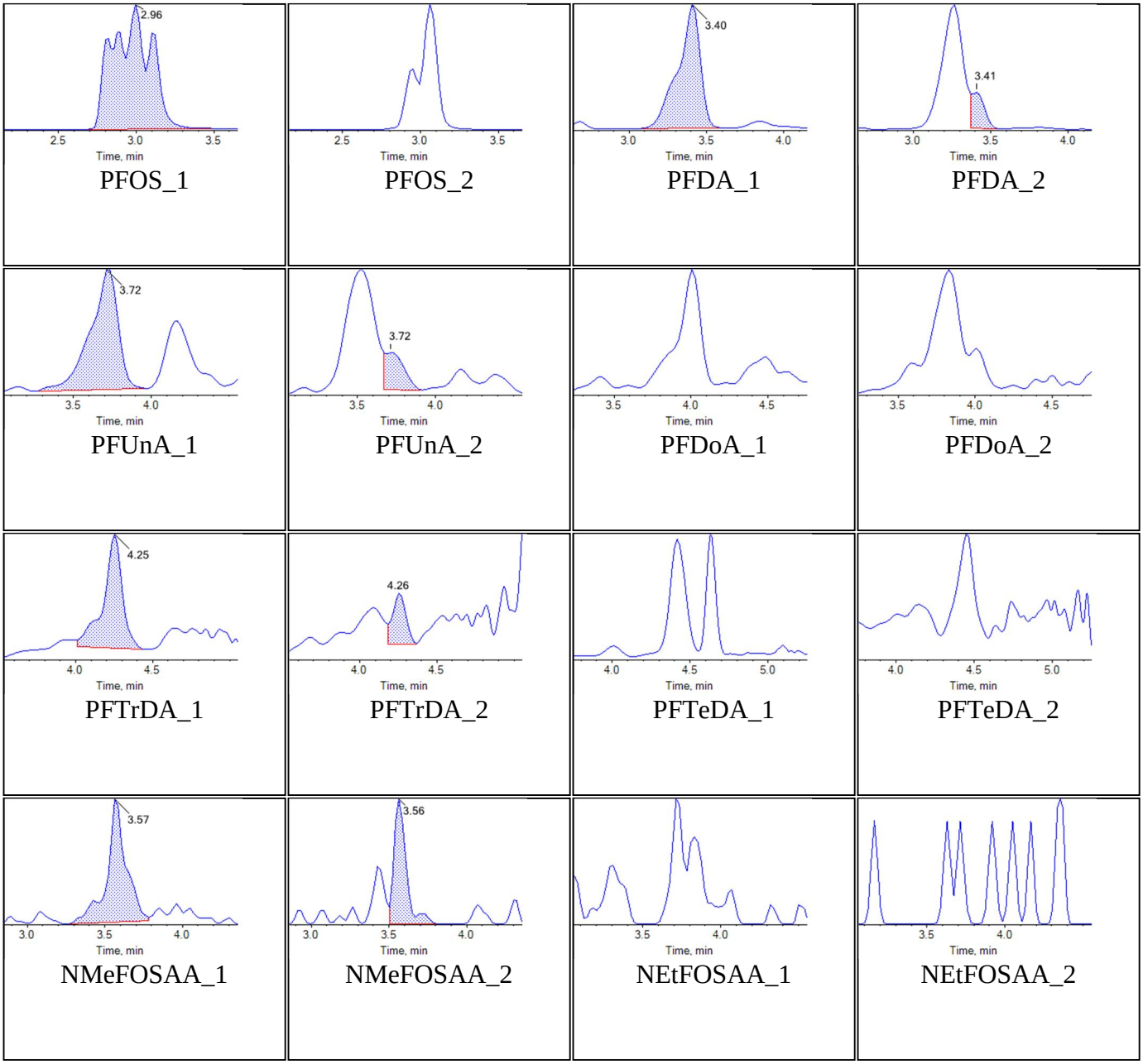


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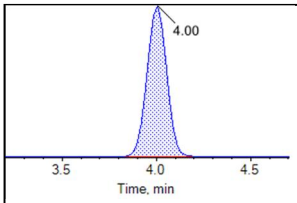


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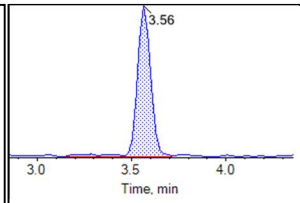
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Chromatogram Report

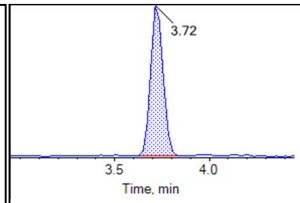
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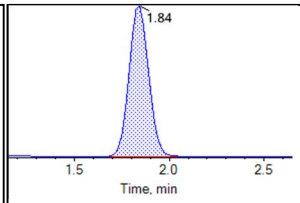
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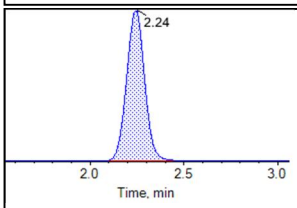
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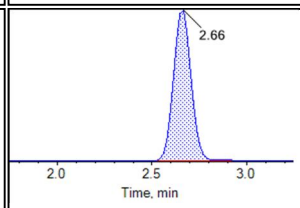
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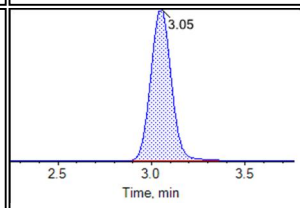
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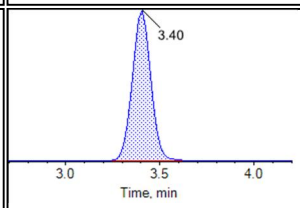
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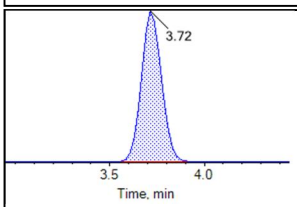
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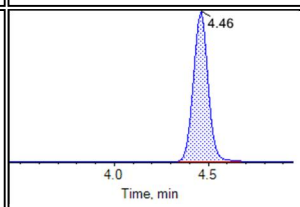
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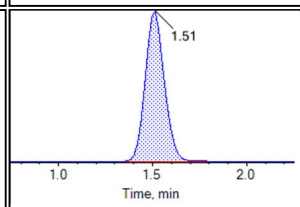
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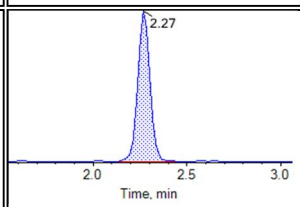
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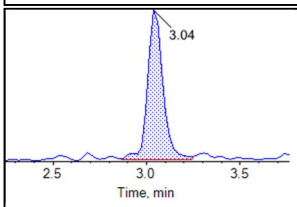
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13C3-PFBS



13C3-PFHxS



13C8-PFOS

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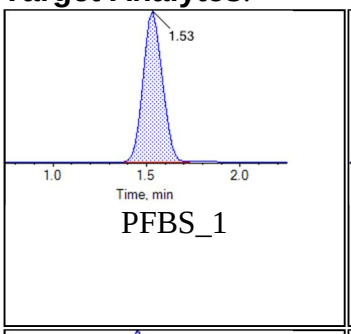
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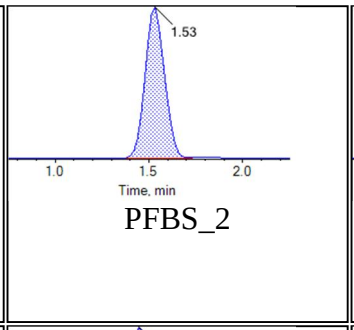
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Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:59:38	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

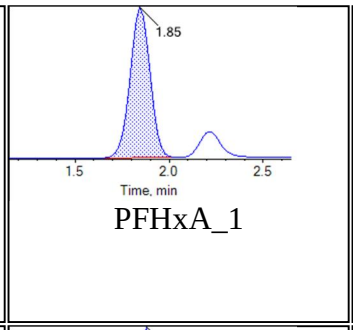
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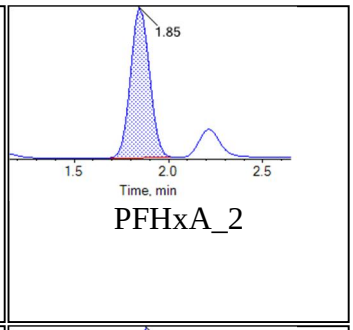
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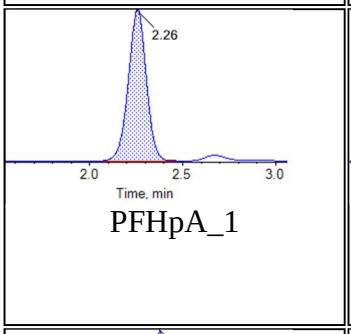
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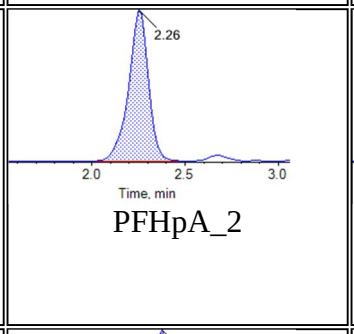
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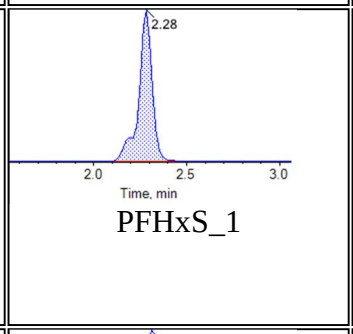
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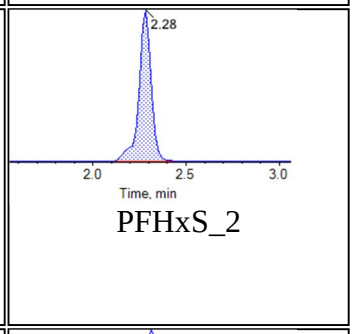
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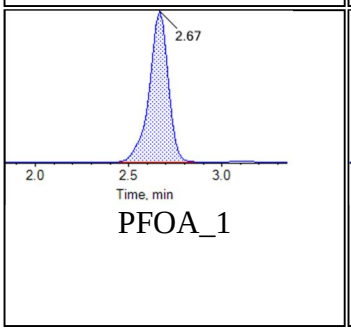
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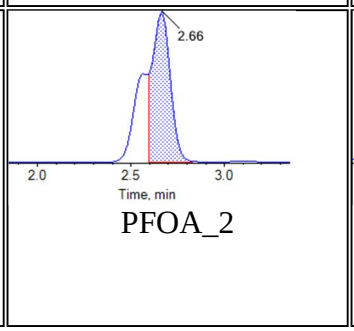
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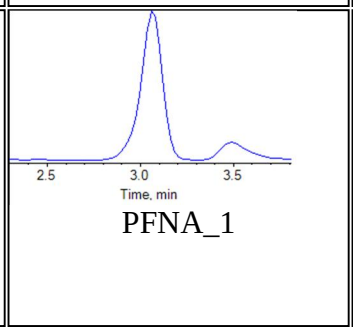
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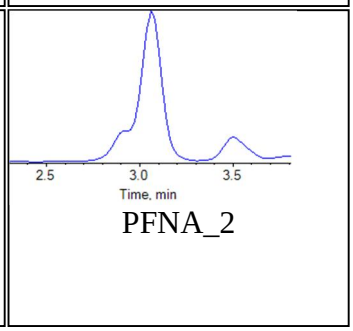
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PFOA_2



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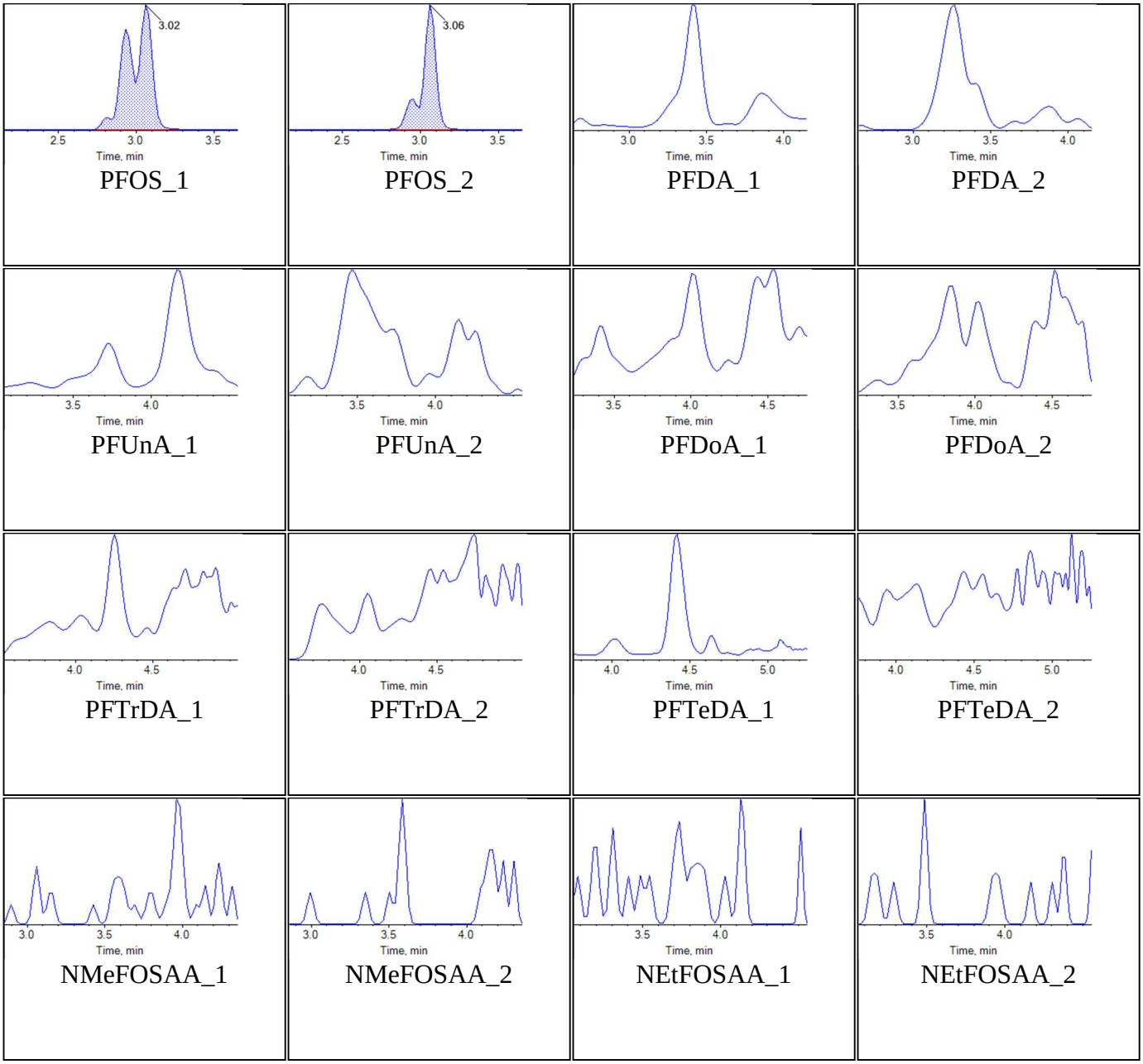


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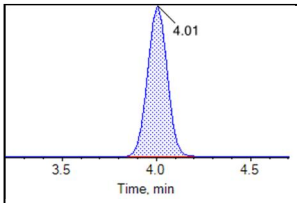


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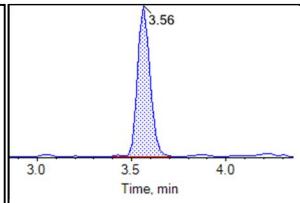
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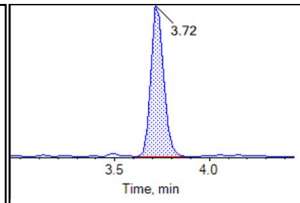
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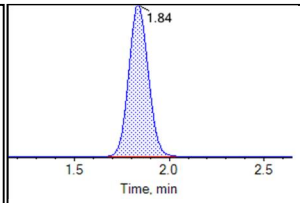
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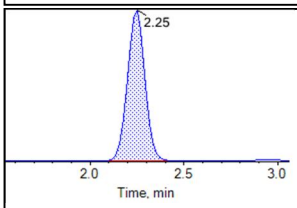
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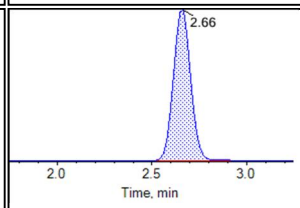
d5-EtFOSAA



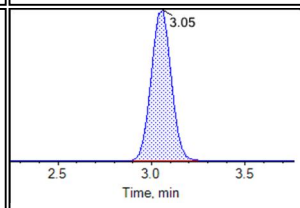
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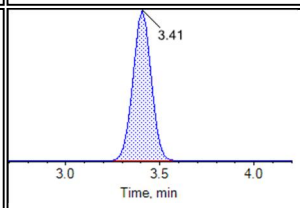
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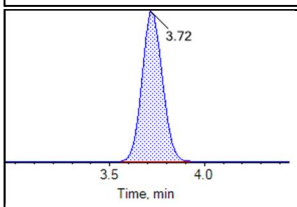
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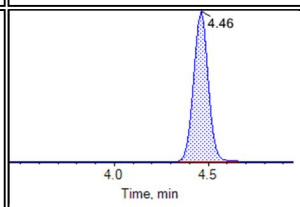
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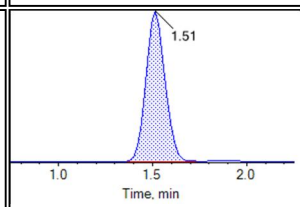
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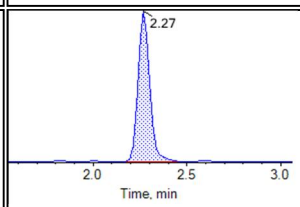
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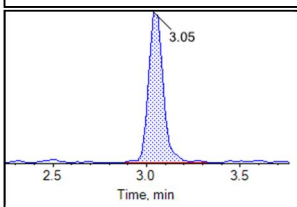
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13C3-PFBS



13C3-PFHxS



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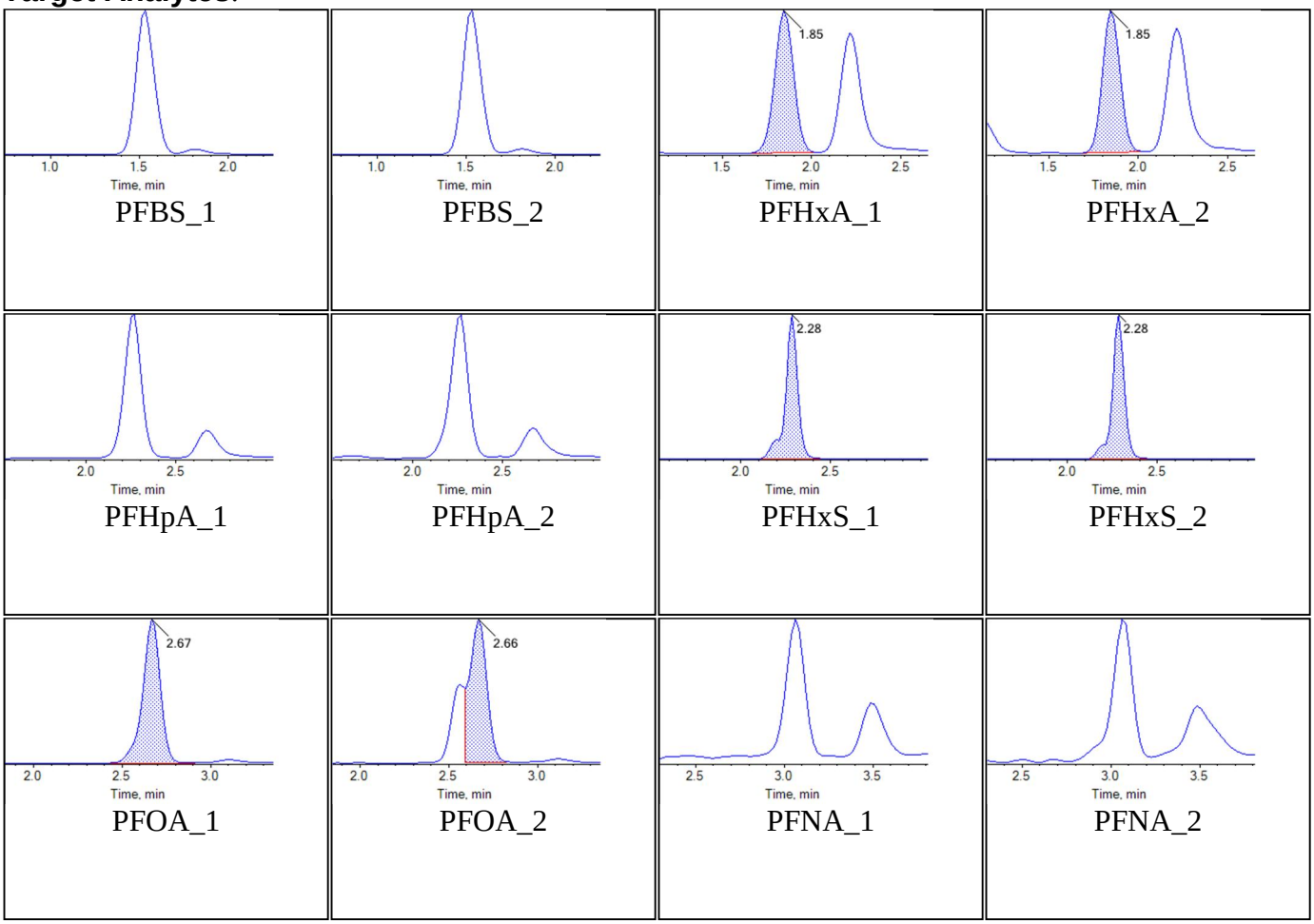
Chromatogram Report

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Sample Name	J8442-FS-D(7)	**Injection Vial**	51
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:10:33	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

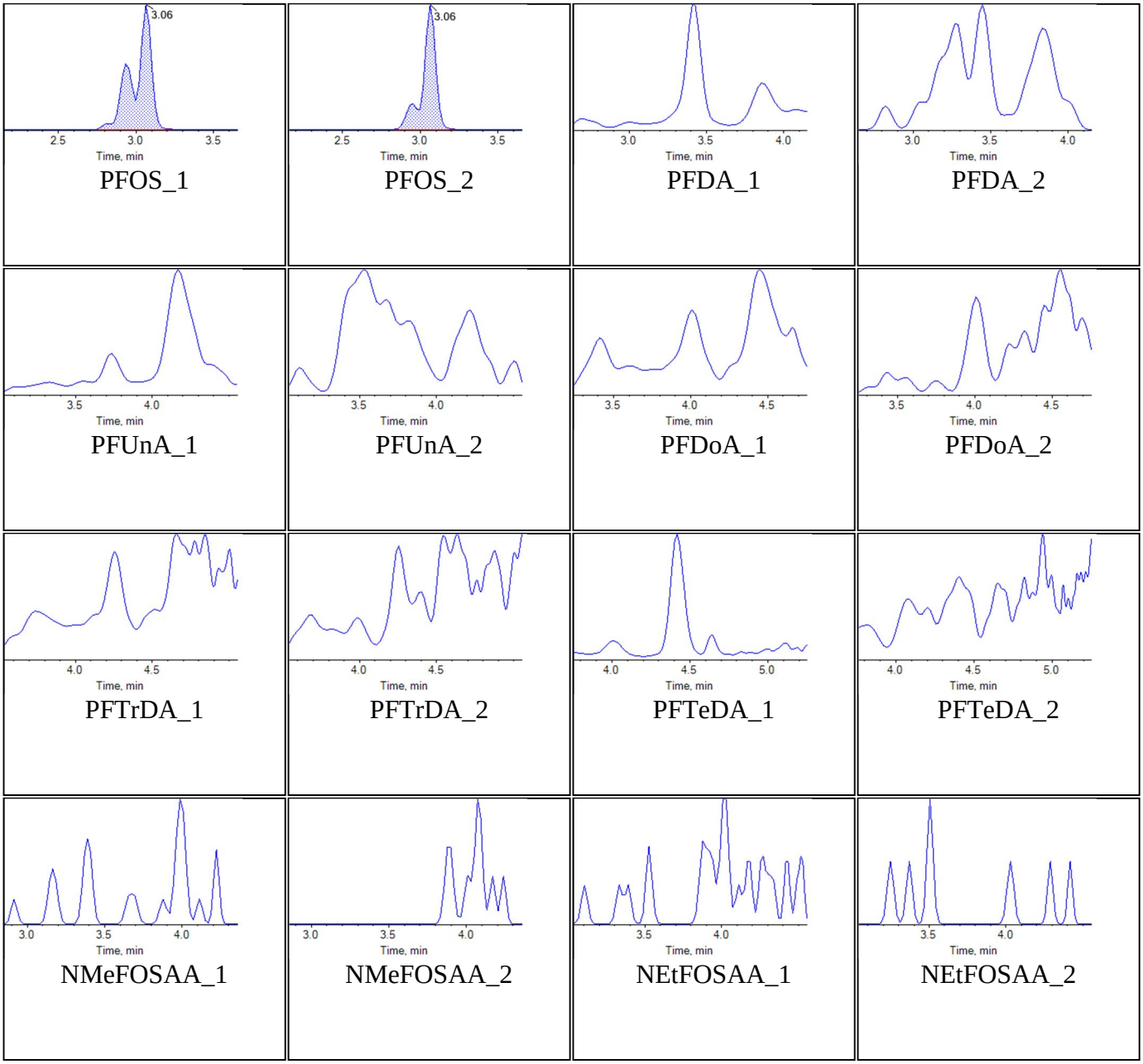
Target Analytes:



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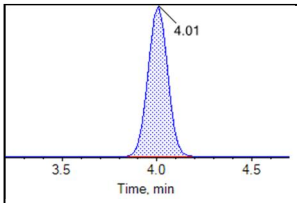


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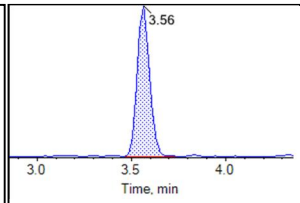
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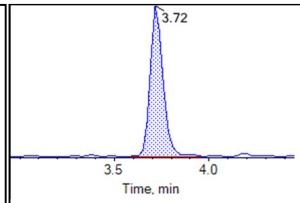
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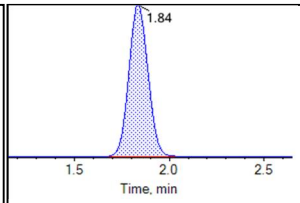
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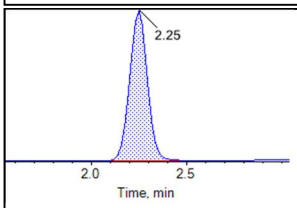
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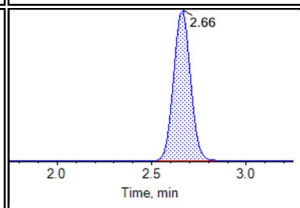
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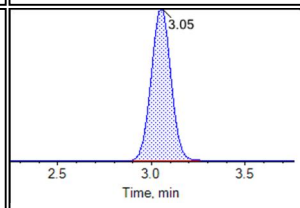
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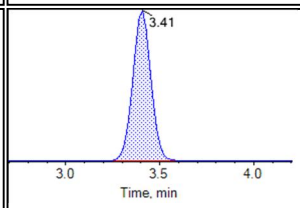
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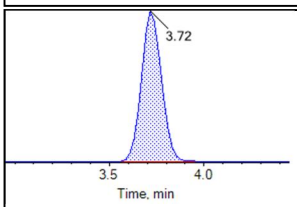
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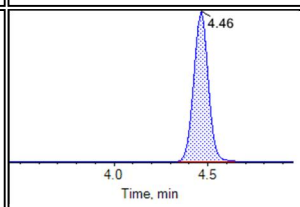
13C9-PFNA



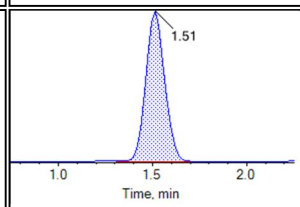
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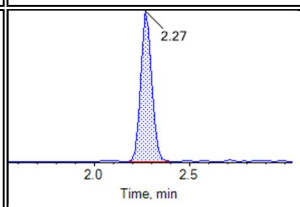
13C7-PFUnA



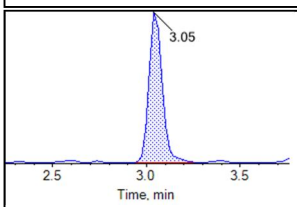
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

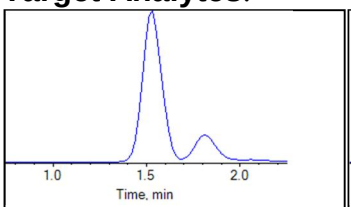
Chromatogram Report

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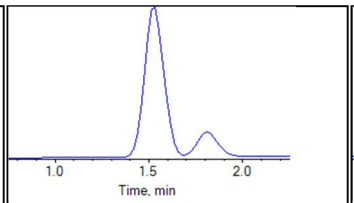
Sample Name	J8442-FS-D(9)	**Injection Vial**	52
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:21:26	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

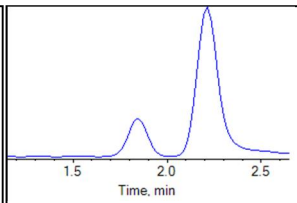
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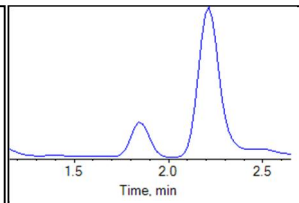
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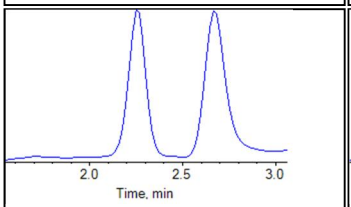
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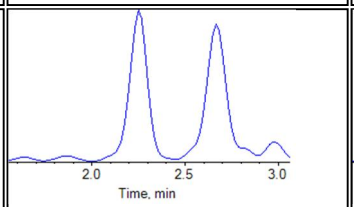
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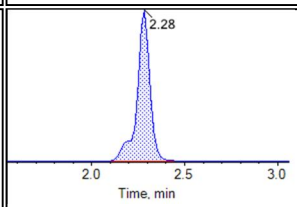
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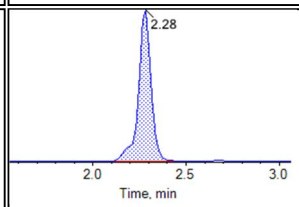
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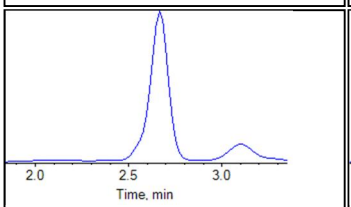
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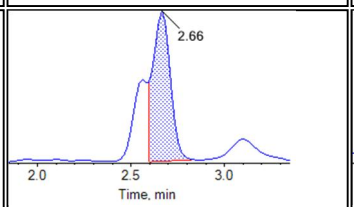
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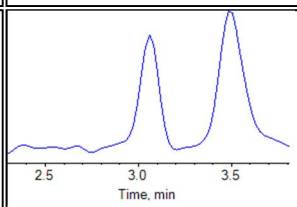
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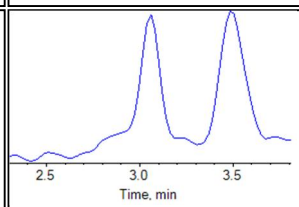
PFOA_1



PFOA_2



PFNA_1

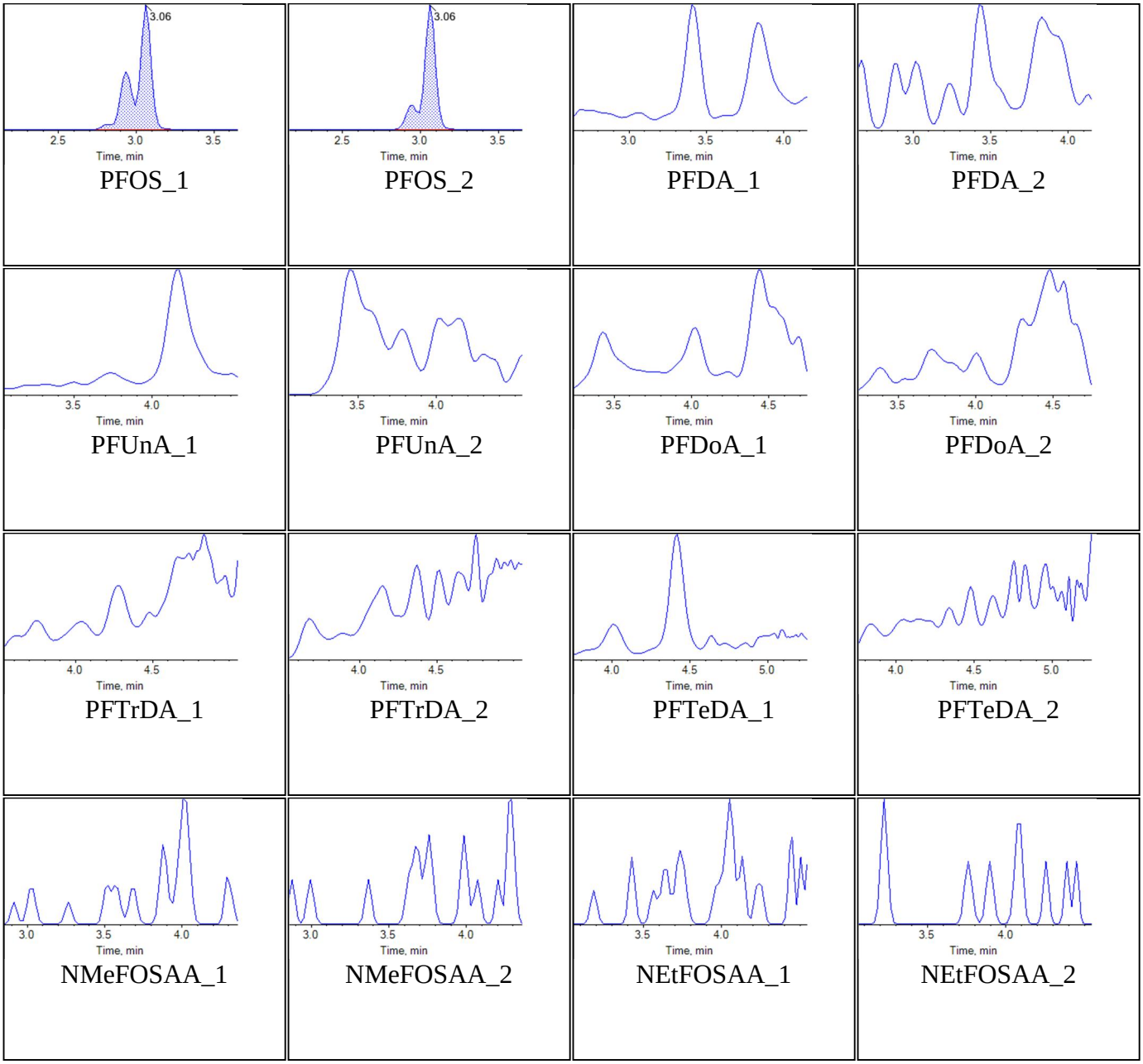


PFNA_2

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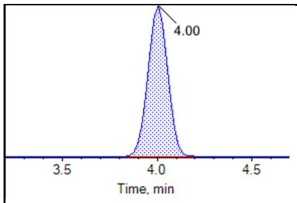


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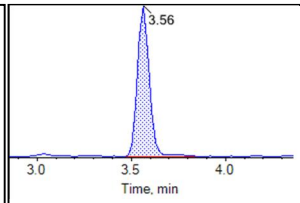
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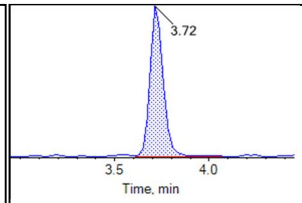
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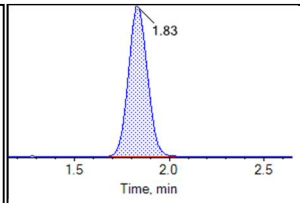
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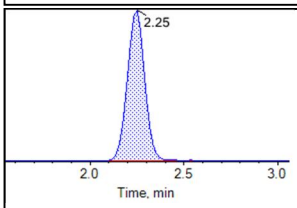
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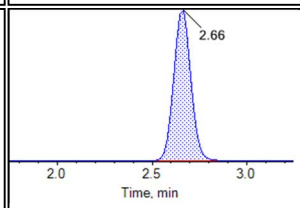
d5-EtFOSAA



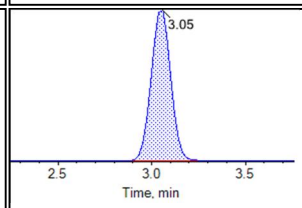
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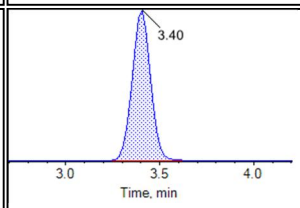
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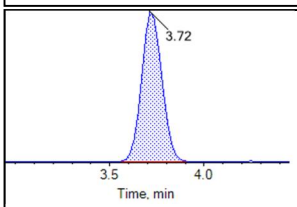
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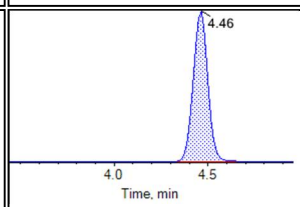
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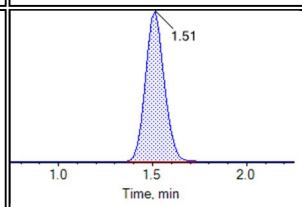
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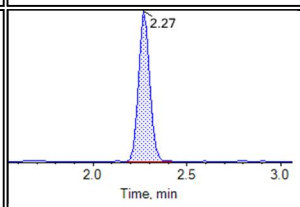
13C7-PFUnA



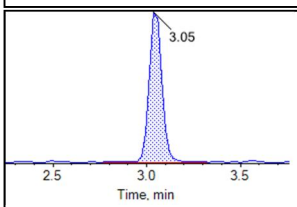
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13C3-PFBS



13C3-PFHxS



13C8-PFOS

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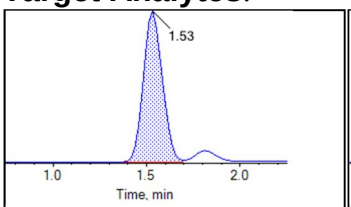
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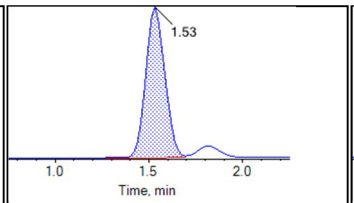
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Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:32:19	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

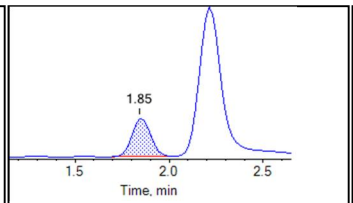
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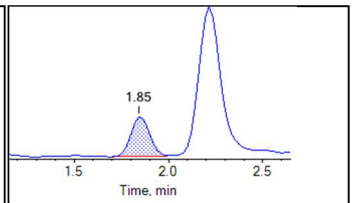
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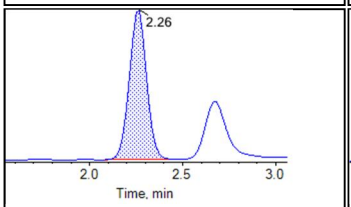
PFBS_2



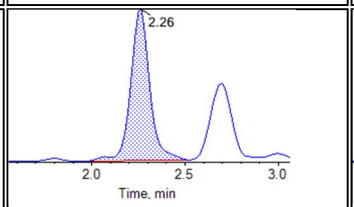
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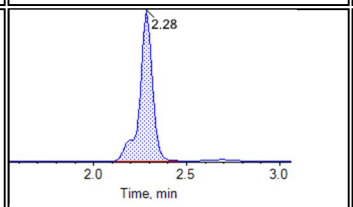
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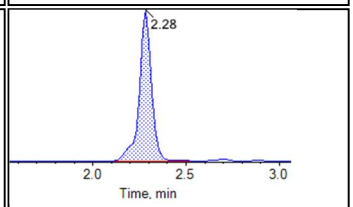
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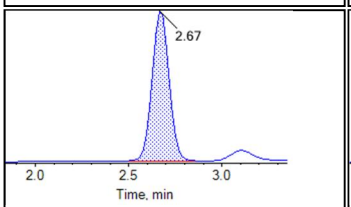
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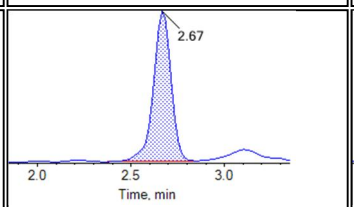
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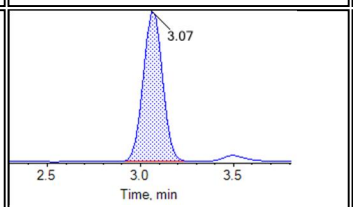
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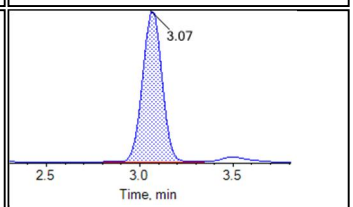
PFOA_1



PFOA_2



PFNA_1

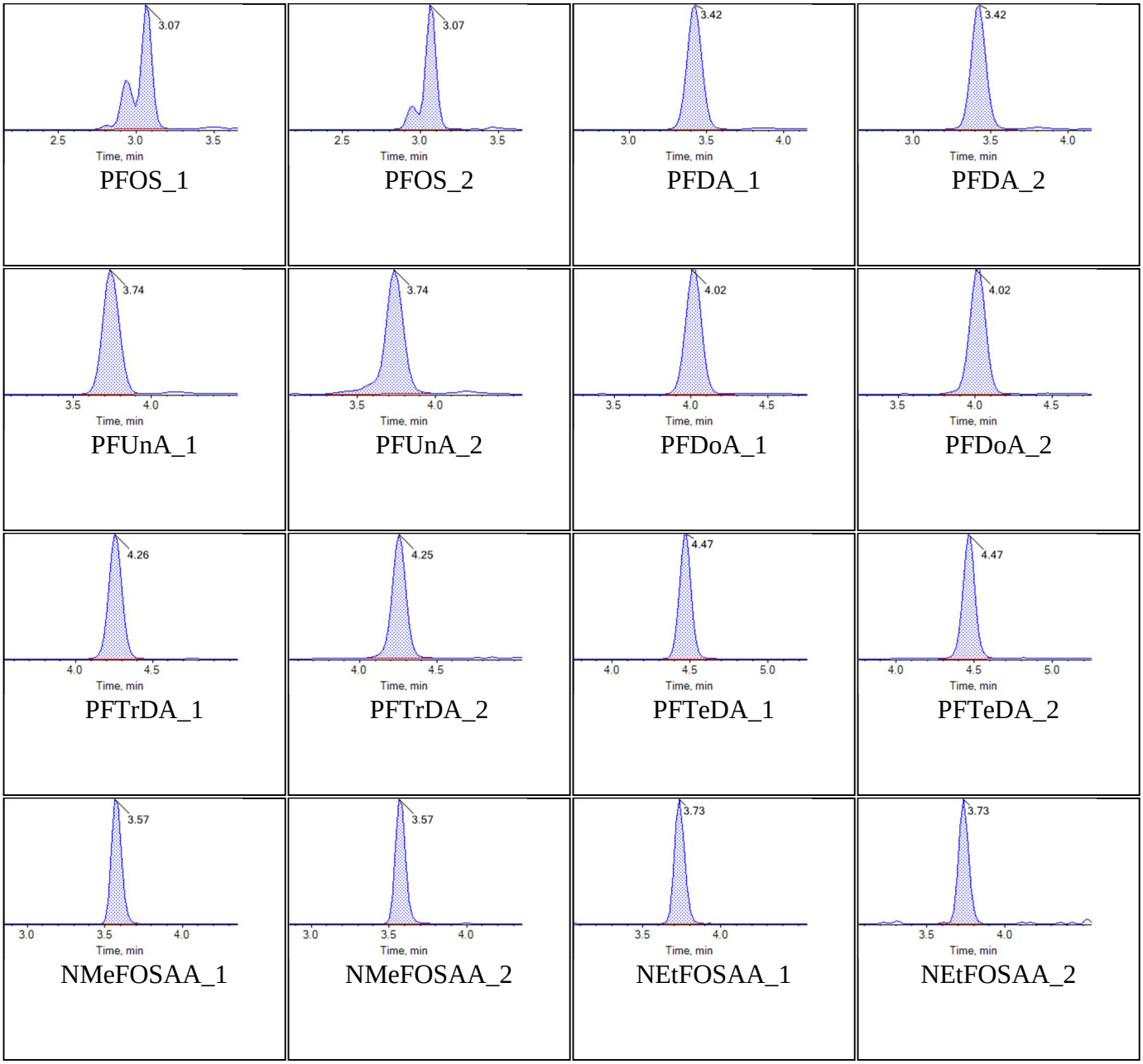


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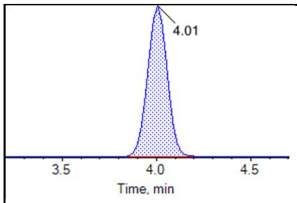


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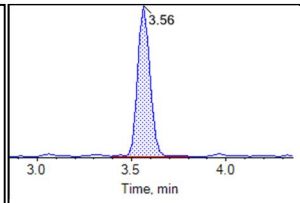
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Chromatogram Report

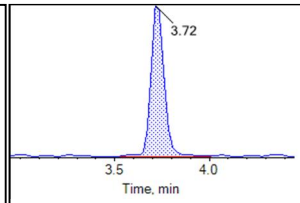
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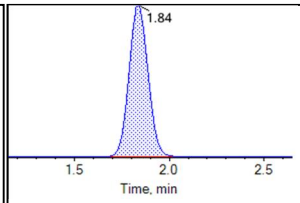
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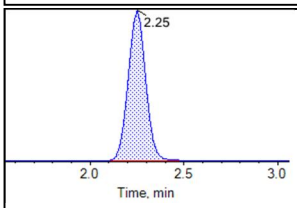
d3-MeFOSAA



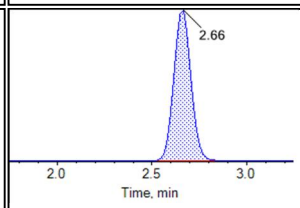
d5-EtFOSAA



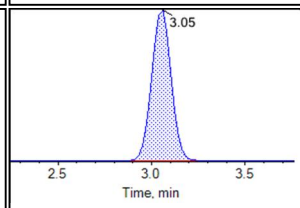
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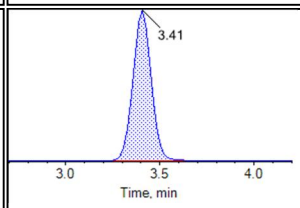
13C4-PFHpA



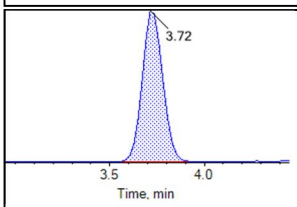
13C8-PFOA



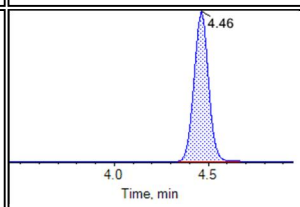
13C9-PFNA



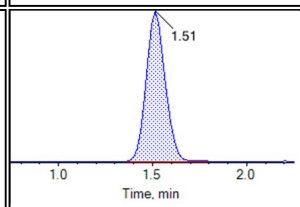
13C6-PFDA



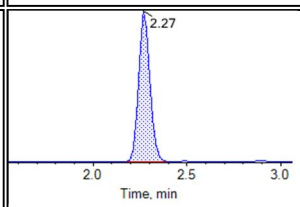
13C7-PFUnA



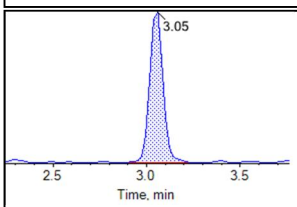
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

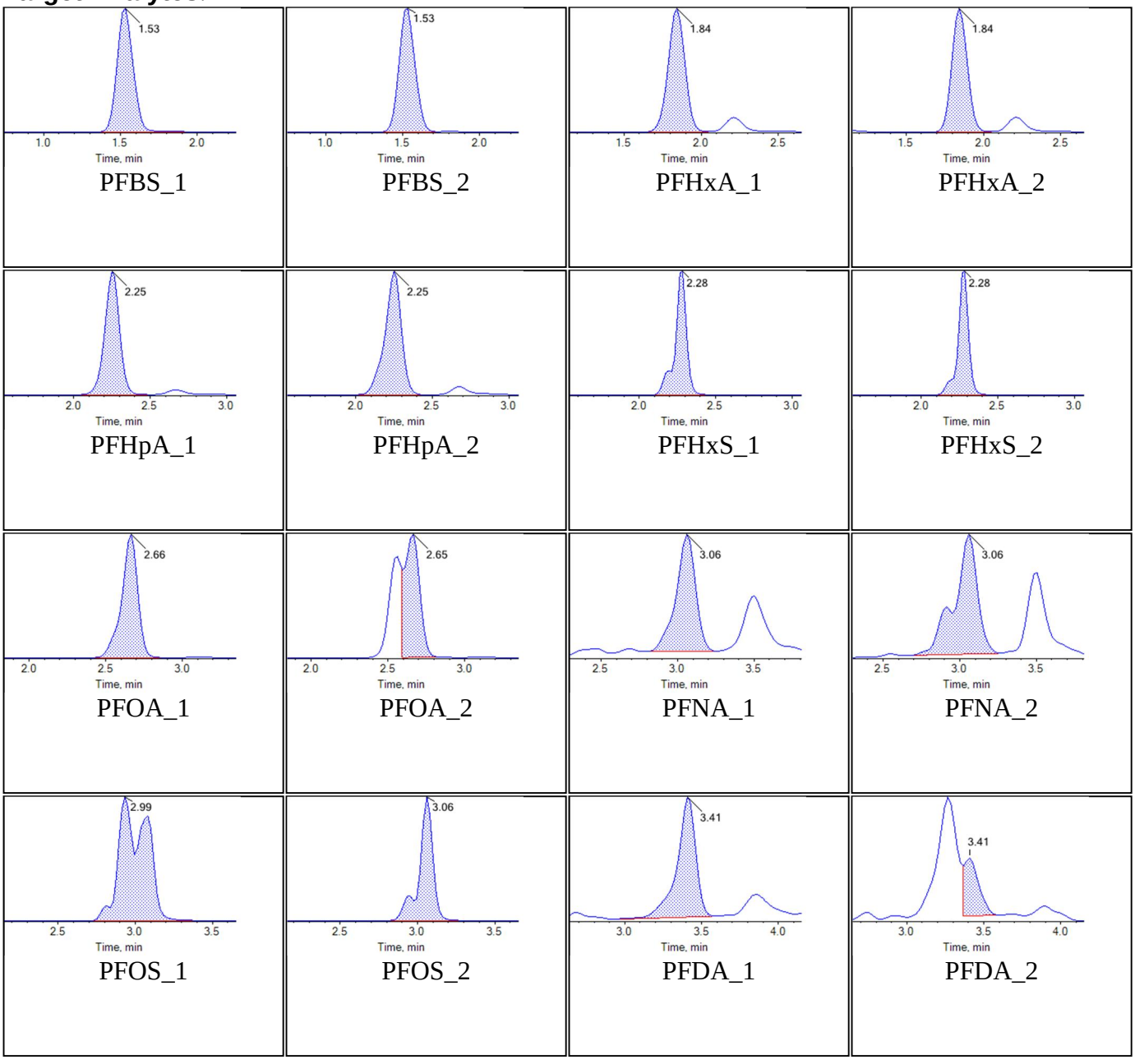
Chromatogram Report

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Printed: 25/10/2018 11:18:57 AM

Sample Name	J8443-FS(3)	**Injection Vial**	1
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:54:05	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

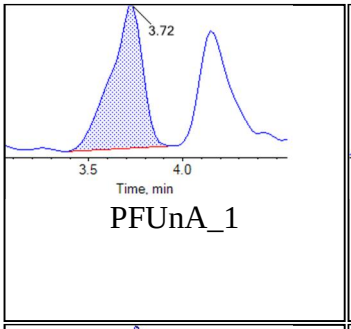
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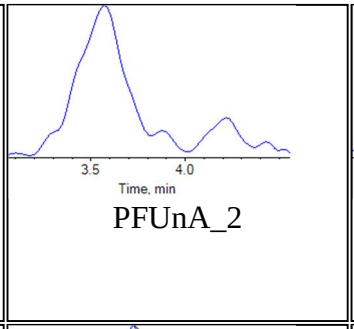
BATTELLE

Chromatogram Report

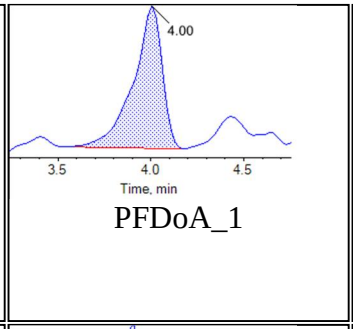
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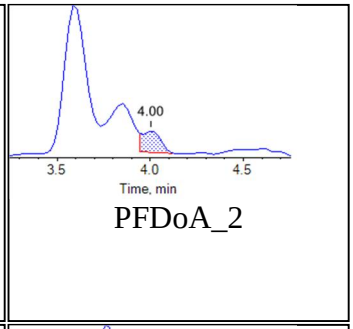
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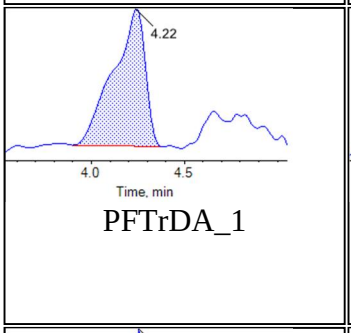
PFUnA_2



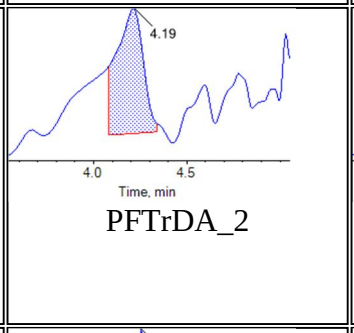
PFDoA_1



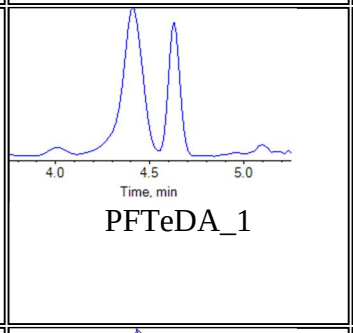
PFDoA_2



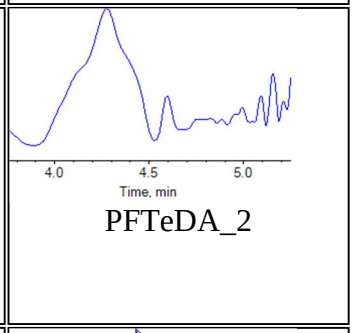
PFTrDA_1



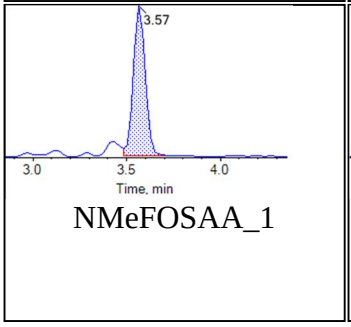
PFTrDA_2



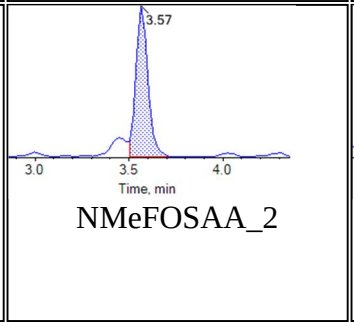
PFTeDA_1



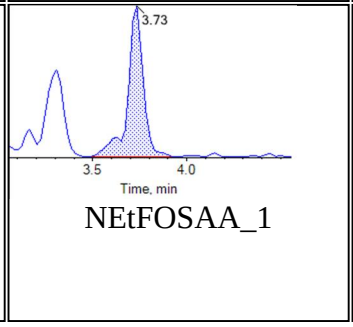
PFTeDA_2



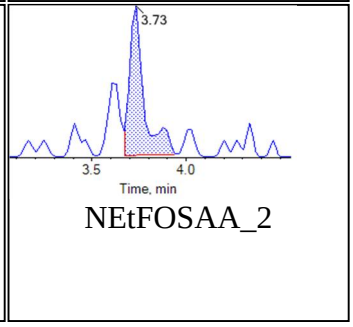
NMeFOSAA_1



NMeFOSAA_2

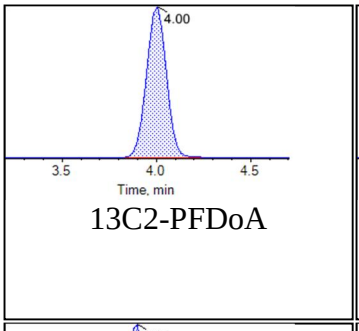


NEtFOSAA_1

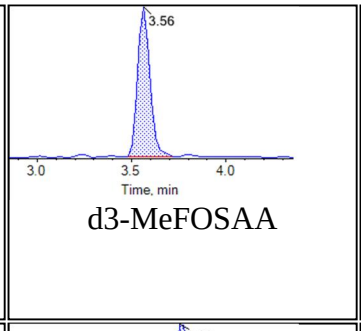


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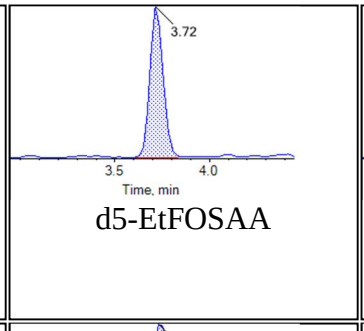
Internal Standards:



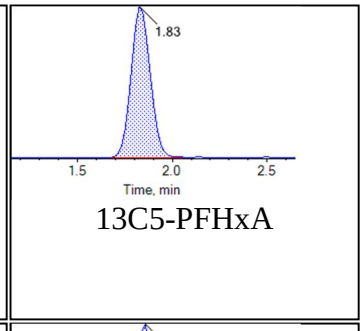
13C2-PFDoA



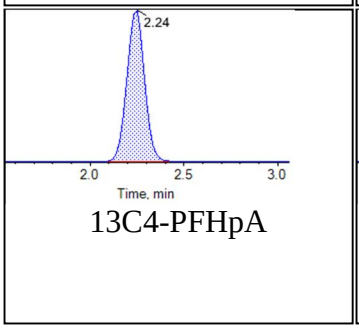
d3-MeFOSAA



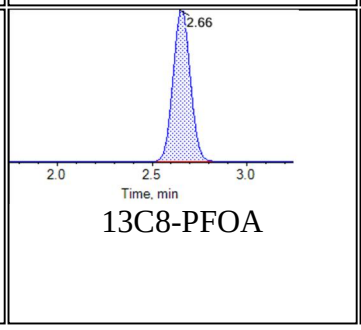
d5-EtFOSAA



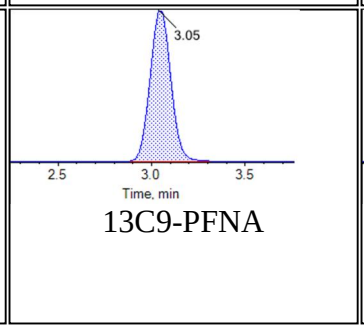
13C5-PFHxA



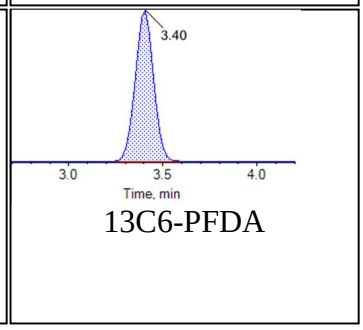
13C4-PFHpA



13C8-PFOA



13C9-PFNA

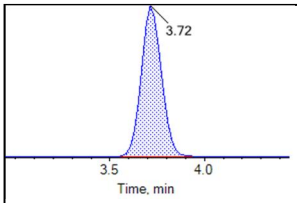


13C6-PFDA

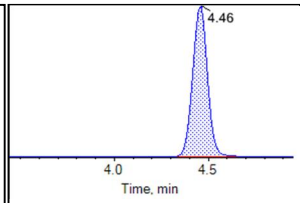
BATTELLE

Chromatogram Report

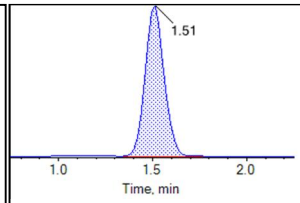
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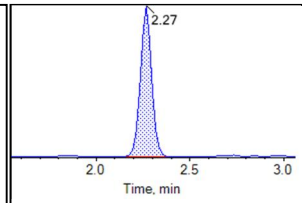
13C7-PFUnA



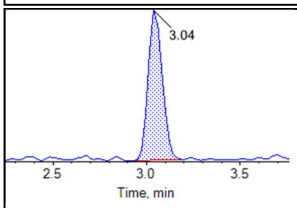
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

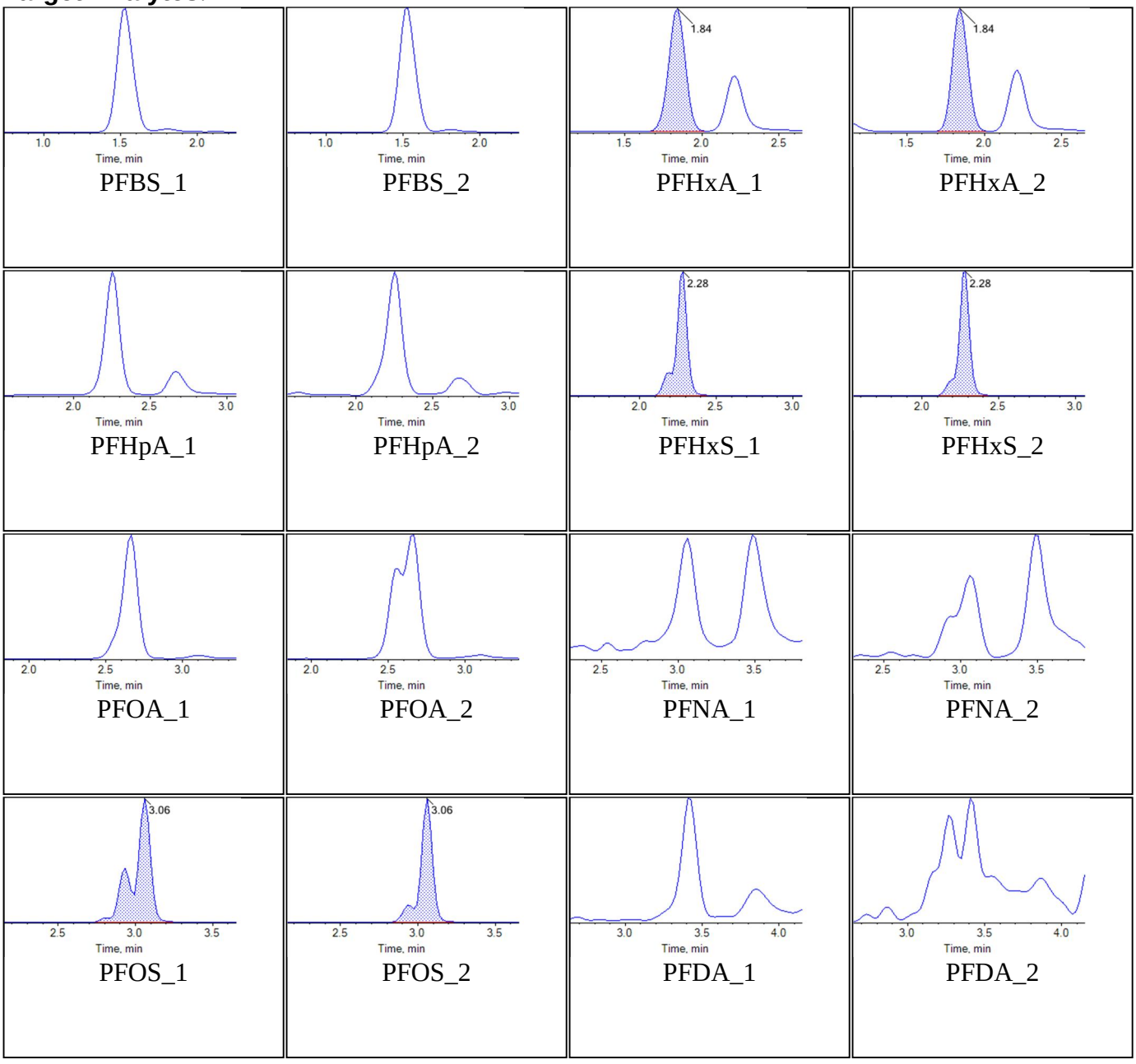
Chromatogram Report

Created with Analyst Reporter
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Sample Name	J8443-FS-D(5)	**Injection Vial**	2
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:04:56	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

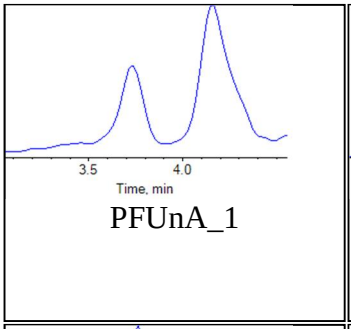
Target Analytes:



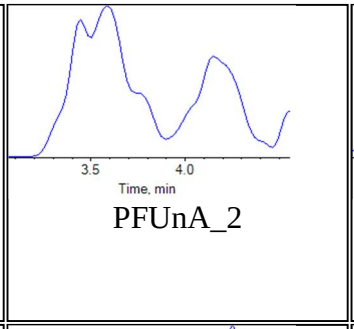
BATTELLE

Chromatogram Report

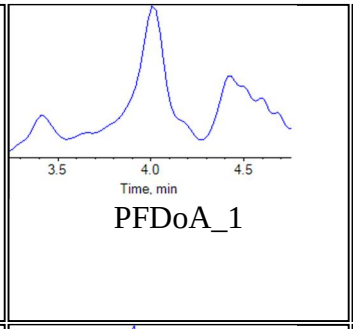
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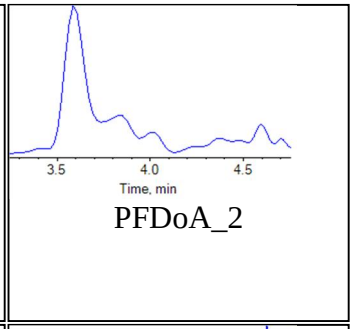
PFUnA_1



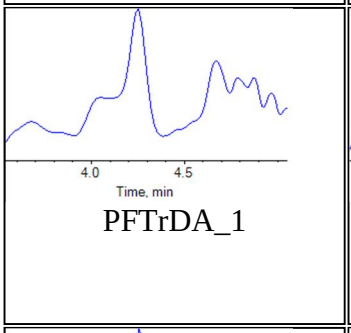
PFUnA_2



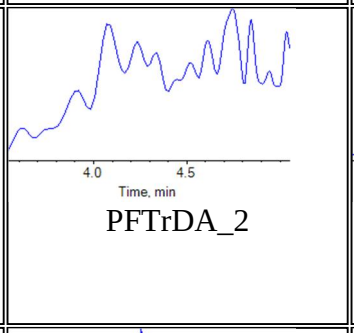
PFDoA_1



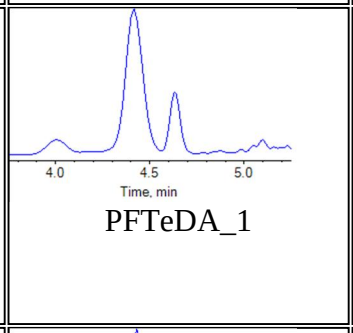
PFDoA_2



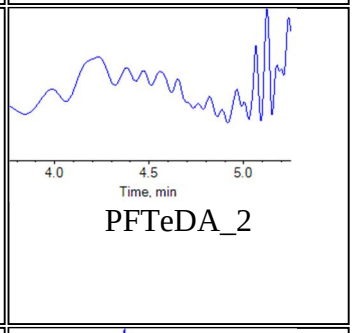
PFTrDA_1



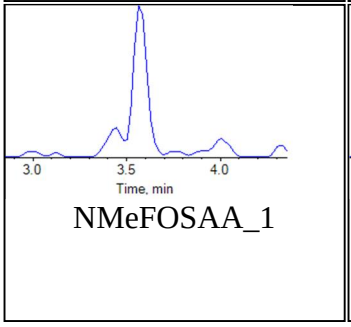
PFTrDA_2



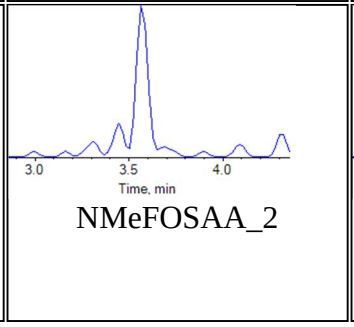
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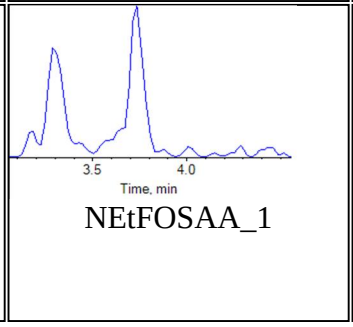
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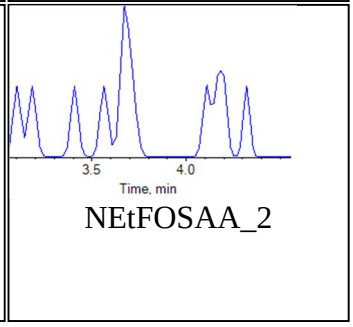
NMeFOSAA_1



NMeFOSAA_2

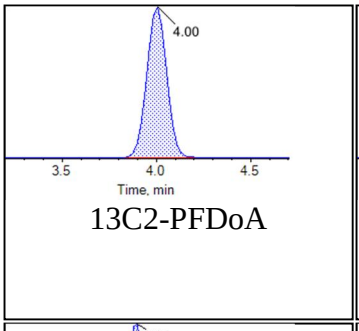


NEtFOSAA_1

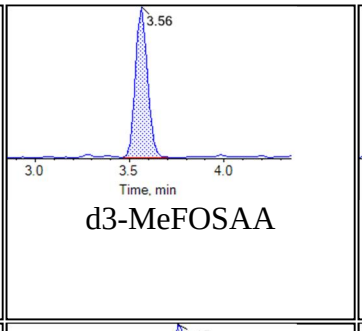


NEtFOSAA_2

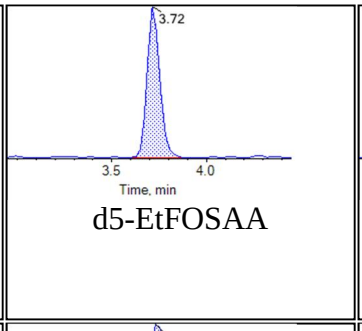
Internal Standards:



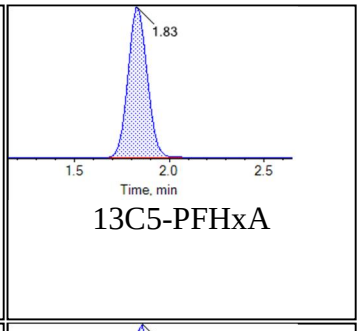
13C2-PFDoA



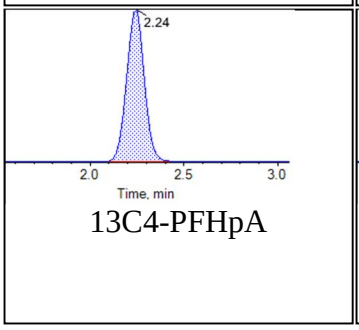
d3-MeFOSAA



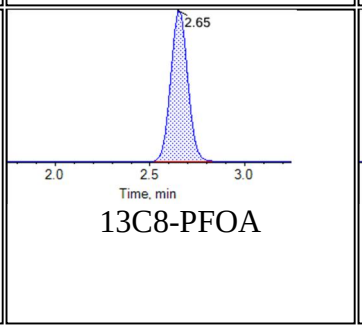
d5-EtFOSAA



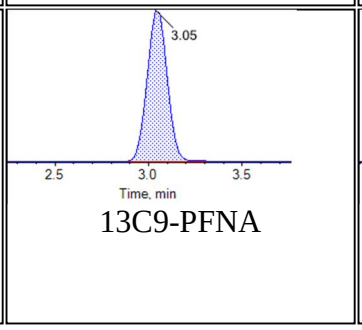
13C5-PFHxA



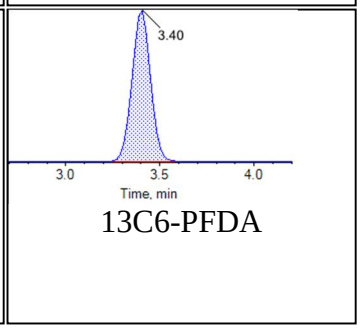
13C4-PFHpA



13C8-PFOA



13C9-PFNA

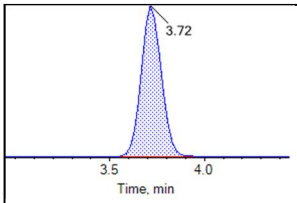


13C6-PFDA

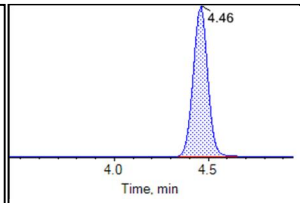
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Chromatogram Report

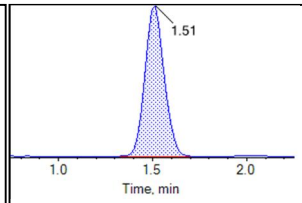
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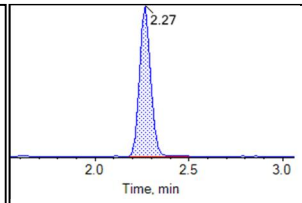
13C7-PFUnA



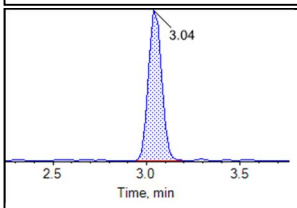
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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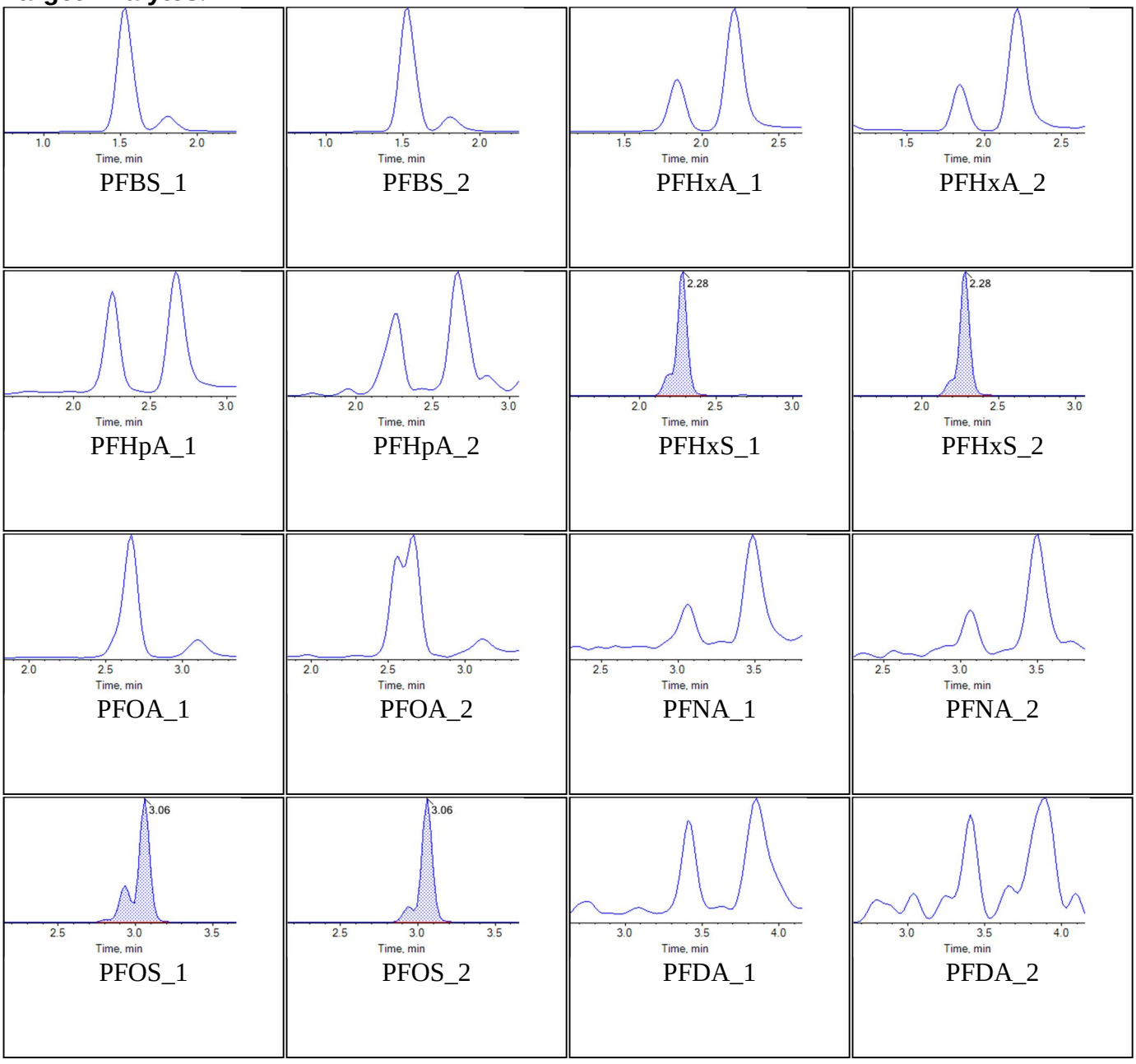
Chromatogram Report

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Sample Name	J8443-FS-D(7)	**Injection Vial**	3
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:15:48	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

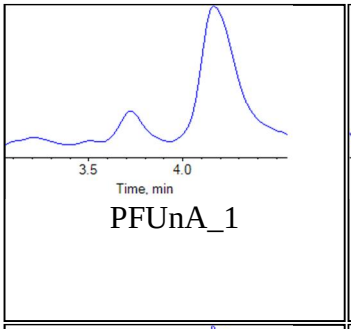
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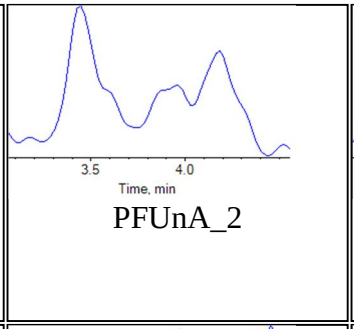
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Chromatogram Report

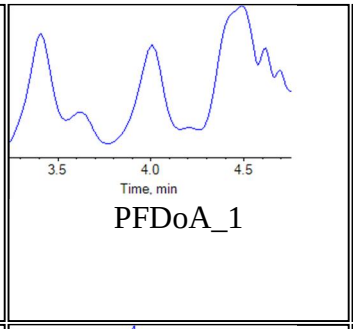
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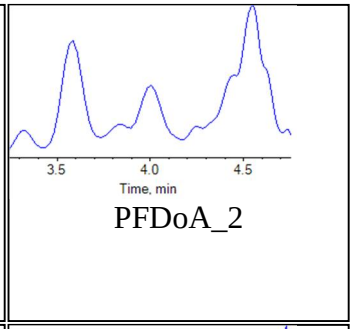
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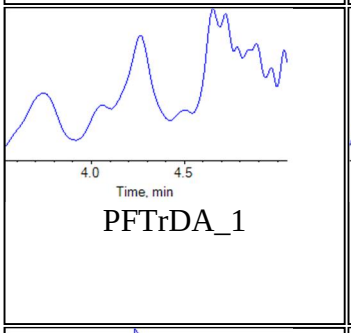
PFUnA_2



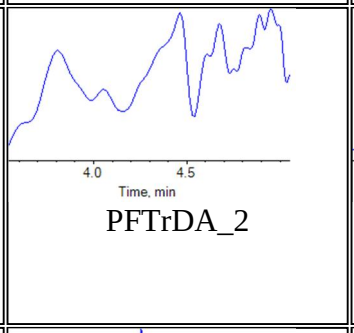
PFDoA_1



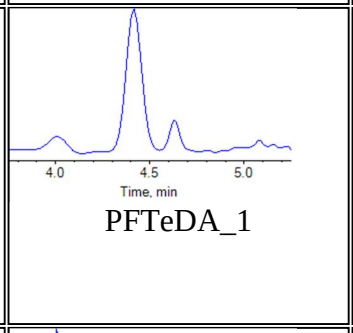
PFDoA_2



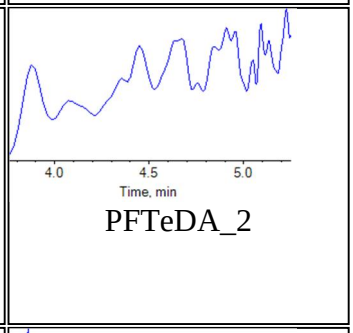
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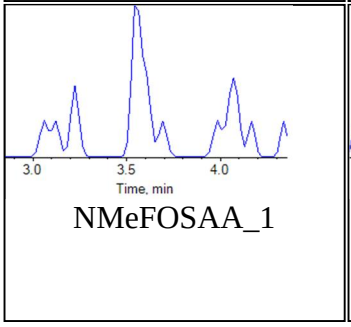
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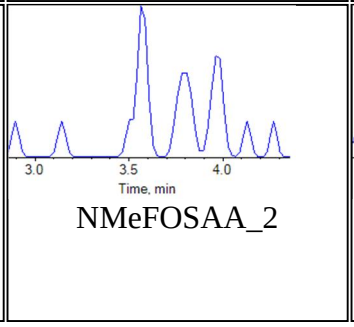
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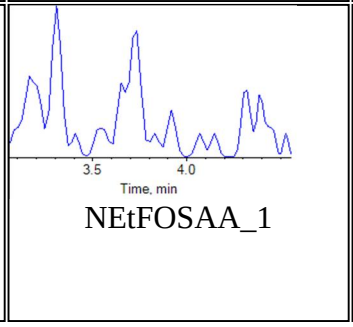
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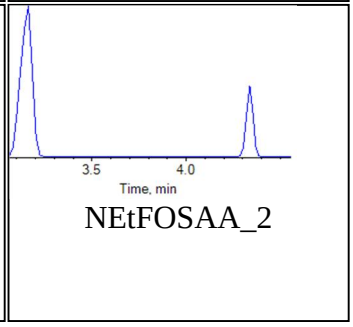
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NMeFOSAA_2

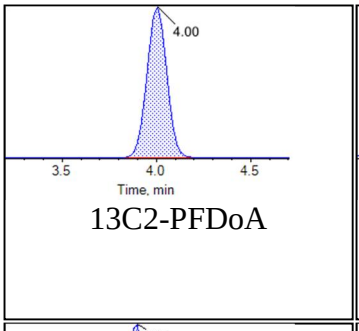


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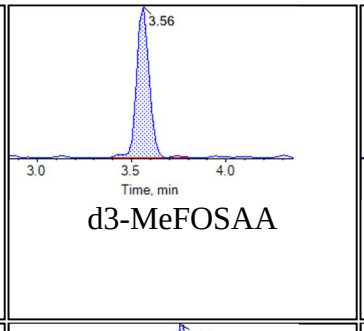


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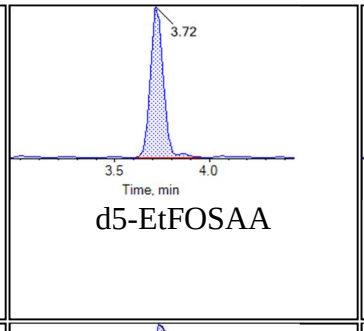
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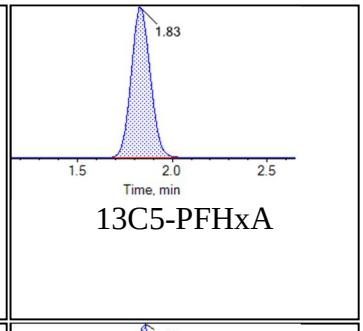
13C2-PFDoA



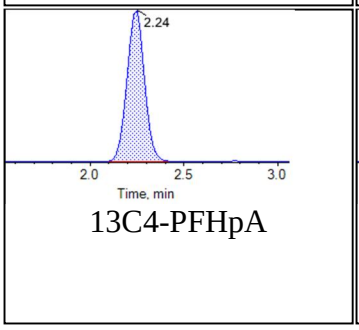
d3-MeFOSAA



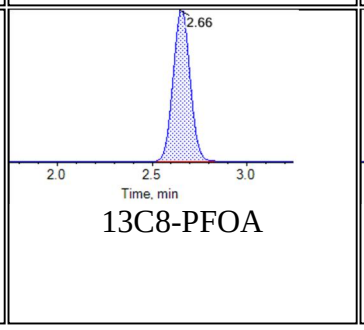
d5-EtFOSAA



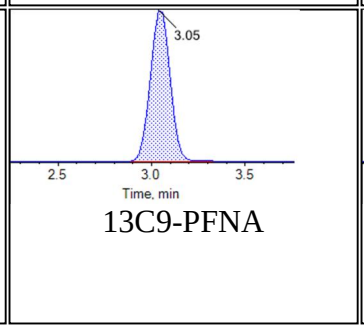
13C5-PFHxA



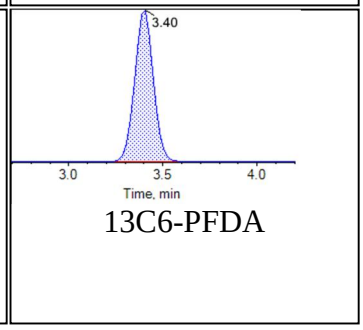
13C4-PFHpA



13C8-PFOA



13C9-PFNA

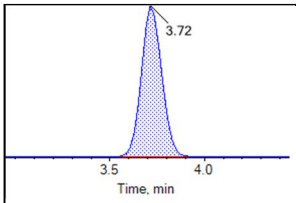


13C6-PFDA

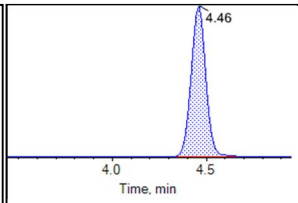
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Chromatogram Report

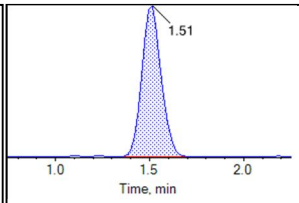
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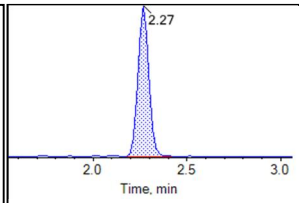
13C7-PFUnA



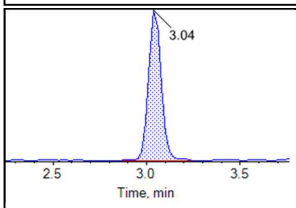
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

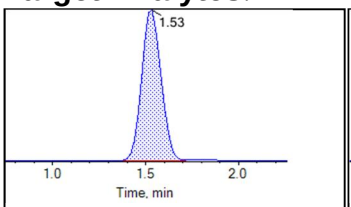
Chromatogram Report

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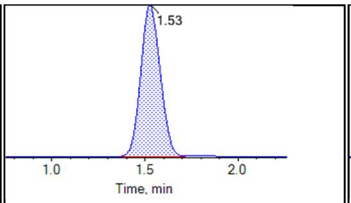
Sample Name	J8444-FS-D(7)	**Injection Vial**	4
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:26:39	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

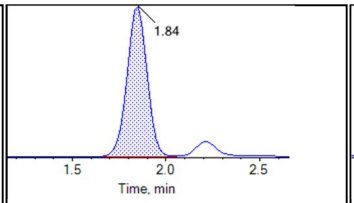
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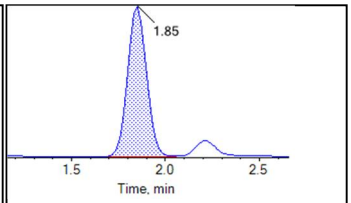
PFBS_1



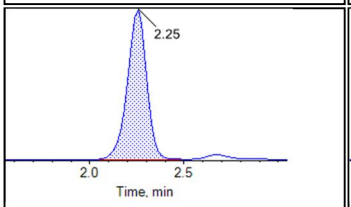
PFBS_2



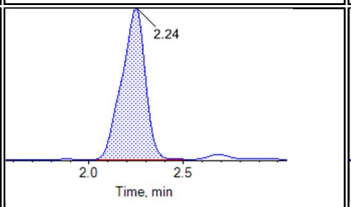
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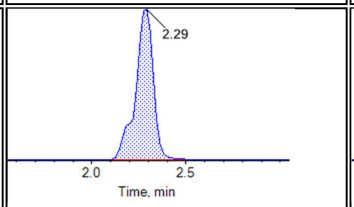
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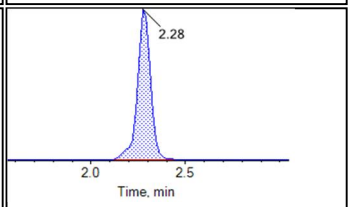
PFHpA_1



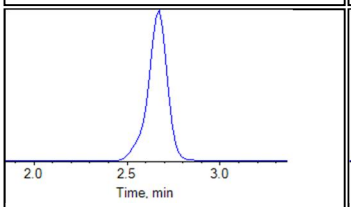
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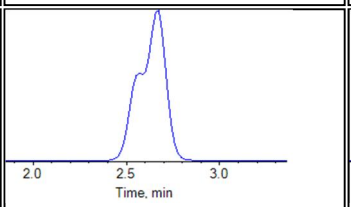
PFHxS_1



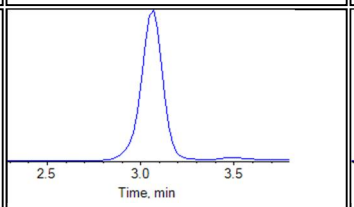
PFHxS_2



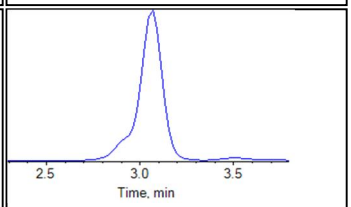
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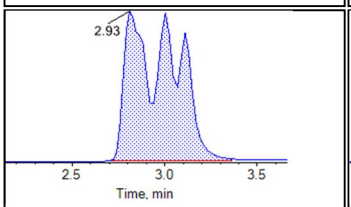
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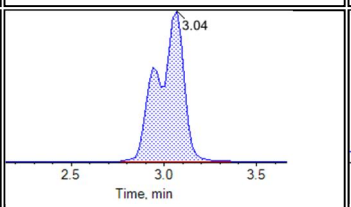
PFNA_1



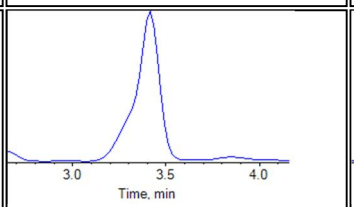
PFNA_2



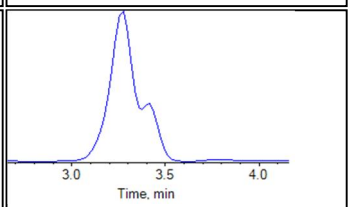
PFOS_1



PFOS_2



PFDA_1

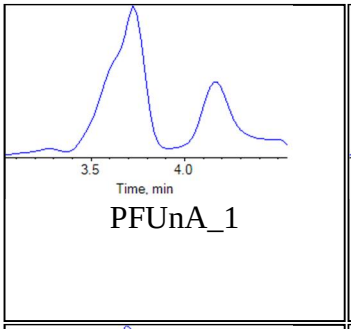


PFDA_2

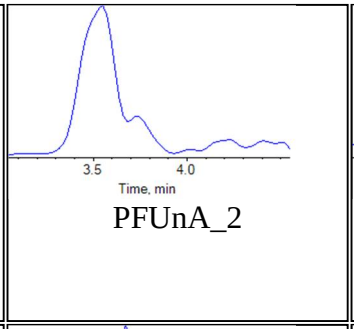
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Chromatogram Report

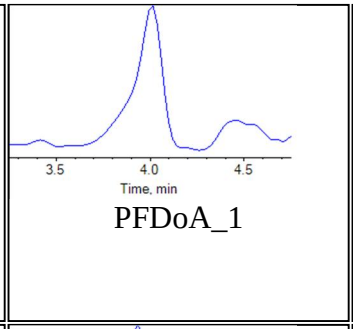
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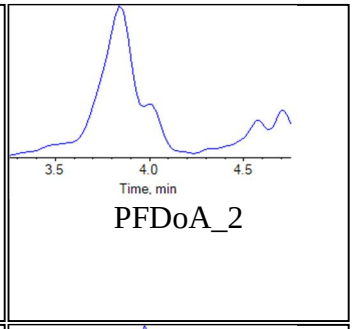
PFUnA_1



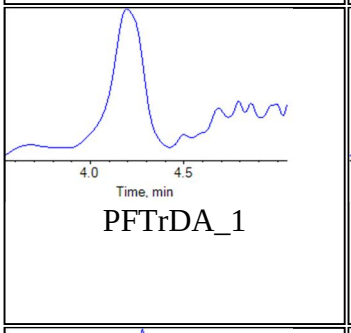
PFUnA_2



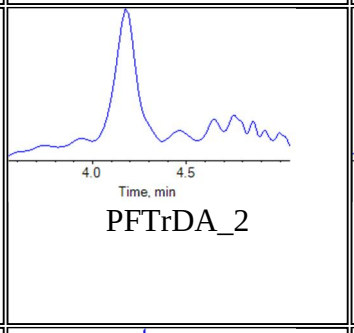
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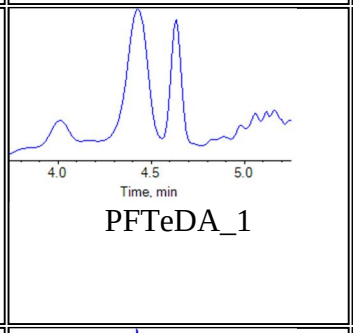
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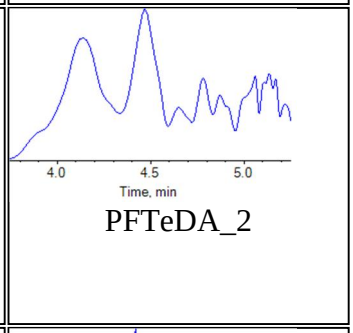
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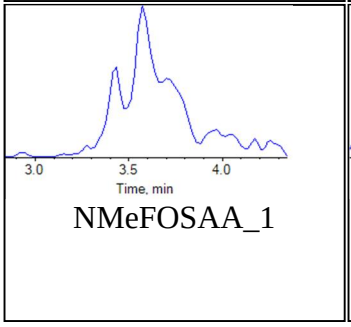
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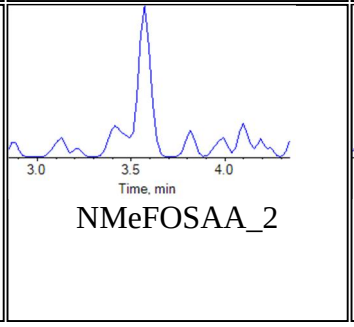
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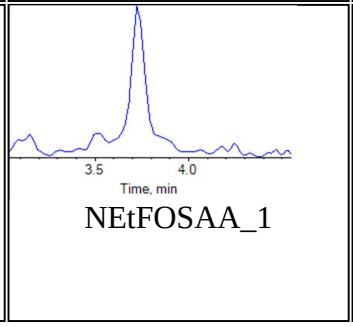
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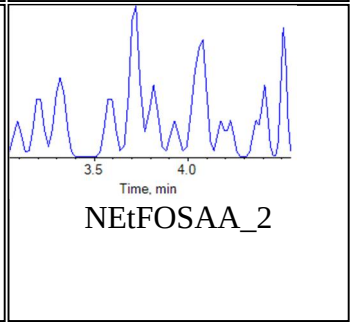
NMeFOSAA_1



NMeFOSAA_2

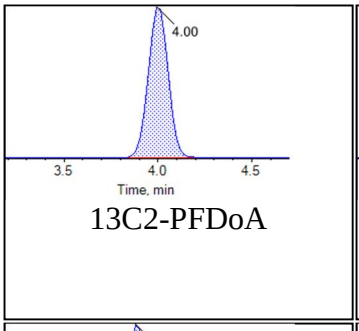


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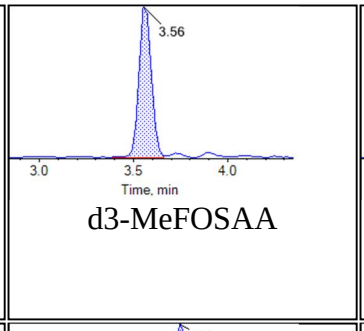


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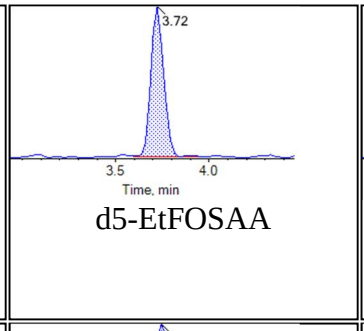
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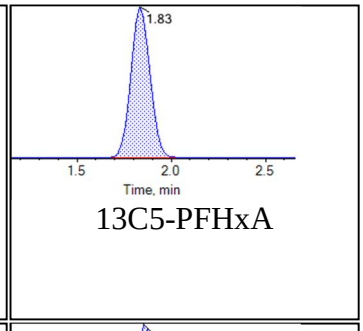
13C2-PFDoA



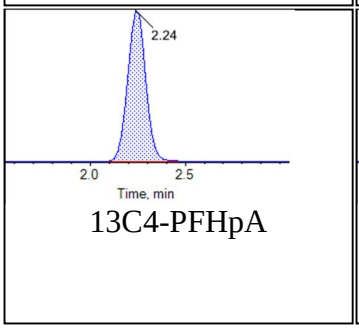
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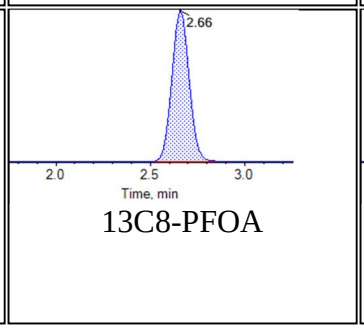
d5-EtFOSAA



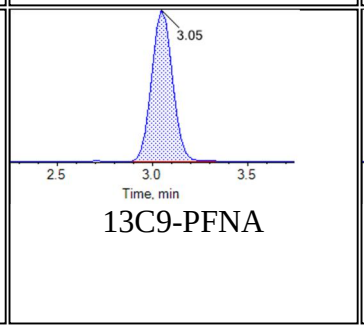
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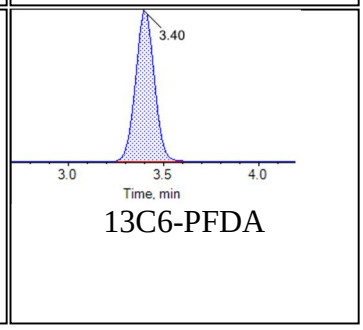
13C4-PFHpA



13C8-PFOA



13C9-PFNA

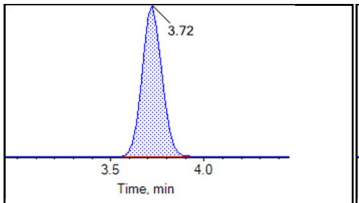


13C6-PFDA

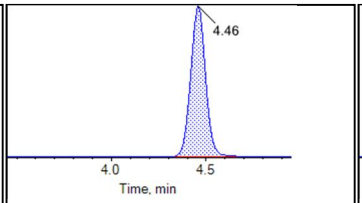
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Chromatogram Report

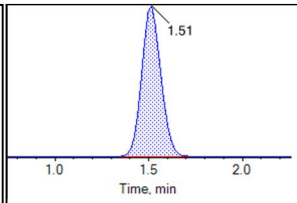
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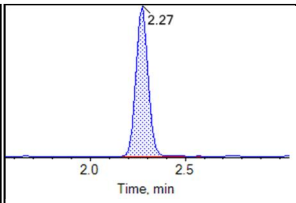
13C7-PFUnA



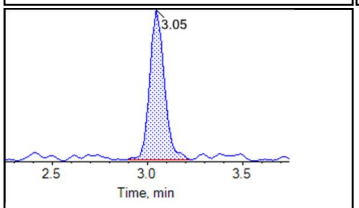
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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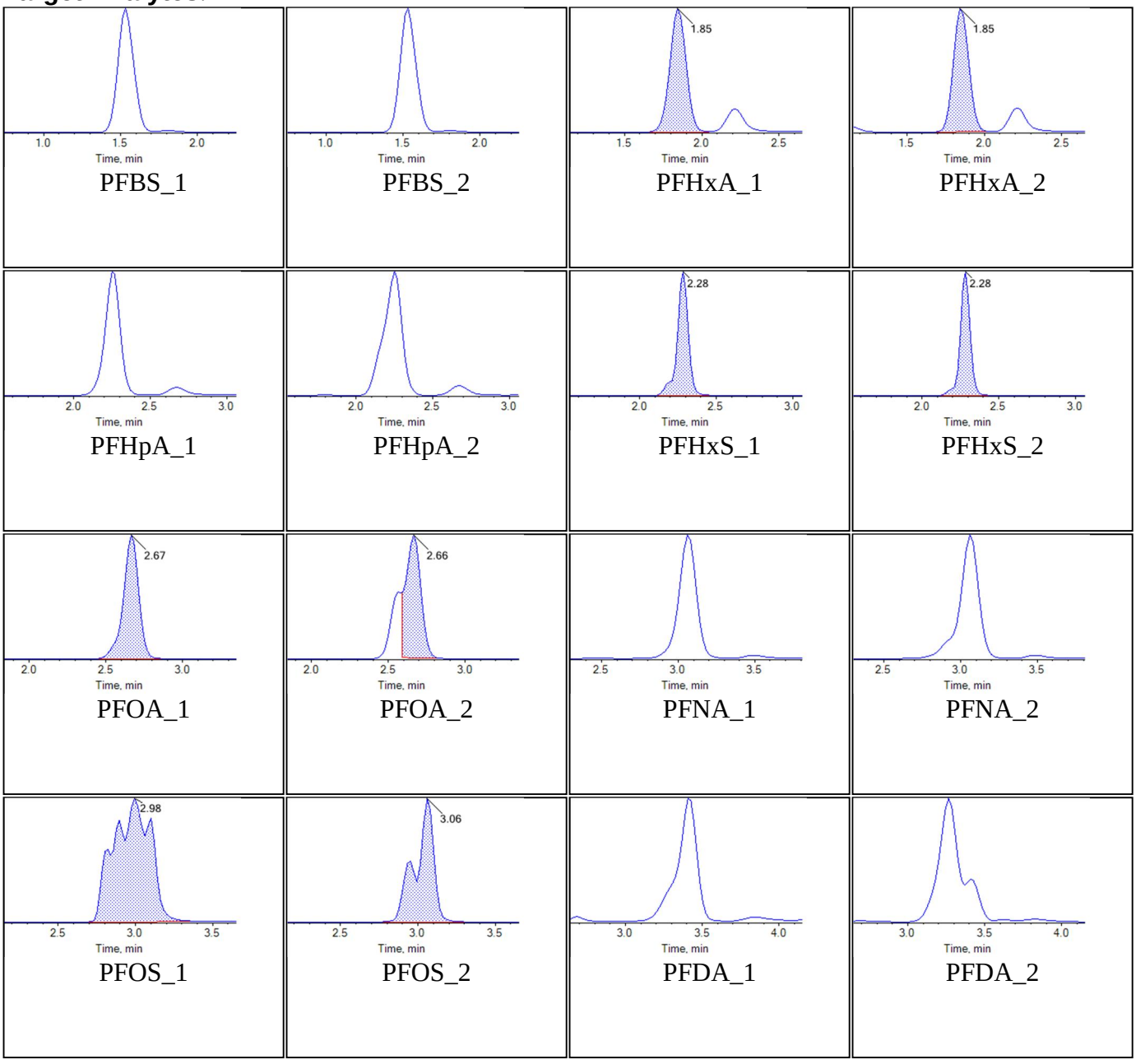
Chromatogram Report

Created with Analyst Reporter
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Sample Name	J8444-FS-D(9)	**Injection Vial**	5
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:37:32	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

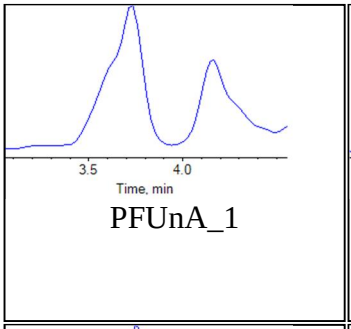
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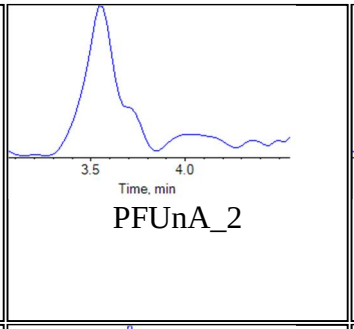
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Chromatogram Report

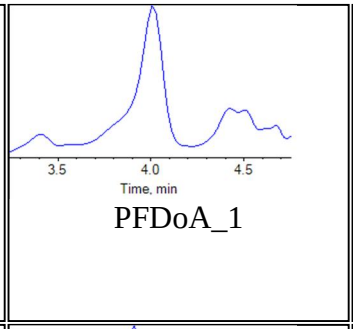
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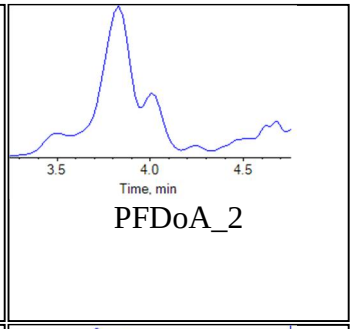
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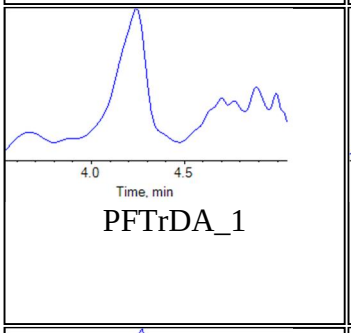
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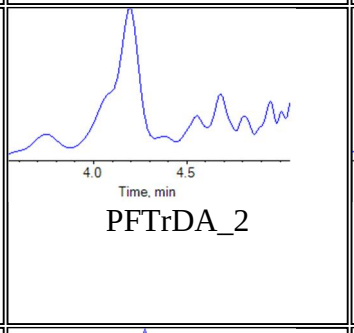
PFDoA_1



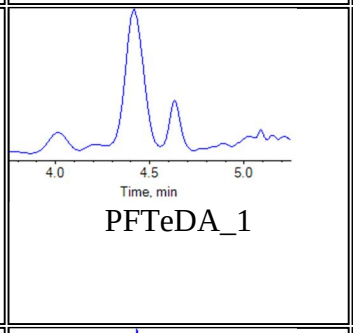
PFDoA_2



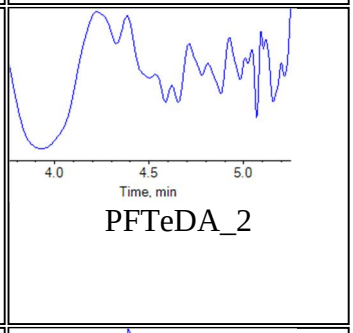
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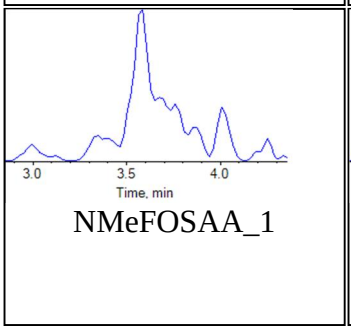
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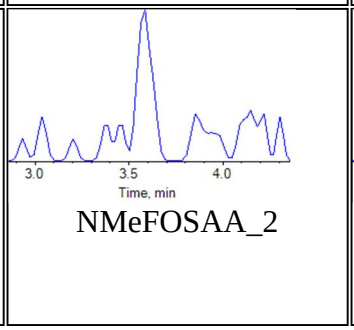
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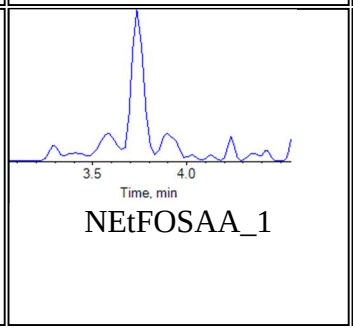
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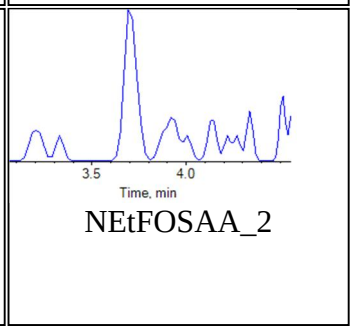
NMeFOSAA_1



NMeFOSAA_2

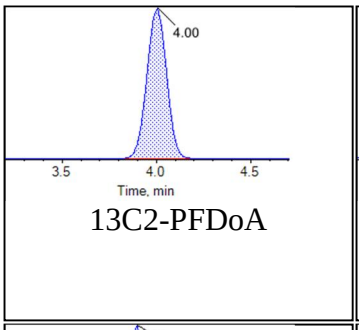


NEtFOSAA_1

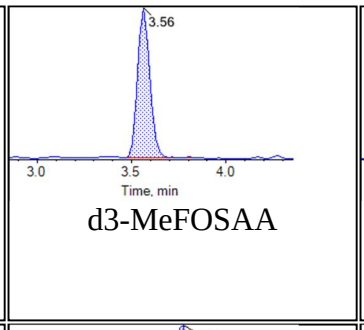


NEtFOSAA_2

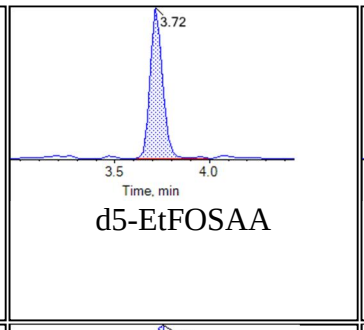
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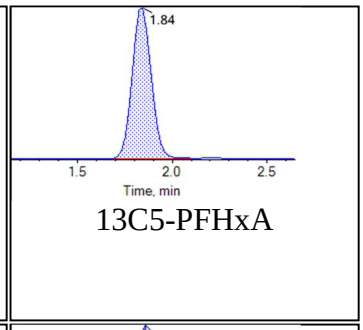
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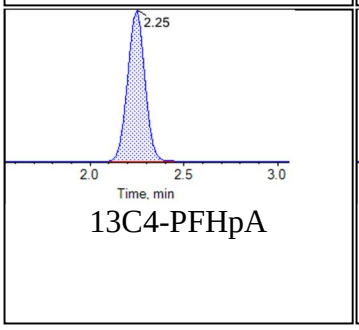
d3-MeFOSAA



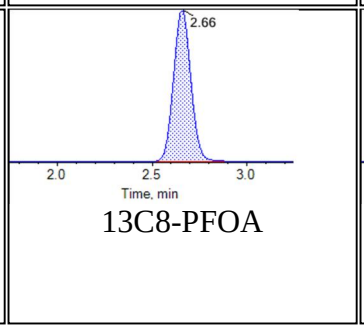
d5-EtFOSAA



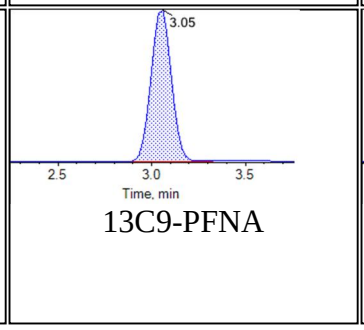
13C5-PFHxA



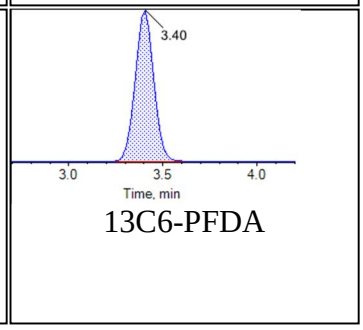
13C4-PFHpA



13C8-PFOA



13C9-PFNA

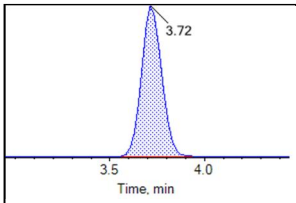


13C6-PFDA

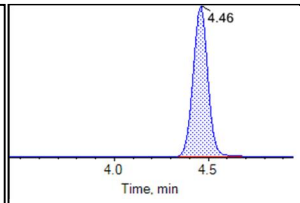
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Chromatogram Report

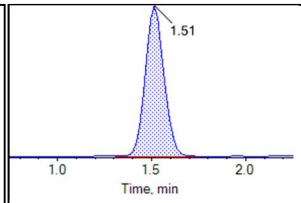
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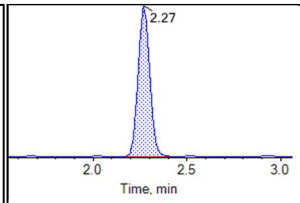
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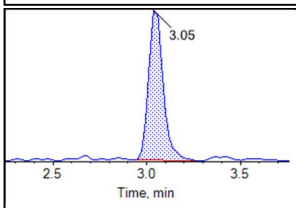
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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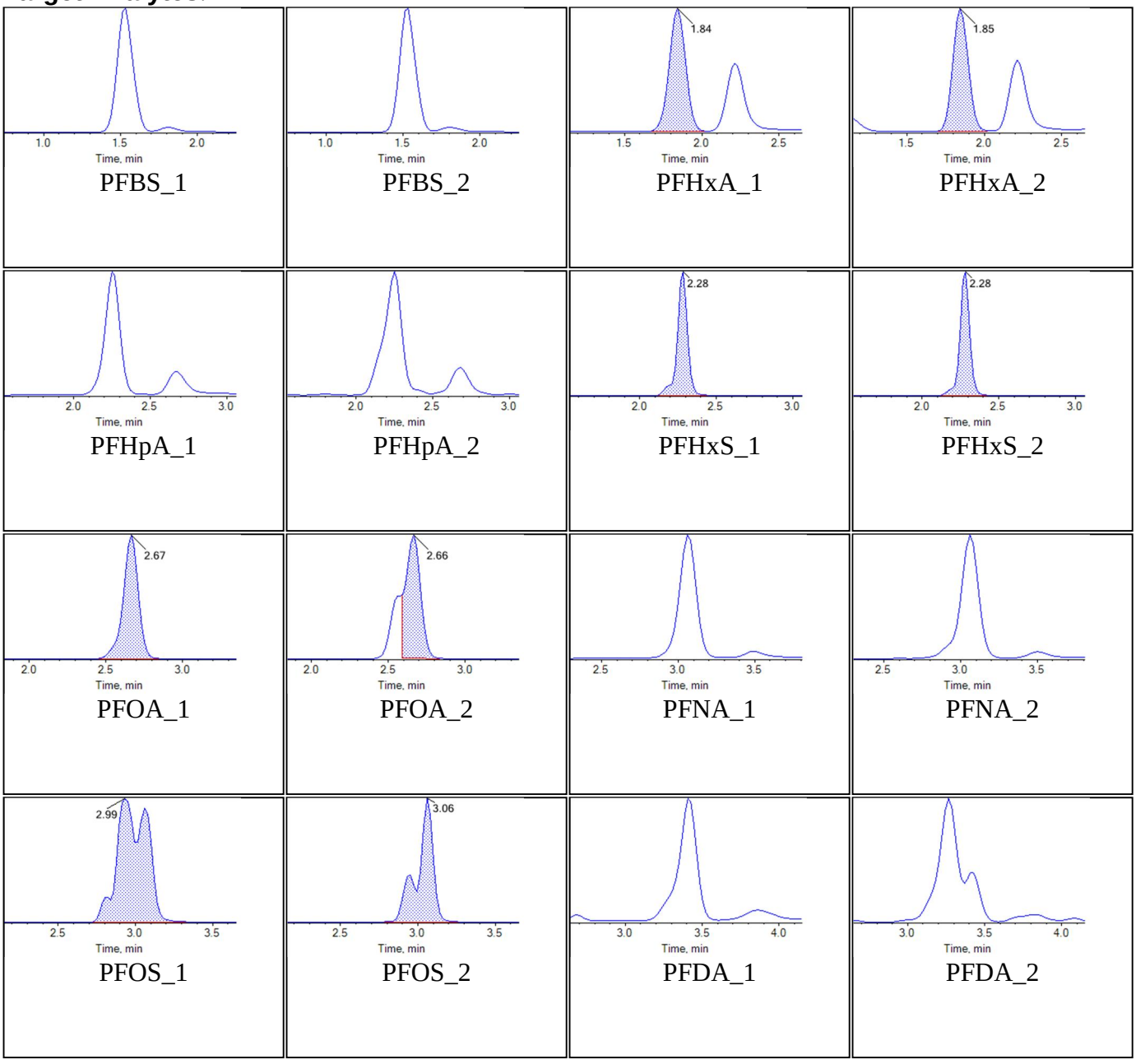
Chromatogram Report

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Printed: 25/10/2018 11:19:24 AM

Sample Name	J8444-FS-D(11)	**Injection Vial**	6
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:48:24	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

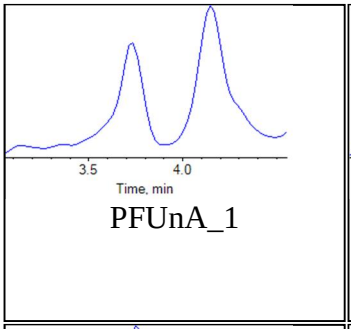
Target Analytes:



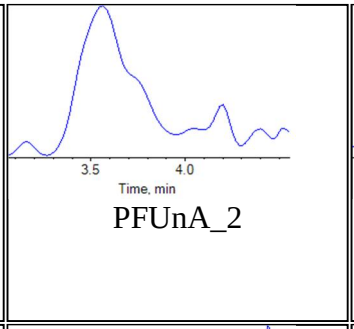
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Chromatogram Report

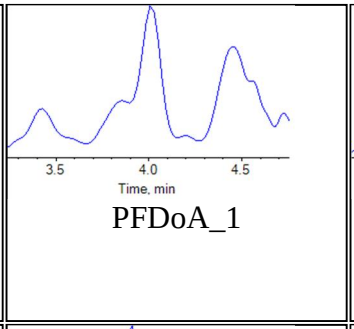
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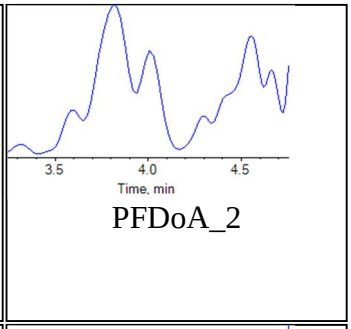
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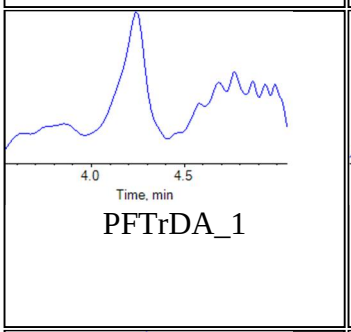
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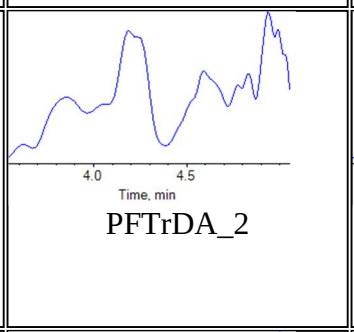
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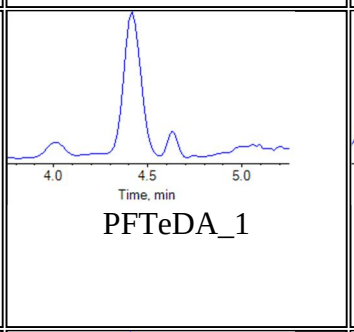
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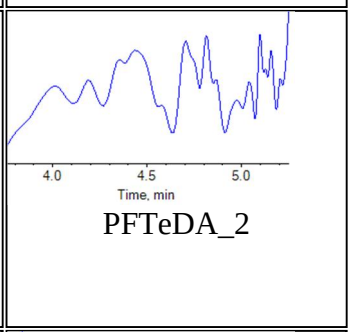
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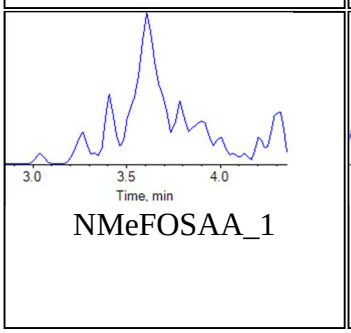
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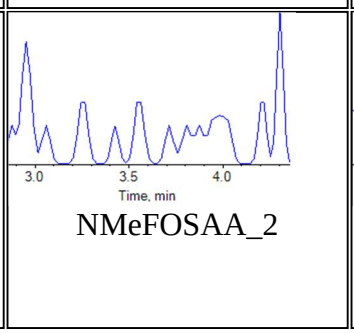
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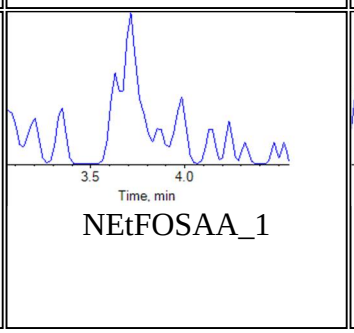
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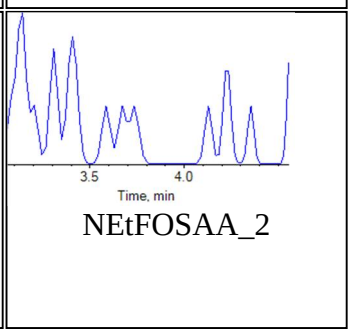
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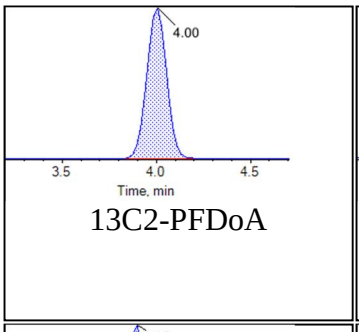


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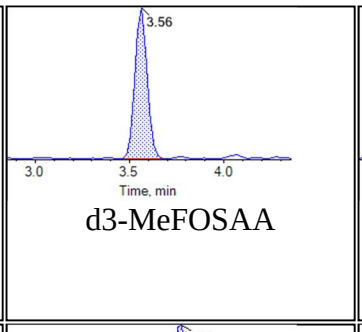


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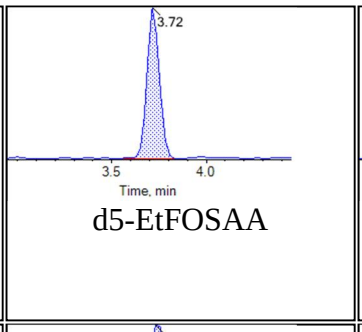
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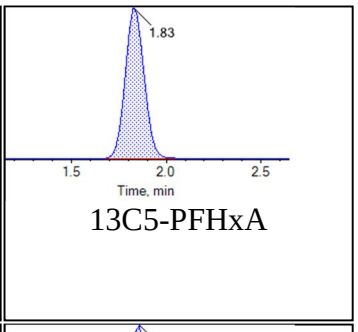
13C2-PFDoA



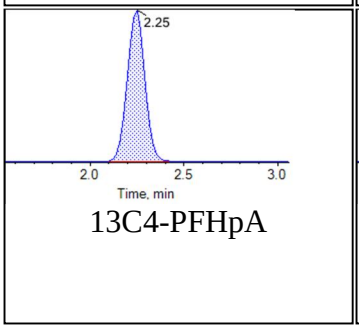
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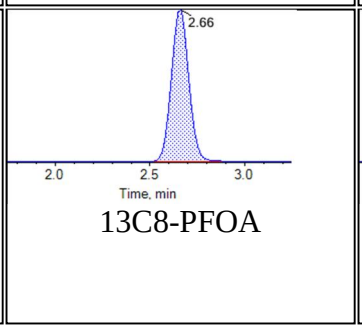
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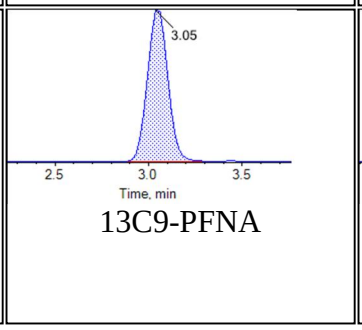
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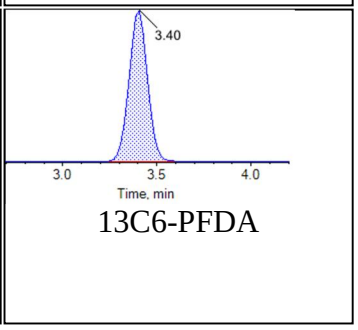
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13C8-PFOA



13C9-PFNA

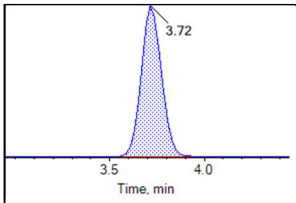


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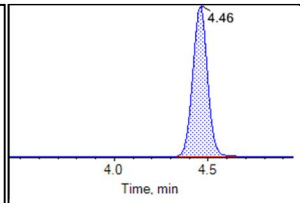
BATTELLE

Chromatogram Report

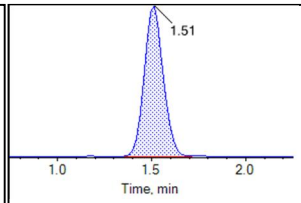
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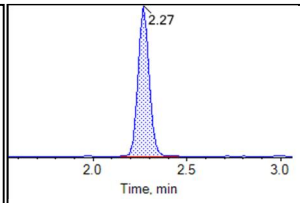
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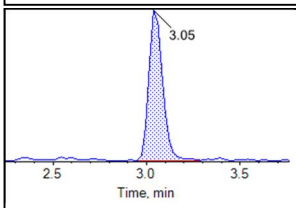
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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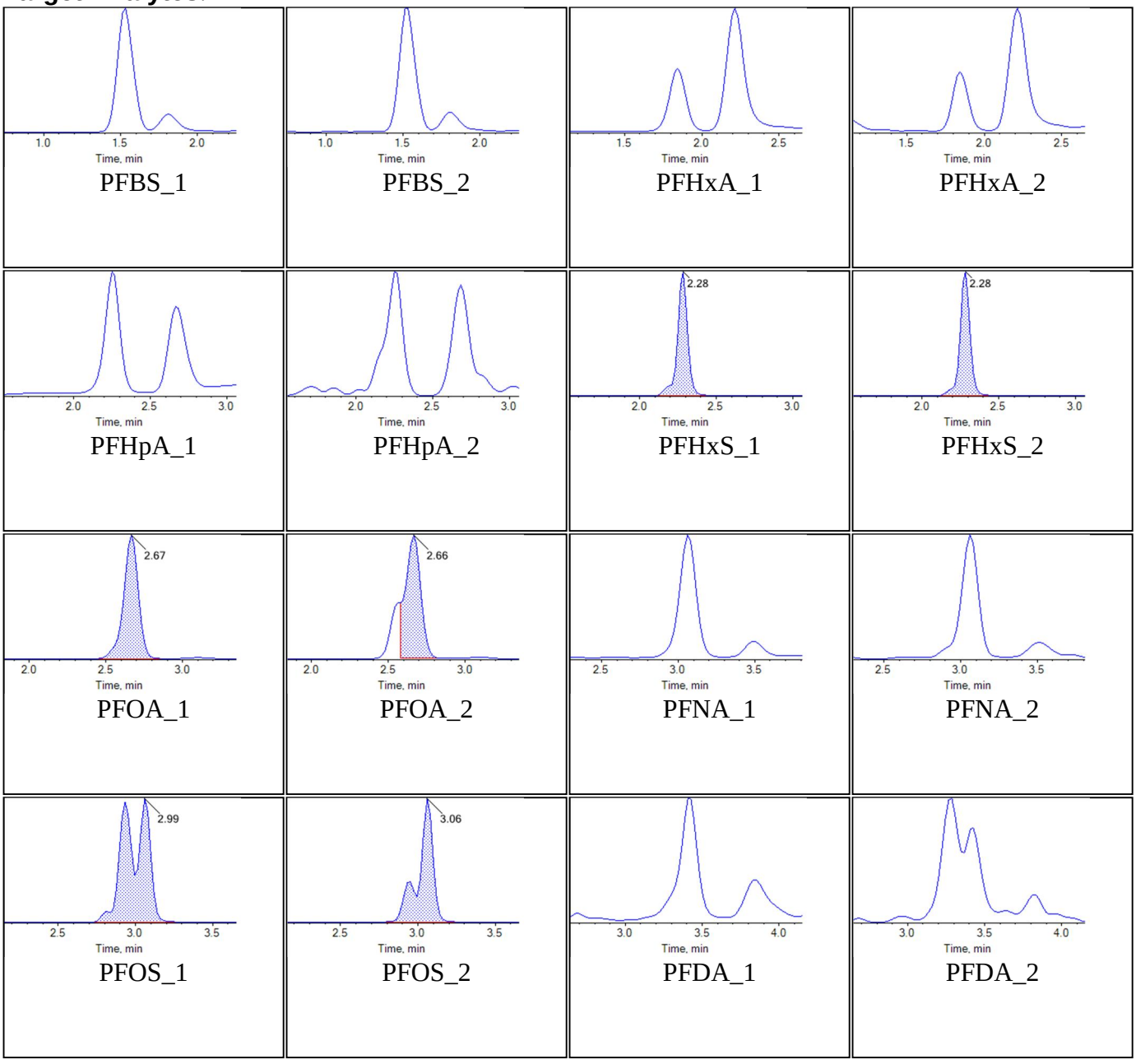
Chromatogram Report

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Sample Name	J8444-FS-D(13)	**Injection Vial**	7
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:59:16	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

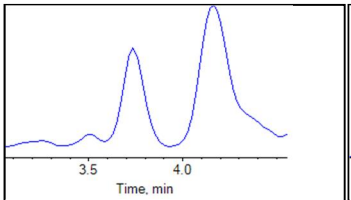
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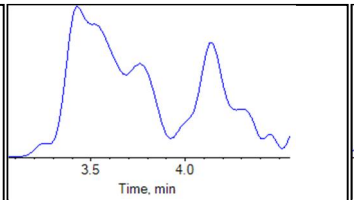
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Chromatogram Report

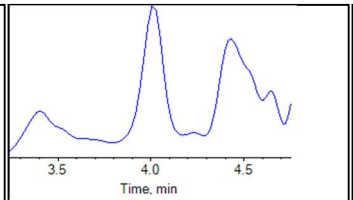
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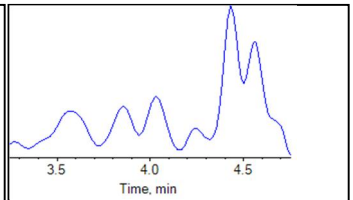
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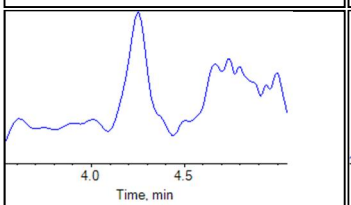
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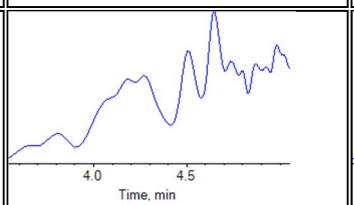
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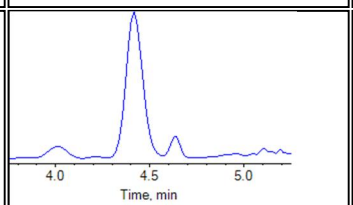
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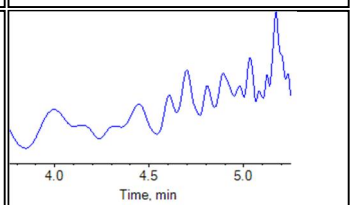
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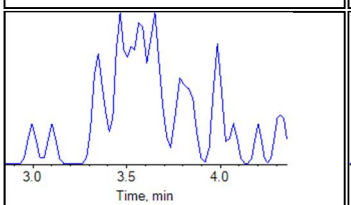
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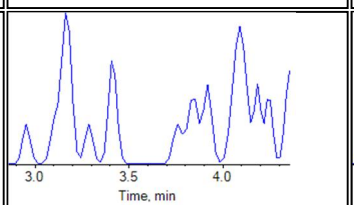
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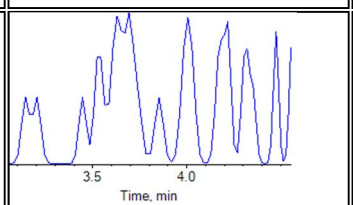
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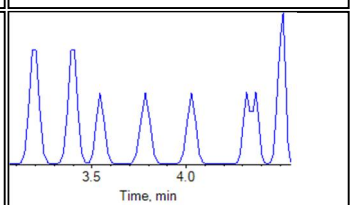
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NMeFOSAA_2

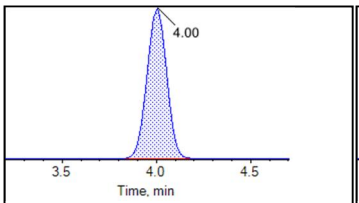


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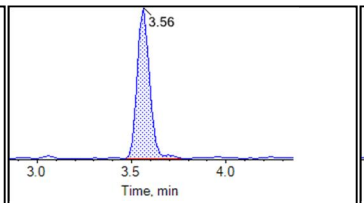


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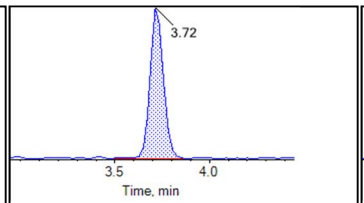
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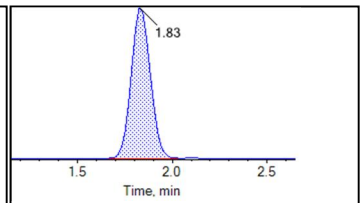
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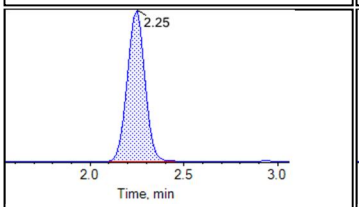
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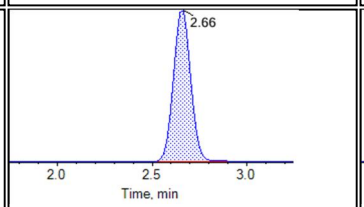
d5-EtFOSAA



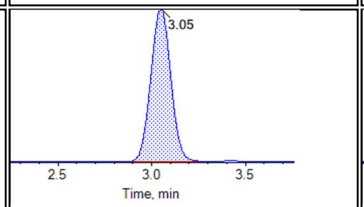
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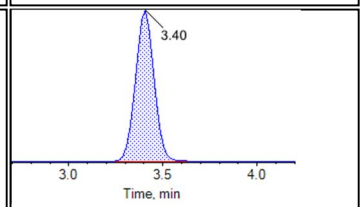
13C4-PFHpA



13C8-PFOA



13C9-PFNA

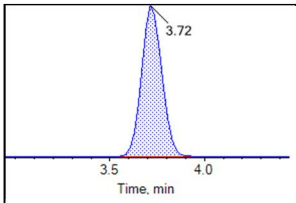


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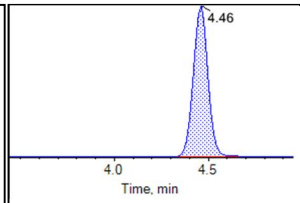
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Chromatogram Report

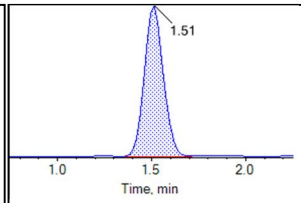
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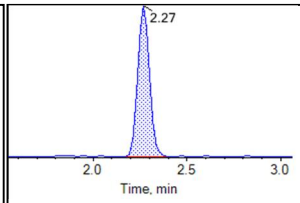
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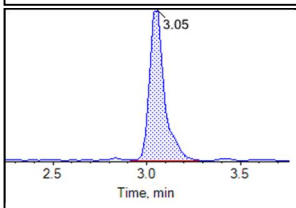
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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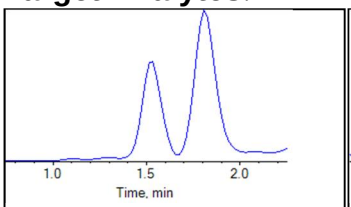
Chromatogram Report

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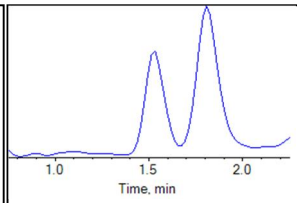
Sample Name	J8444-FS-D(15)	**Injection Vial**	8
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:10:08	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

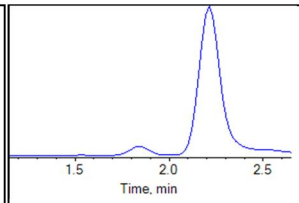
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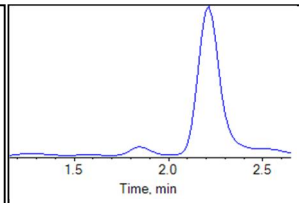
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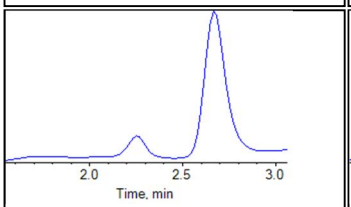
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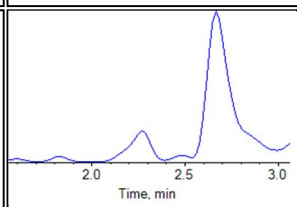
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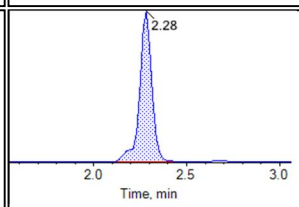
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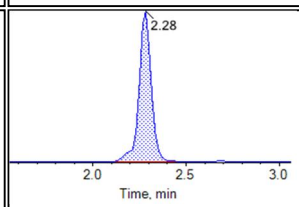
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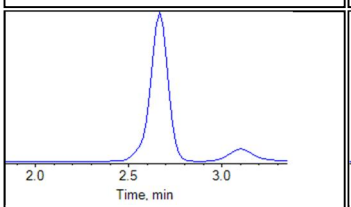
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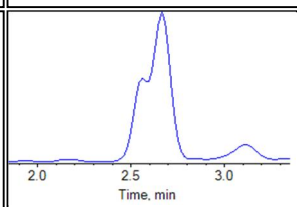
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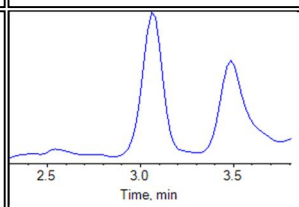
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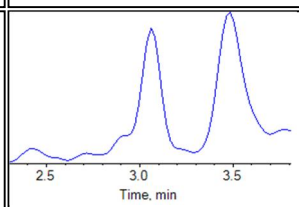
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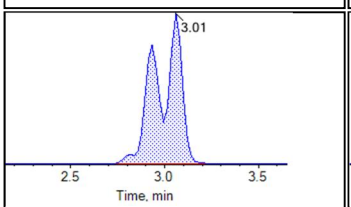
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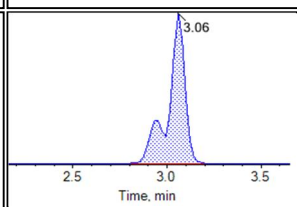
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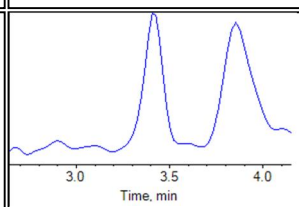
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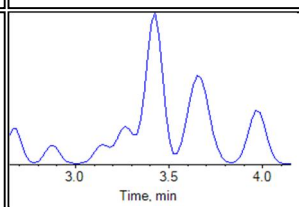
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PFOS_2



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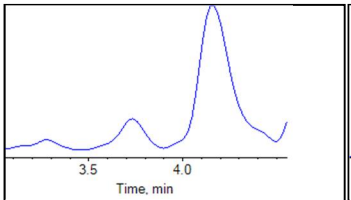


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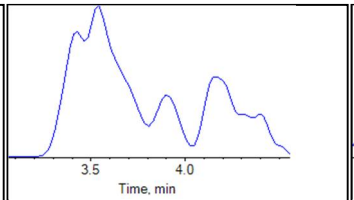
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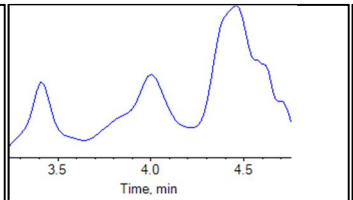
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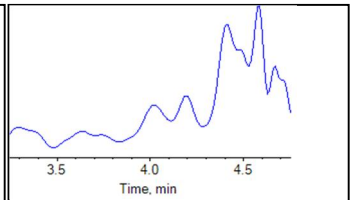
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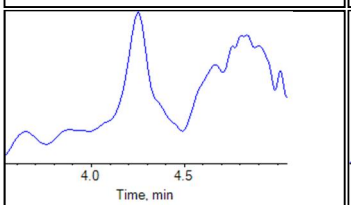
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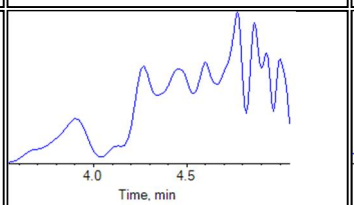
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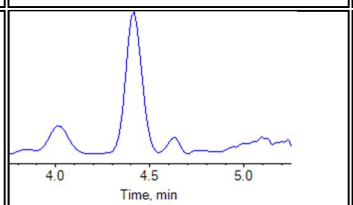
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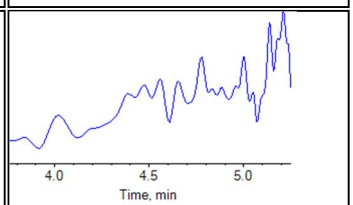
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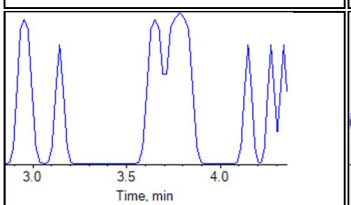
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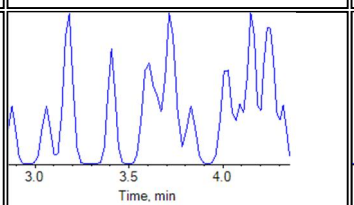
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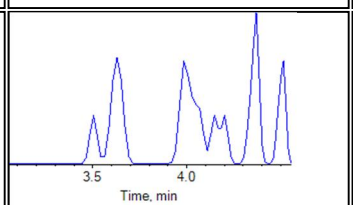
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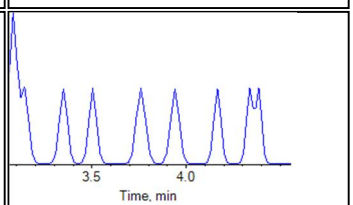
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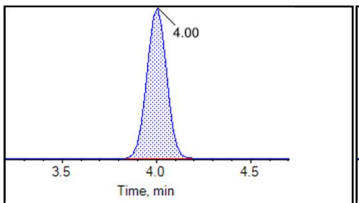


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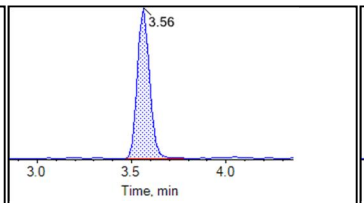


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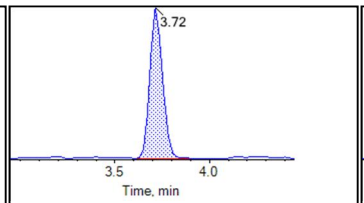
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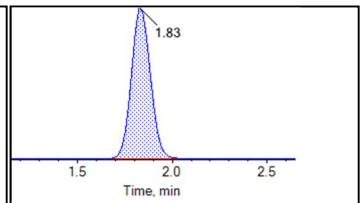
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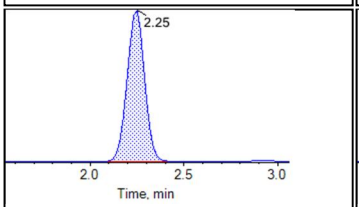
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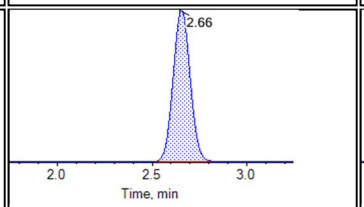
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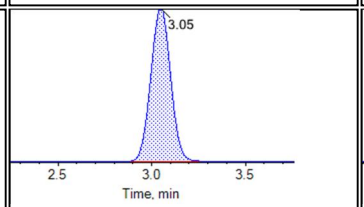
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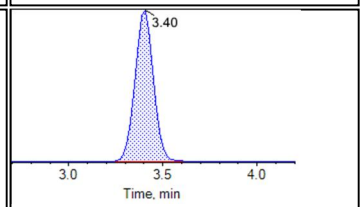
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13C8-PFOA



13C9-PFNA

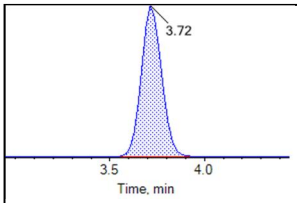


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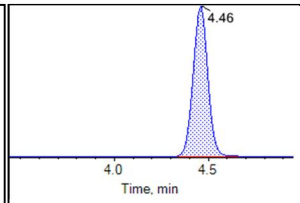
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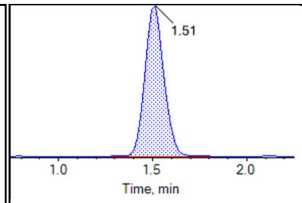
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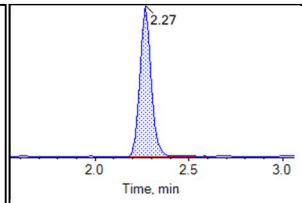
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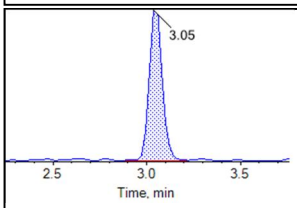
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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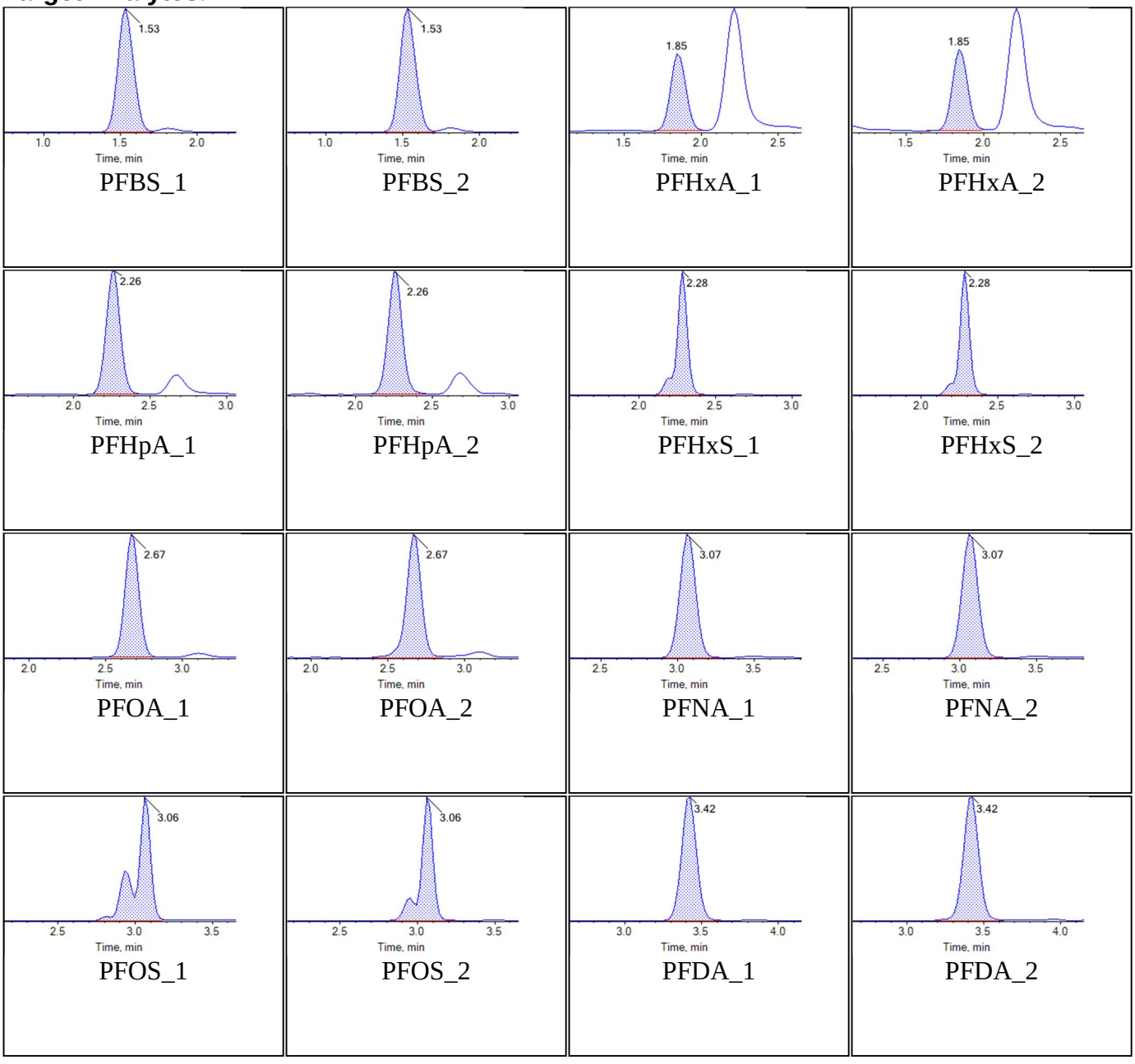
Chromatogram Report

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Sample Name	KB77 CCV	**Injection Vial**	9
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:20:59	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

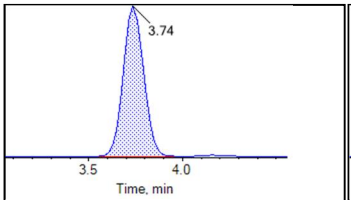
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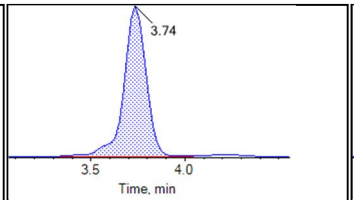
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Chromatogram Report

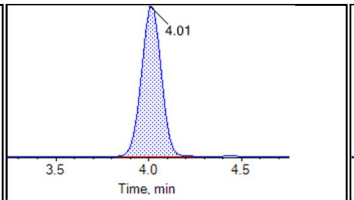
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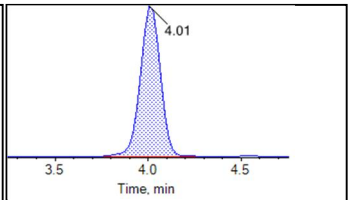
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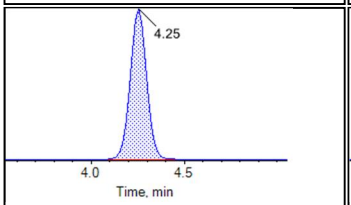
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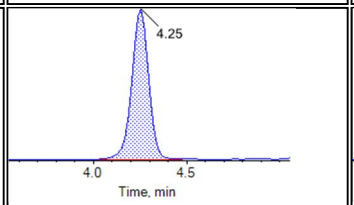
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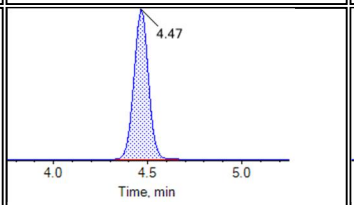
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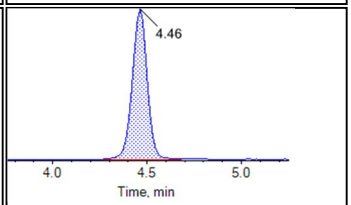
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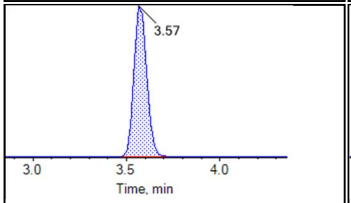
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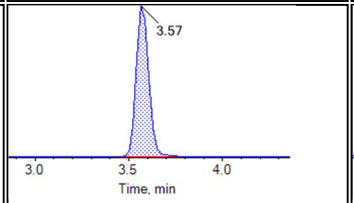
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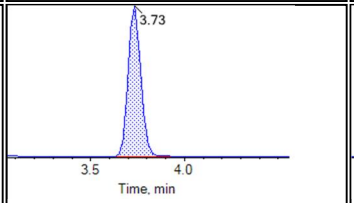
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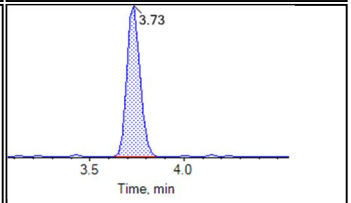
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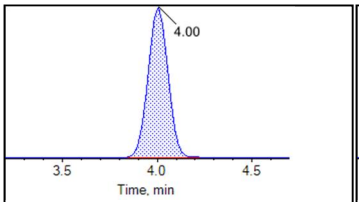


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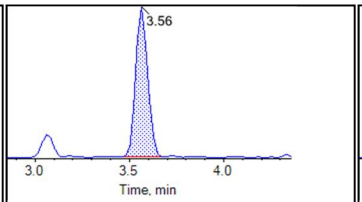


NEtFOSAA_2

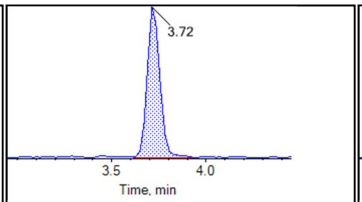
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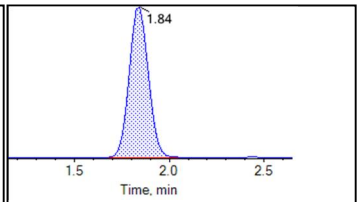
13C2-PFDoA



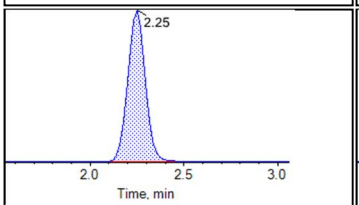
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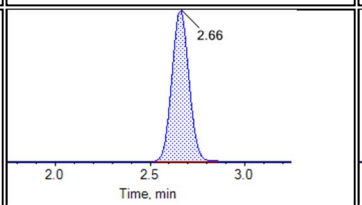
d5-EtFOSAA



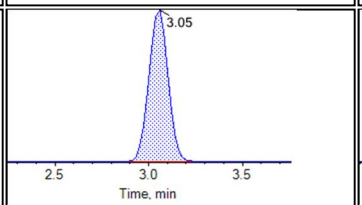
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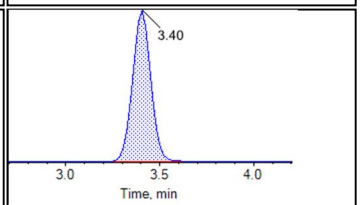
13C4-PFHpA



13C8-PFOA



13C9-PFNA

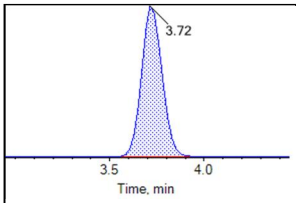


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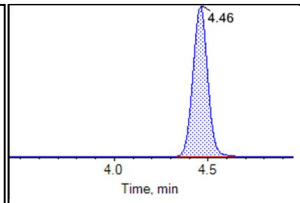
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Chromatogram Report

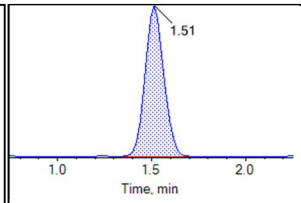
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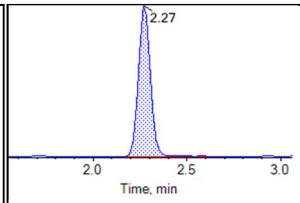
13C7-PFUnA



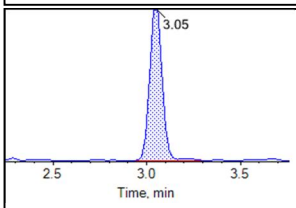
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

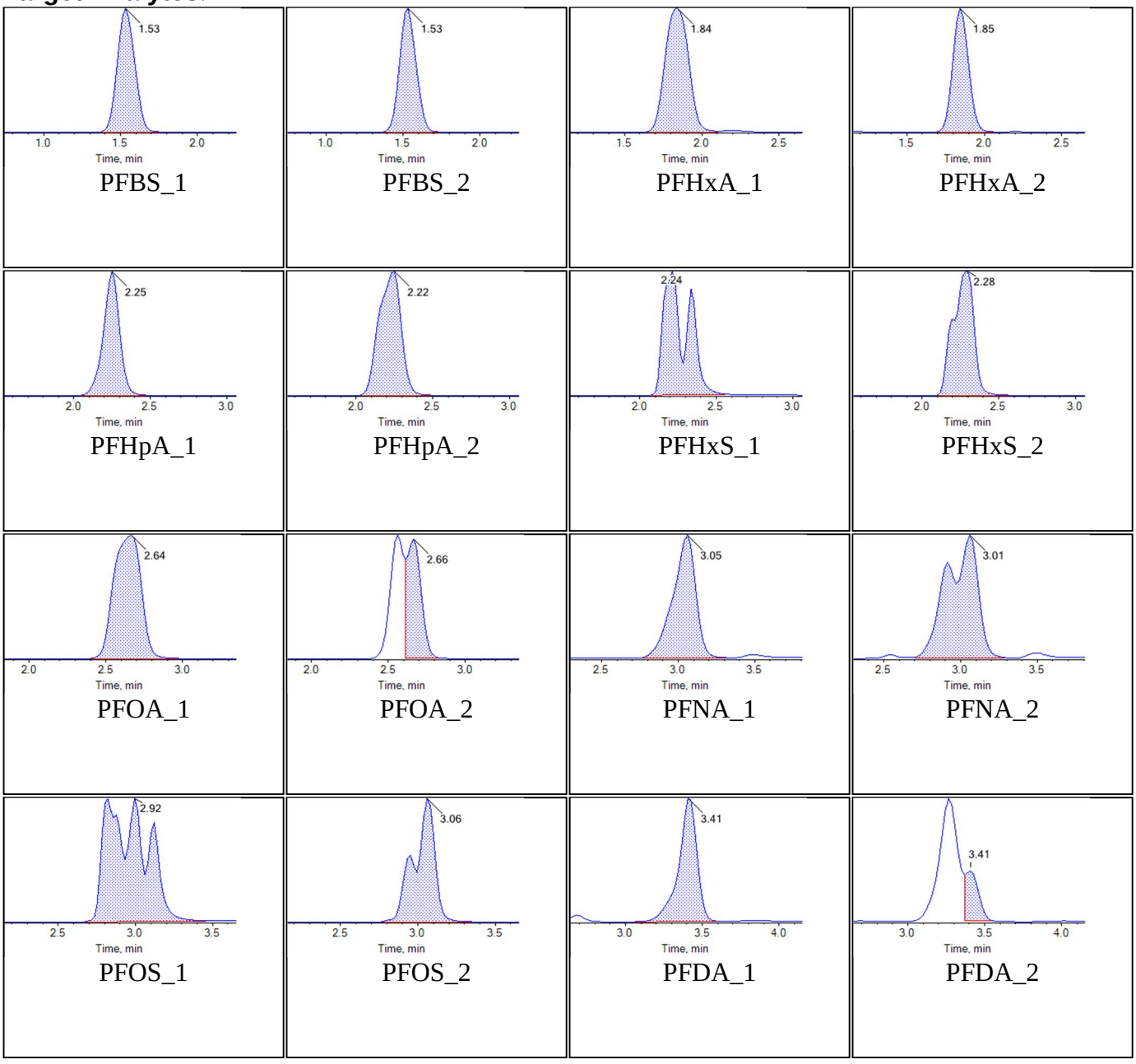
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 11:19:45 AM

Sample Name	J8445-FS(3)	**Injection Vial**	11
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:42:42	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

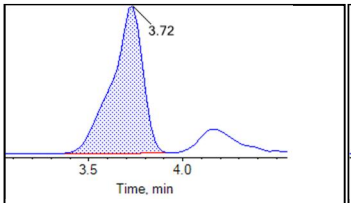
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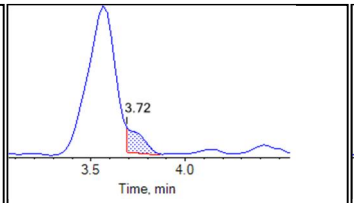
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Chromatogram Report

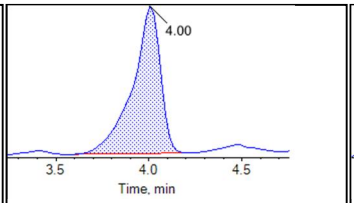
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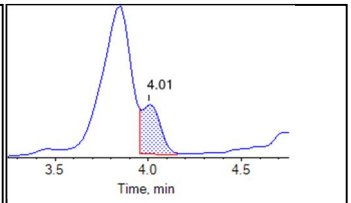
PFUnA_1



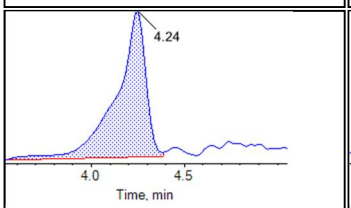
PFUnA_2



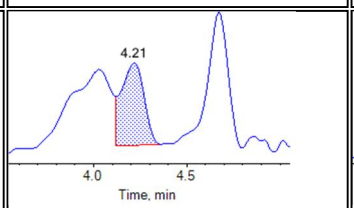
PFDoA_1



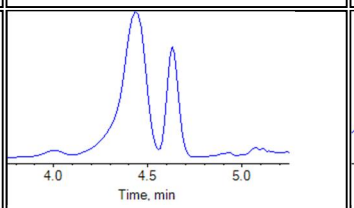
PFDoA_2



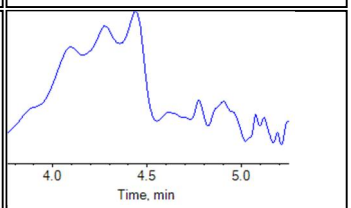
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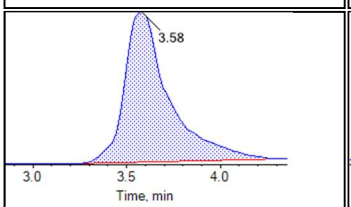
PFTrDA_2



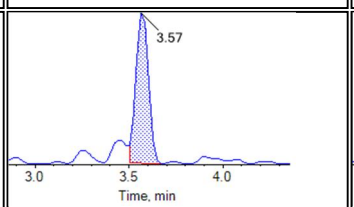
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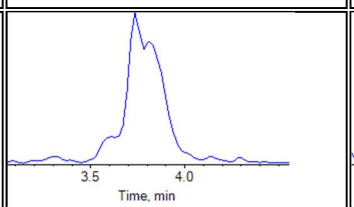
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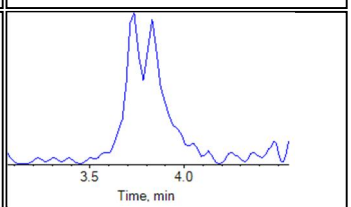
NMeFOSAA_1



NMeFOSAA_2

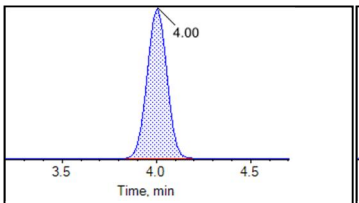


NEtFOSAA_1

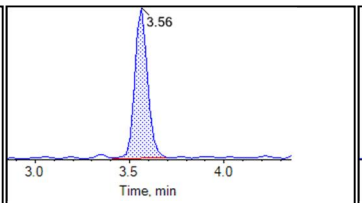


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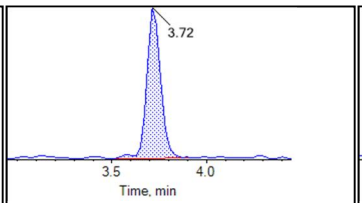
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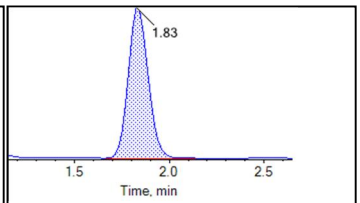
13C2-PFDoA



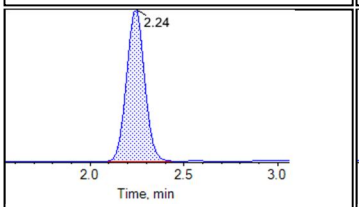
d3-MeFOSAA



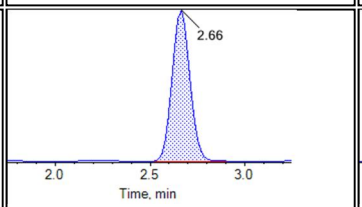
d5-EtFOSAA



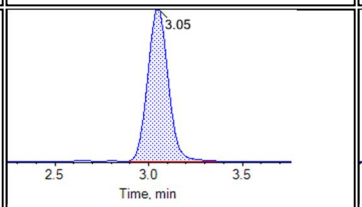
13C5-PFHxA



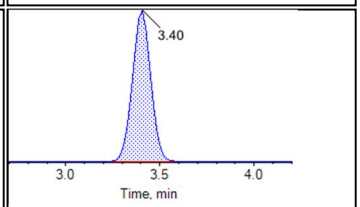
13C4-PFHpA



13C8-PFOA



13C9-PFNA

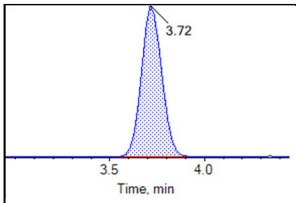


13C6-PFDA

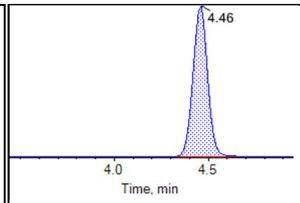
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Chromatogram Report

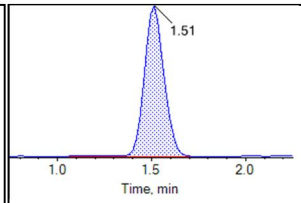
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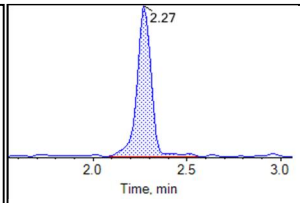
13C7-PFUnA



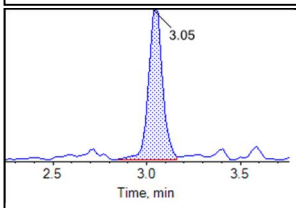
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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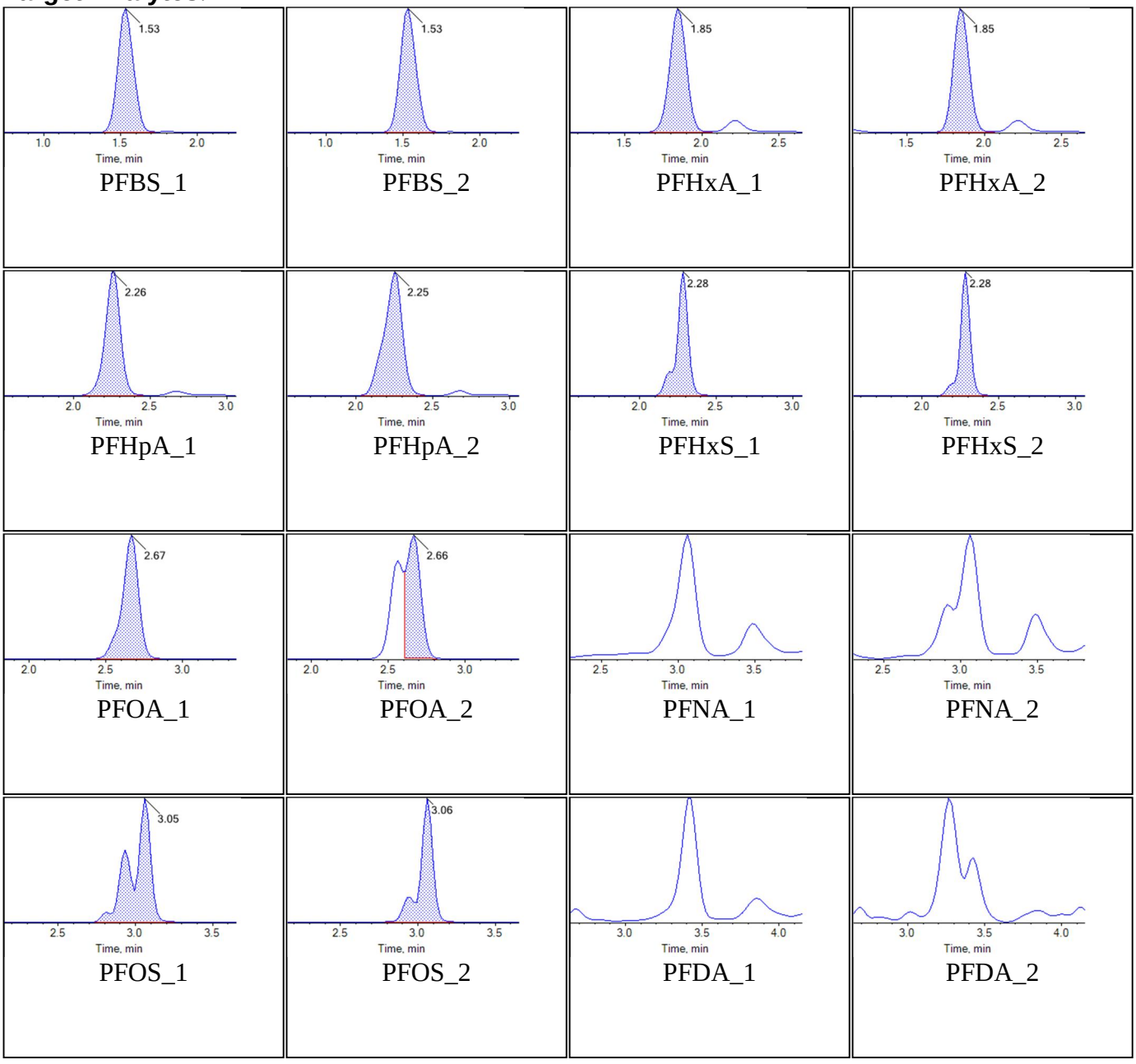
Chromatogram Report

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Printed: 25/10/2018 11:19:50 AM

Sample Name	J8445-FS-D(5)	**Injection Vial**	12
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:53:34	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

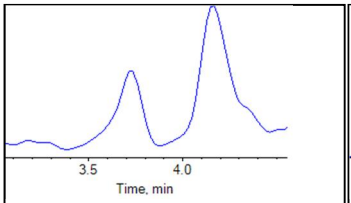
Target Analytes:



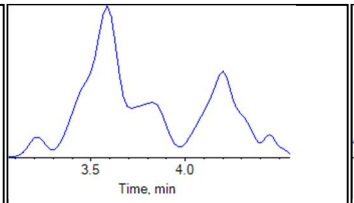
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Chromatogram Report

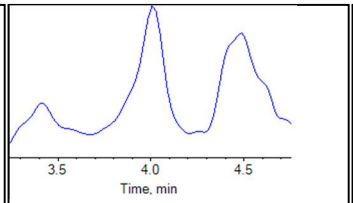
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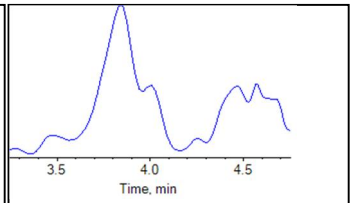
PFUnA_1



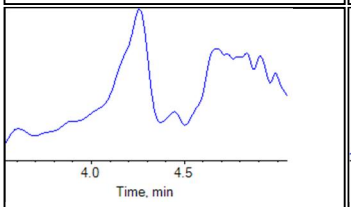
PFUnA_2



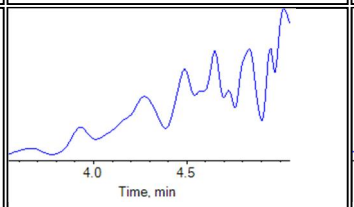
PFDoA_1



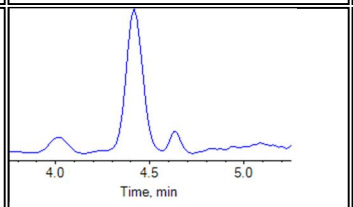
PFDoA_2



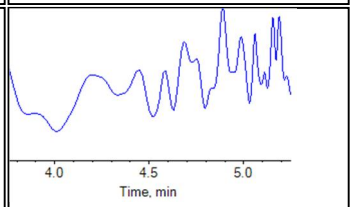
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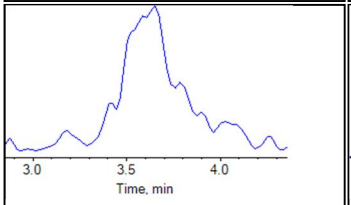
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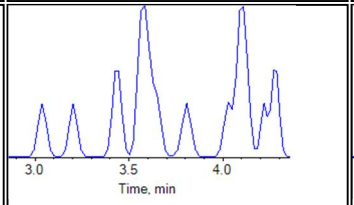
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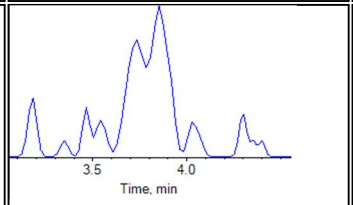
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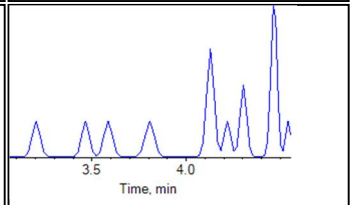
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NMeFOSAA_2

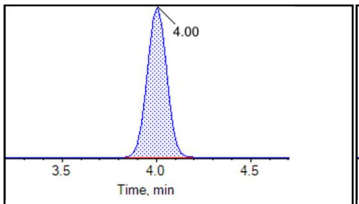


NEtFOSAA_1

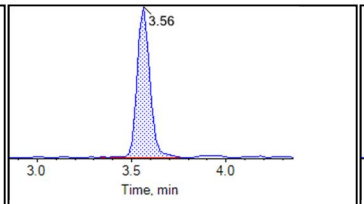


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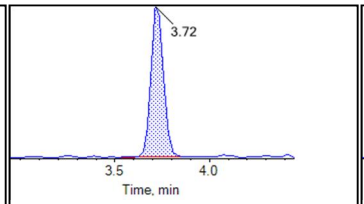
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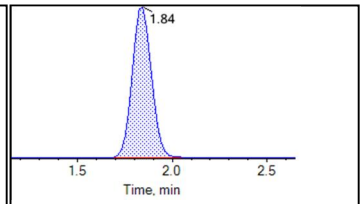
13C2-PFDoA



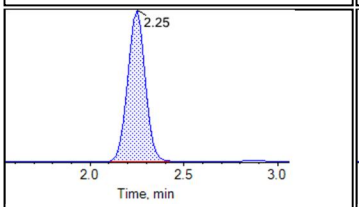
d3-MeFOSAA



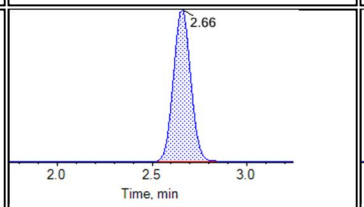
d5-EtFOSAA



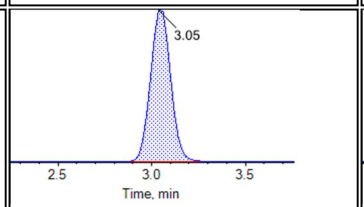
13C5-PFHxA



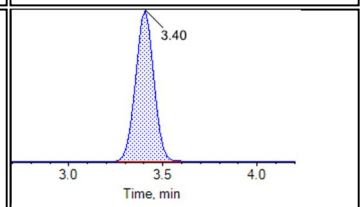
13C4-PFHpA



13C8-PFOA



13C9-PFNA

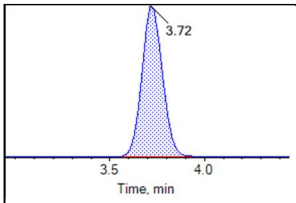


13C6-PFDA

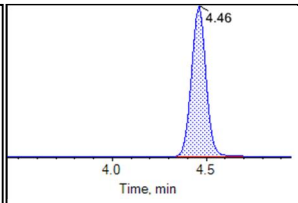
BATTELLE

Chromatogram Report

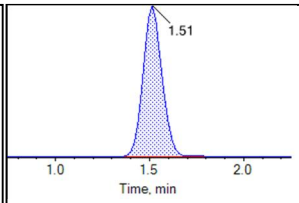
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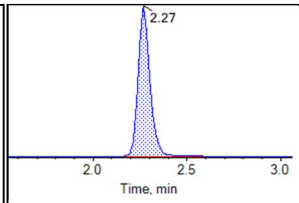
13C7-PFUnA



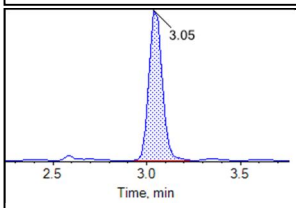
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

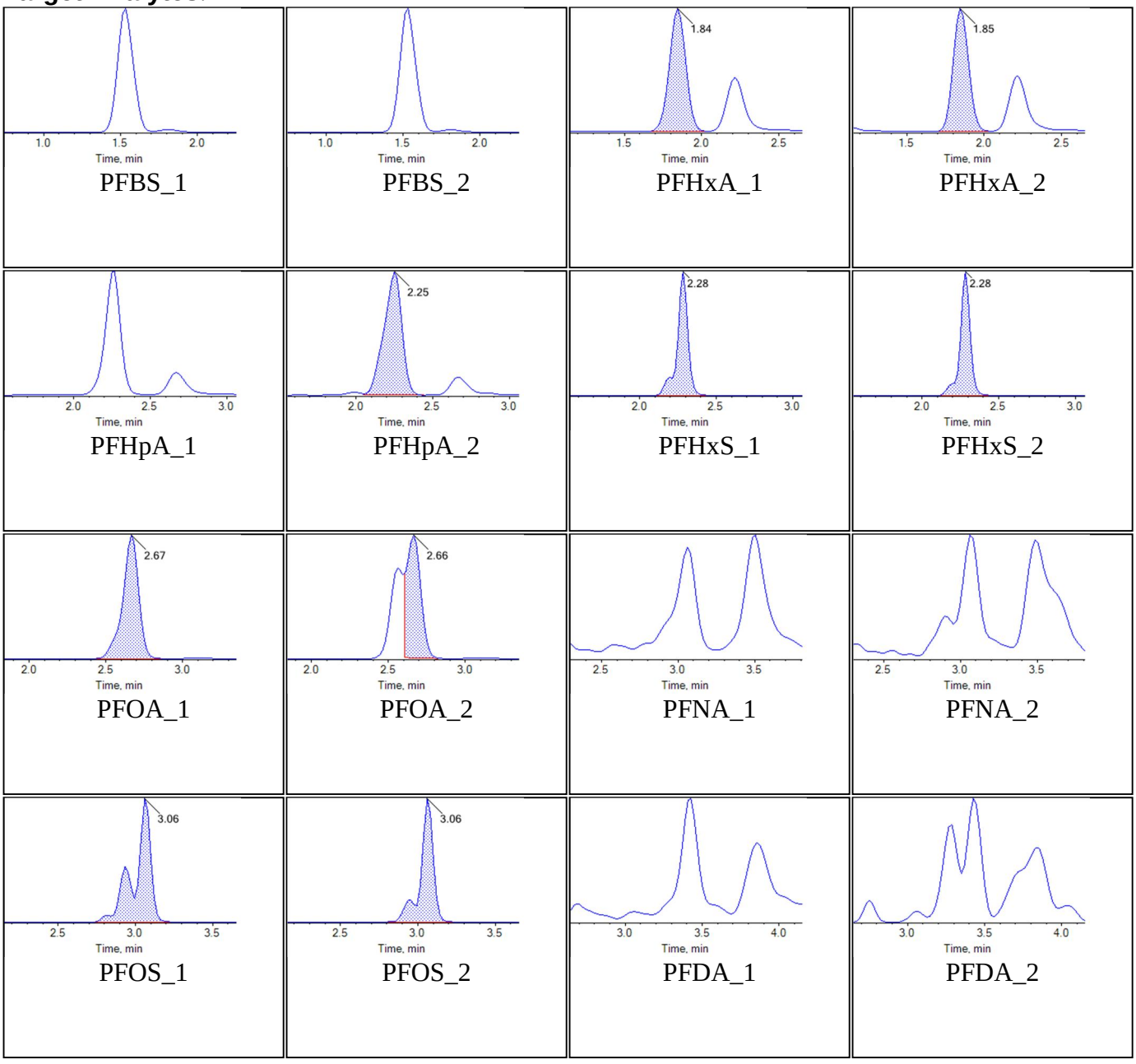
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 11:19:54 AM

Sample Name	J8445-FS-D(7)	**Injection Vial**	13
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:04:26	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

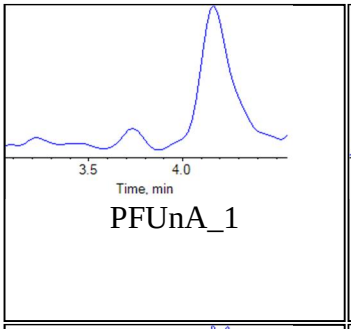
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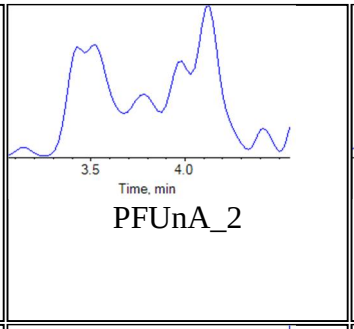
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Chromatogram Report

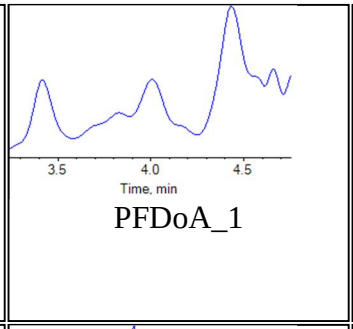
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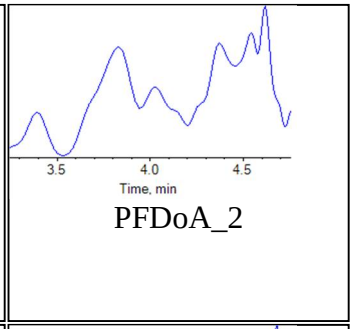
PFUnA_1



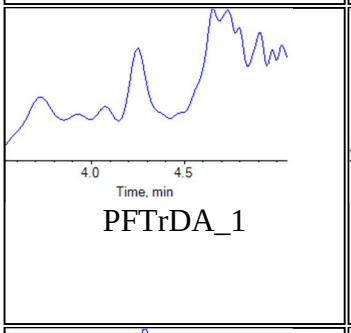
PFUnA_2



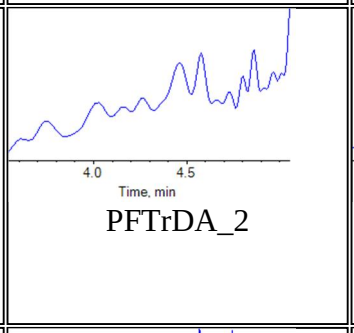
PFDoA_1



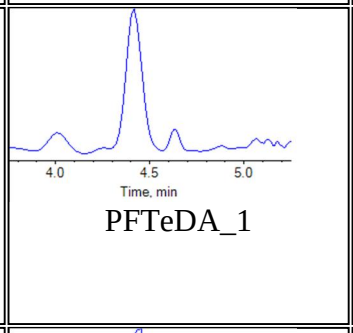
PFDoA_2



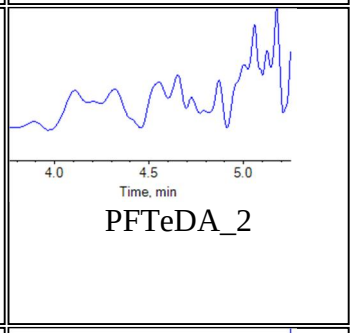
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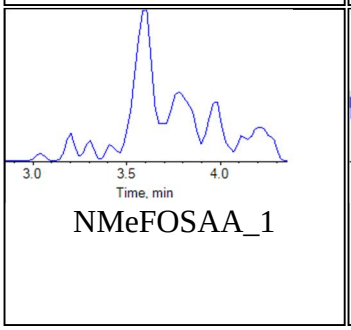
PFTrDA_2



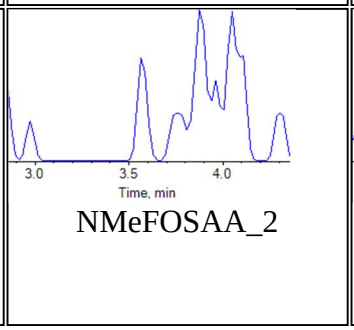
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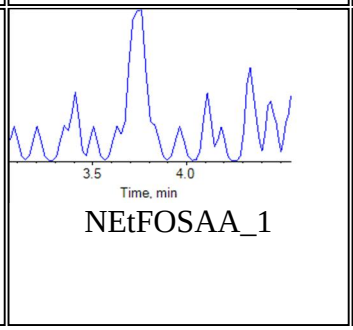
PFTeDA_2



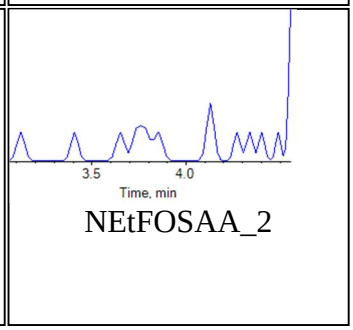
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NMeFOSAA_2

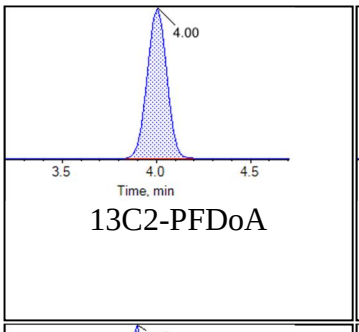


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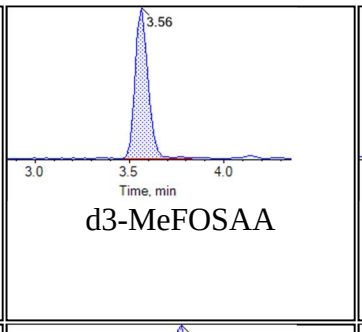


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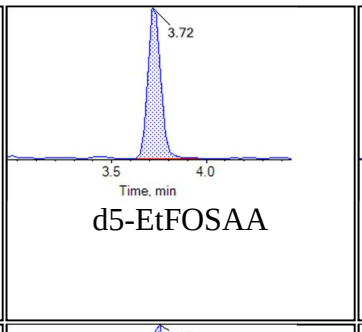
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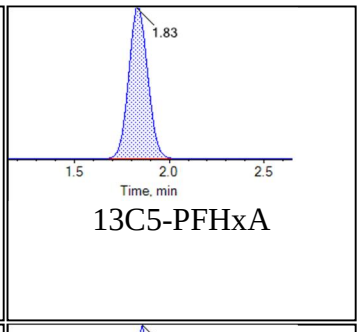
13C2-PFDoA



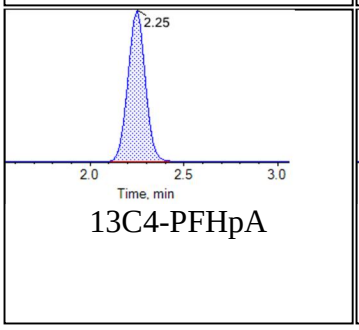
d3-MeFOSAA



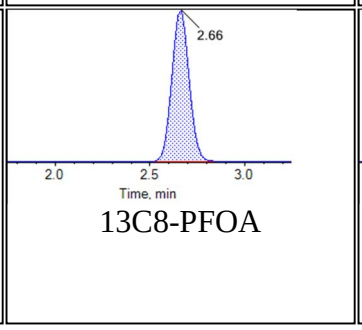
d5-EtFOSAA



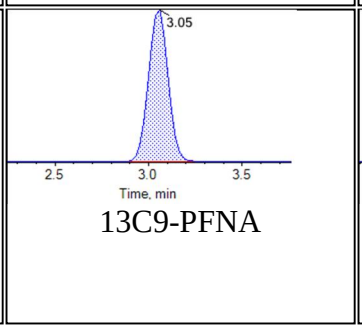
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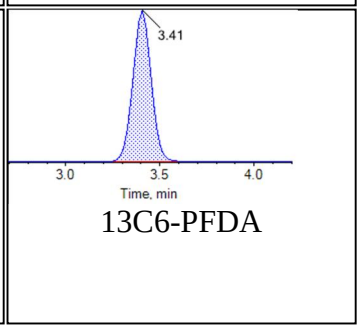
13C4-PFHpA



13C8-PFOA



13C9-PFNA

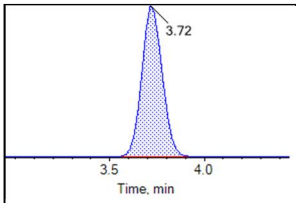


13C6-PFDA

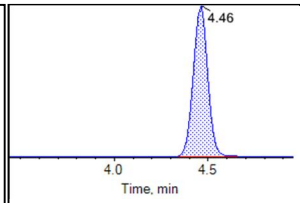
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Chromatogram Report

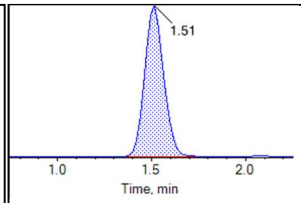
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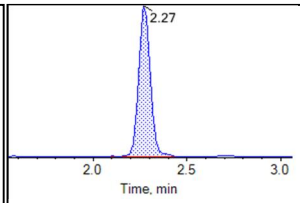
13C7-PFUnA



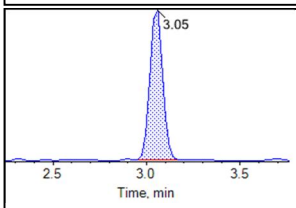
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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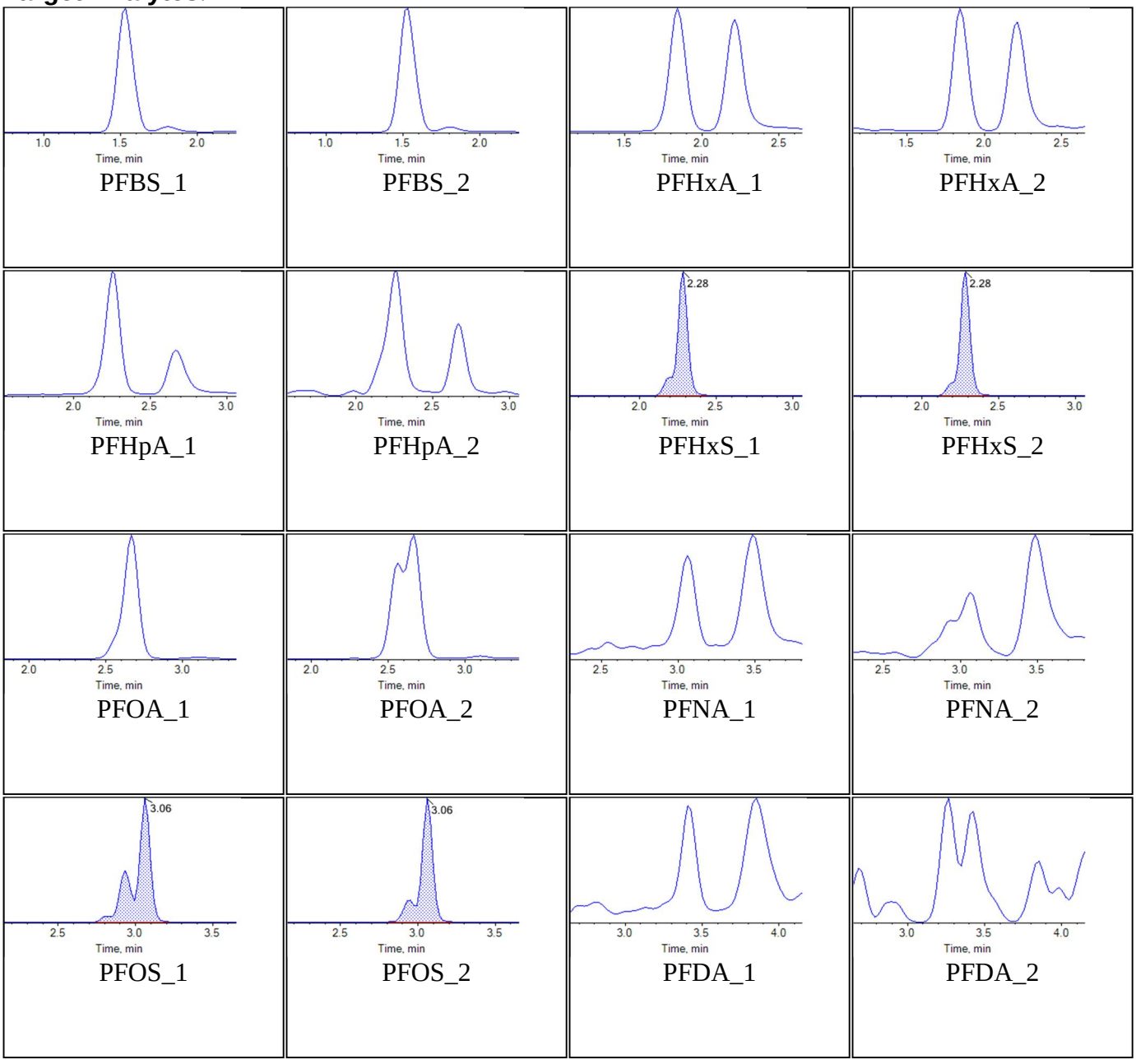
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 11:20:00 AM

Sample Name	J8445-FS-D(9)	**Injection Vial**	14
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:15:17	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

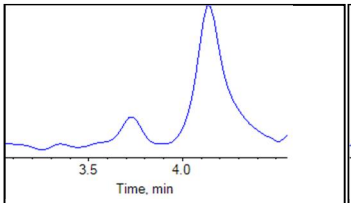
Target Analytes:



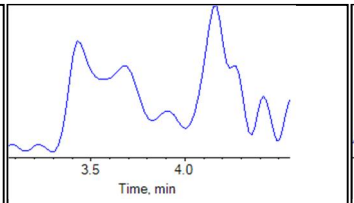
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Chromatogram Report

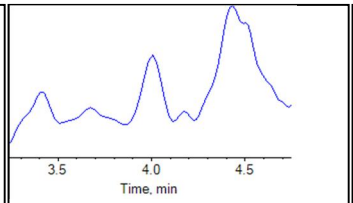
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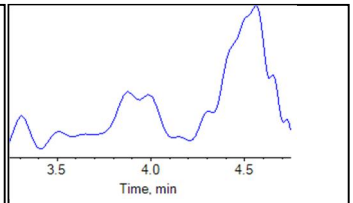
PFUnA_1



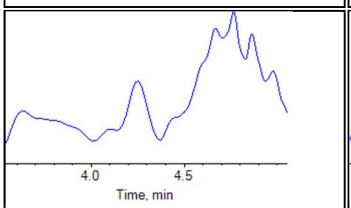
PFUnA_2



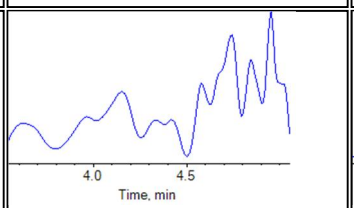
PFDoA_1



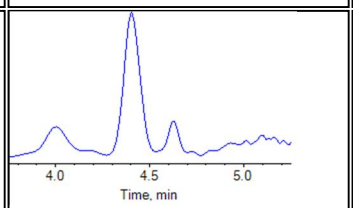
PFDoA_2



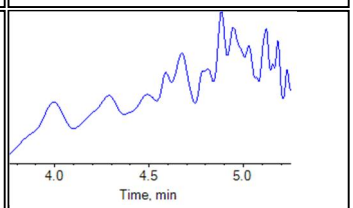
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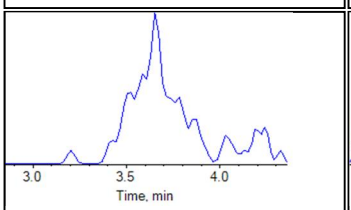
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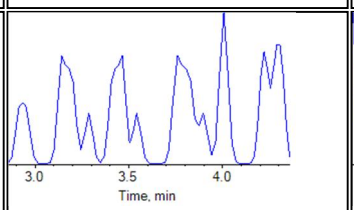
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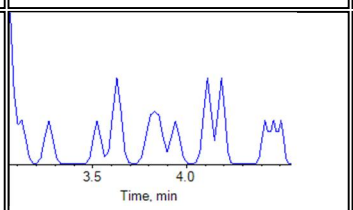
PFTeDA_2



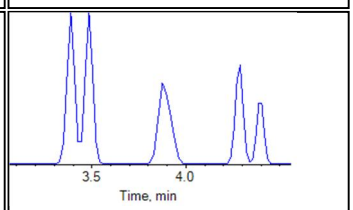
NMeFOSAA_1



NMeFOSAA_2

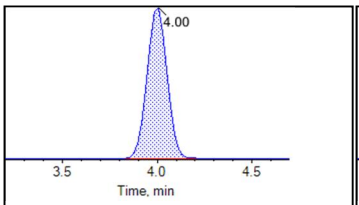


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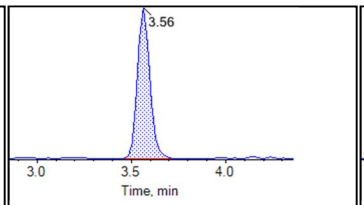


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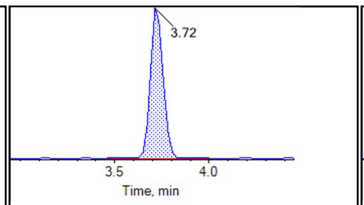
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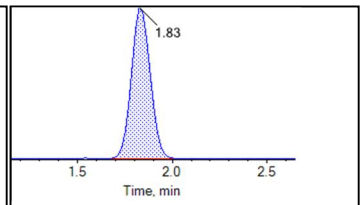
13C2-PFDoA



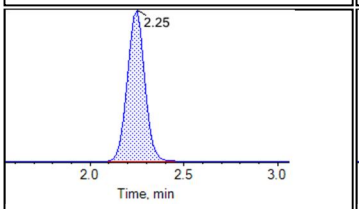
d3-MeFOSAA



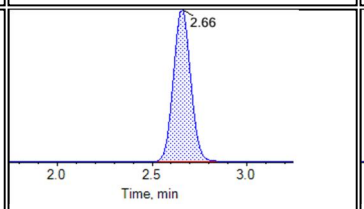
d5-EtFOSAA



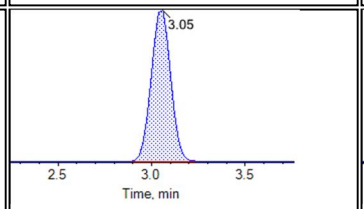
13C5-PFHxA



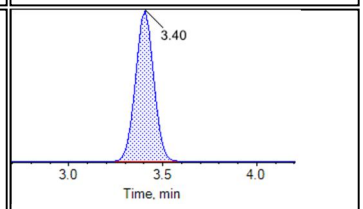
13C4-PFHpA



13C8-PFOA



13C9-PFNA

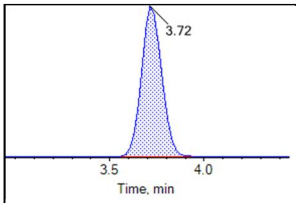


13C6-PFDA

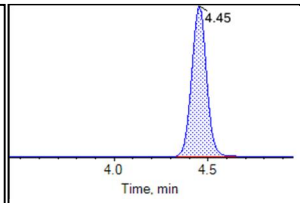
BATTELLE

Chromatogram Report

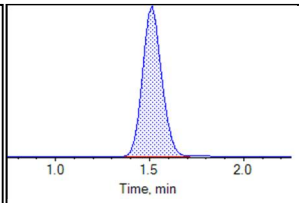
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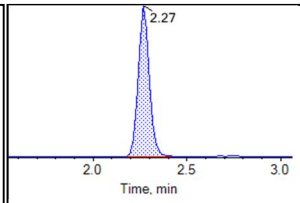
13C7-PFUnA



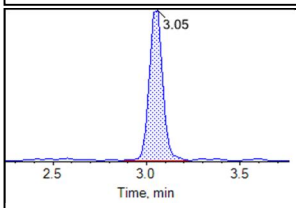
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

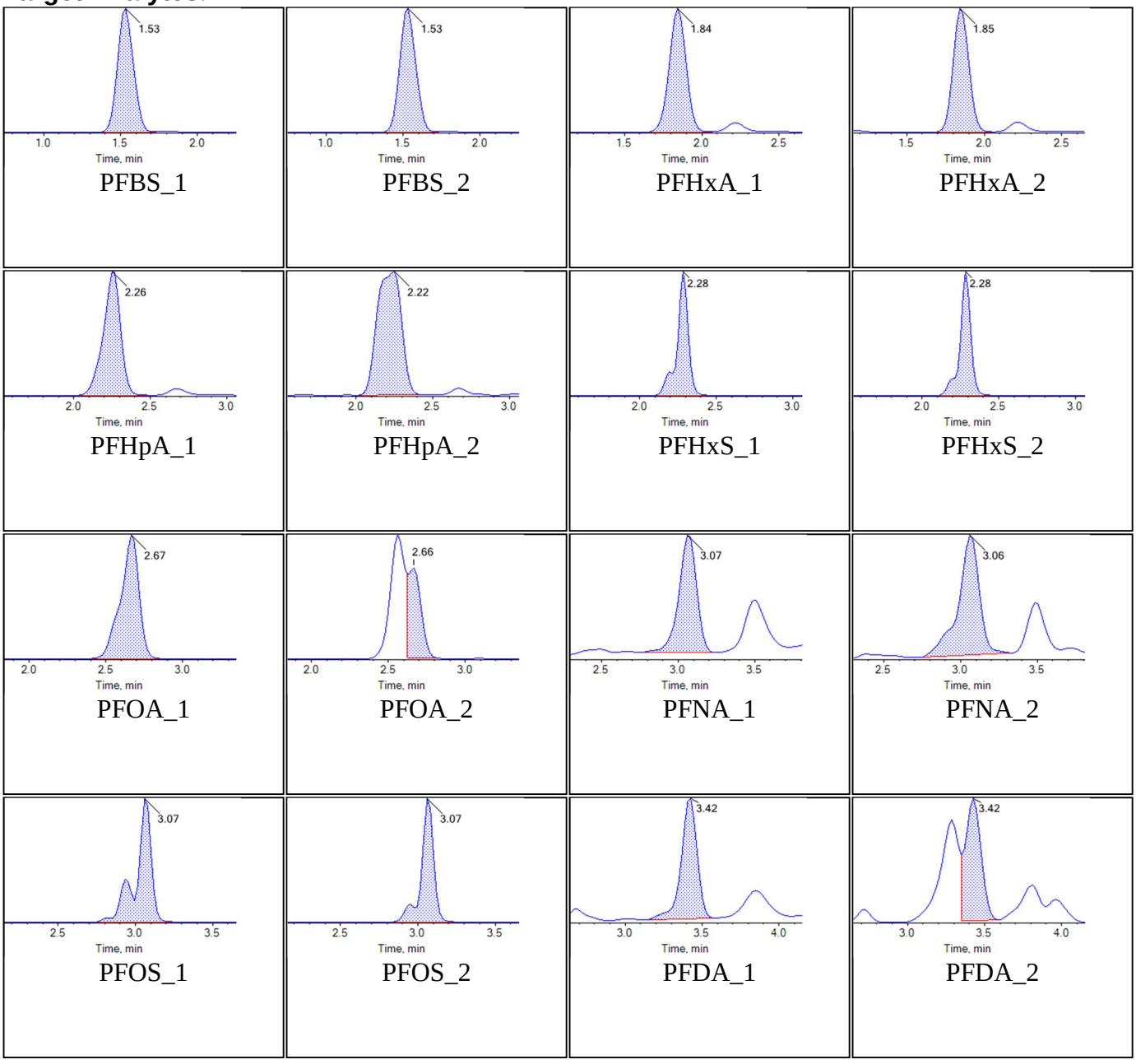
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 11:20:05 AM

Sample Name	J8446-FS(3)	**Injection Vial**	15
Sample ID	VC-MS09-SB03-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:26:09	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

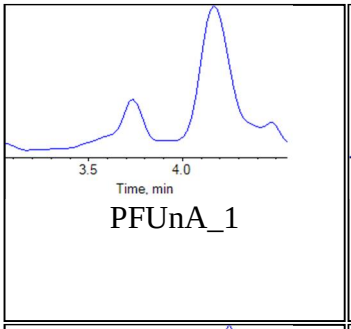
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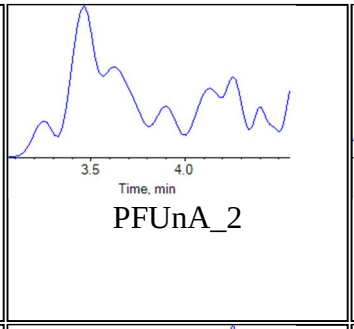
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Chromatogram Report

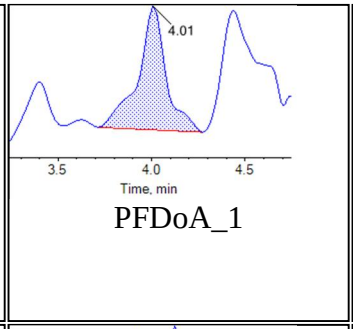
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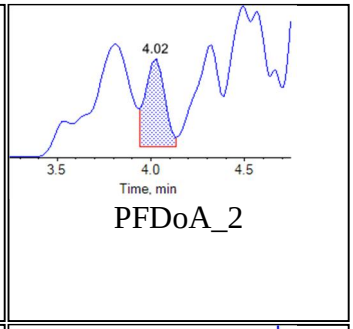
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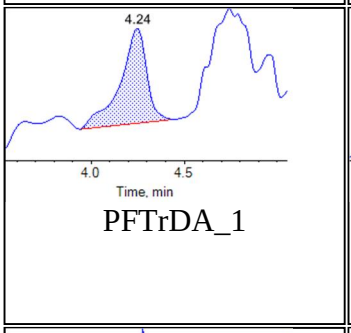
PFUnA_2



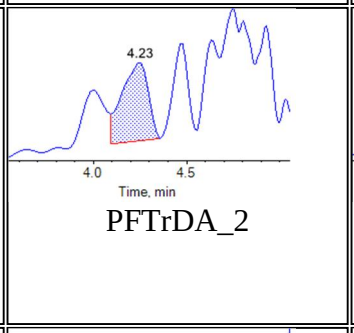
PFDoA_1



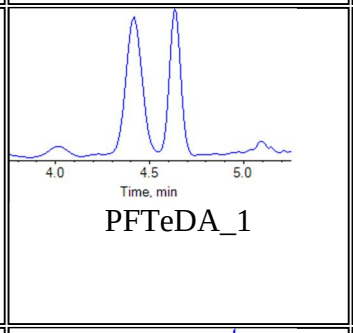
PFDoA_2



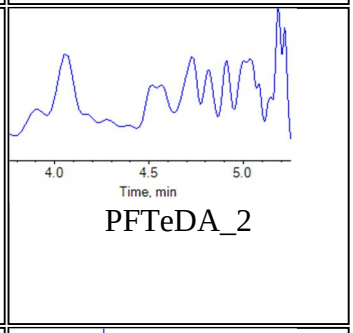
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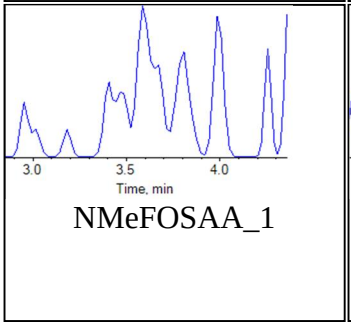
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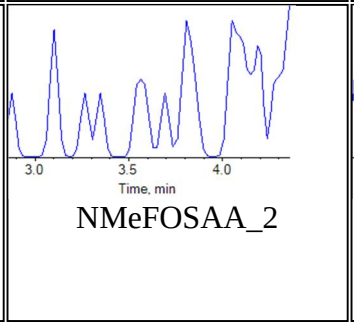
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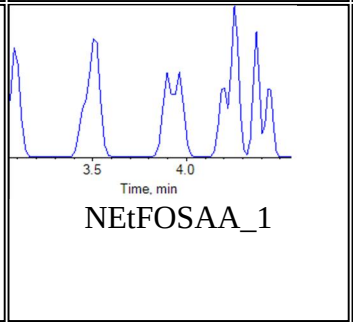
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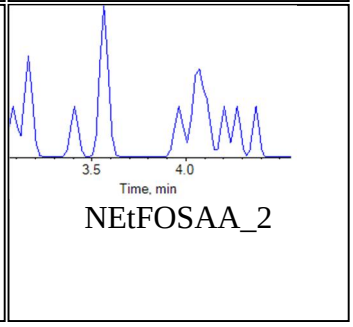
NMeFOSAA_1



NMeFOSAA_2

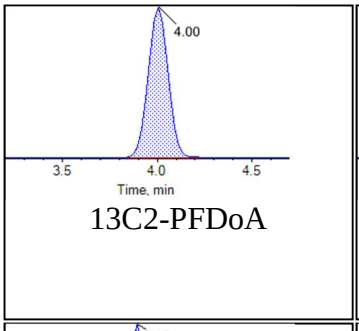


NEtFOSAA_1

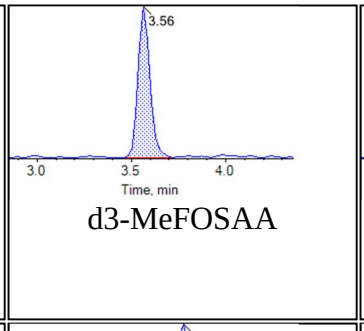


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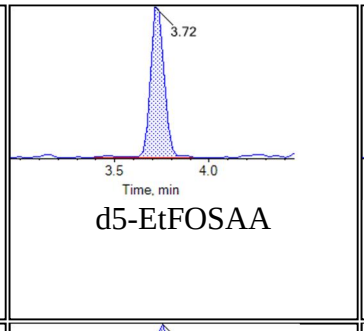
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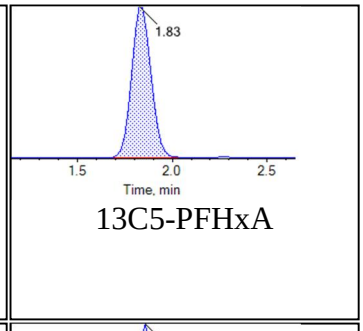
13C2-PFDoA



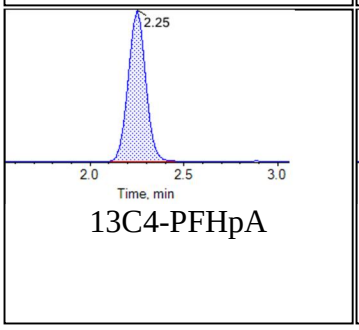
d3-MeFOSAA



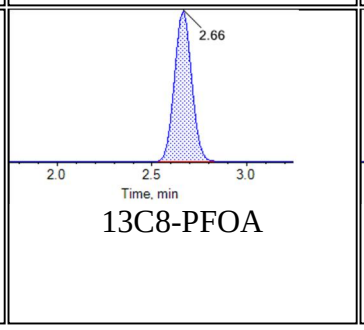
d5-EtFOSAA



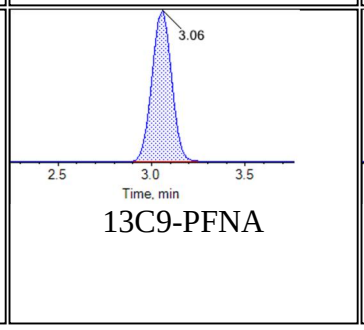
13C5-PFHxA



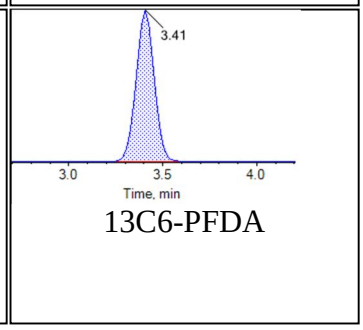
13C4-PFHpA



13C8-PFOA



13C9-PFNA

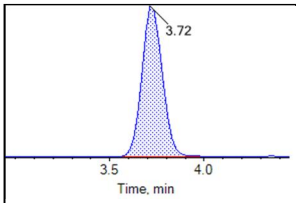


13C6-PFDA

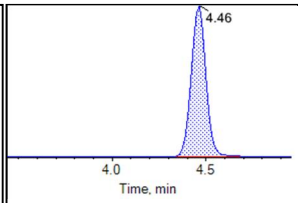
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Chromatogram Report

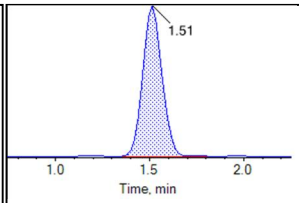
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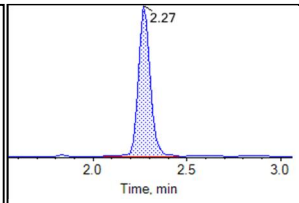
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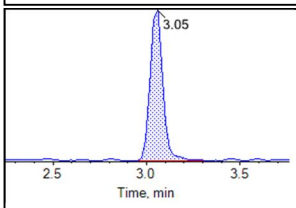
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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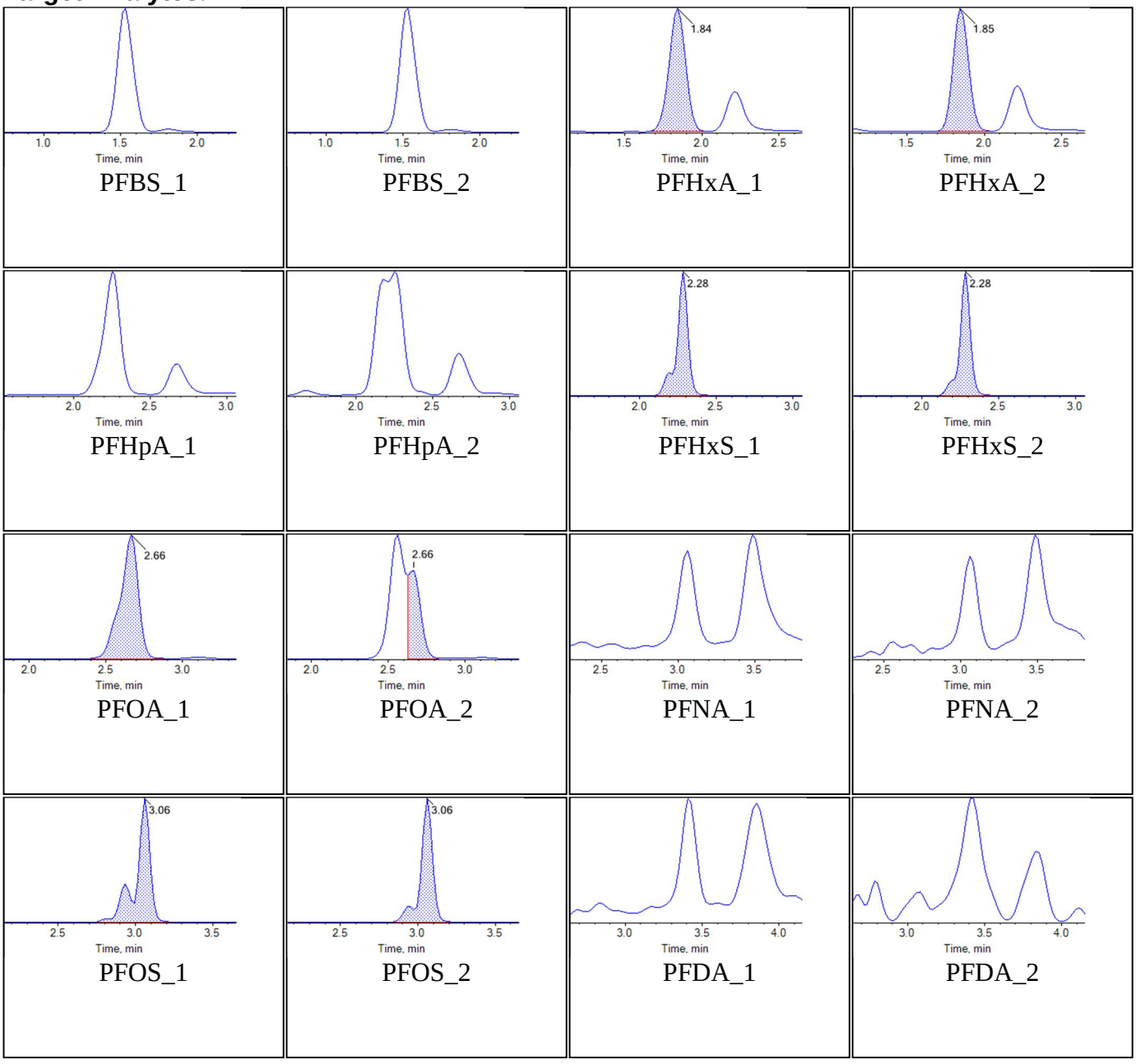
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 11:20:10 AM

Sample Name	J8446-FS-D(5)	**Injection Vial**	16
Sample ID	VC-MS09-SB03-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:37:01	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

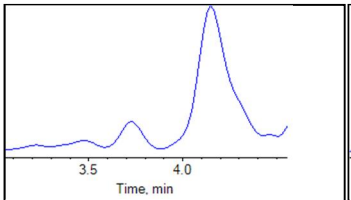
Target Analytes:



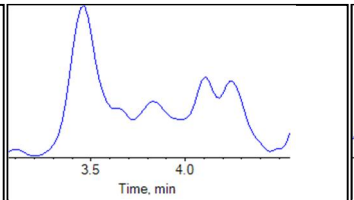
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Chromatogram Report

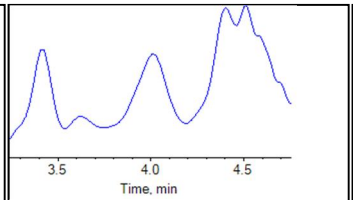
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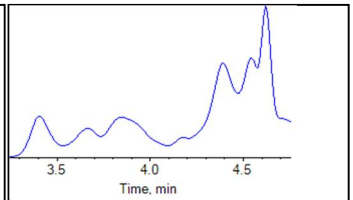
PFUnA_1



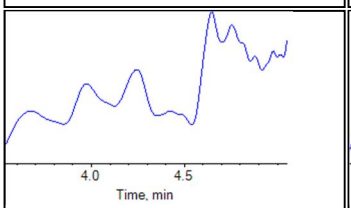
PFUnA_2



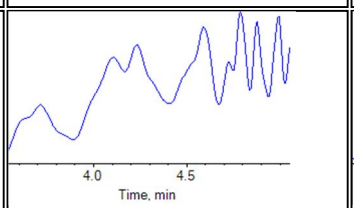
PFDoA_1



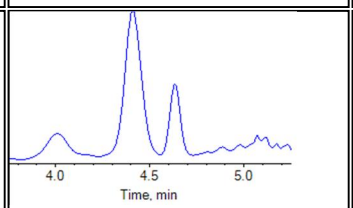
PFDoA_2



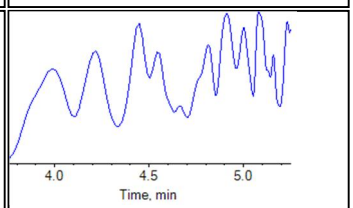
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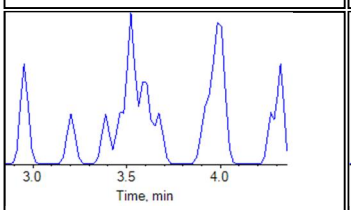
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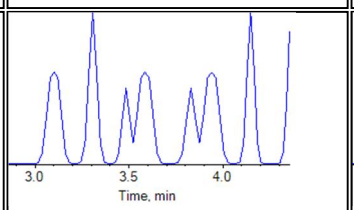
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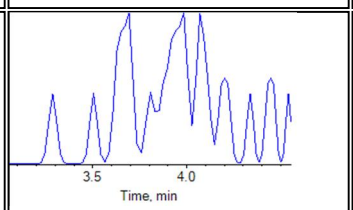
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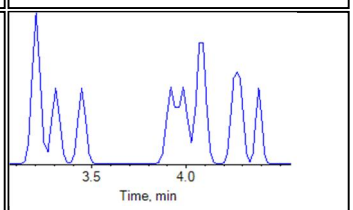
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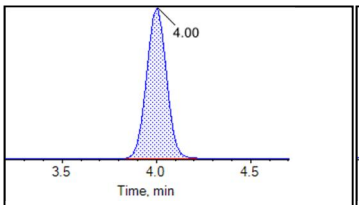


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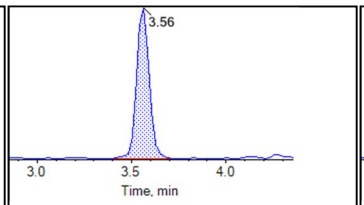


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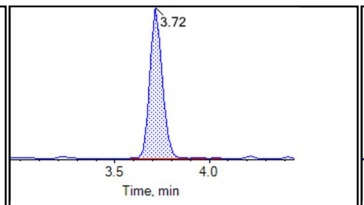
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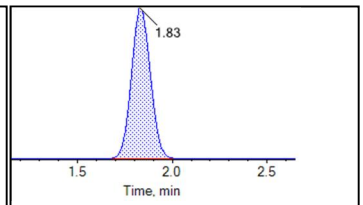
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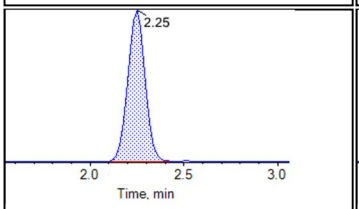
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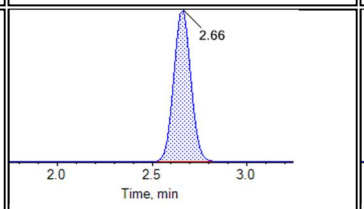
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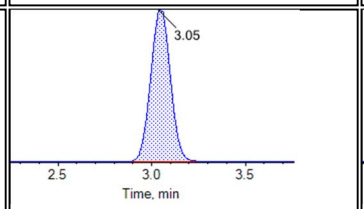
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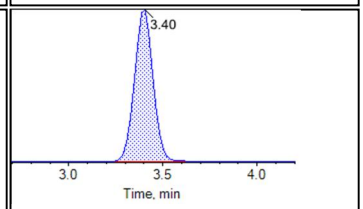
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13C8-PFOA



13C9-PFNA

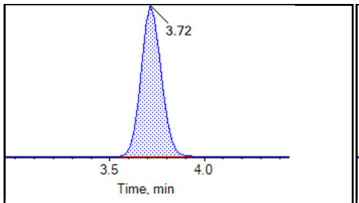


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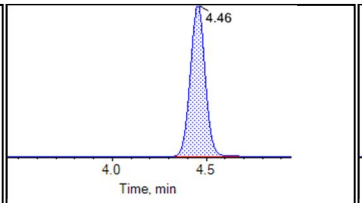
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Chromatogram Report

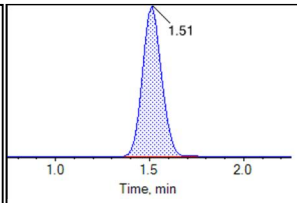
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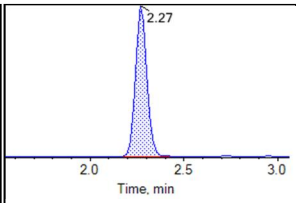
13C7-PFUnA



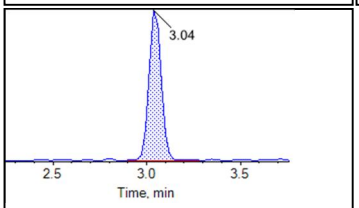
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

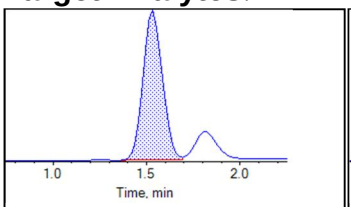
Chromatogram Report

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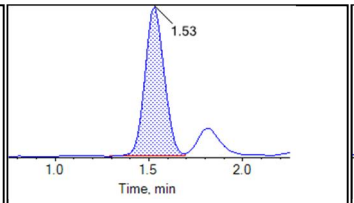
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Sample ID	VC-MS09-SS04-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:47:52	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

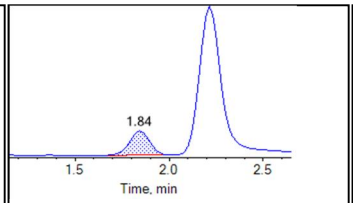
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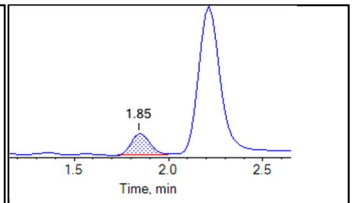
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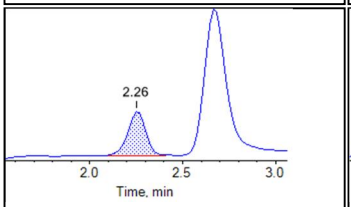
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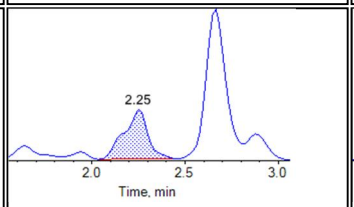
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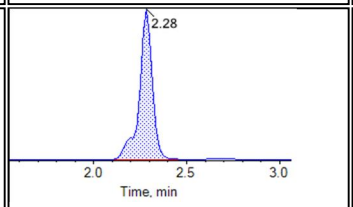
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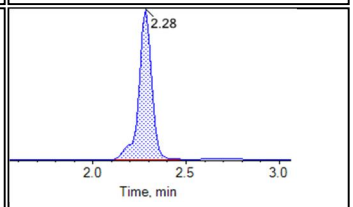
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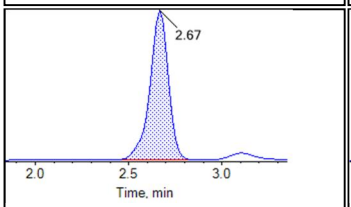
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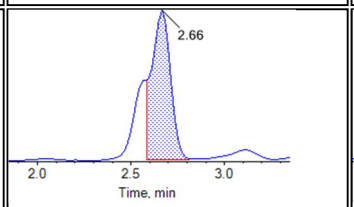
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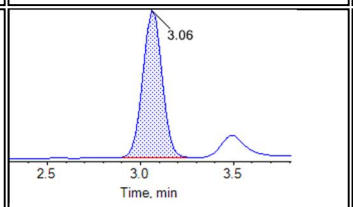
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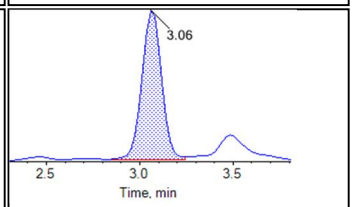
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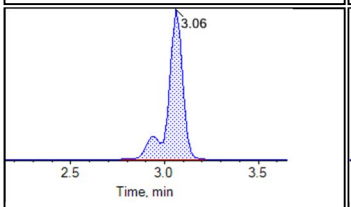
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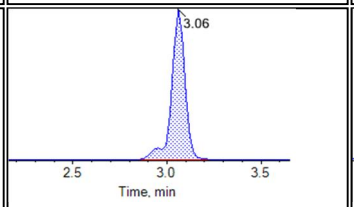
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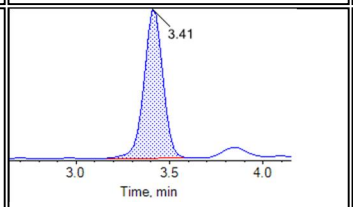
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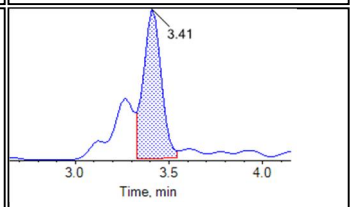
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PFOS_2



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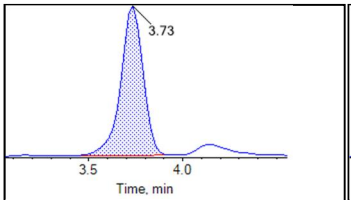


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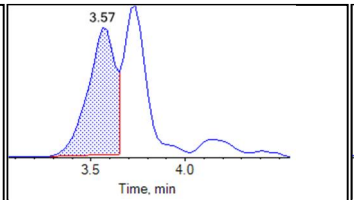
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Chromatogram Report

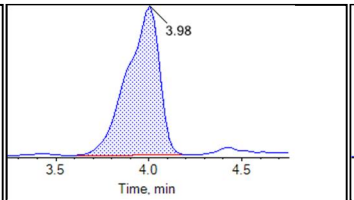
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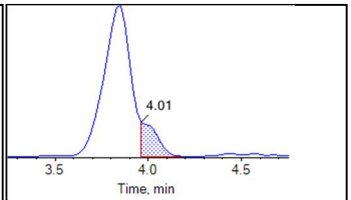
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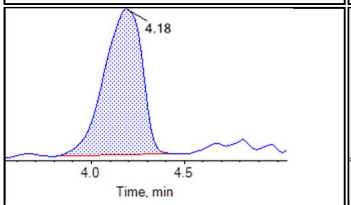
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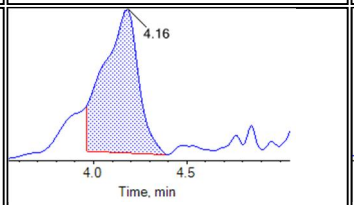
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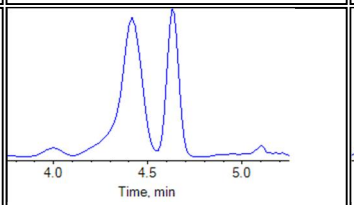
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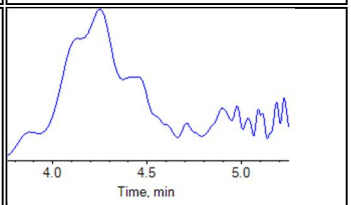
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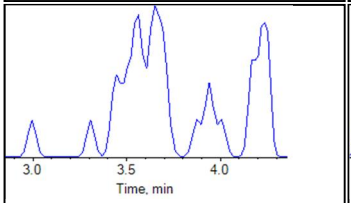
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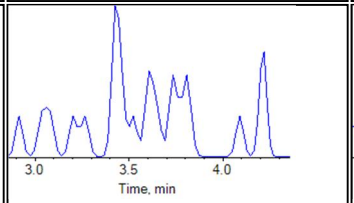
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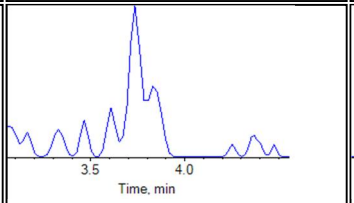
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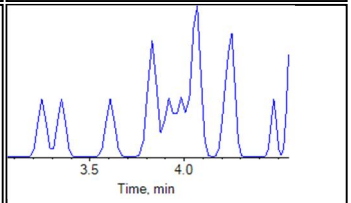
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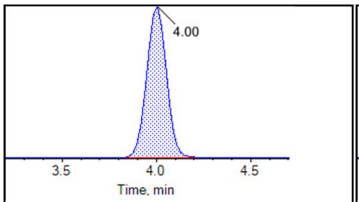


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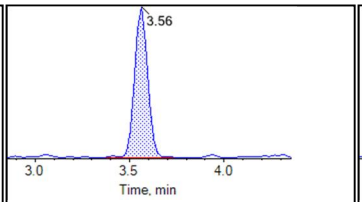


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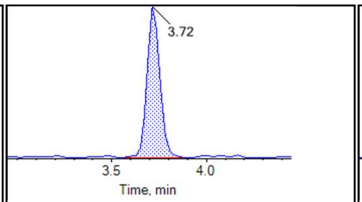
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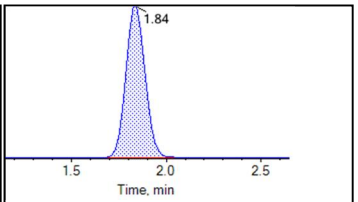
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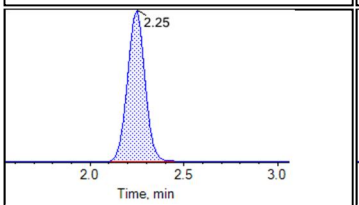
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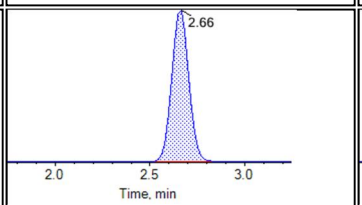
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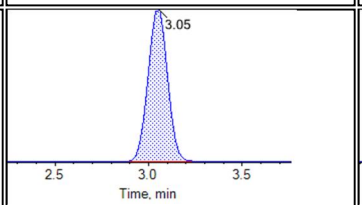
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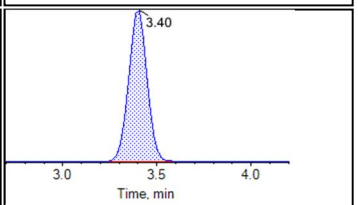
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13C8-PFOA



13C9-PFNA

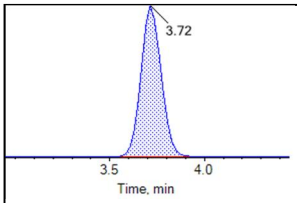


13C6-PFDA

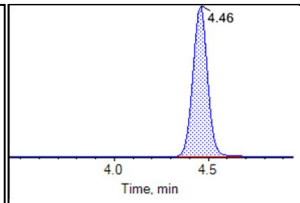
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Chromatogram Report

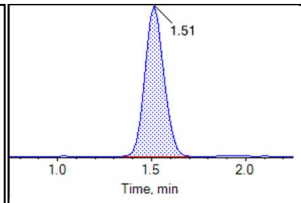
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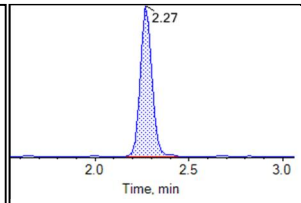
13C7-PFUnA



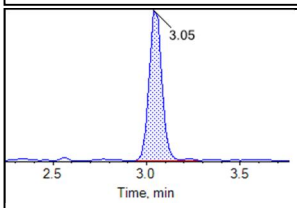
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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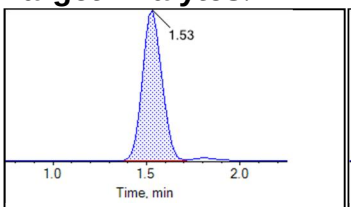
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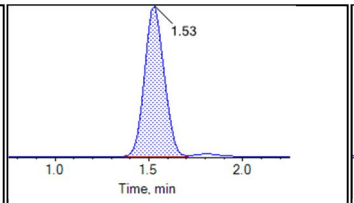
Sample Name	J8448-FS(3)	**Injection Vial**	18
Sample ID	VC-MS09-SB04-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:58:43	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

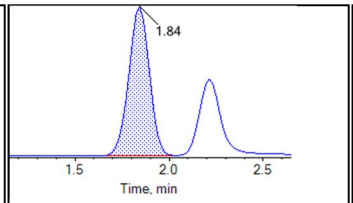
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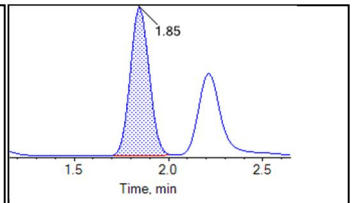
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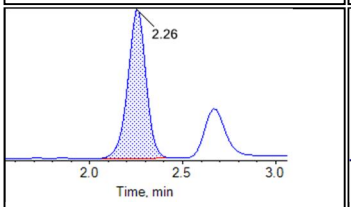
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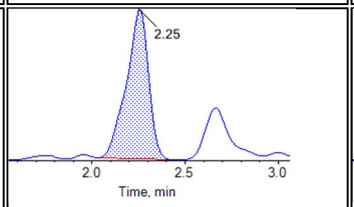
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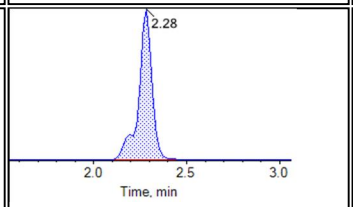
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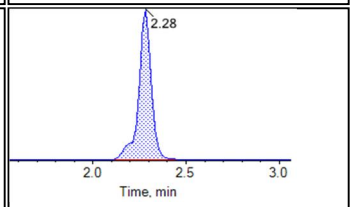
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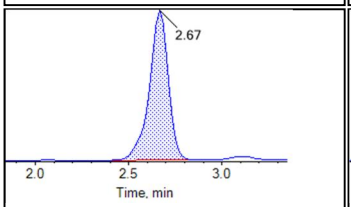
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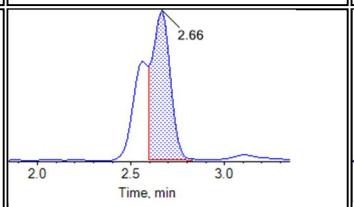
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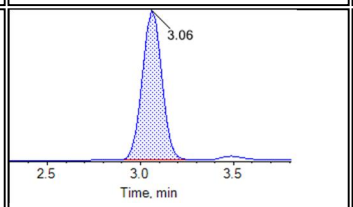
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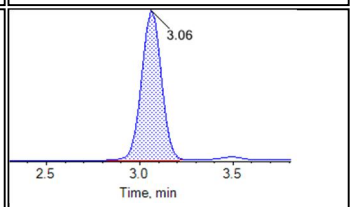
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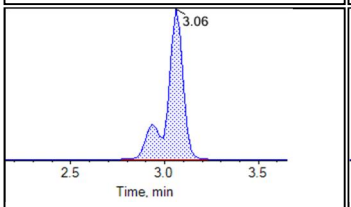
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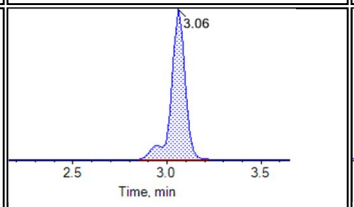
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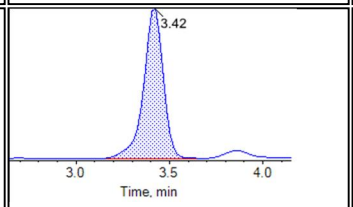
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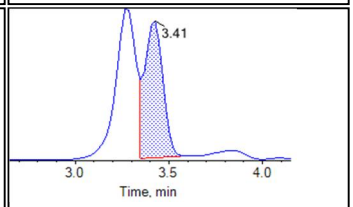
PFOS_1



PFOS_2



PFDA_1

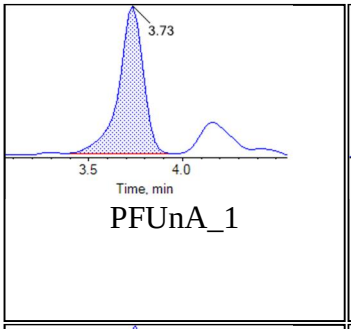


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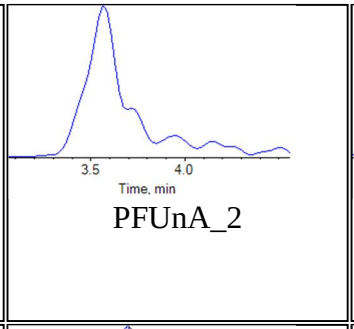
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Chromatogram Report

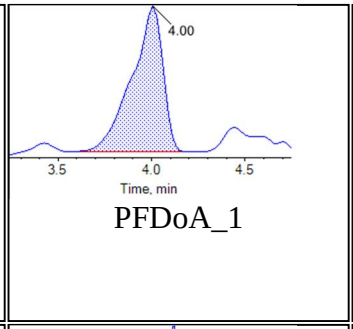
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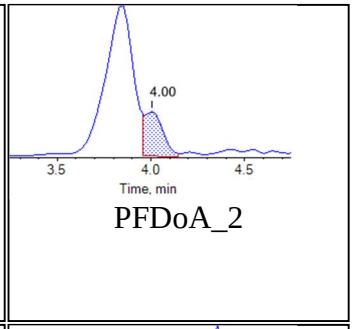
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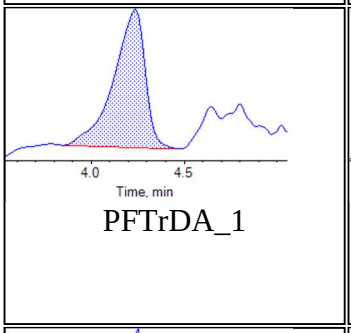
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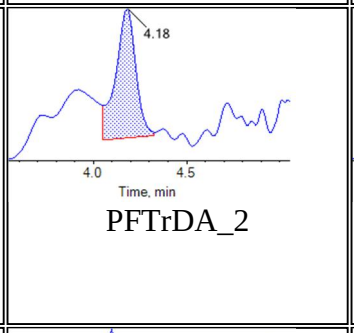
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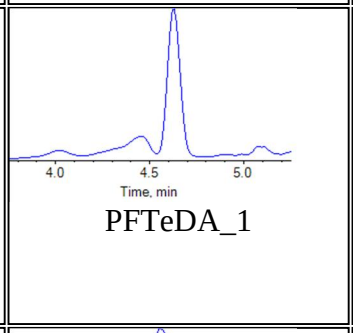
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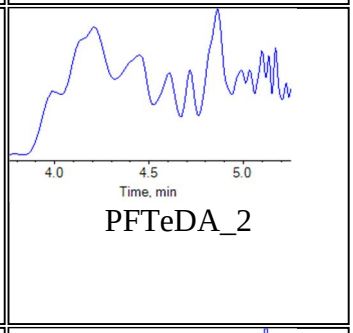
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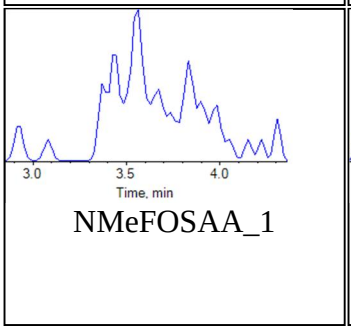
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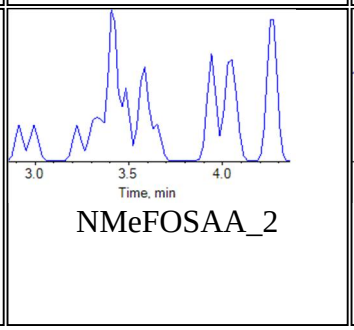
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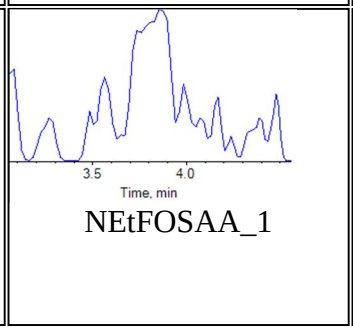
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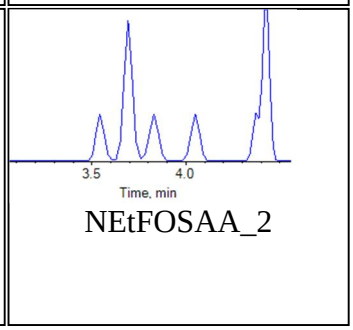
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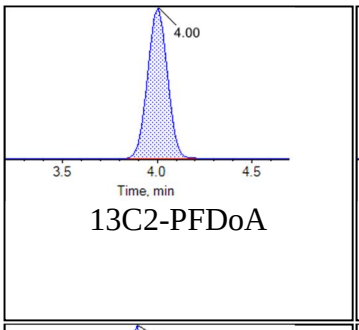


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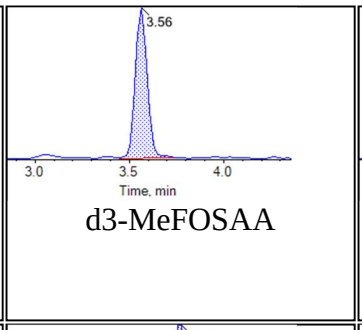


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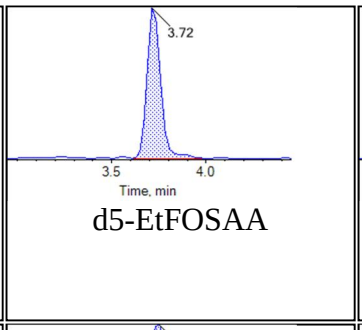
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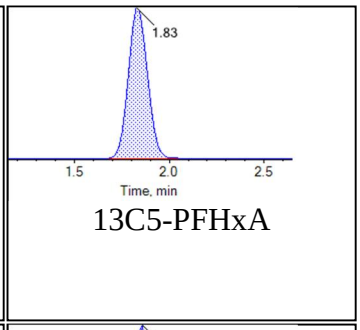
13C2-PFDoA



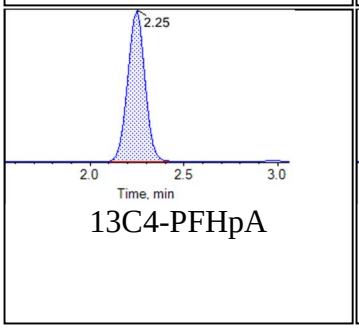
d3-MeFOSAA



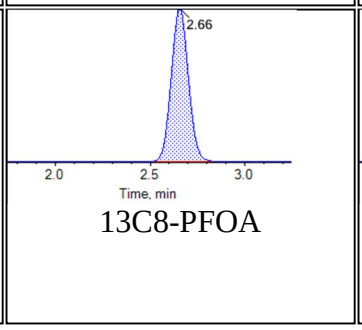
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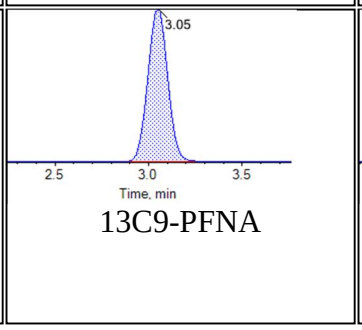
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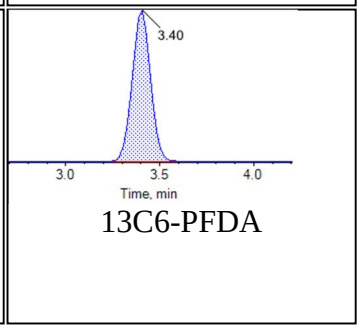
13C4-PFHpA



13C8-PFOA



13C9-PFNA

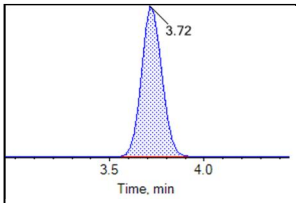


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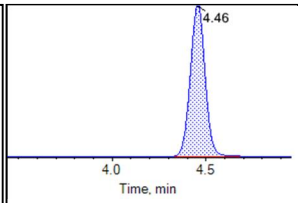
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Chromatogram Report

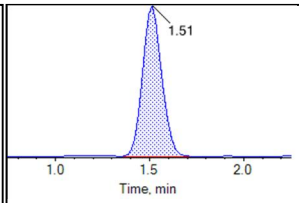
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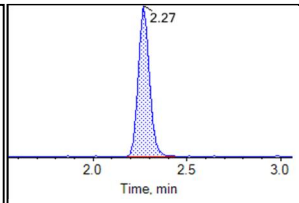
13C7-PFUnA



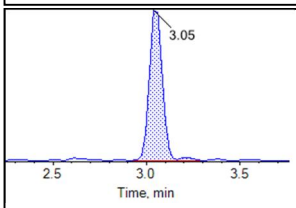
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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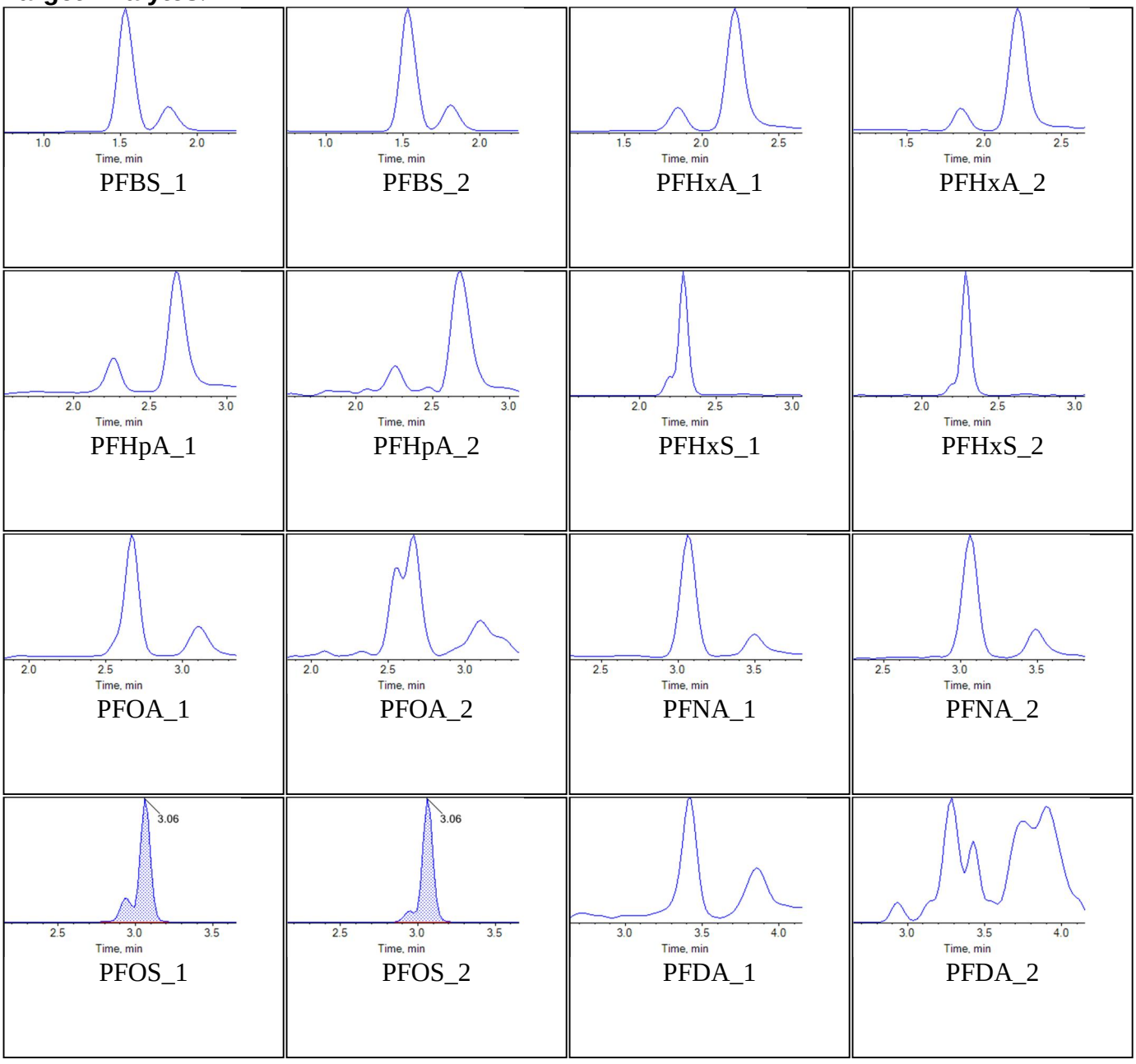
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 11:20:26 AM

Sample Name	J8448-FS-D(5)	**Injection Vial**	19
Sample ID	VC-MS09-SB04-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:09:33	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

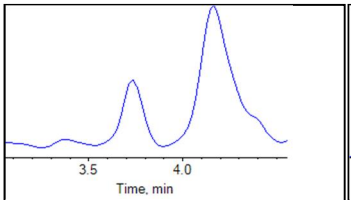
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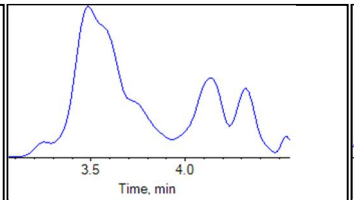
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Chromatogram Report

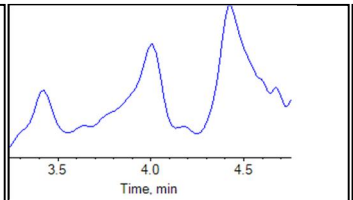
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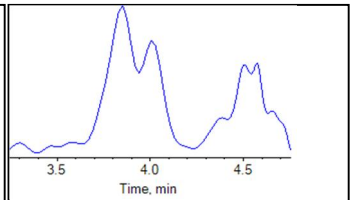
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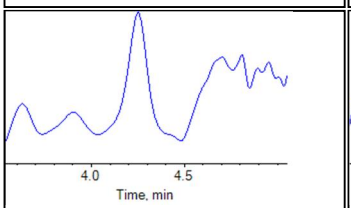
PFUnA_2



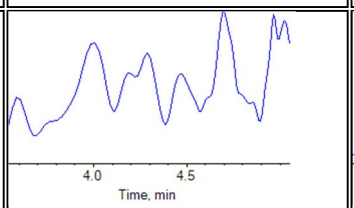
PFDoA_1



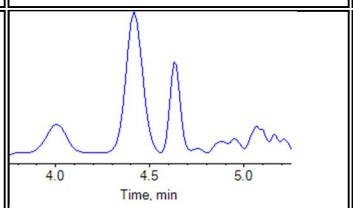
PFDoA_2



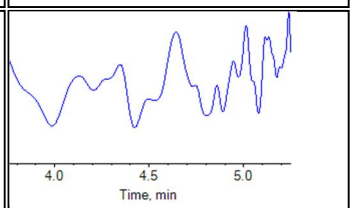
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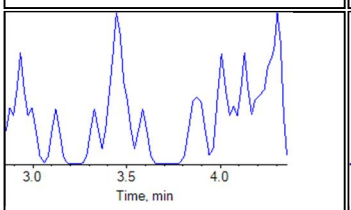
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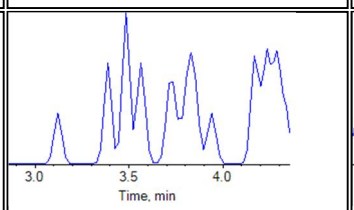
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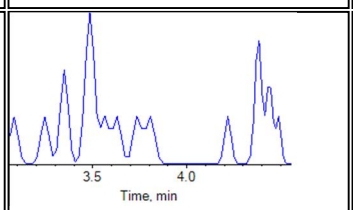
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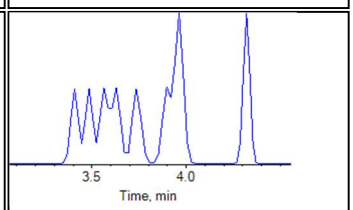
NMeFOSAA_1



NMeFOSAA_2

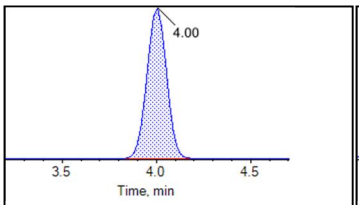


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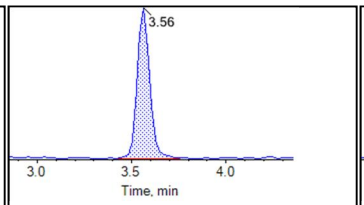


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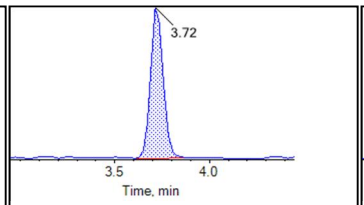
Internal Standards:



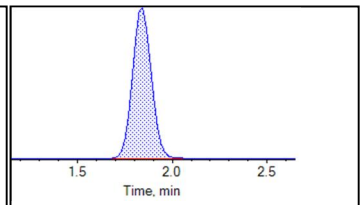
13C2-PFDoA



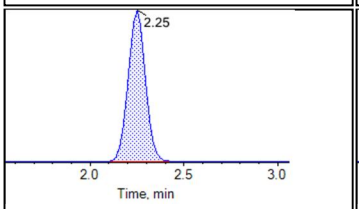
d3-MeFOSAA



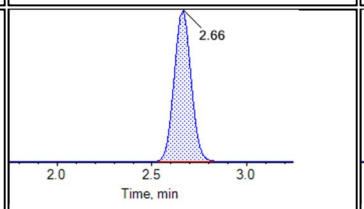
d5-EtFOSAA



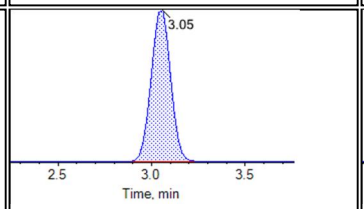
13C5-PFHxA



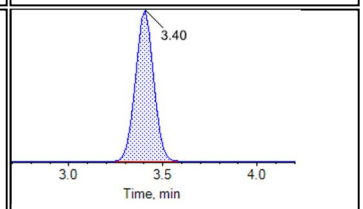
13C4-PFHpA



13C8-PFOA



13C9-PFNA

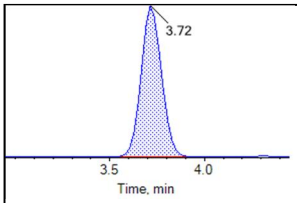


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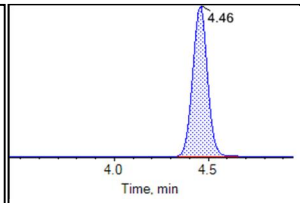
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Chromatogram Report

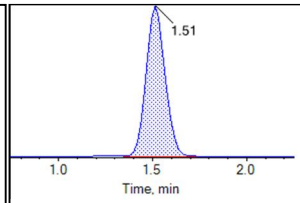
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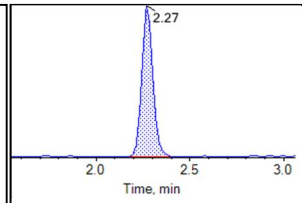
13C7-PFUnA



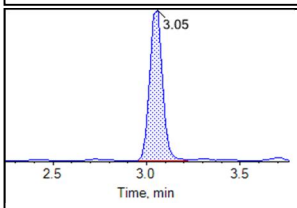
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

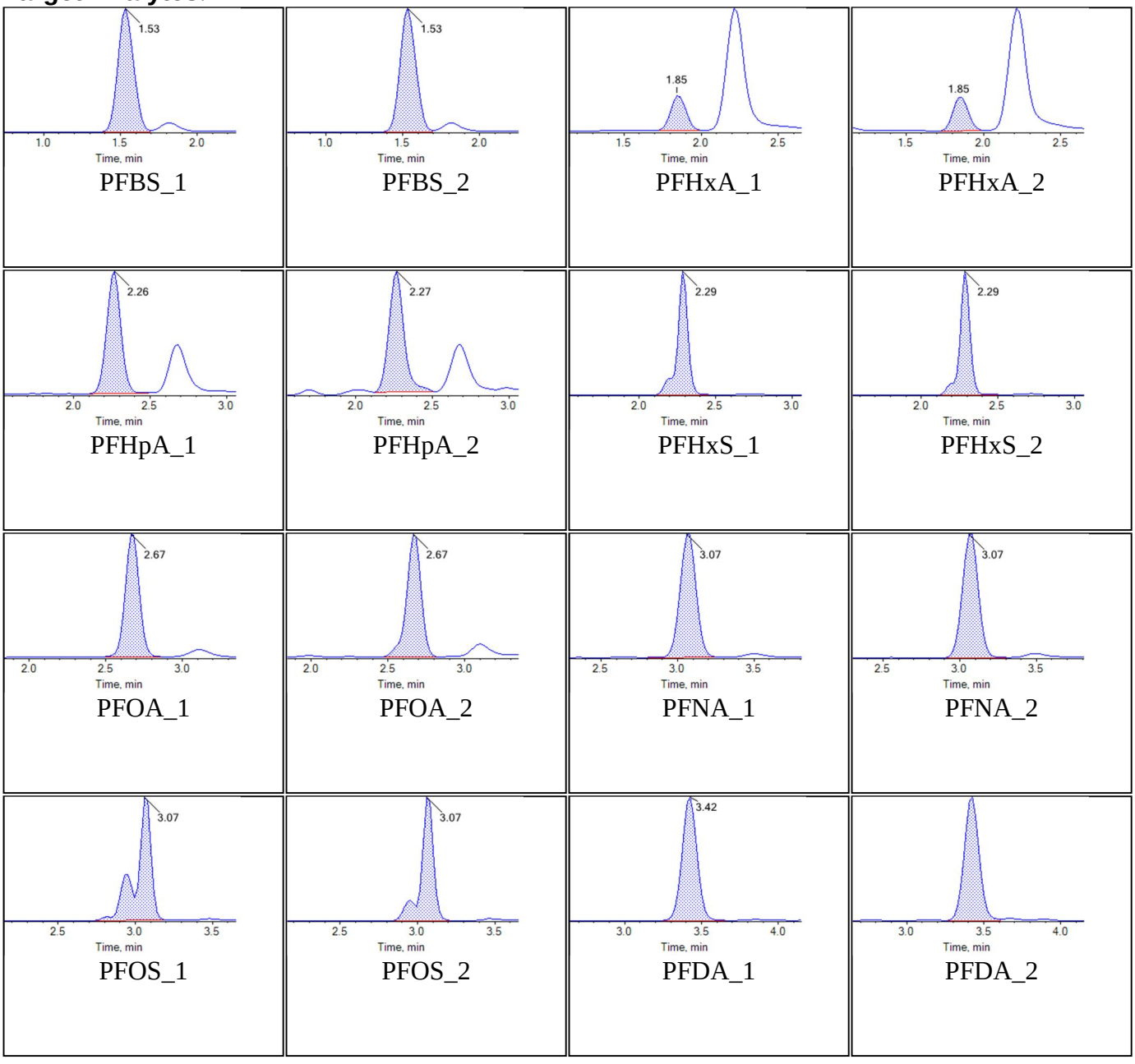
Chromatogram Report

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Printed: 25/10/2018 11:20:32 AM

Sample Name	KB76 CCV	**Injection Vial**	20
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:20:24	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

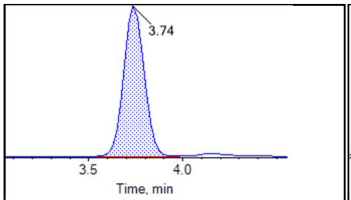
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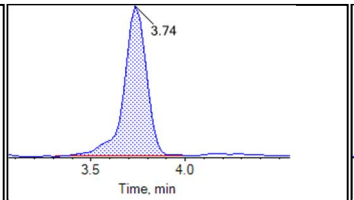
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Chromatogram Report

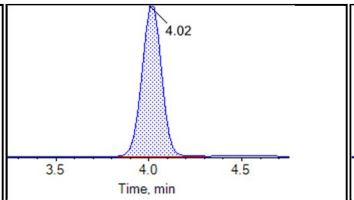
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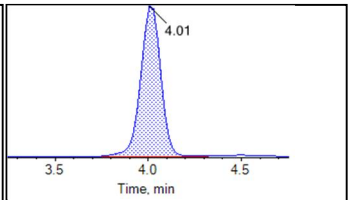
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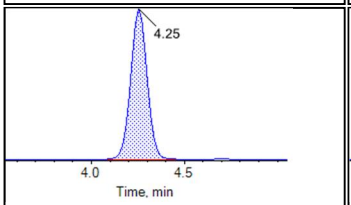
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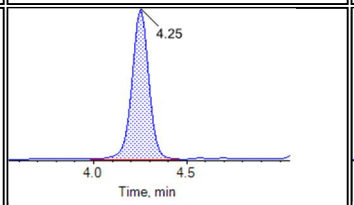
PFDoA_1



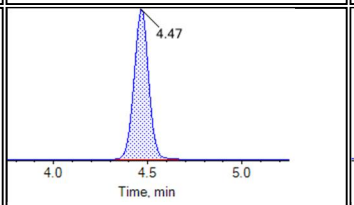
PFDoA_2



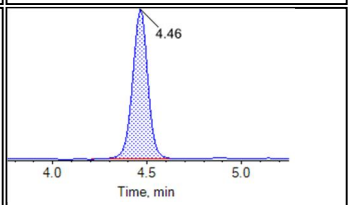
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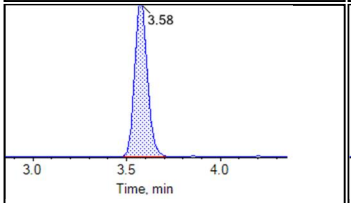
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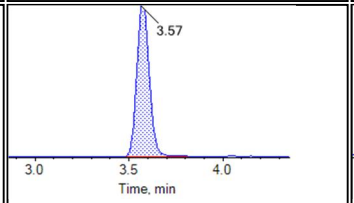
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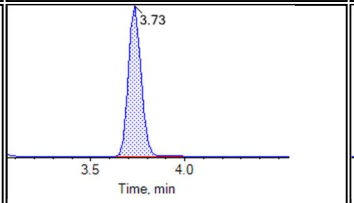
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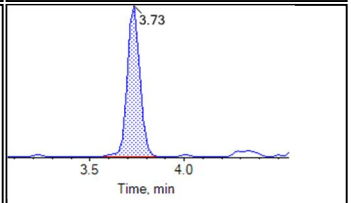
NMeFOSAA_1



NMeFOSAA_2

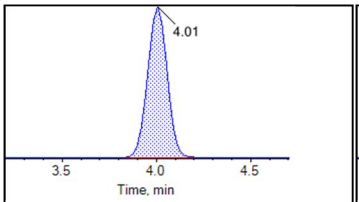


NEtFOSAA_1

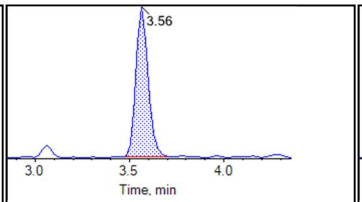


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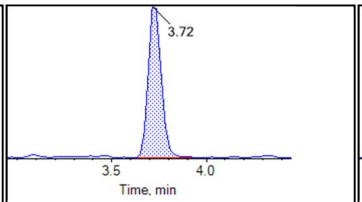
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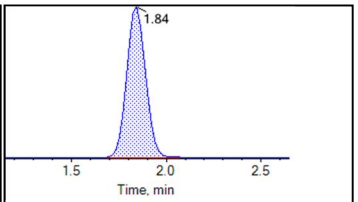
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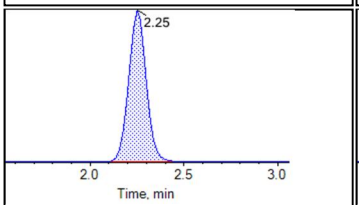
d3-MeFOSAA



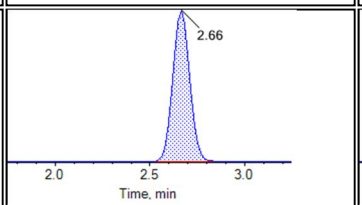
d5-EtFOSAA



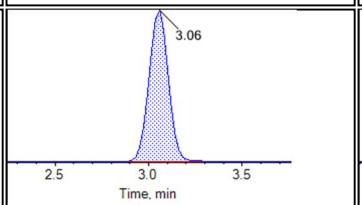
13C5-PFHxA



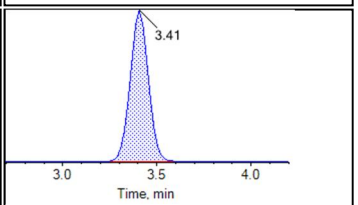
13C4-PFHpA



13C8-PFOA



13C9-PFNA

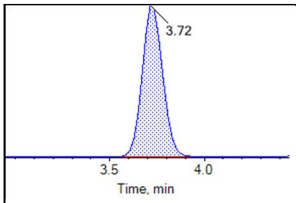


13C6-PFDA

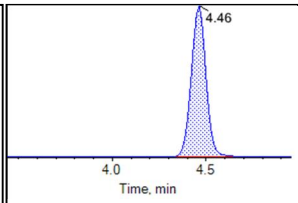
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Chromatogram Report

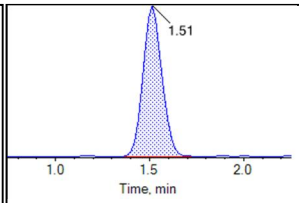
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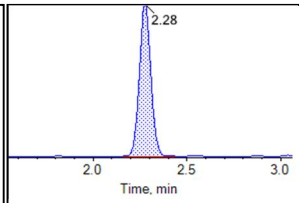
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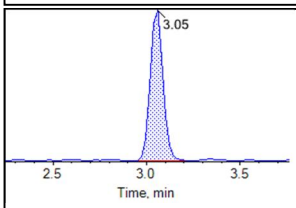
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

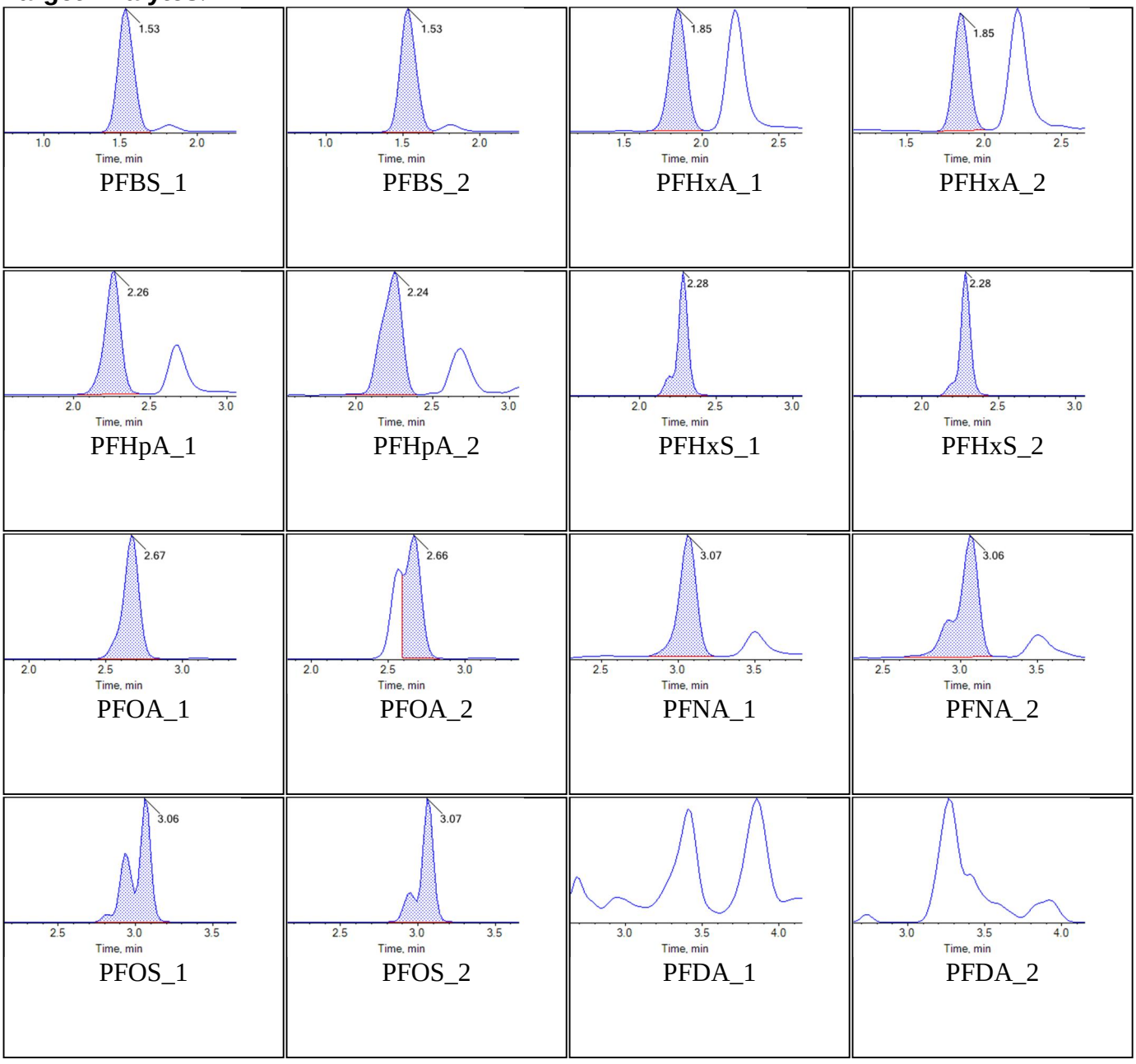
Chromatogram Report

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Printed: 25/10/2018 11:20:37 AM

Sample Name	J8449-FS(3)	**Injection Vial**	22
Sample ID	VC-MS09-SB04-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:42:10	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

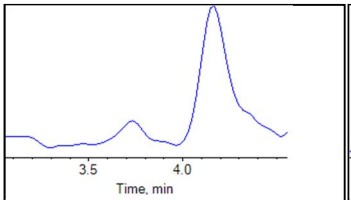
Target Analytes:



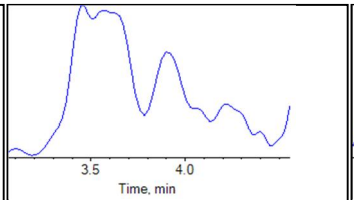
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Chromatogram Report

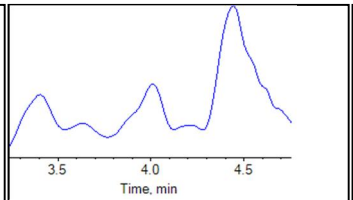
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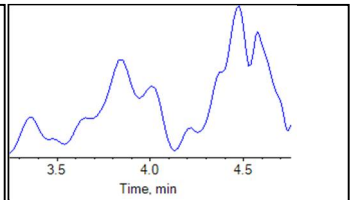
PFUnA_1



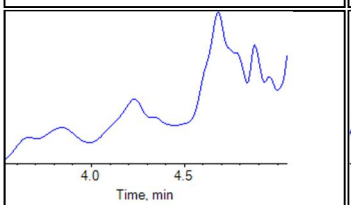
PFUnA_2



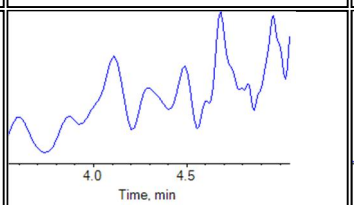
PFDoA_1



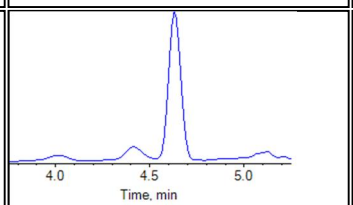
PFDoA_2



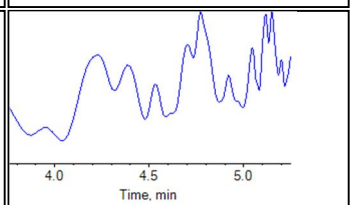
PFTrDA_1



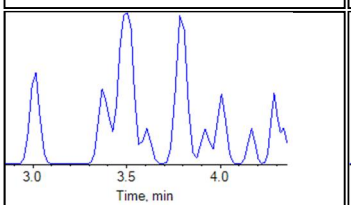
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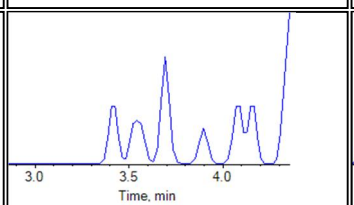
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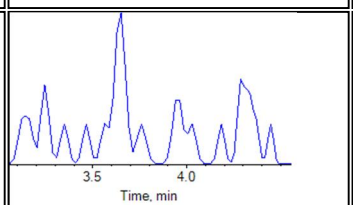
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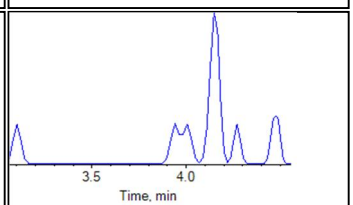
NMeFOSAA_1



NMeFOSAA_2

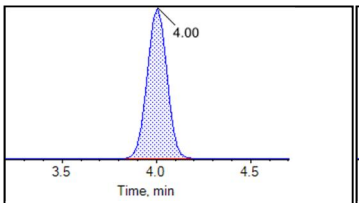


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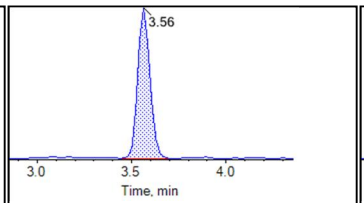


NEtFOSAA_2

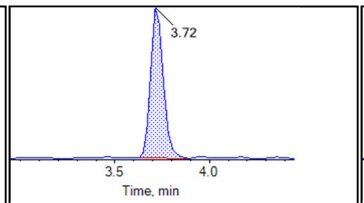
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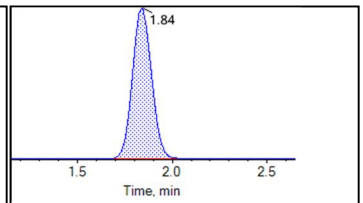
13C2-PFDoA



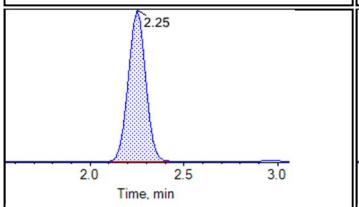
d3-MeFOSAA



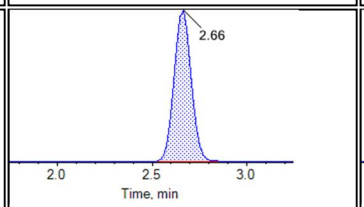
d5-EtFOSAA



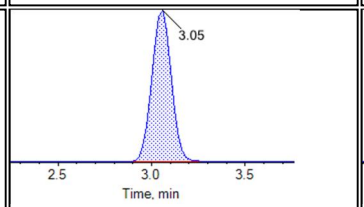
13C5-PFHxA



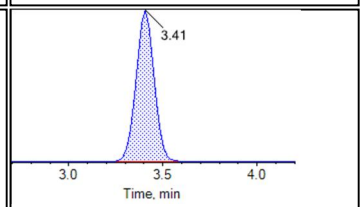
13C4-PFHpA



13C8-PFOA



13C9-PFNA

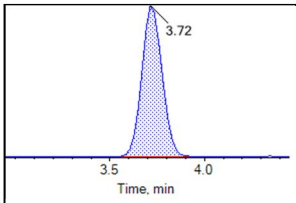


13C6-PFDA

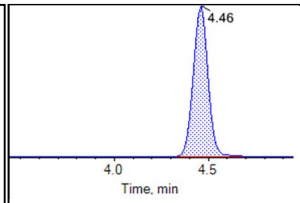
BATTELLE

Chromatogram Report

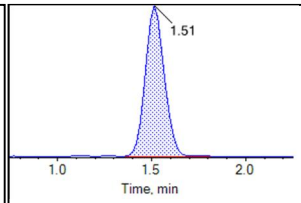
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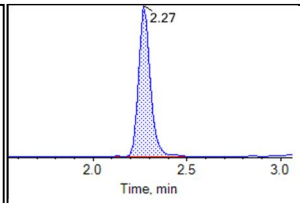
13C7-PFUnA



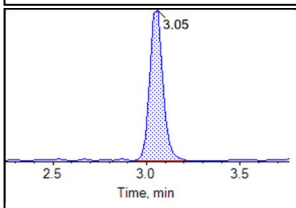
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

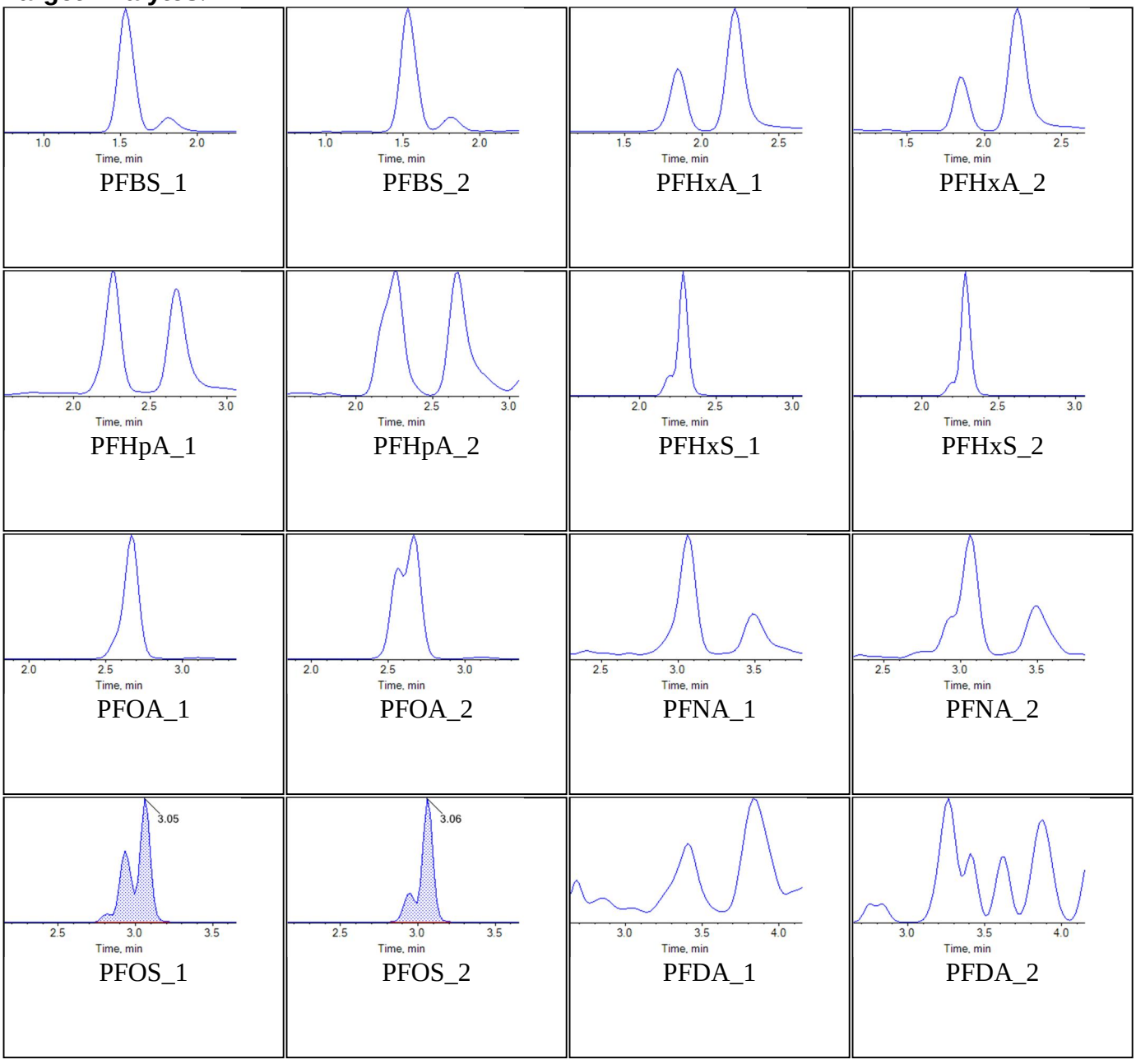
Chromatogram Report

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Printed: 25/10/2018 11:20:43 AM

Sample Name	J8449-FS-D(5)	**Injection Vial**	23
Sample ID	VC-MS09-SB04-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:53:03	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

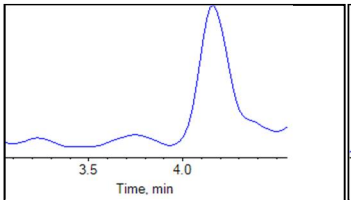
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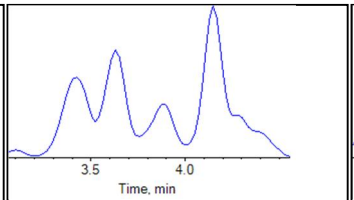
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Chromatogram Report

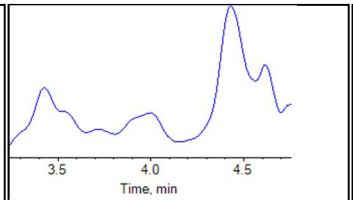
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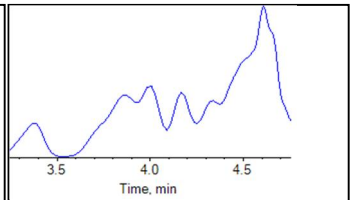
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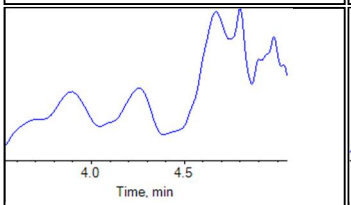
PFUnA_2



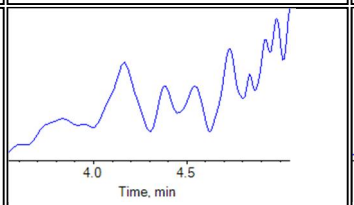
PFDoA_1



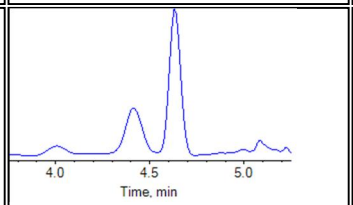
PFDoA_2



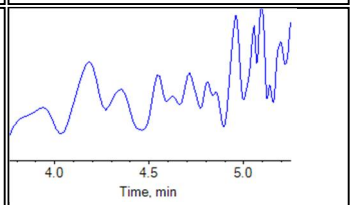
PFTrDA_1



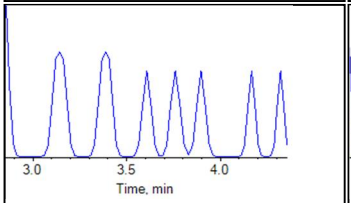
PFTrDA_2



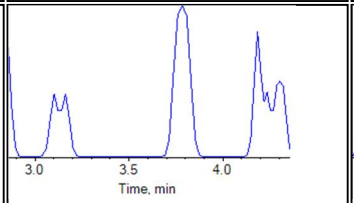
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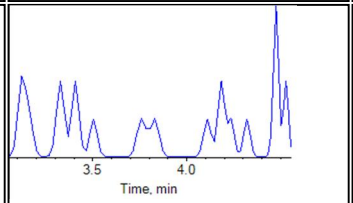
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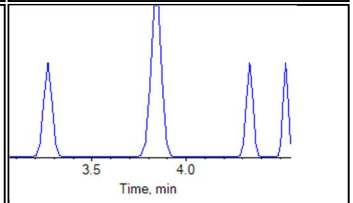
NMeFOSAA_1



NMeFOSAA_2

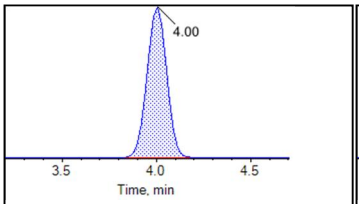


NEtFOSAA_1

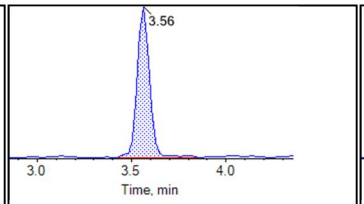


NEtFOSAA_2

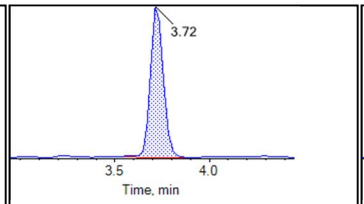
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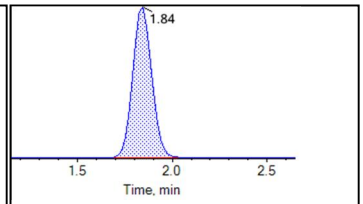
13C2-PFDoA



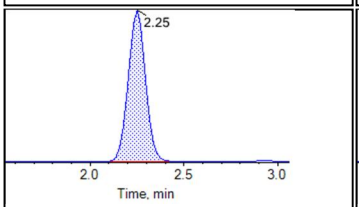
d3-MeFOSAA



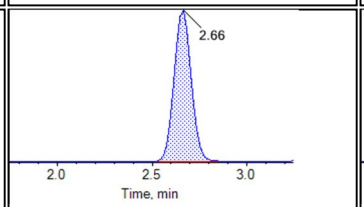
d5-EtFOSAA



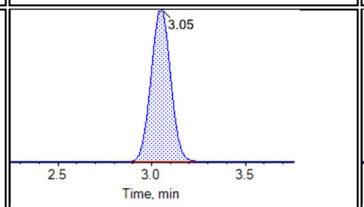
13C5-PFHxA



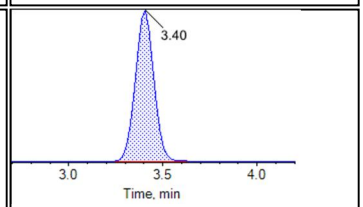
13C4-PFHpA



13C8-PFOA



13C9-PFNA

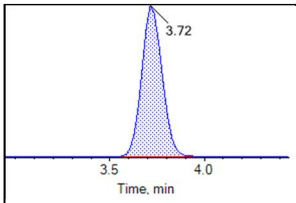


13C6-PFDA

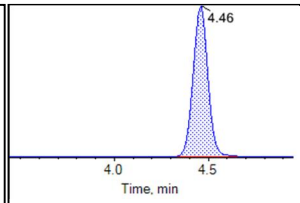
BATTELLE

Chromatogram Report

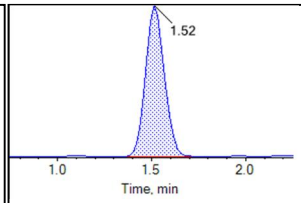
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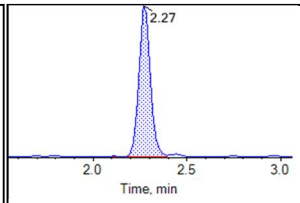
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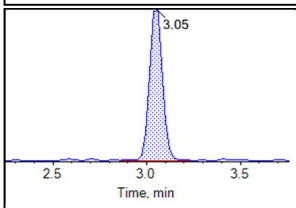
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

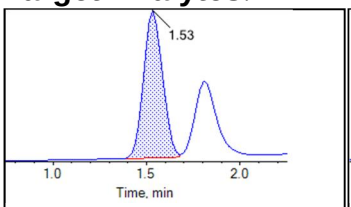
Chromatogram Report

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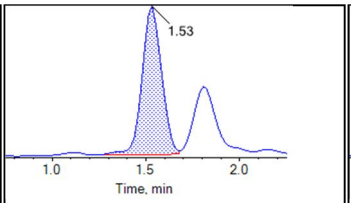
Sample Name	J8450-FS(3)	**Injection Vial**	24
Sample ID	VC-MS09-SS05-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:03:55	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

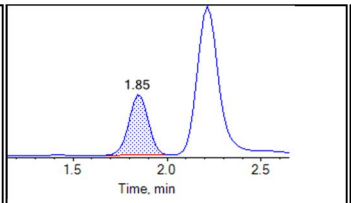
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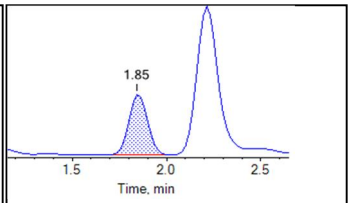
PFBS_1



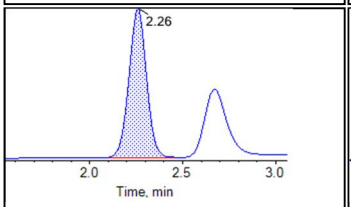
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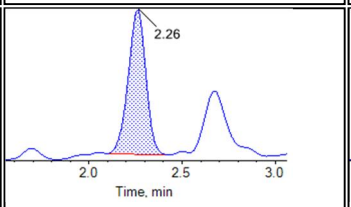
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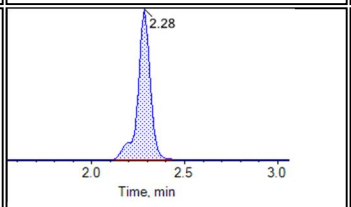
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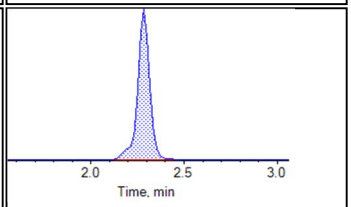
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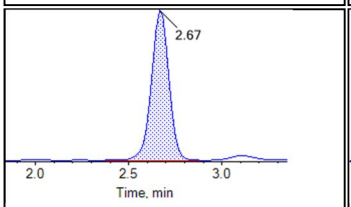
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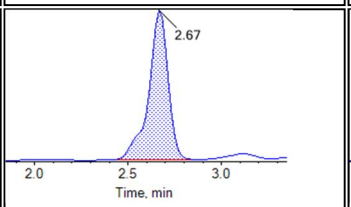
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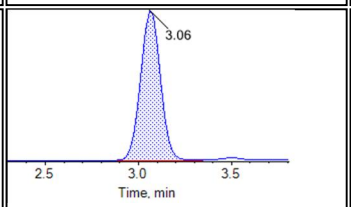
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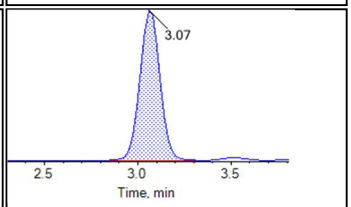
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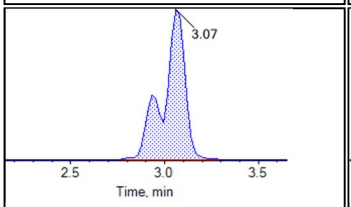
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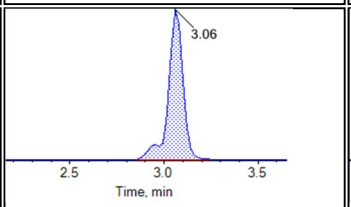
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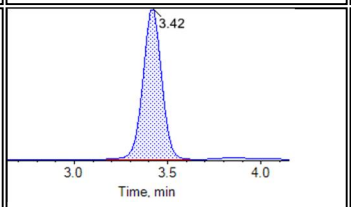
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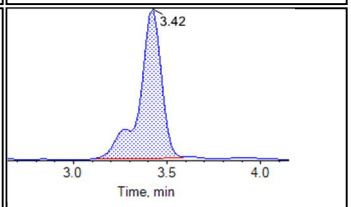
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PFOS_2



PFDA_1

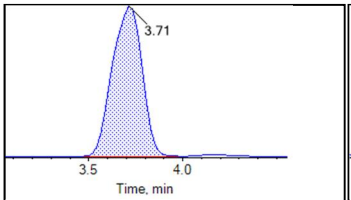


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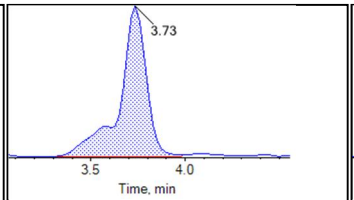
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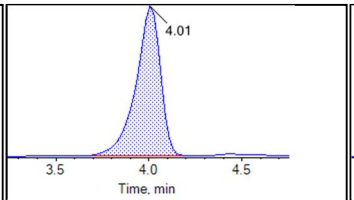
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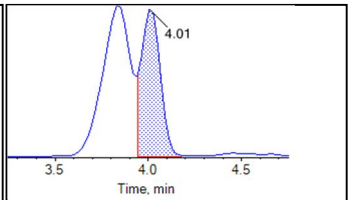
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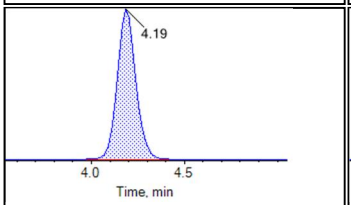
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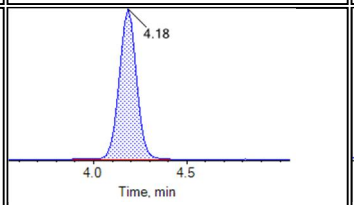
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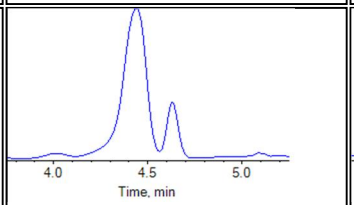
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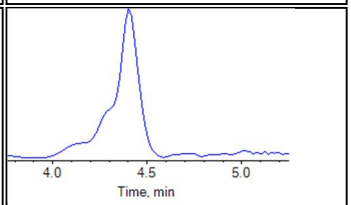
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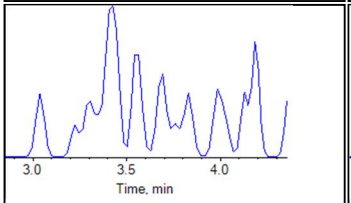
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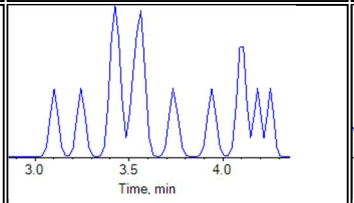
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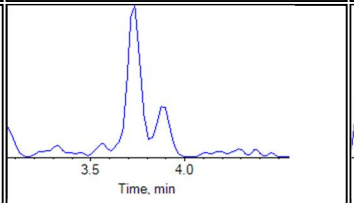
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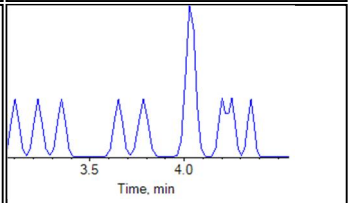
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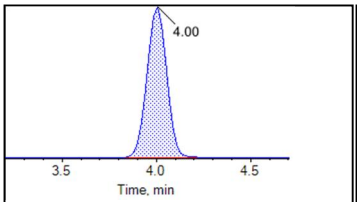


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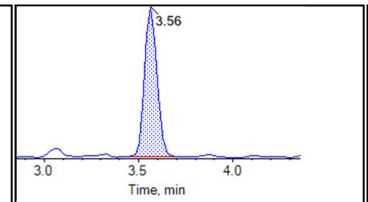


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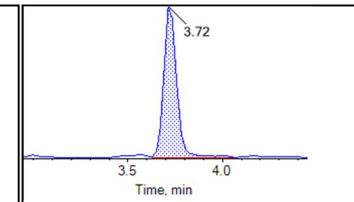
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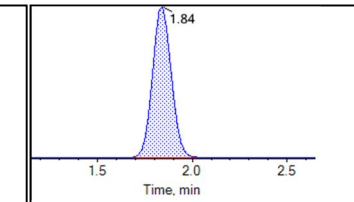
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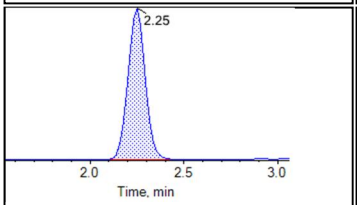
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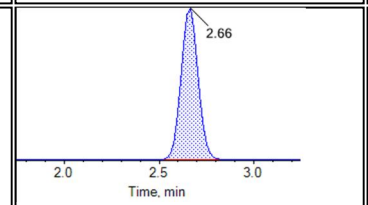
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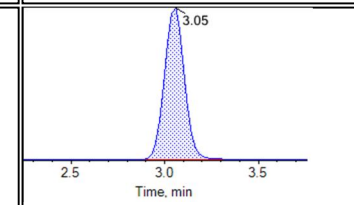
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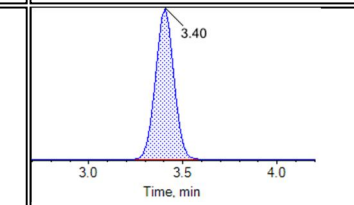
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13C8-PFOA



13C9-PFNA

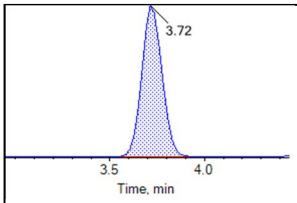


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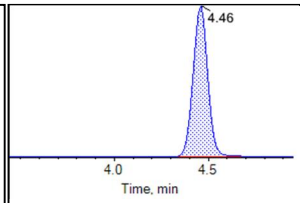
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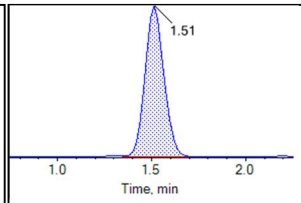
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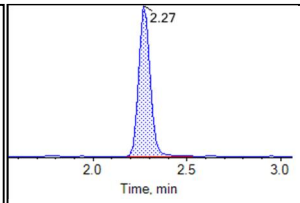
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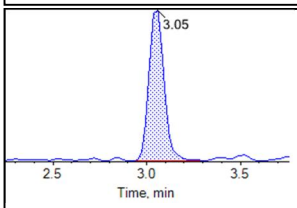
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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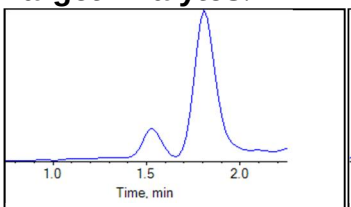
Chromatogram Report

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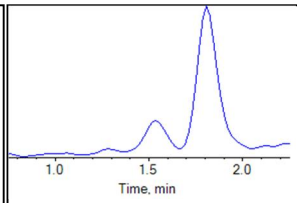
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Sample ID	VC-MS09-SS05-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:14:47	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

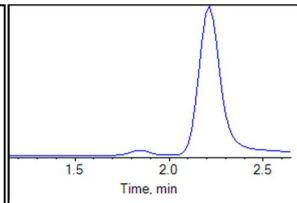
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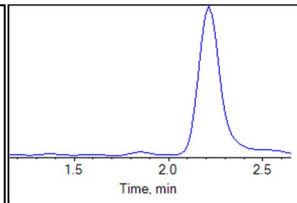
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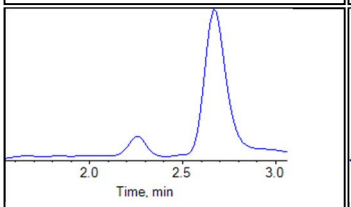
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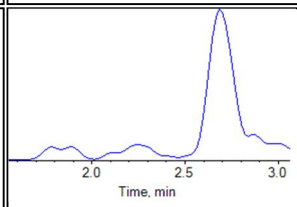
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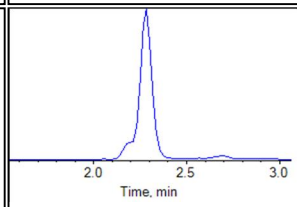
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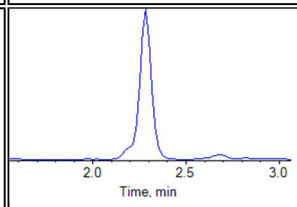
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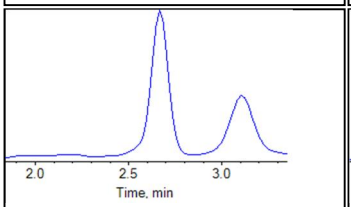
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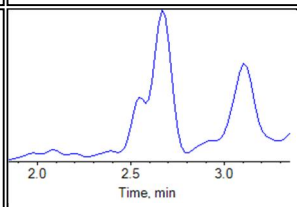
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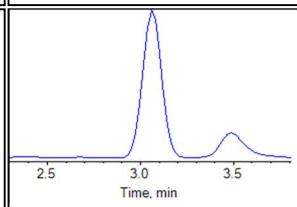
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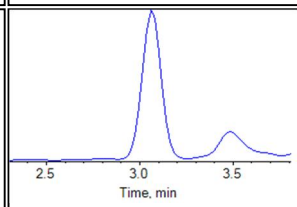
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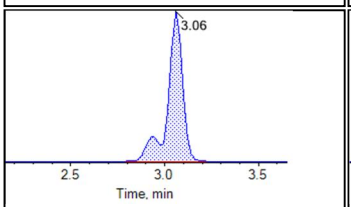
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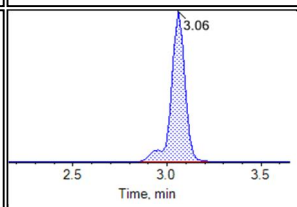
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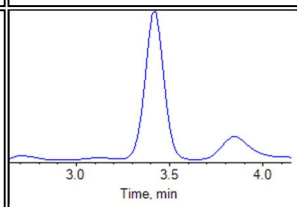
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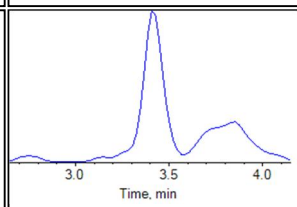
PFOS_1



PFOS_2



PFDA_1

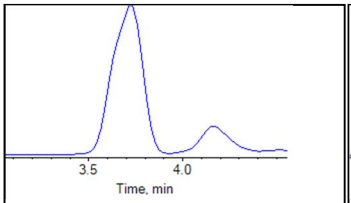


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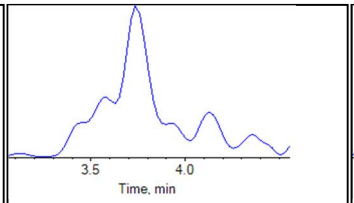
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Chromatogram Report

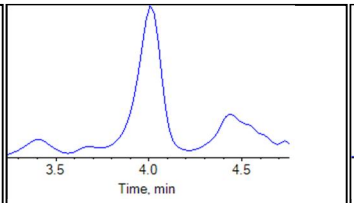
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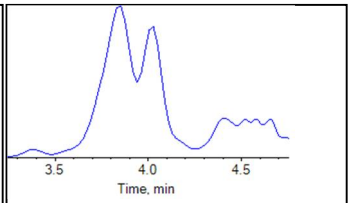
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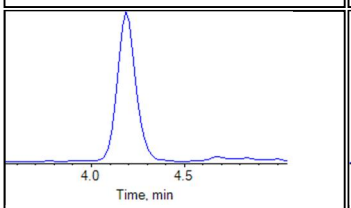
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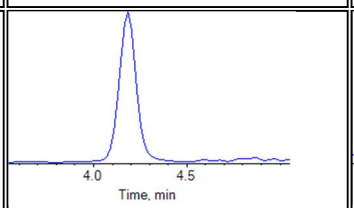
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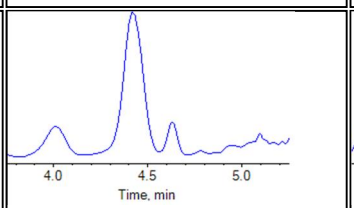
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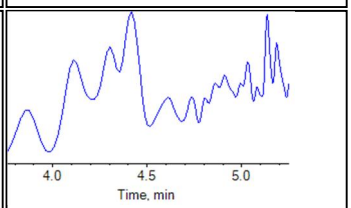
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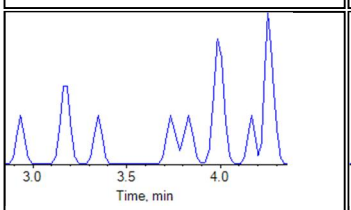
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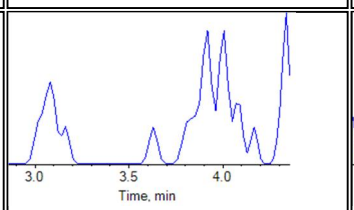
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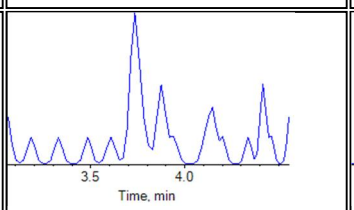
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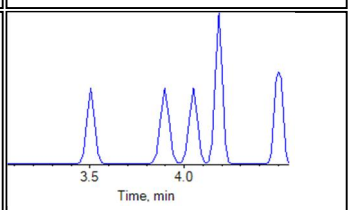
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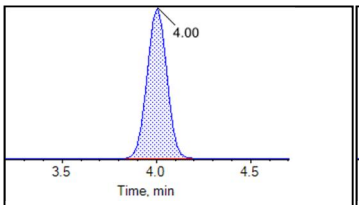


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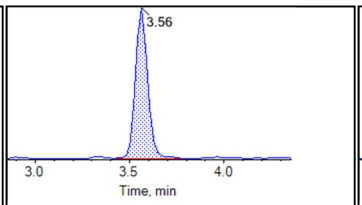


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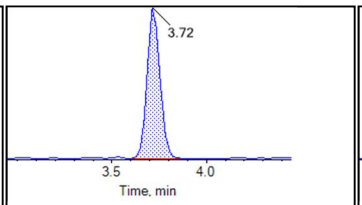
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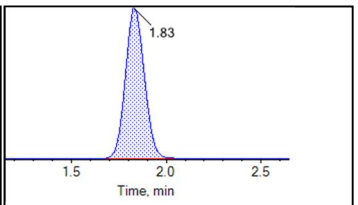
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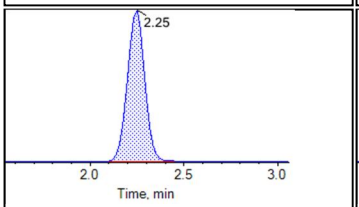
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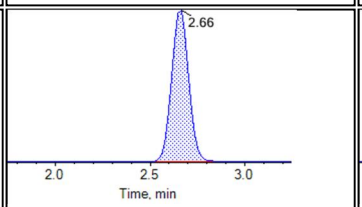
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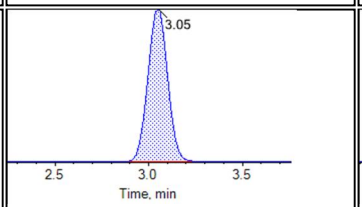
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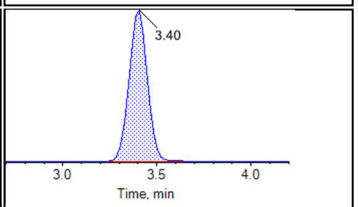
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13C8-PFOA



13C9-PFNA

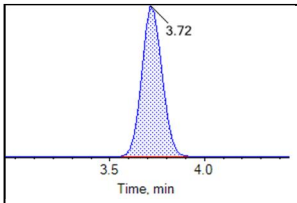


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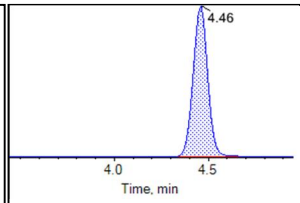
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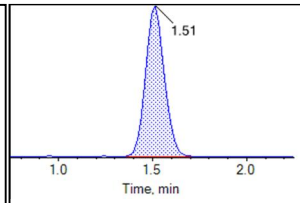
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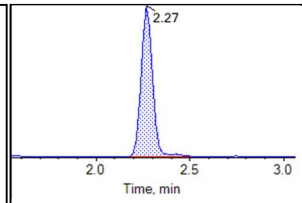
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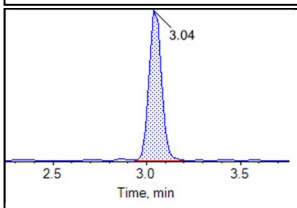
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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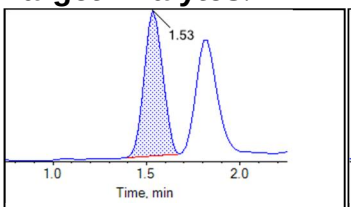
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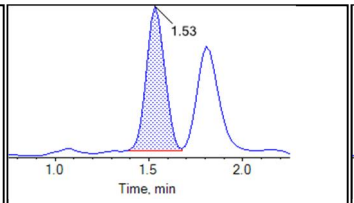
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Sample ID	VC-MS09-SB05-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:25:38	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

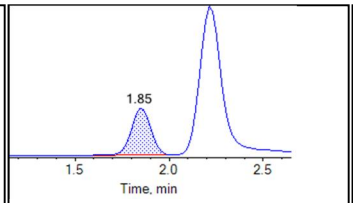
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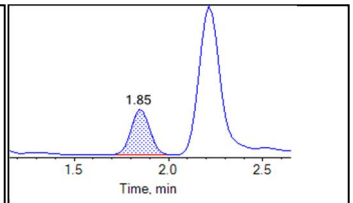
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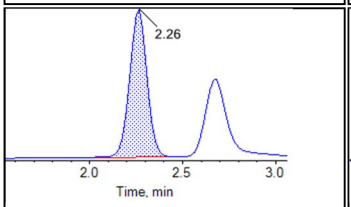
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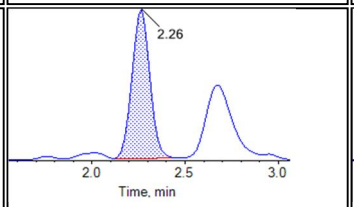
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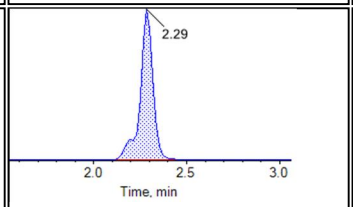
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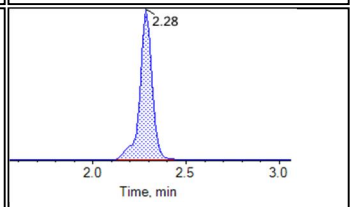
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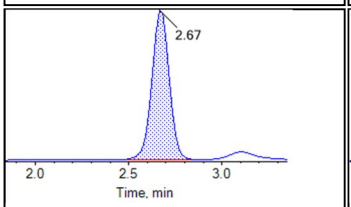
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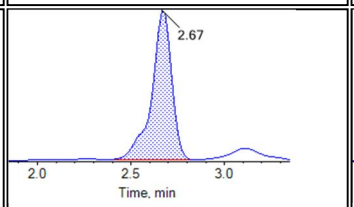
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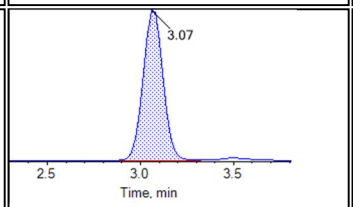
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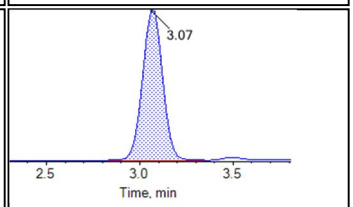
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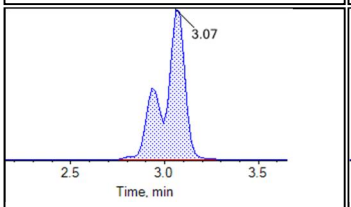
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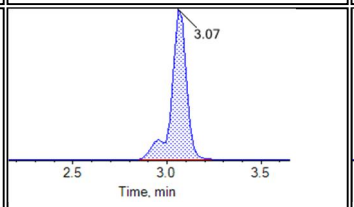
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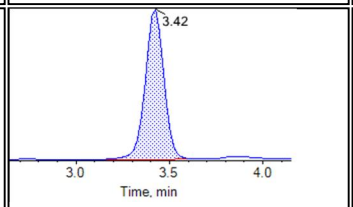
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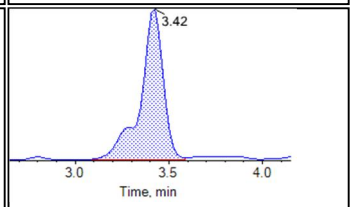
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PFOS_2



PFDA_1

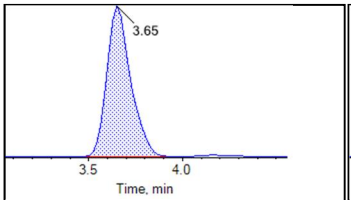


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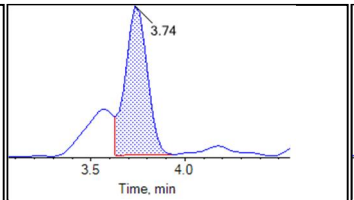
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Chromatogram Report

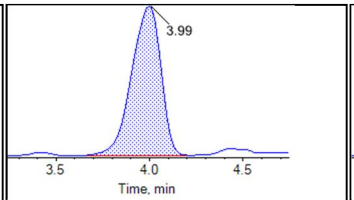
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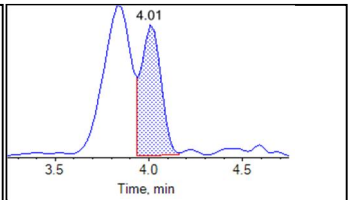
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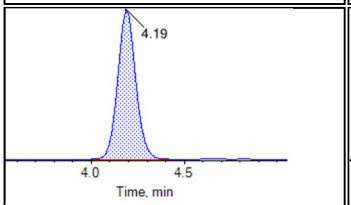
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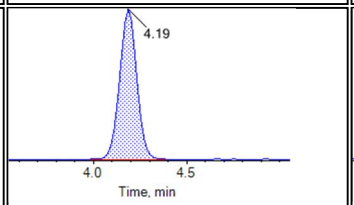
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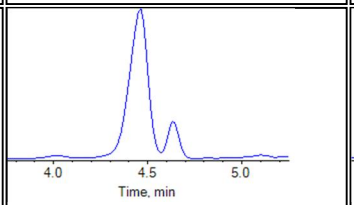
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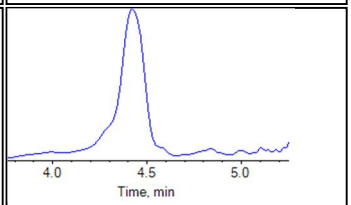
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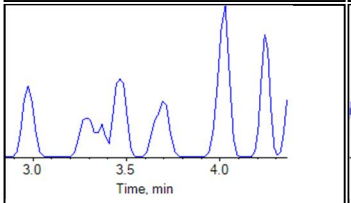
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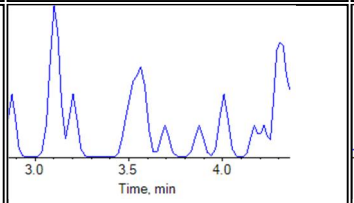
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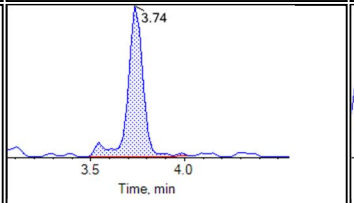
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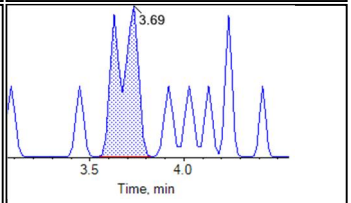
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NMeFOSAA_2

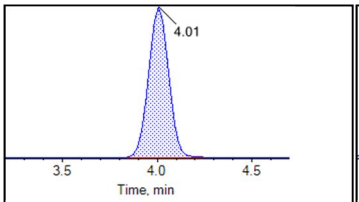


NEtFOSAA_1

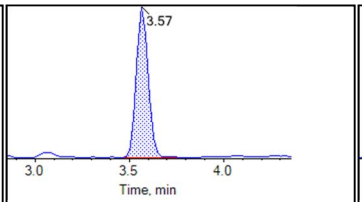


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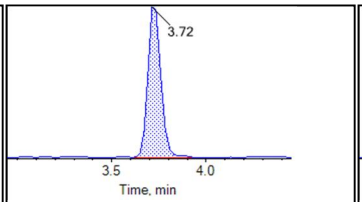
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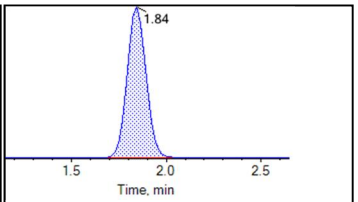
13C2-PFDoA



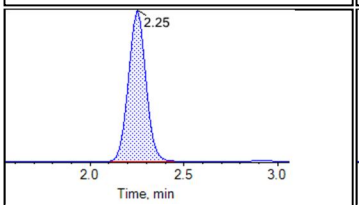
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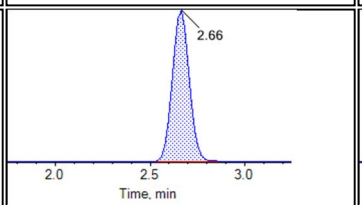
d5-EtFOSAA



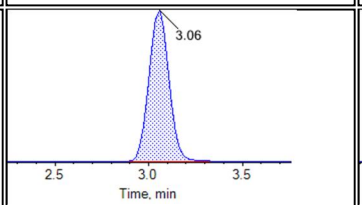
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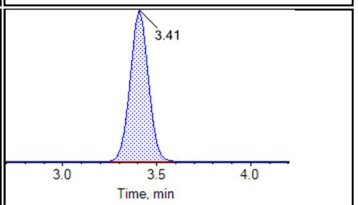
13C4-PFHpA



13C8-PFOA



13C9-PFNA

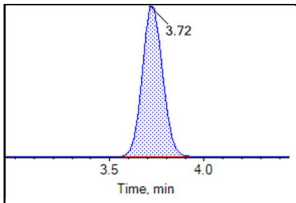


13C6-PFDA

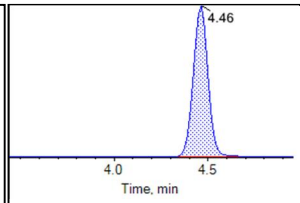
BATTELLE

Chromatogram Report

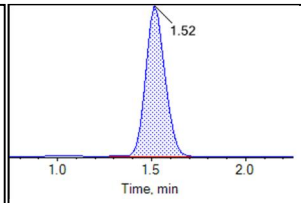
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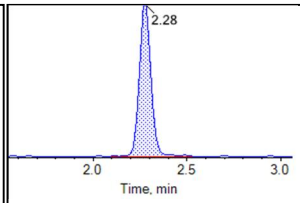
13C7-PFUnA



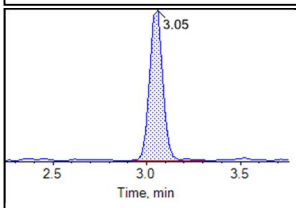
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

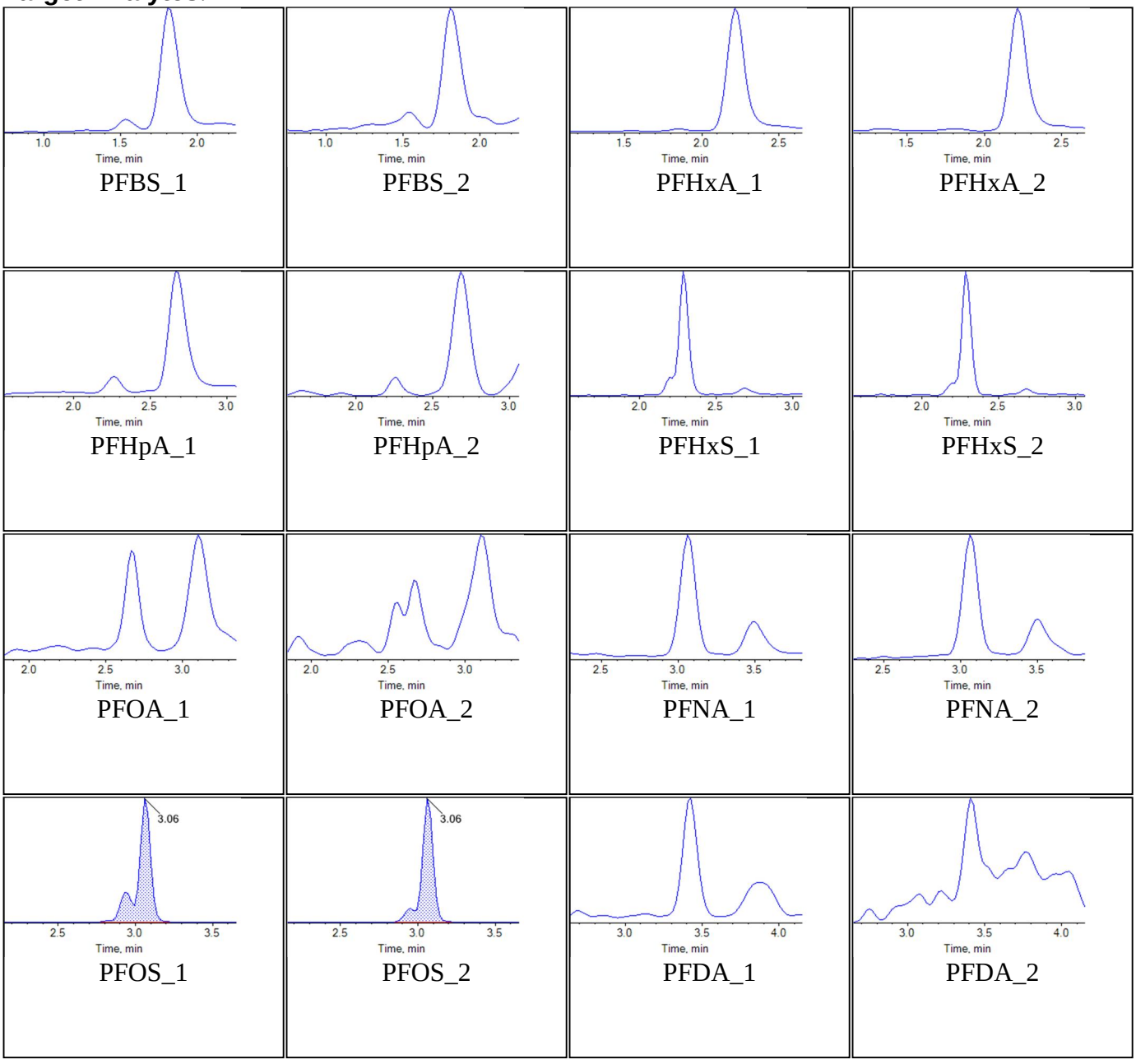
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 11:21:06 AM

Sample Name	J8451-FS-D(5)	**Injection Vial**	27
Sample ID	VC-MS09-SB05-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:36:29	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

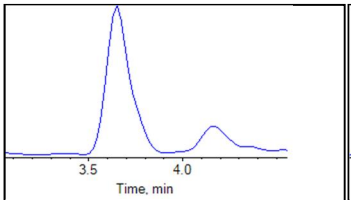
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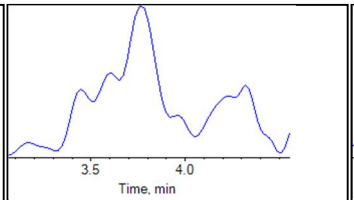
BATTELLE

Chromatogram Report

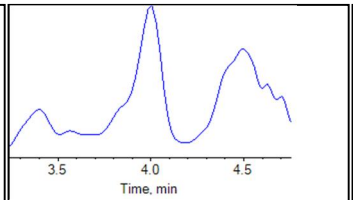
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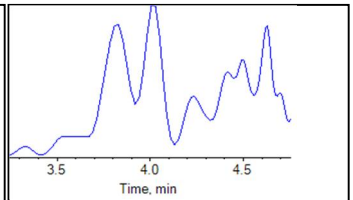
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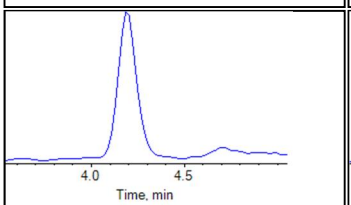
PFUnA_2



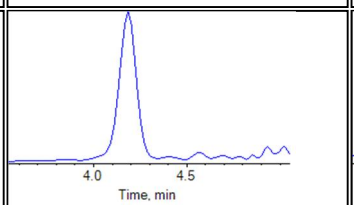
PFDoA_1



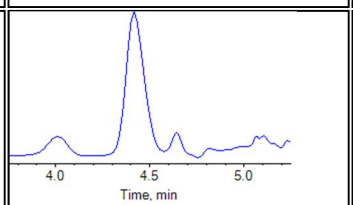
PFDoA_2



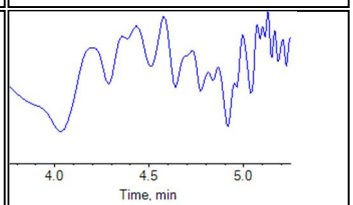
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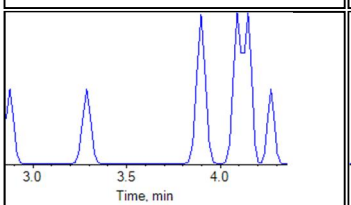
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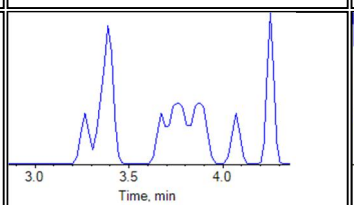
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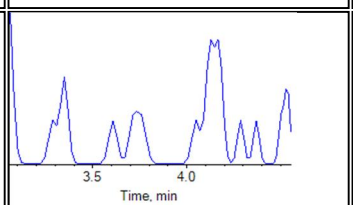
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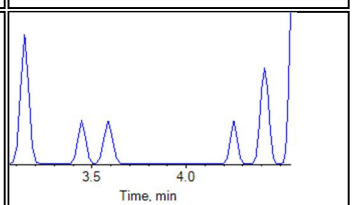
NMeFOSAA_1



NMeFOSAA_2

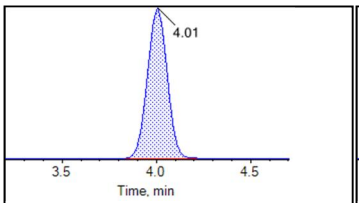


NEtFOSAA_1

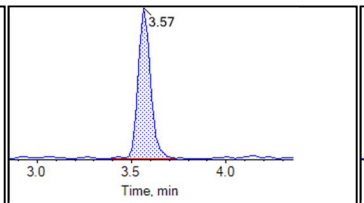


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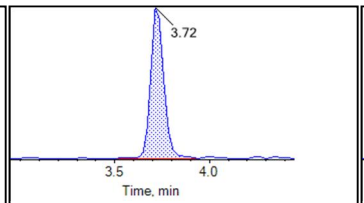
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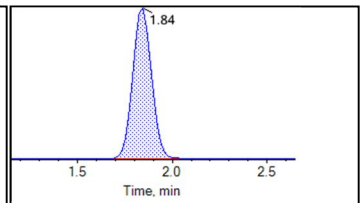
13C2-PFDoA



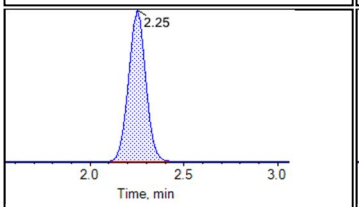
d3-MeFOSAA



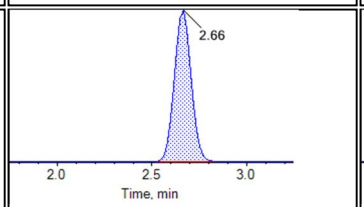
d5-EtFOSAA



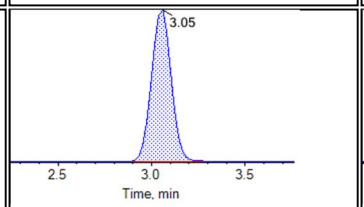
13C5-PFHxA



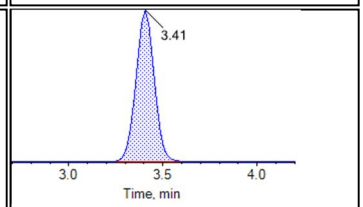
13C4-PFHpA



13C8-PFOA



13C9-PFNA

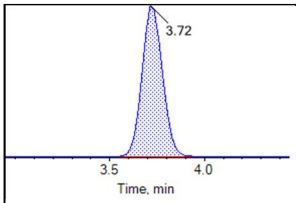


13C6-PFDA

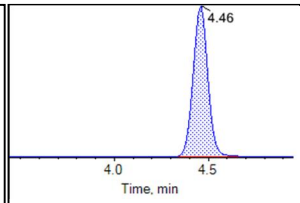
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Chromatogram Report

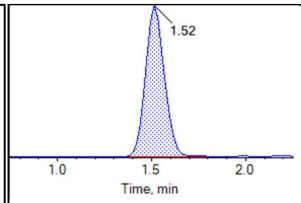
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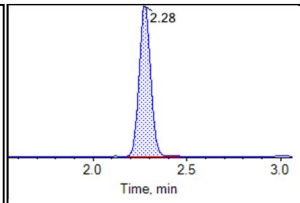
13C7-PFUnA



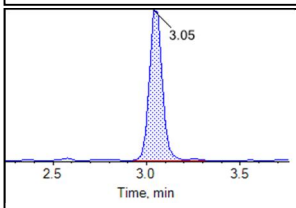
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

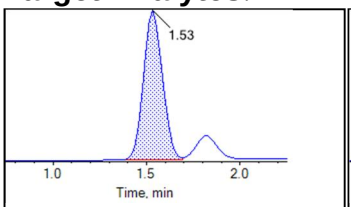
Chromatogram Report

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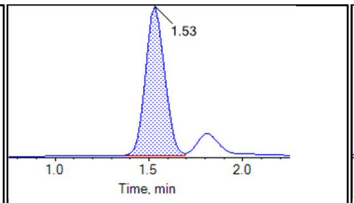
Sample Name	J8452-FS(3)	**Injection Vial**	28
Sample ID	VC-MS09-SB05-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:47:20	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

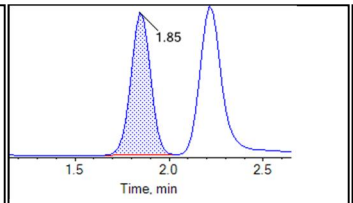
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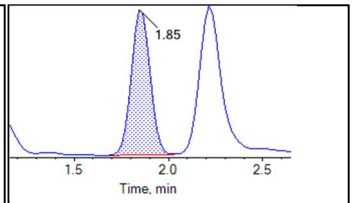
PFBS_1



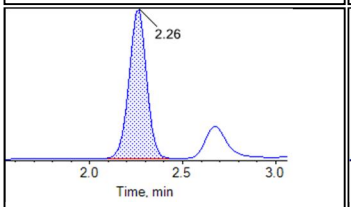
PFBS_2



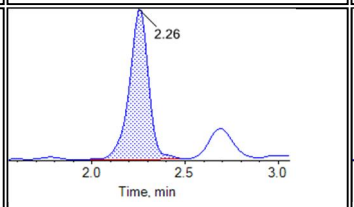
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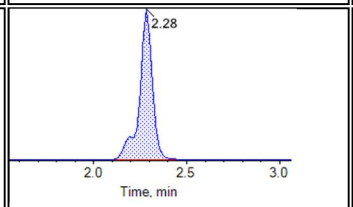
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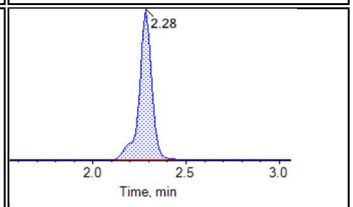
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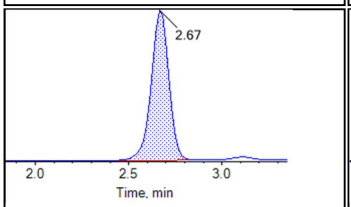
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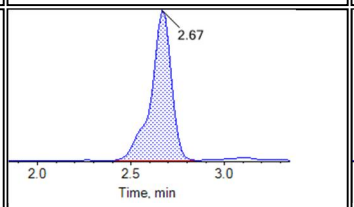
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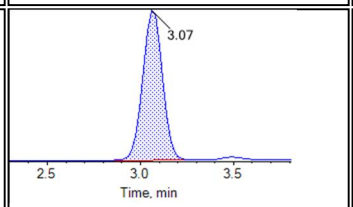
PFHxS_2



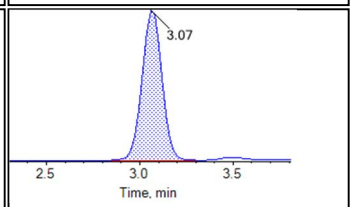
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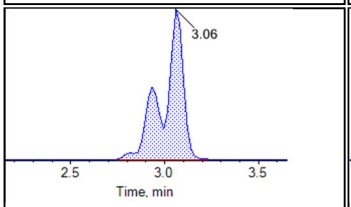
PFOA_2



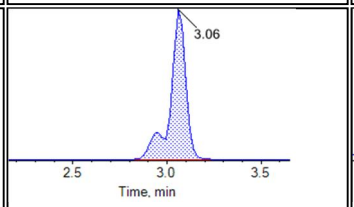
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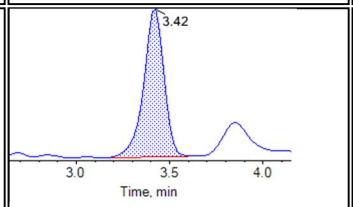
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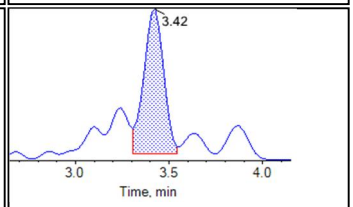
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PFOS_2



PFDA_1

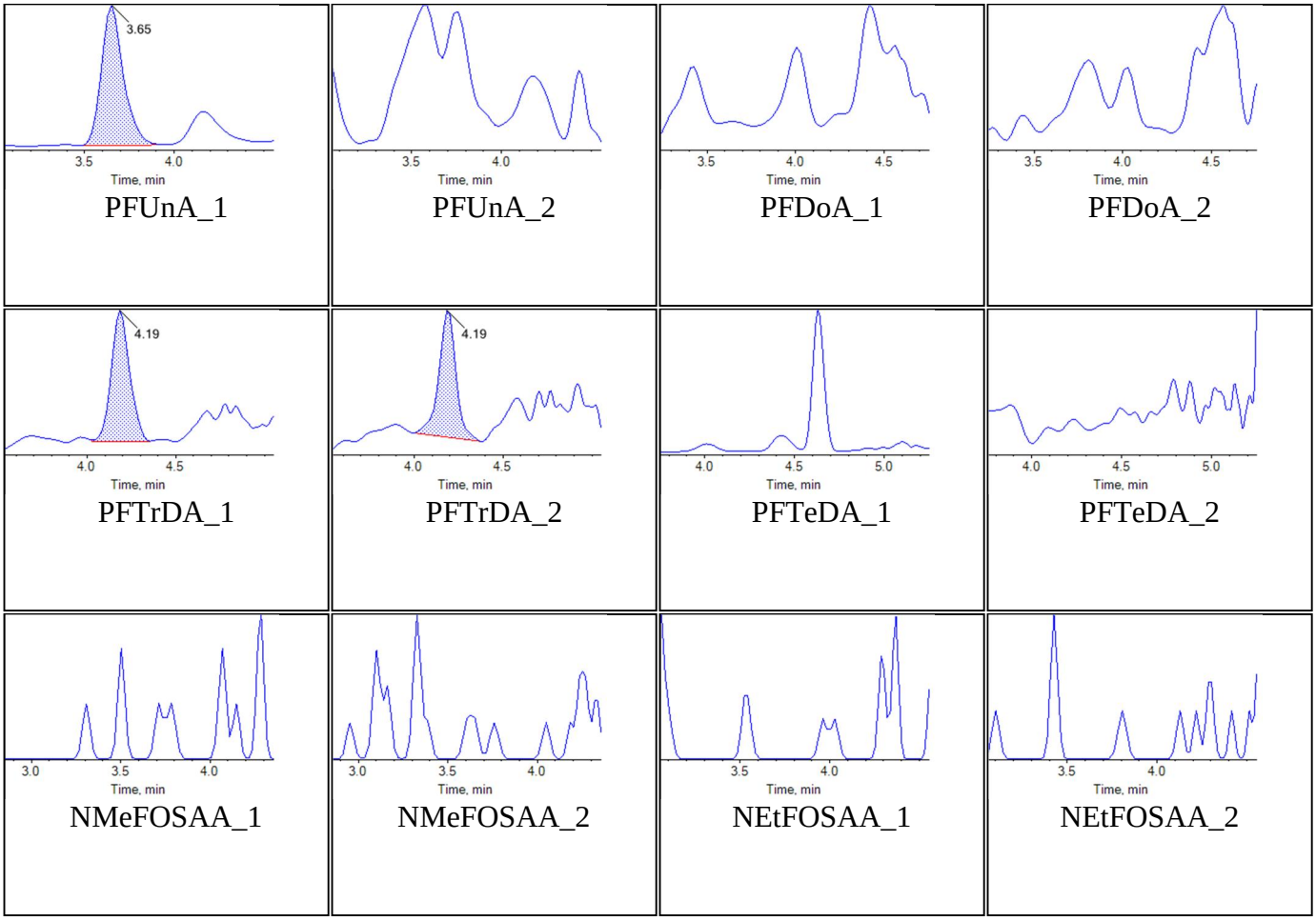


PFDA_2

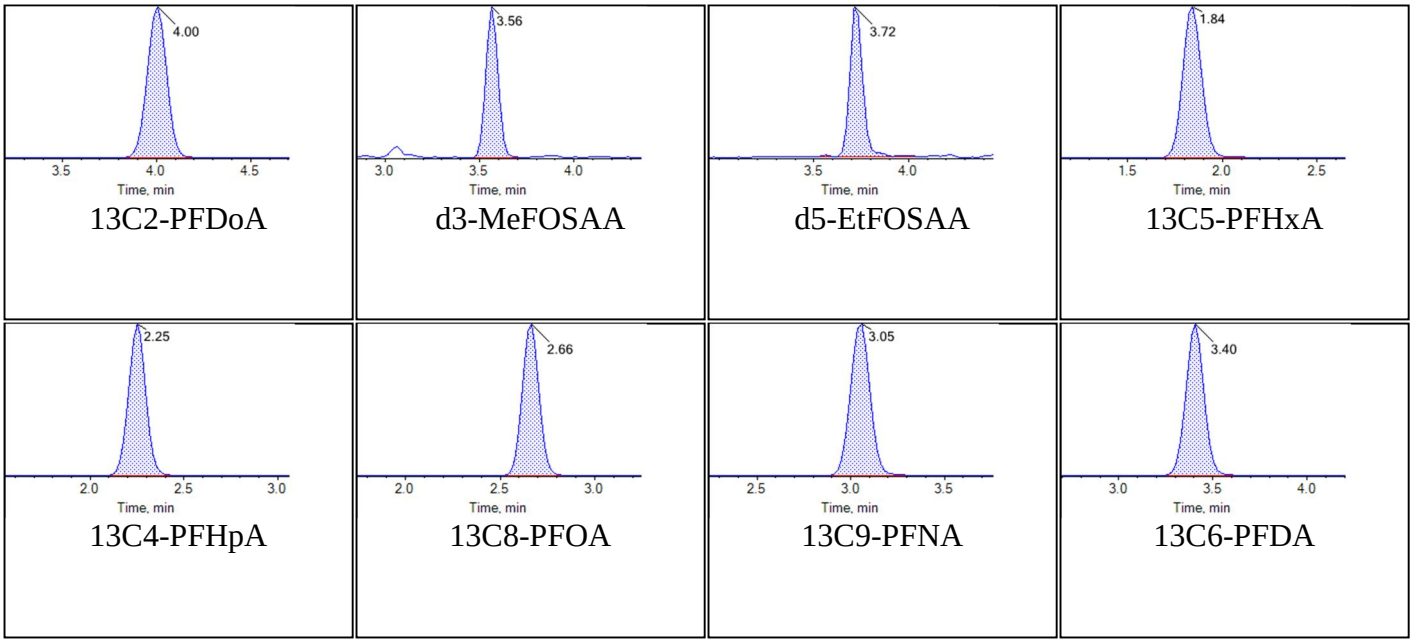
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Chromatogram Report

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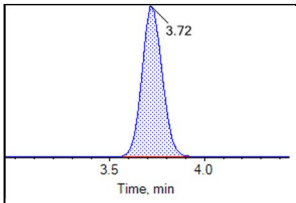
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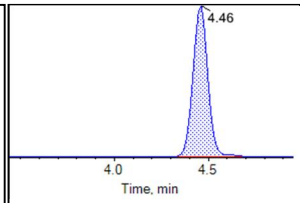
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Chromatogram Report

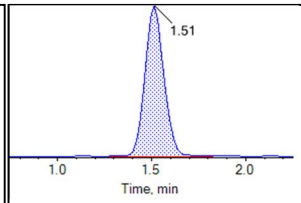
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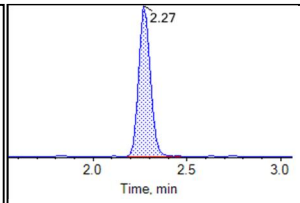
13C7-PFUnA



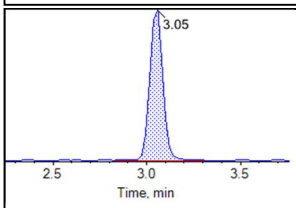
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

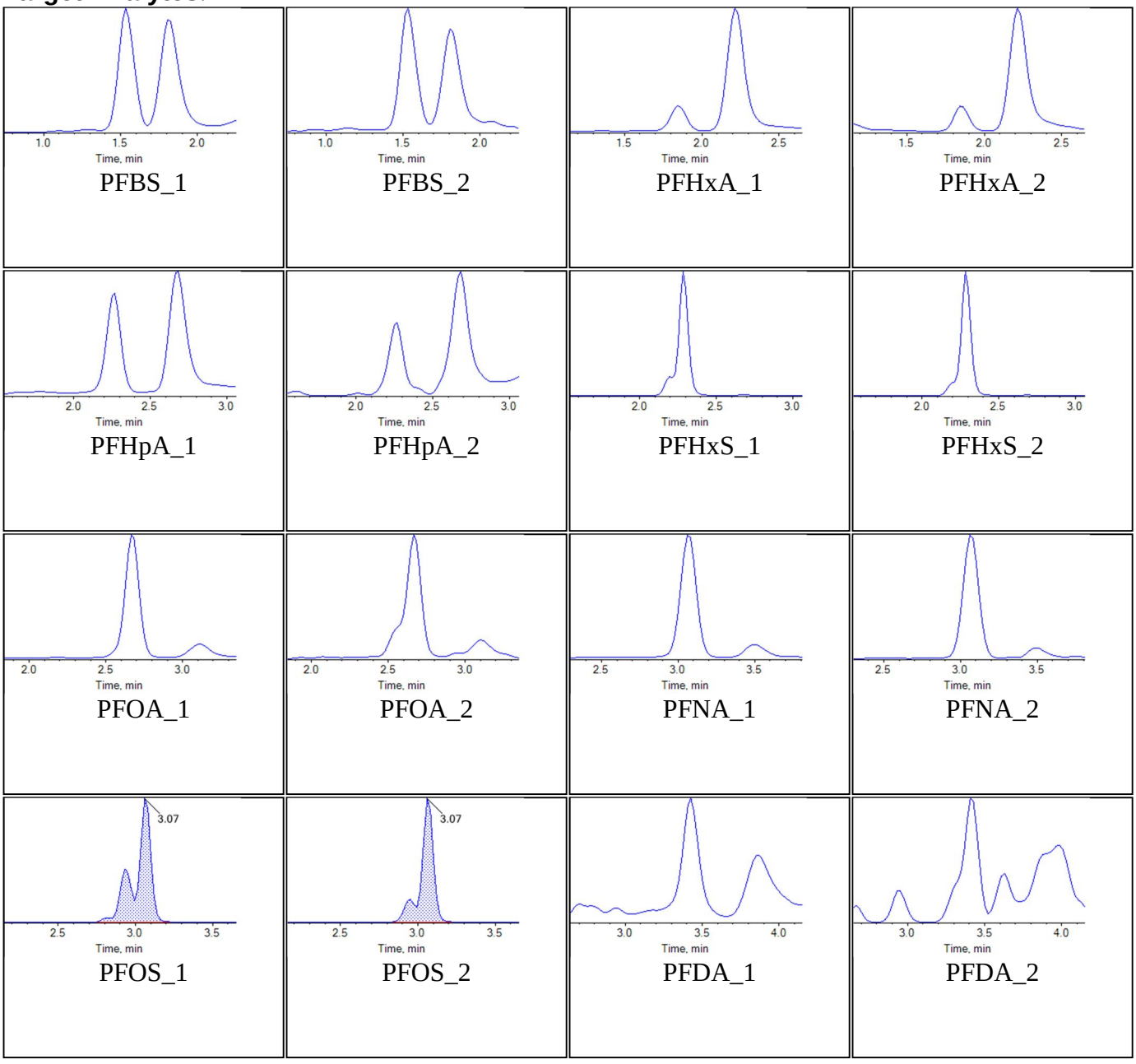
Chromatogram Report

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Sample Name	J8452-FS-D(5)	**Injection Vial**	29
Sample ID	VC-MS09-SB05-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:58:12	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

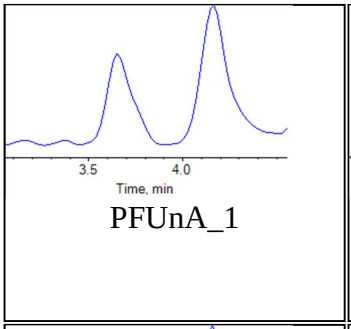
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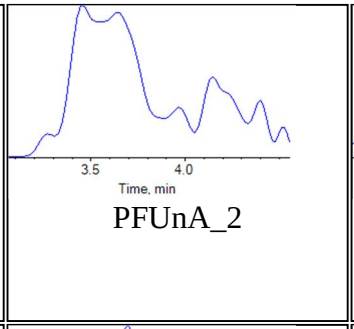
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Chromatogram Report

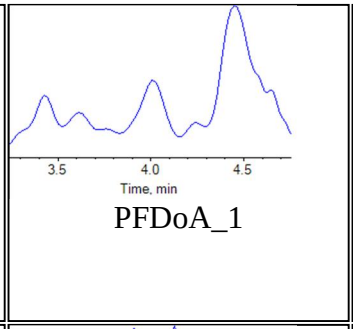
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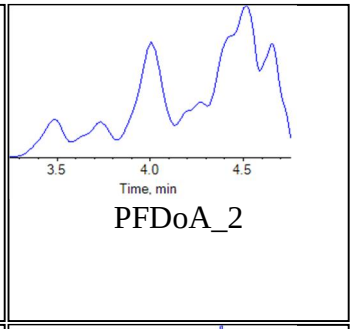
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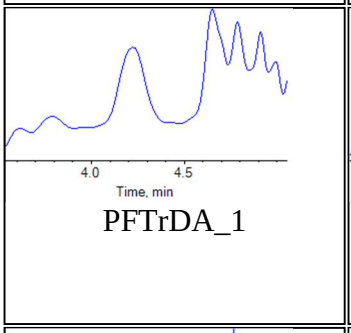
PFUnA_2



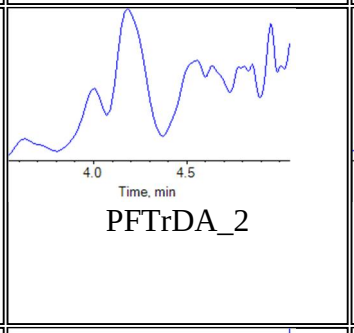
PFDoA_1



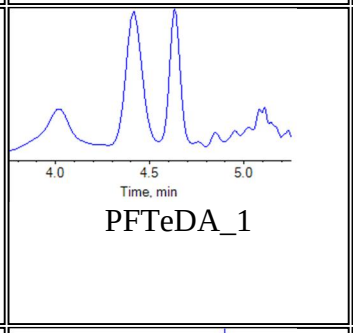
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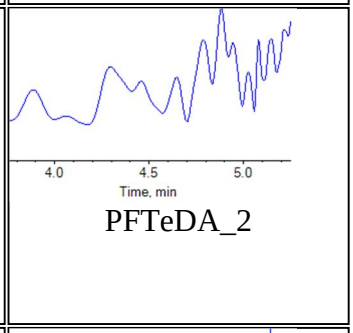
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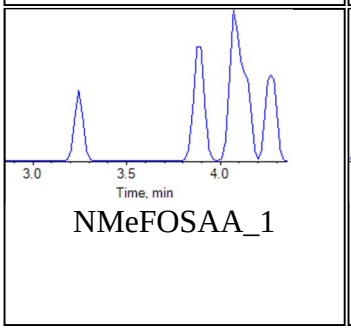
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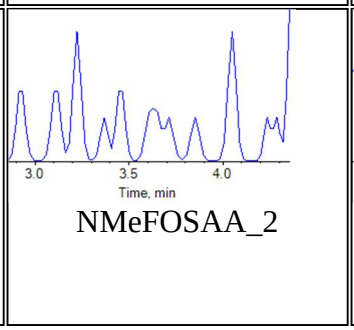
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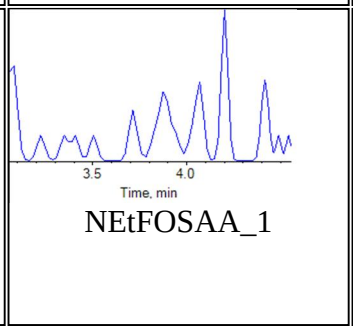
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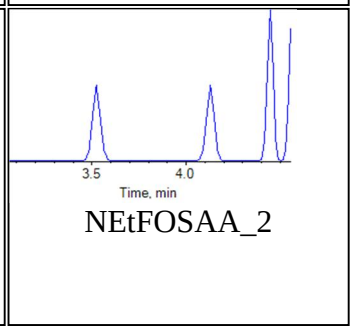
NMeFOSAA_1



NMeFOSAA_2

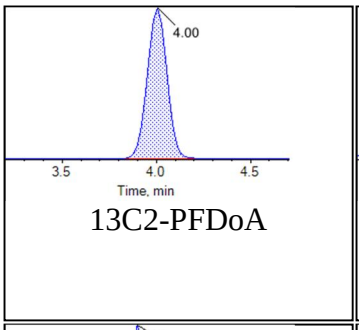


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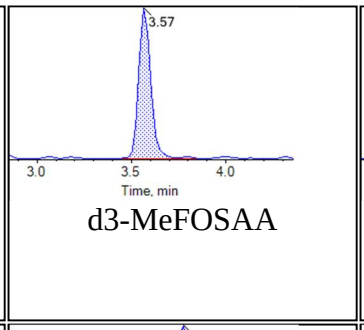


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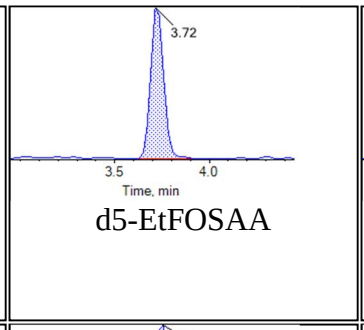
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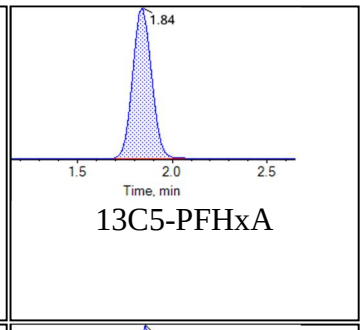
13C2-PFDoA



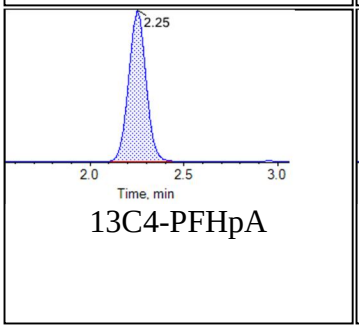
d3-MeFOSAA



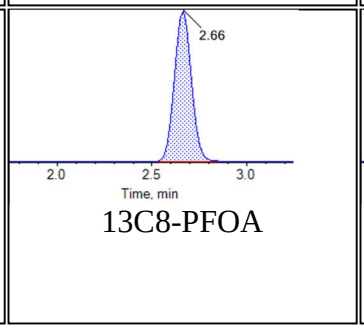
d5-EtFOSAA



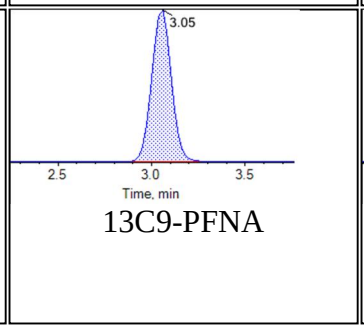
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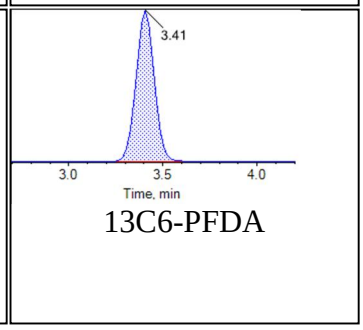
13C4-PFHpA



13C8-PFOA



13C9-PFNA

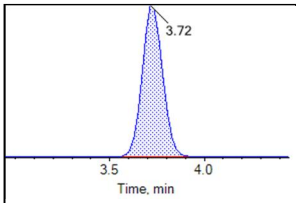


13C6-PFDA

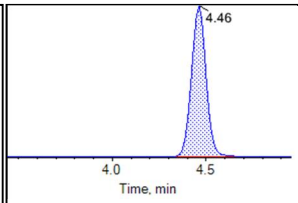
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Chromatogram Report

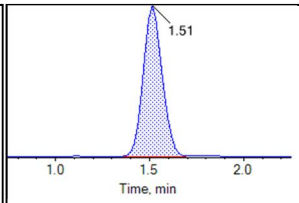
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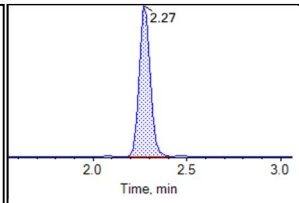
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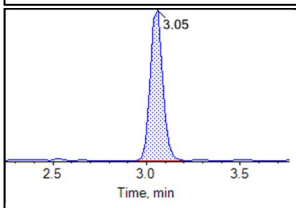
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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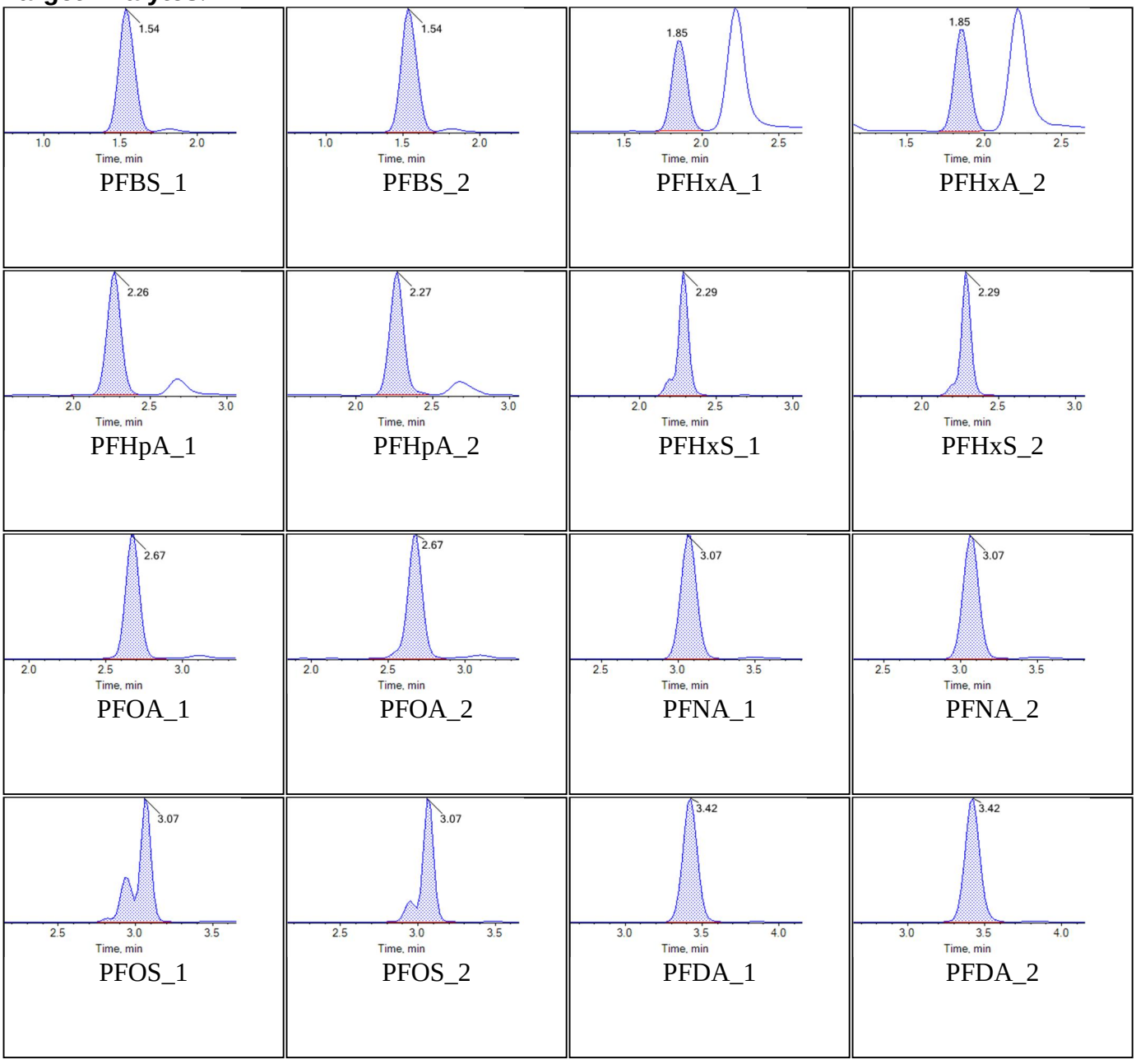
Chromatogram Report

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Printed: 25/10/2018 11:21:24 AM

Sample Name	KB77 CCV	**Injection Vial**	30
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:09:03	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

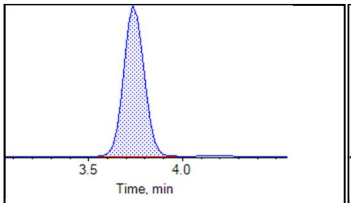
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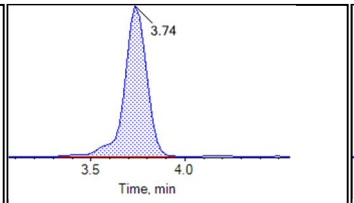
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Chromatogram Report

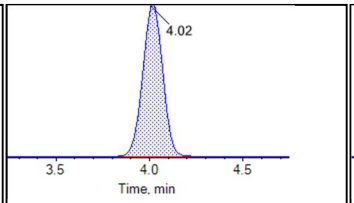
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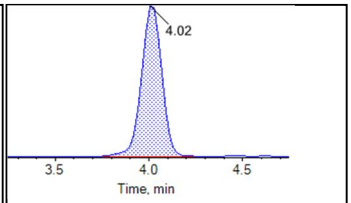
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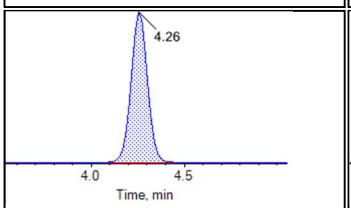
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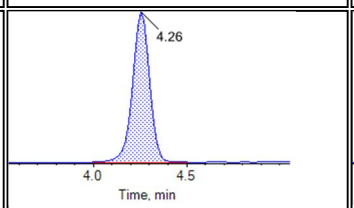
PFDoA_1



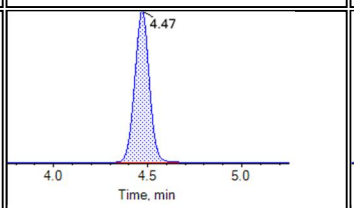
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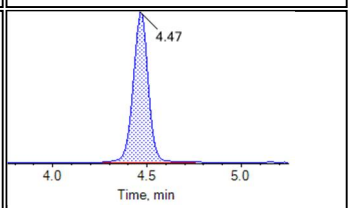
PFTrDA_1



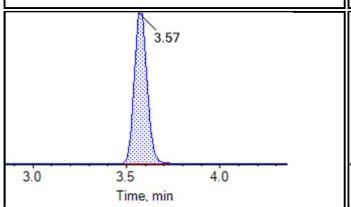
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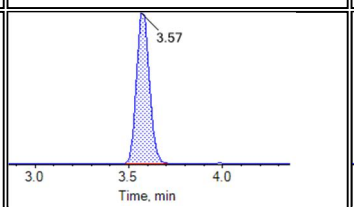
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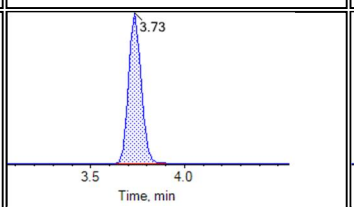
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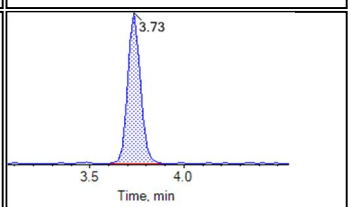
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NMeFOSAA_2

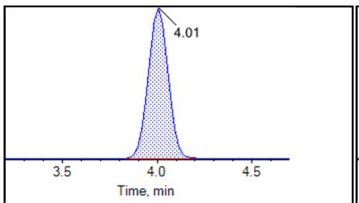


NEtFOSAA_1

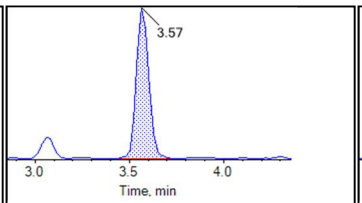


NEtFOSAA_2

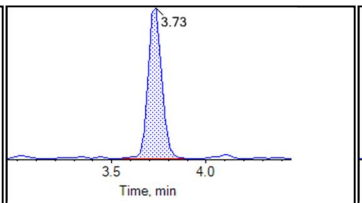
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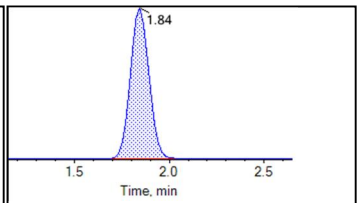
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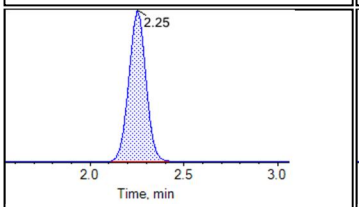
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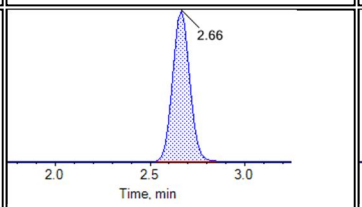
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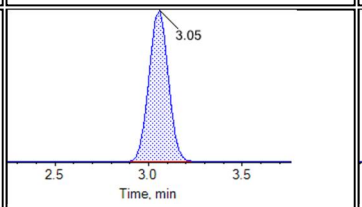
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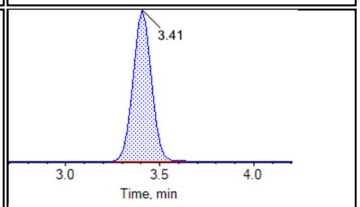
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13C8-PFOA



13C9-PFNA

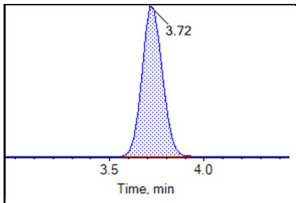


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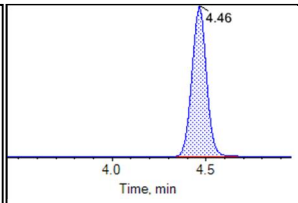
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Chromatogram Report

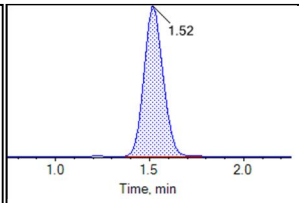
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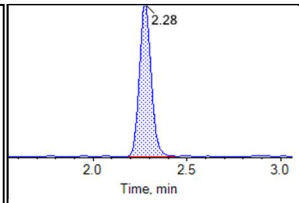
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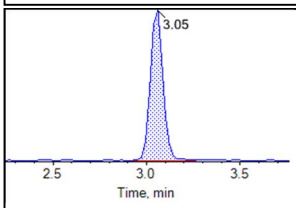
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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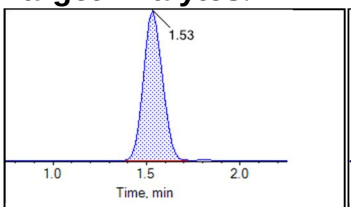
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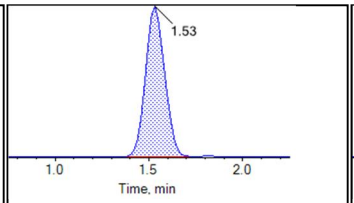
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Sample ID	VC-MS09-SB04-0102-MS	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:30:47	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

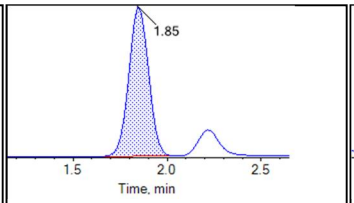
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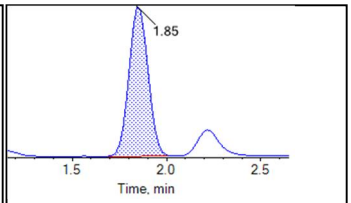
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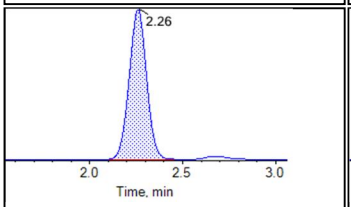
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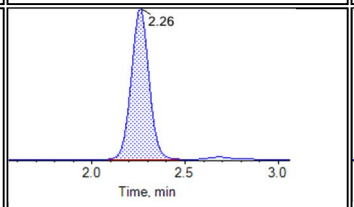
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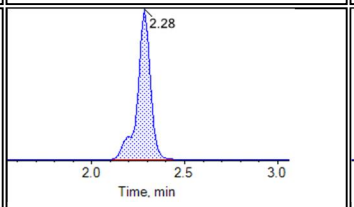
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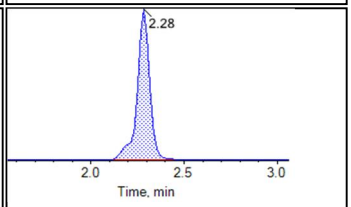
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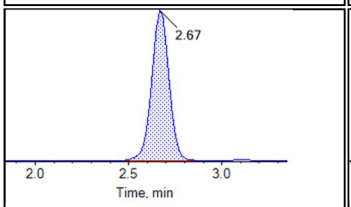
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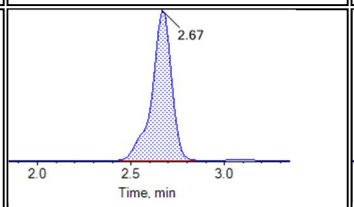
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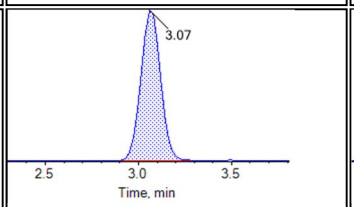
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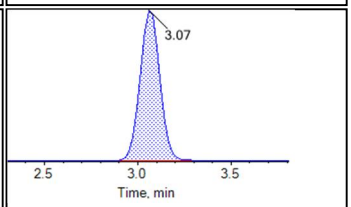
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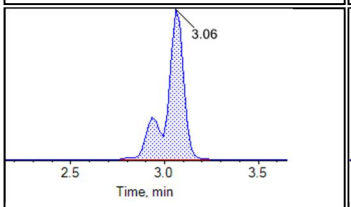
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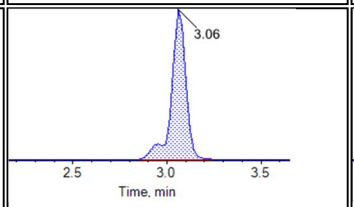
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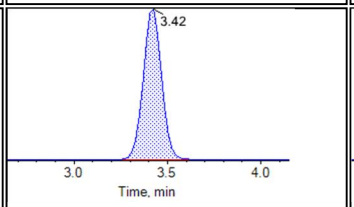
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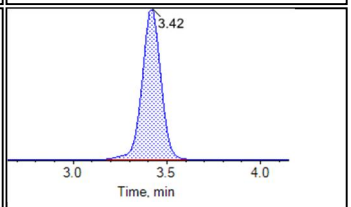
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PFOS_2



PFDA_1

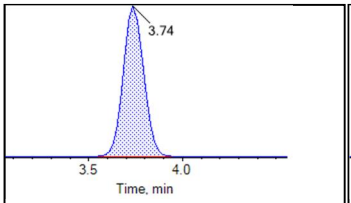


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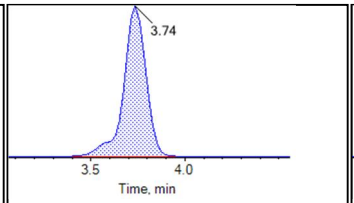
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Chromatogram Report

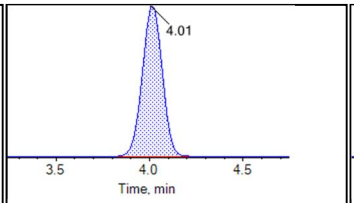
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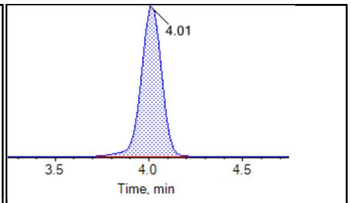
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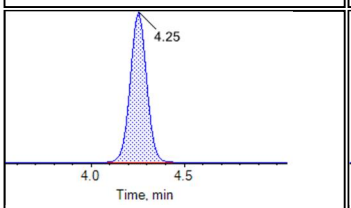
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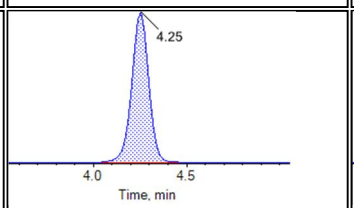
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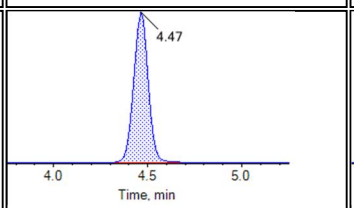
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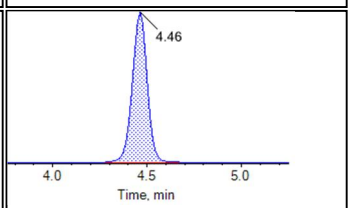
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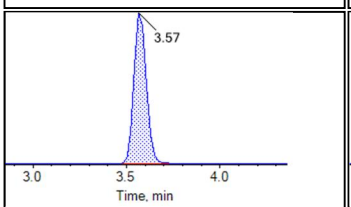
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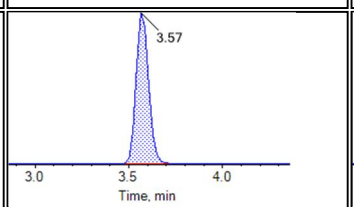
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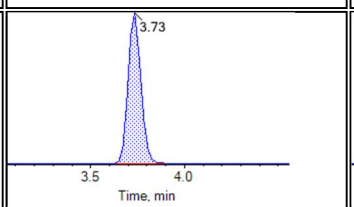
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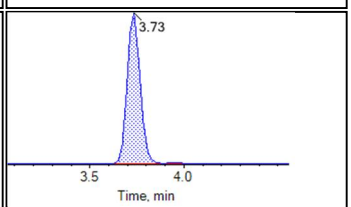
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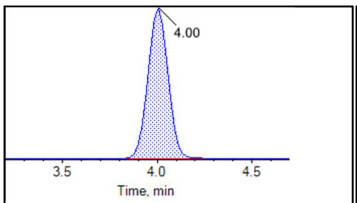


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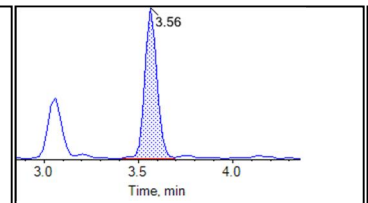


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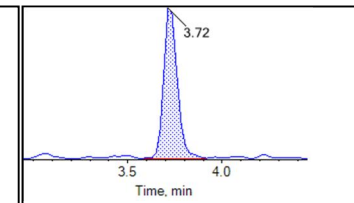
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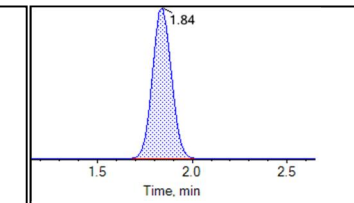
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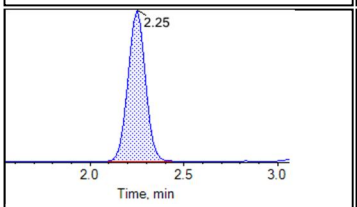
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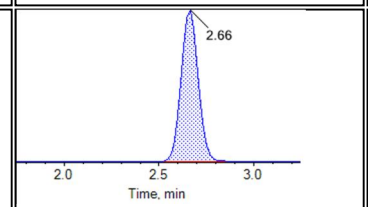
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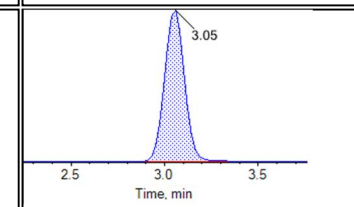
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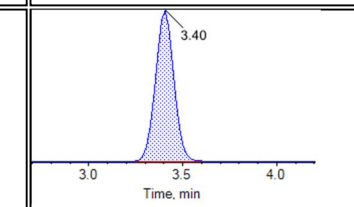
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13C8-PFOA



13C9-PFNA

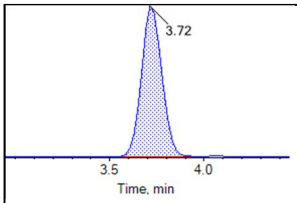


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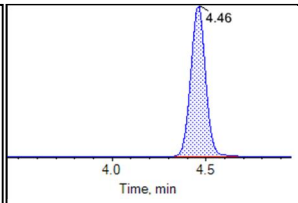
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Chromatogram Report

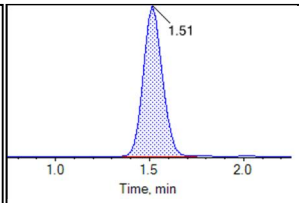
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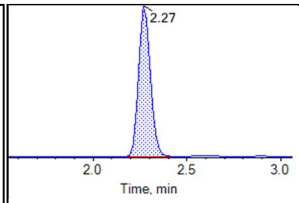
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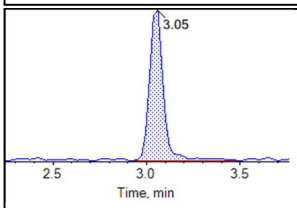
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

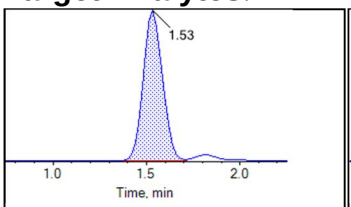
Chromatogram Report

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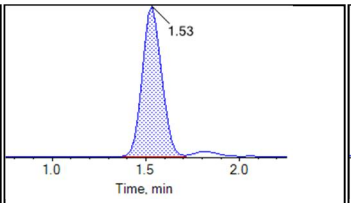
Sample Name	J8453MS-FS-D(5)	**Injection Vial**	33
Sample ID	VC-MS09-SB04-0102-MS	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:41:39	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

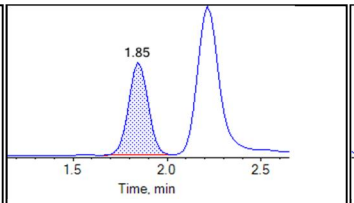
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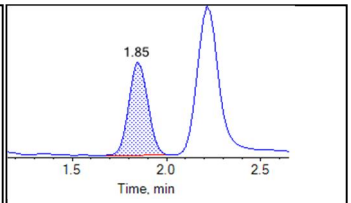
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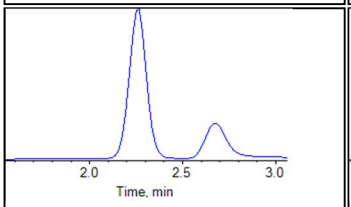
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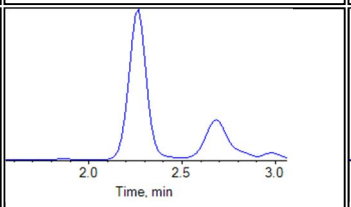
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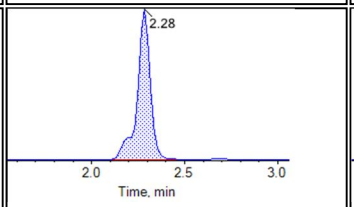
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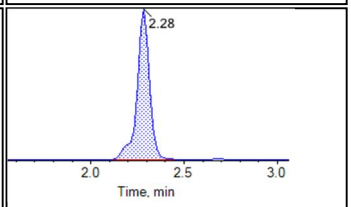
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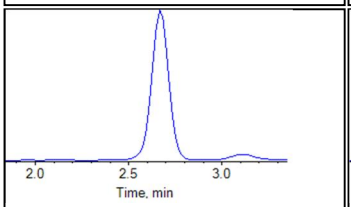
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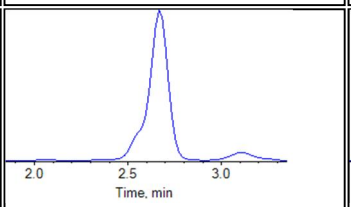
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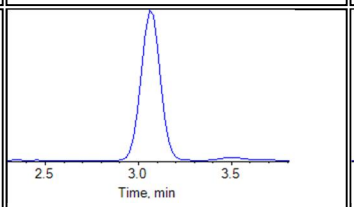
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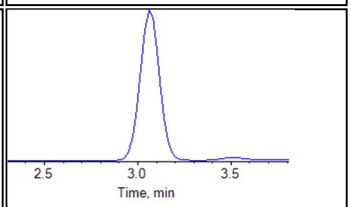
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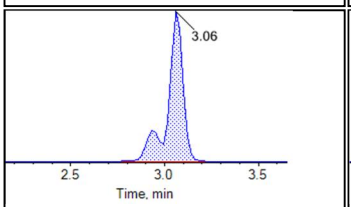
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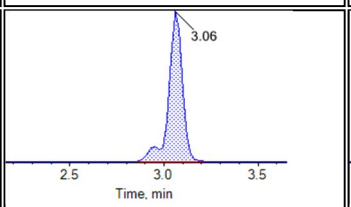
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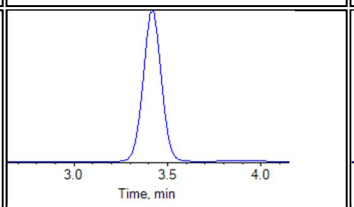
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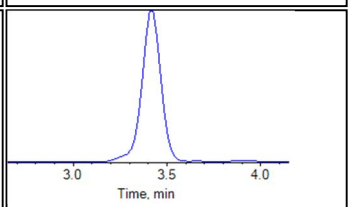
PFOS_1



PFOS_2



PFDA_1

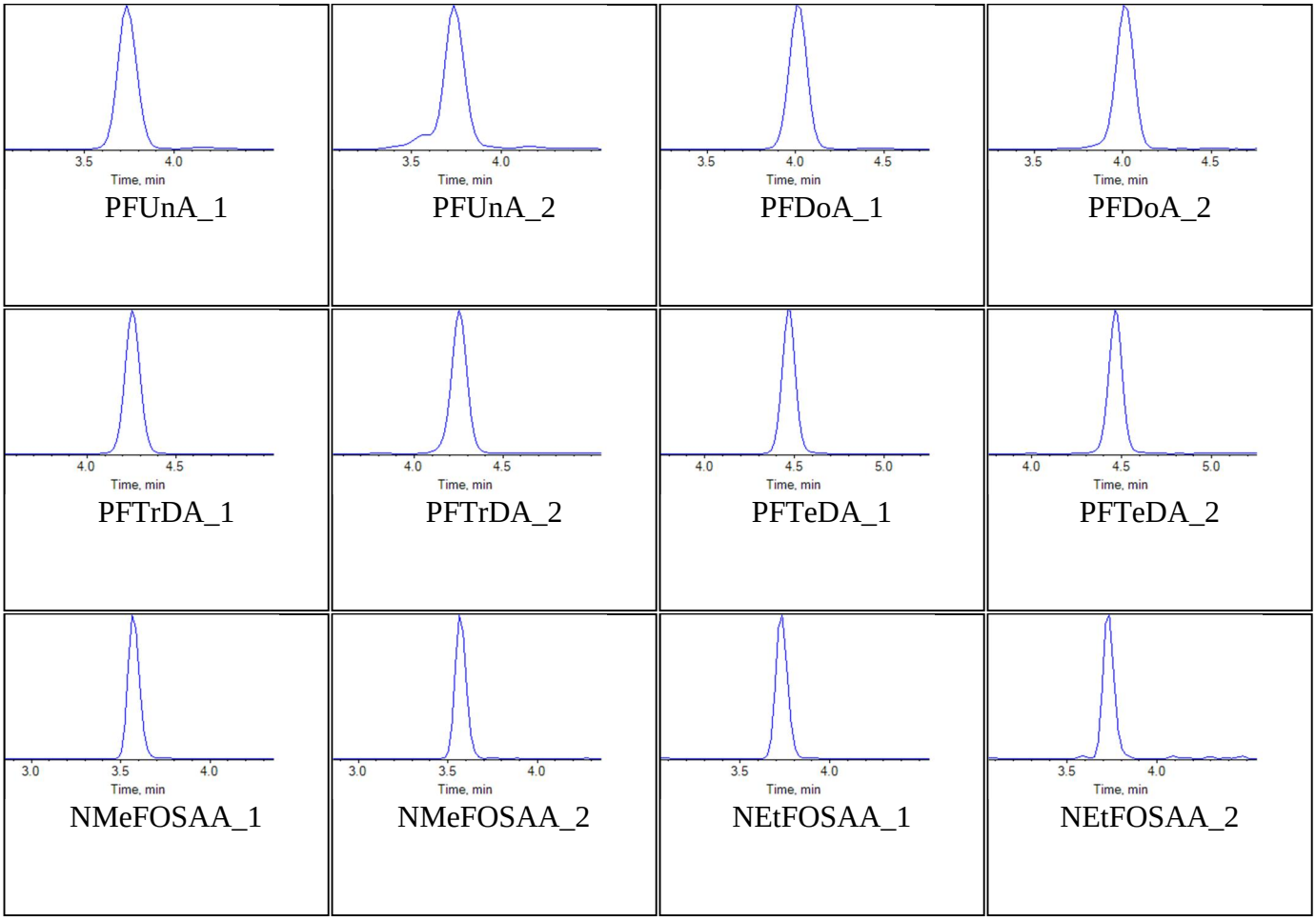


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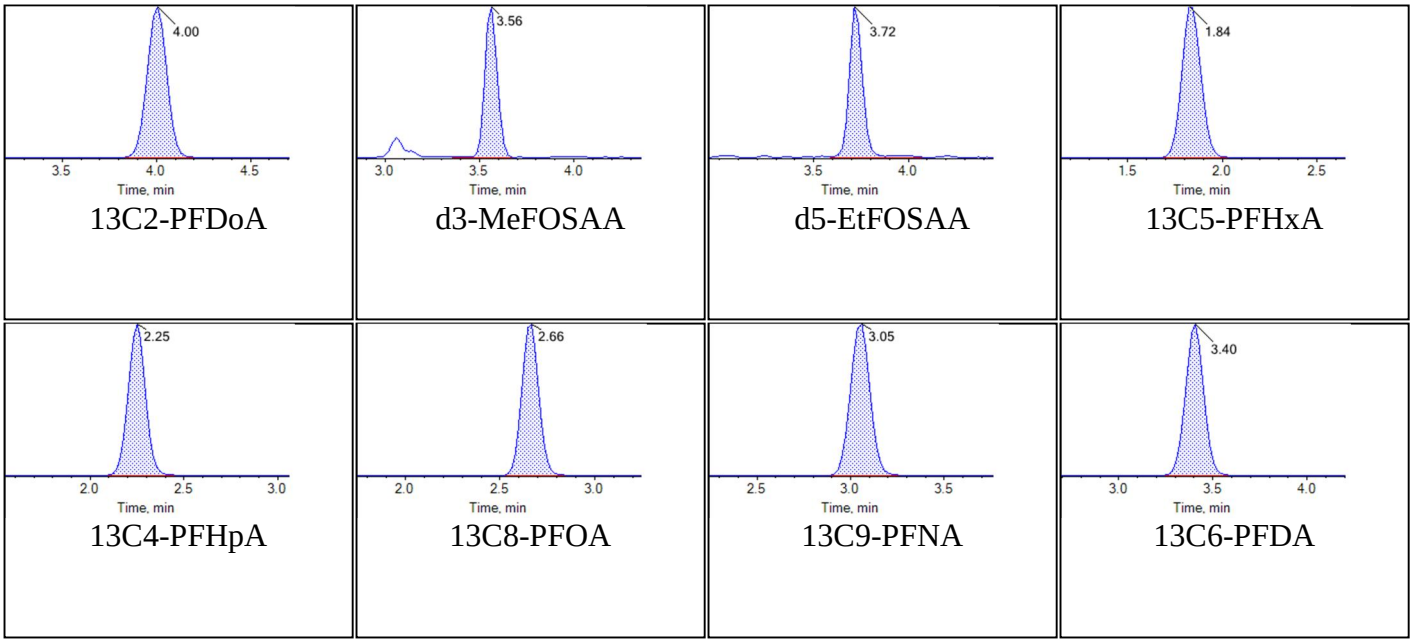
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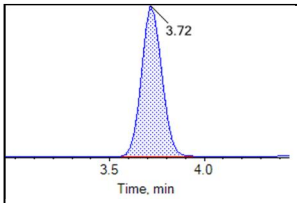
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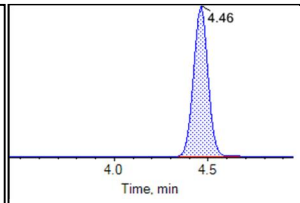
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Chromatogram Report

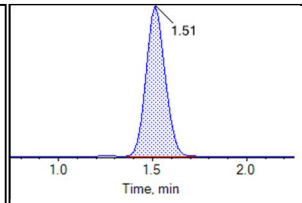
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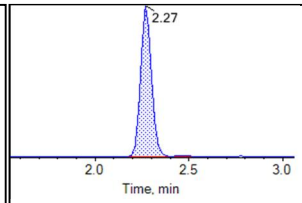
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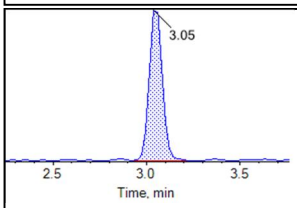
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13C3-PFBS



13C3-PFHxS



13C8-PFOS

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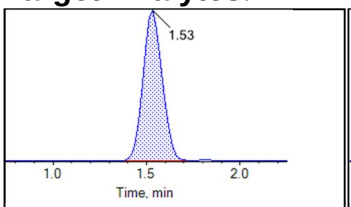
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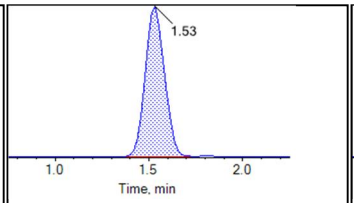
Sample Name	J8454MSD-FS(3)	**Injection Vial**	34
Sample ID	VC-MS09-SB04-0102-MSD	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:52:29	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

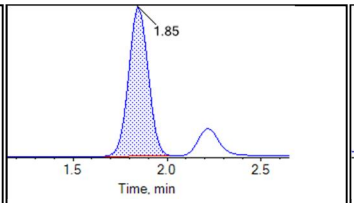
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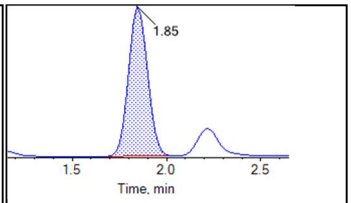
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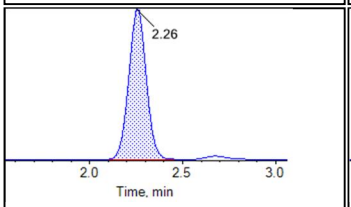
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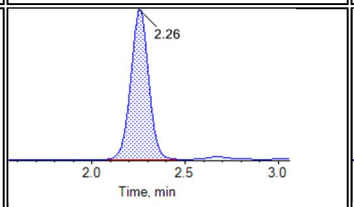
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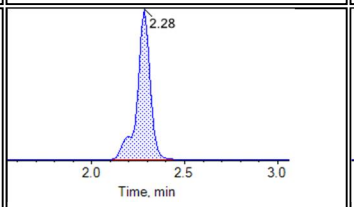
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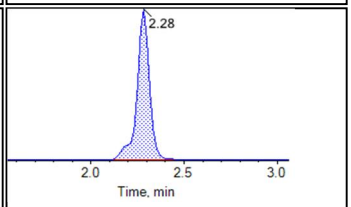
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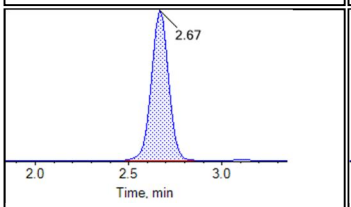
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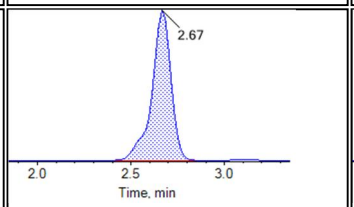
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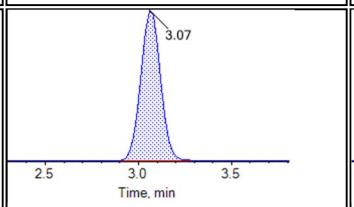
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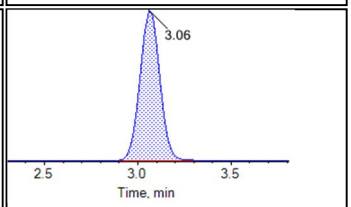
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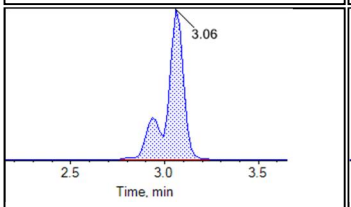
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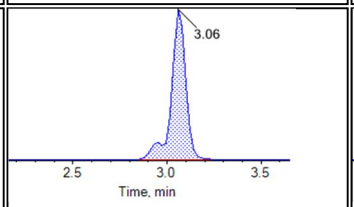
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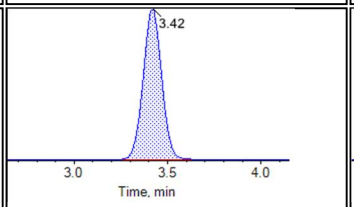
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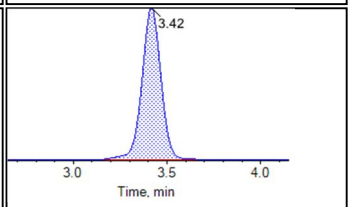
PFOS_1



PFOS_2



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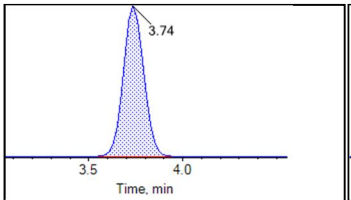


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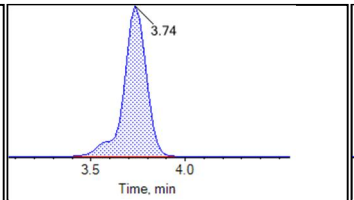
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Chromatogram Report

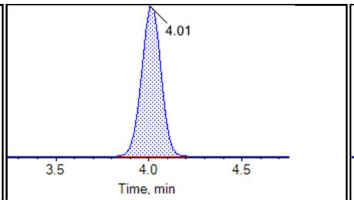
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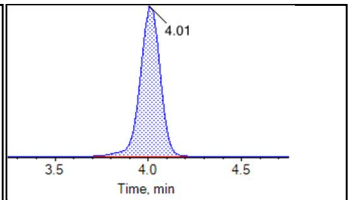
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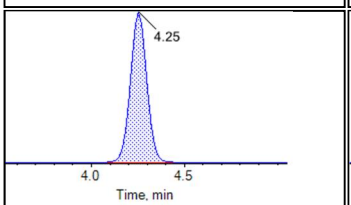
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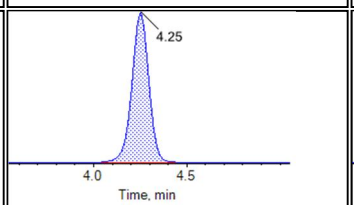
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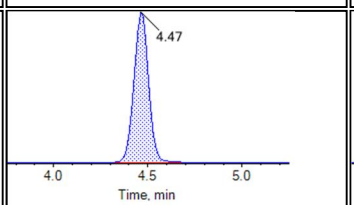
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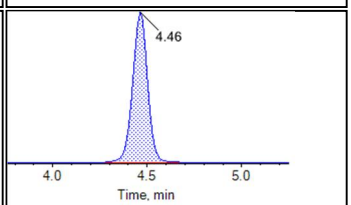
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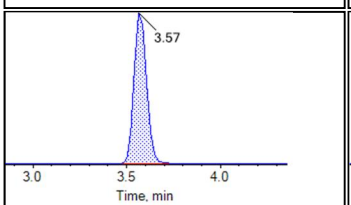
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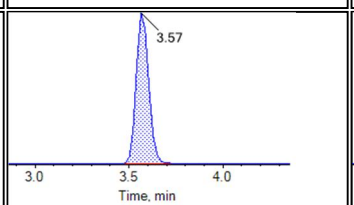
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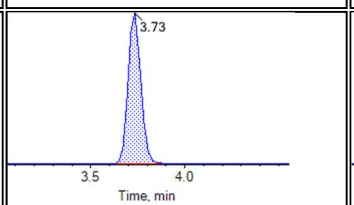
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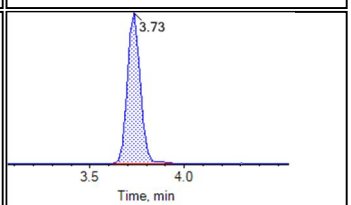
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NMeFOSAA_2

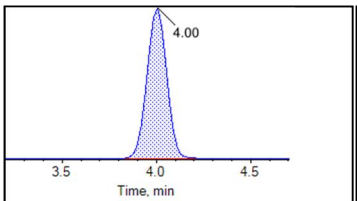


NEtFOSAA_1

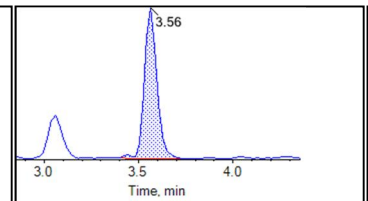


NEtFOSAA_2

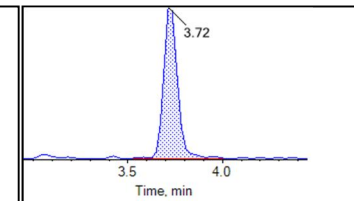
Internal Standards:



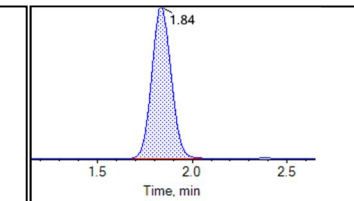
13C2-PFDoA



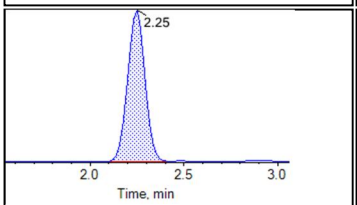
d3-MeFOSAA



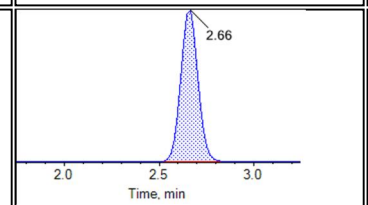
d5-EtFOSAA



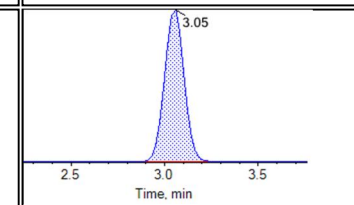
13C5-PFHxA



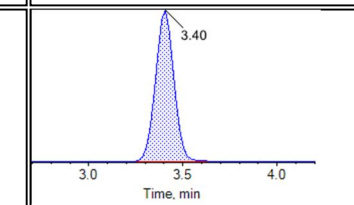
13C4-PFHpA



13C8-PFOA



13C9-PFNA

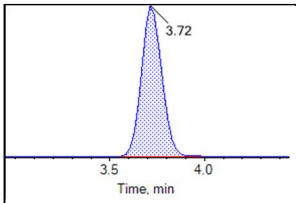


13C6-PFDA

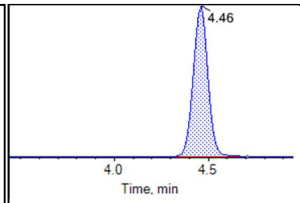
BATTELLE

Chromatogram Report

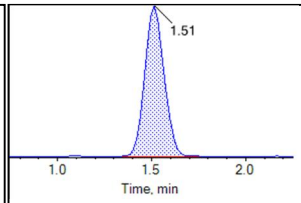
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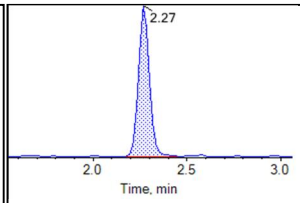
13C7-PFUnA



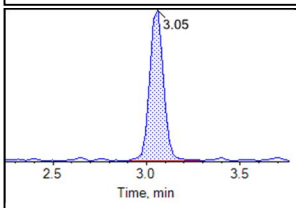
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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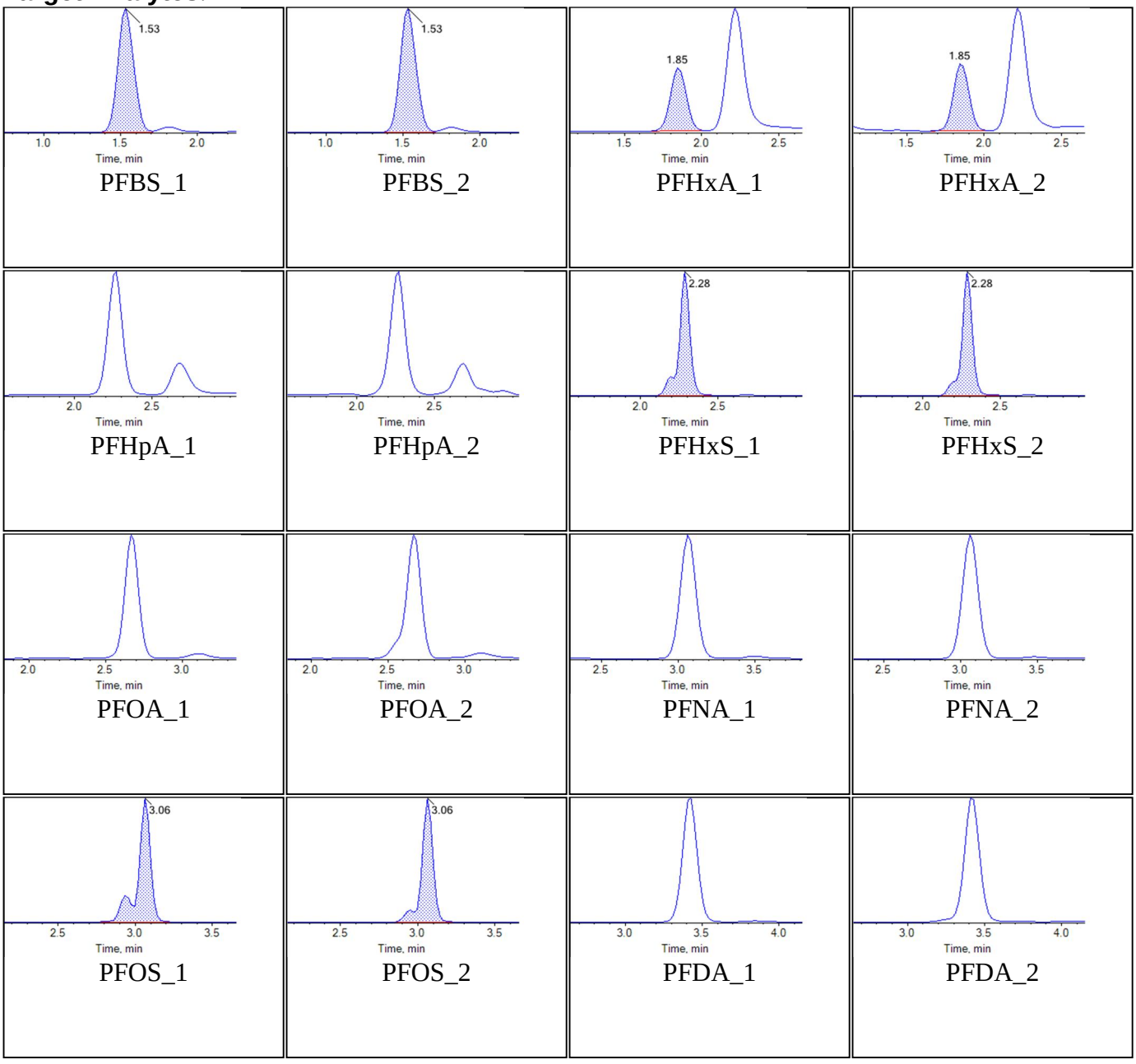
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 11:21:47 AM

Sample Name	J8454MSD-FS-D(5)	**Injection Vial**	35
Sample ID	VC-MS09-SB04-0102-MSD	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:03:21	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

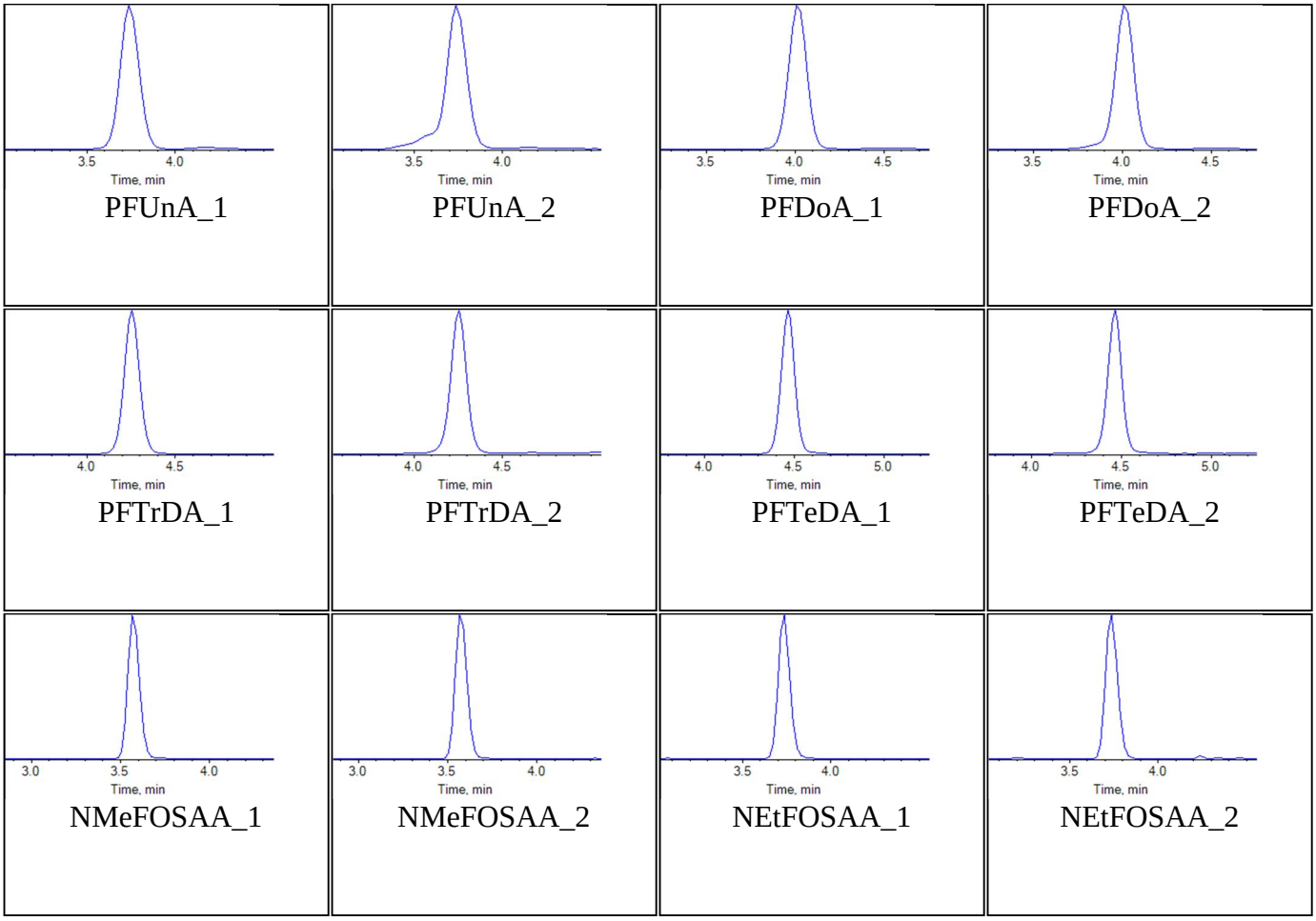
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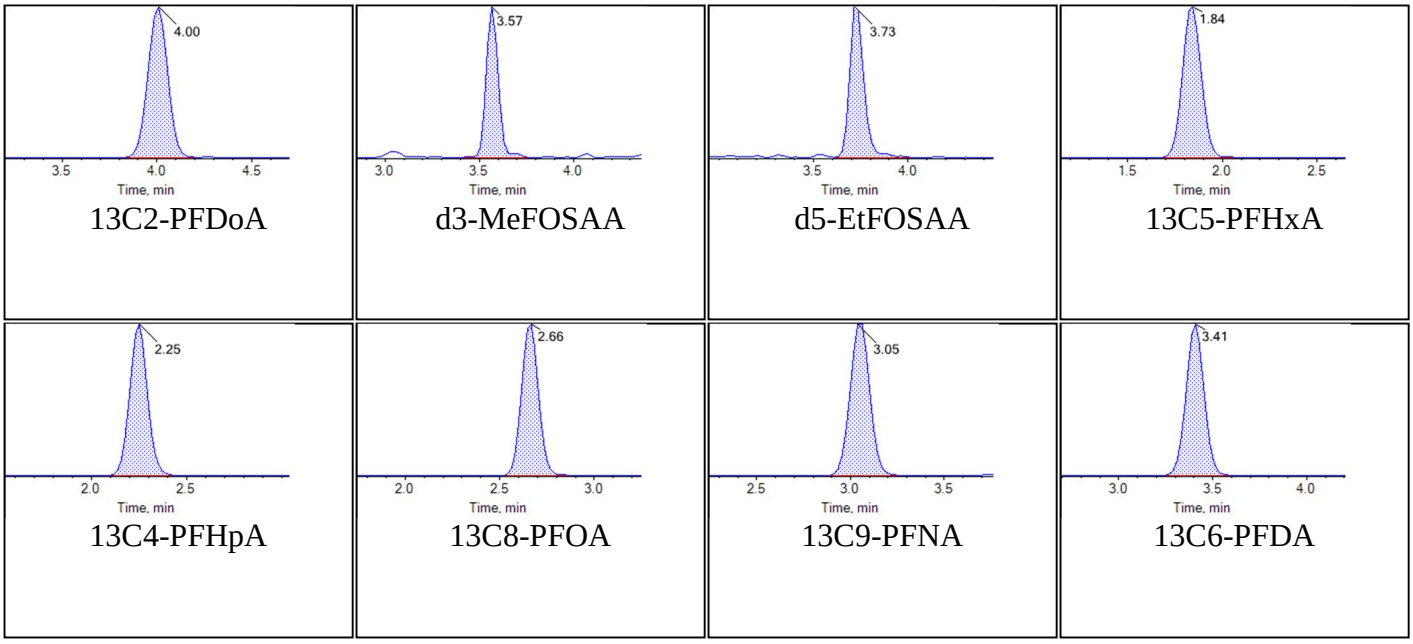
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Chromatogram Report

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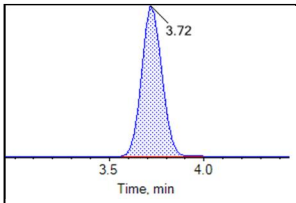
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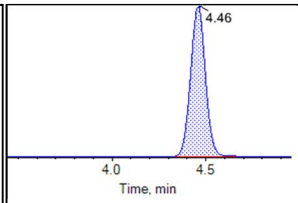
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Chromatogram Report

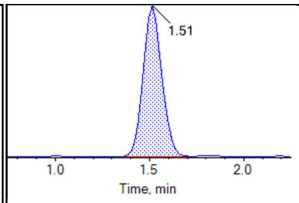
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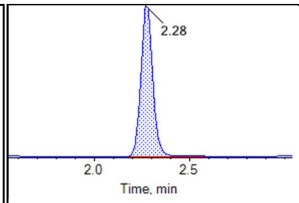
13C7-PFUnA



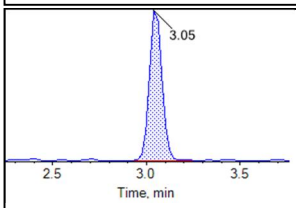
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

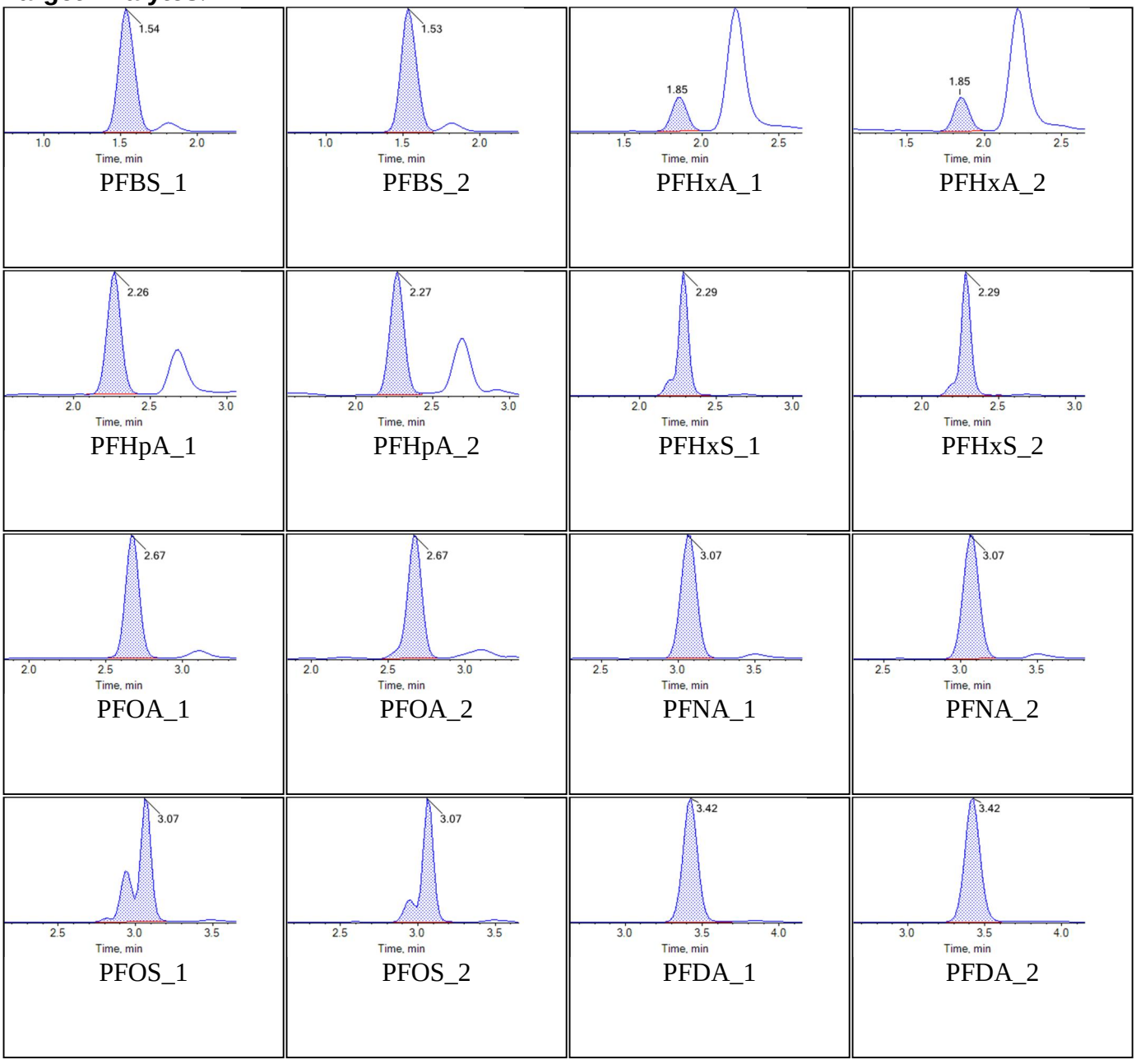
Chromatogram Report

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Printed: 25/10/2018 11:21:52 AM

Sample Name	KB76 CCV	**Injection Vial**	36
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:14:13	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

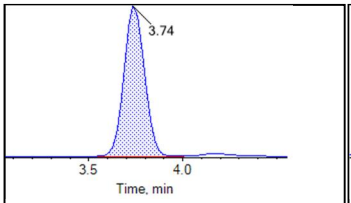
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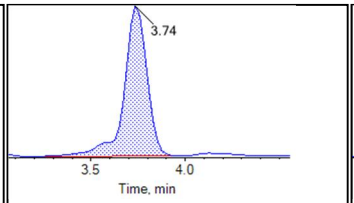
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Chromatogram Report

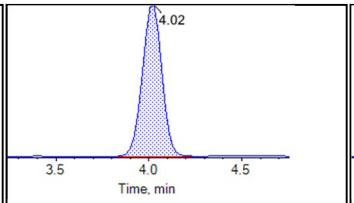
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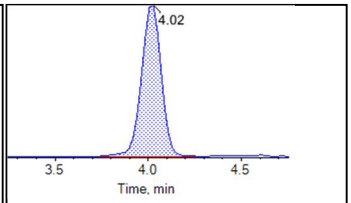
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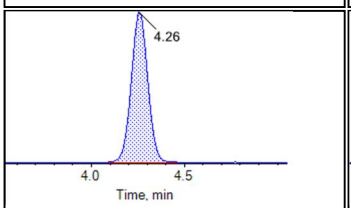
PFUnA_2



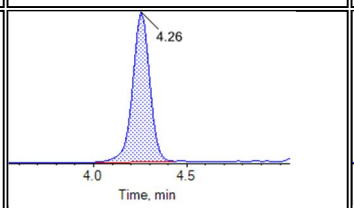
PFDoA_1



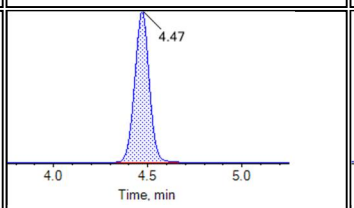
PFDoA_2



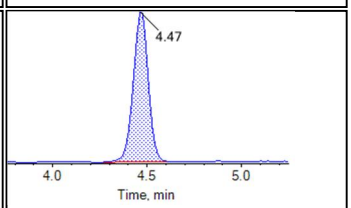
PFTrDA_1



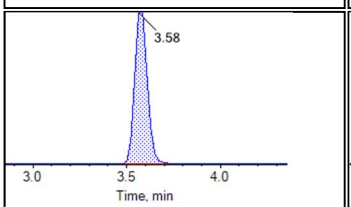
PFTrDA_2



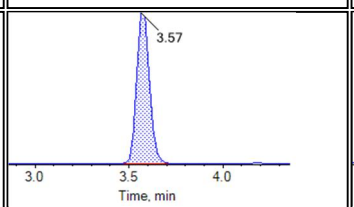
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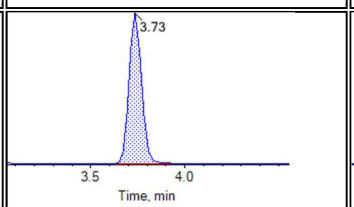
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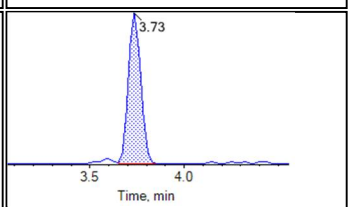
NMeFOSAA_1



NMeFOSAA_2

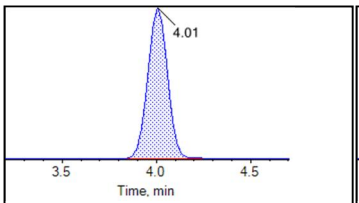


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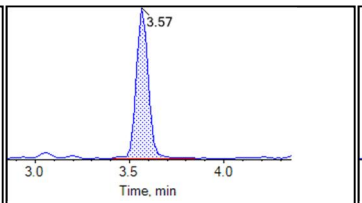


NEtFOSAA_2

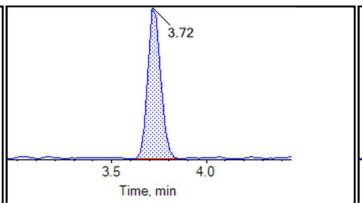
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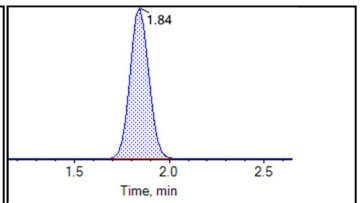
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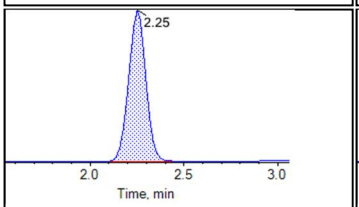
d3-MeFOSAA



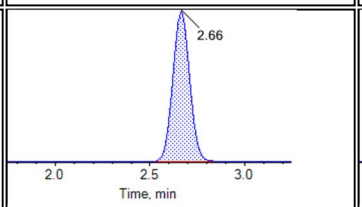
d5-EtFOSAA



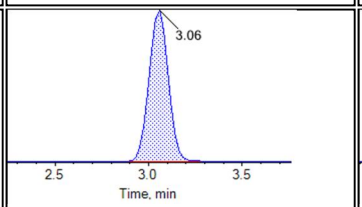
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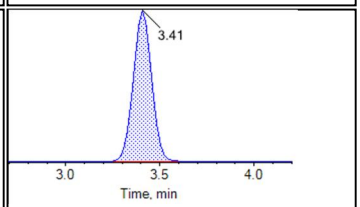
13C4-PFHpA



13C8-PFOA



13C9-PFNA

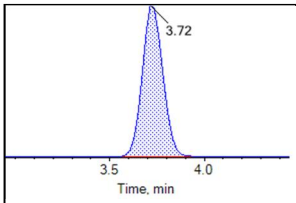


13C6-PFDA

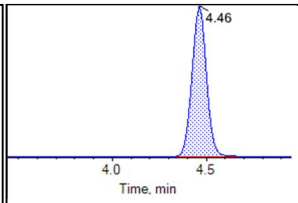
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Chromatogram Report

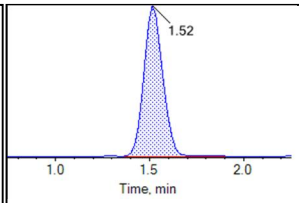
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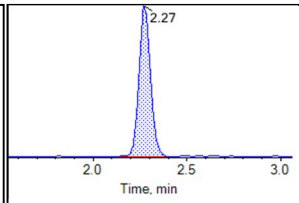
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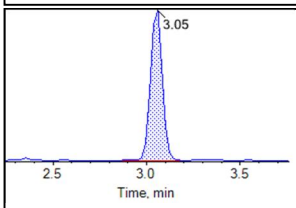
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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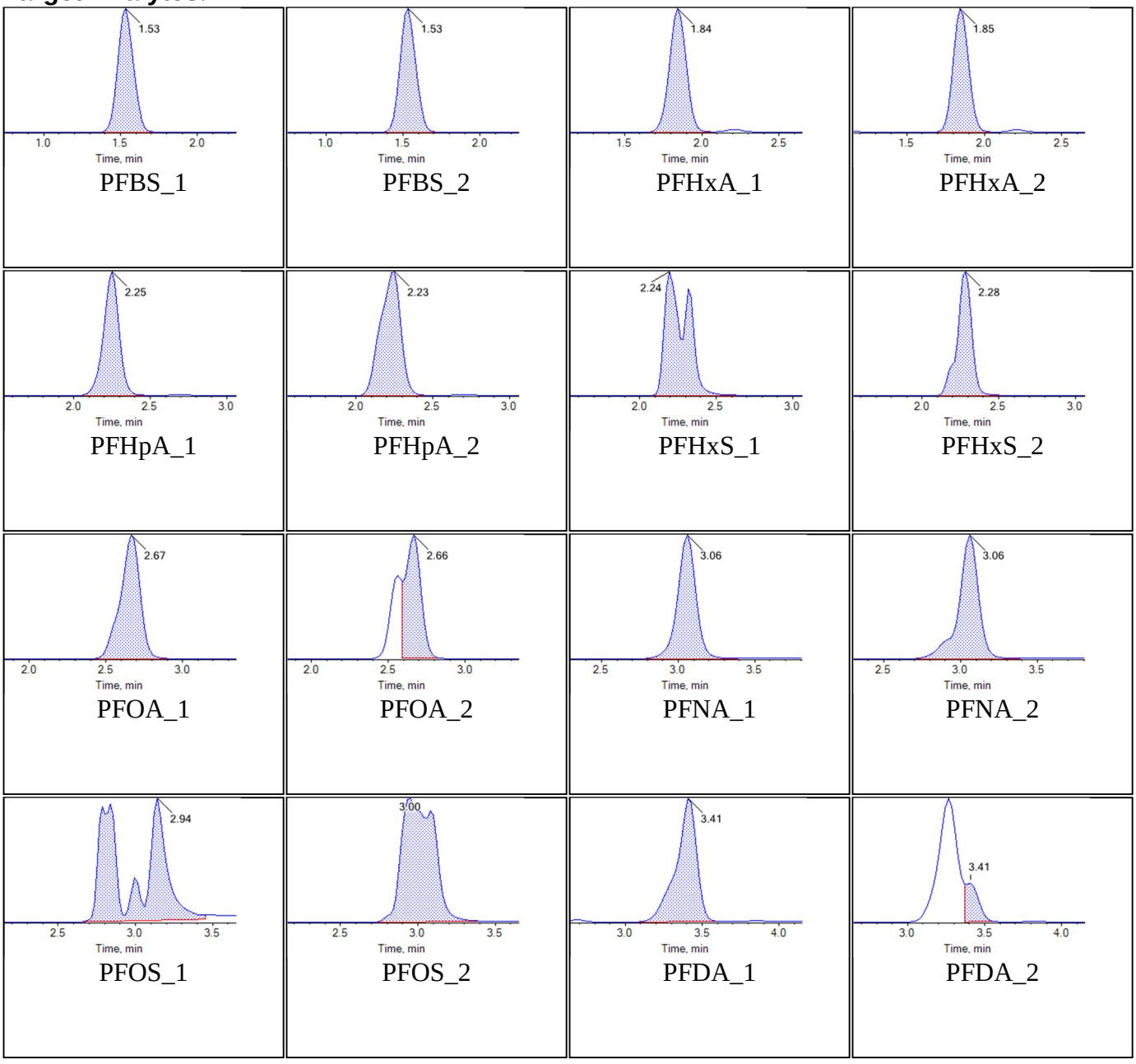
Chromatogram Report

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Printed: 25/10/2018 11:21:58 AM

Sample Name	J8444-FS(5)	**Injection Vial**	38
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:35:56	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

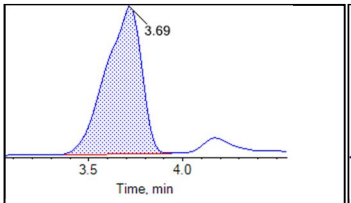
Target Analytes:



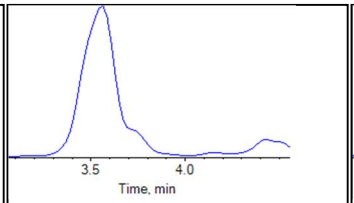
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Chromatogram Report

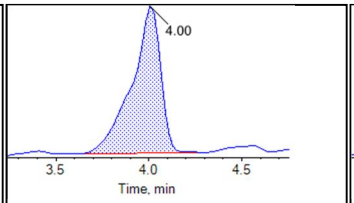
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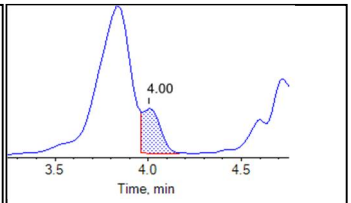
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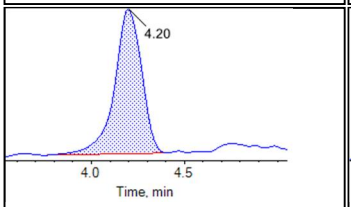
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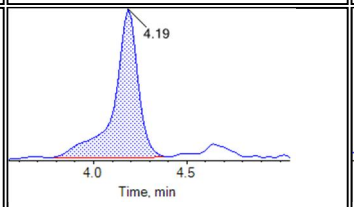
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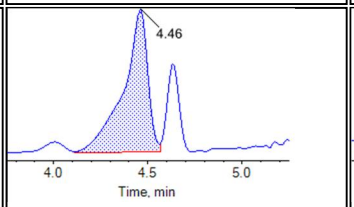
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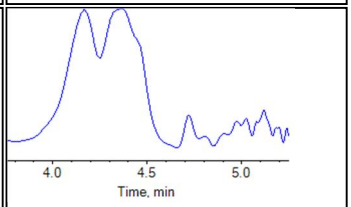
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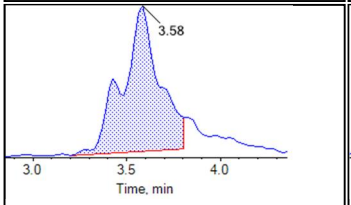
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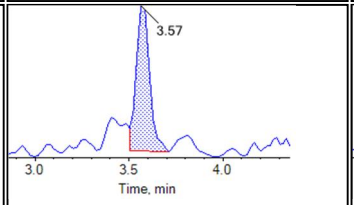
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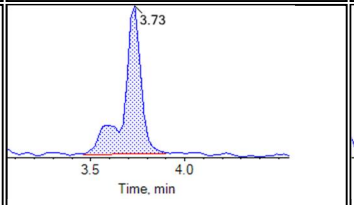
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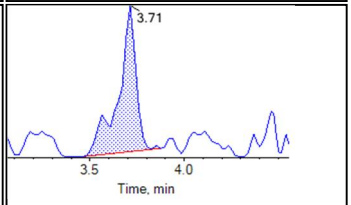
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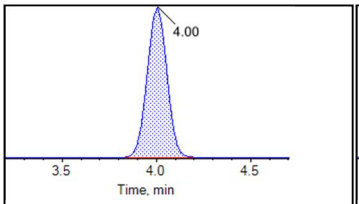


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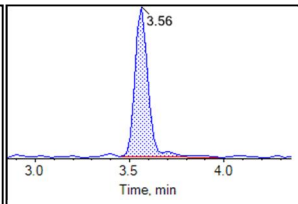


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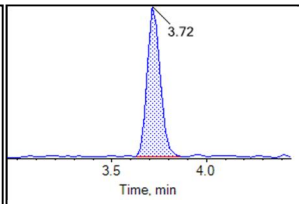
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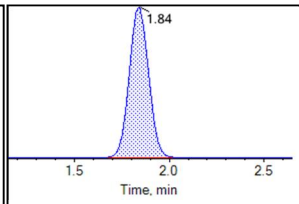
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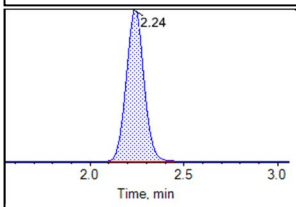
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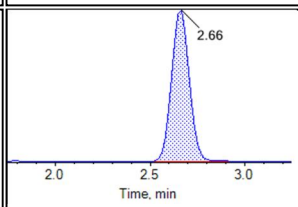
d5-EtFOSAA



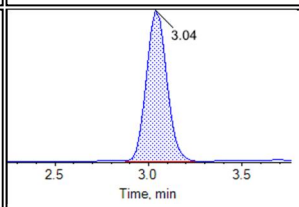
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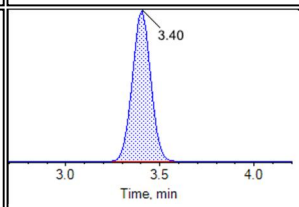
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13C8-PFOA



13C9-PFNA

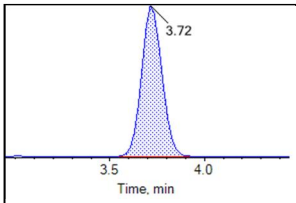


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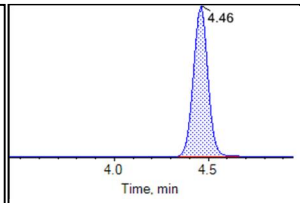
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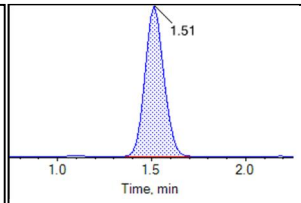
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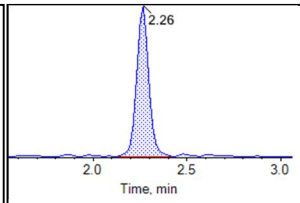
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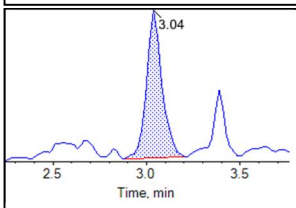
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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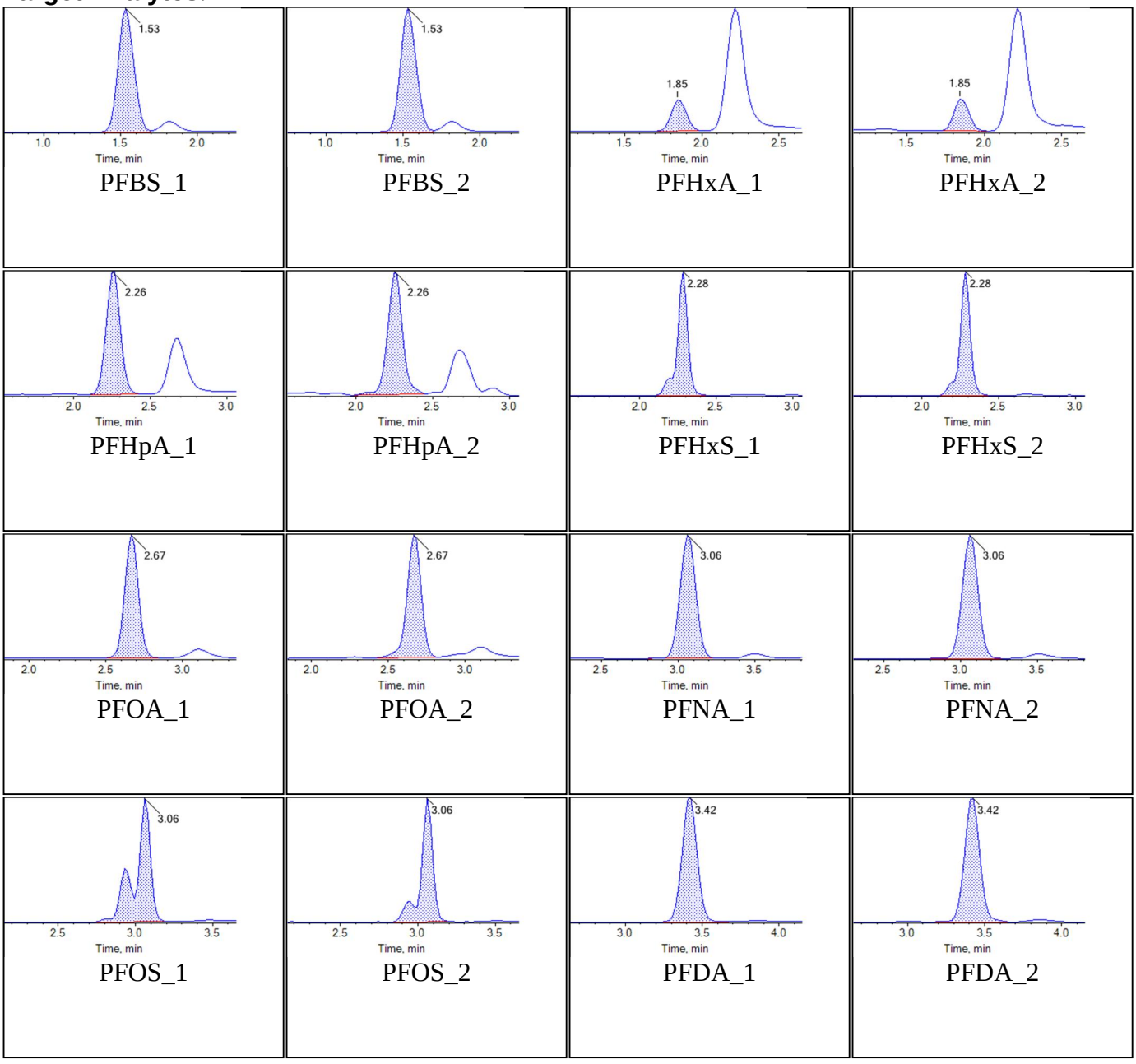
Chromatogram Report

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Sample Name	KB76 CCV	**Injection Vial**	10
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T01:29:53	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_BASE
Sample Comment			

Chromatograms

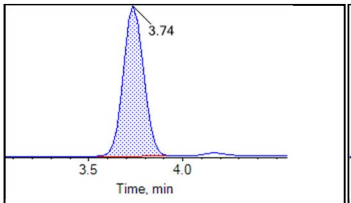
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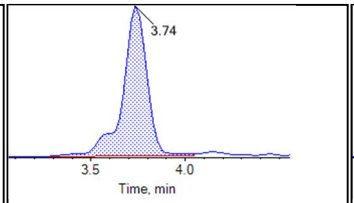
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Chromatogram Report

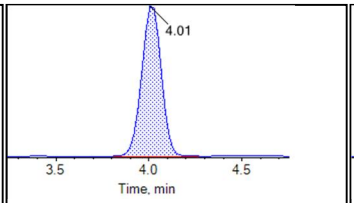
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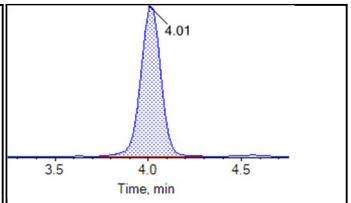
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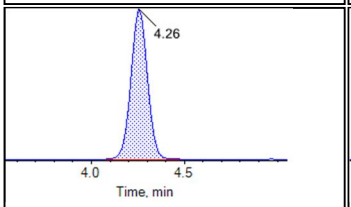
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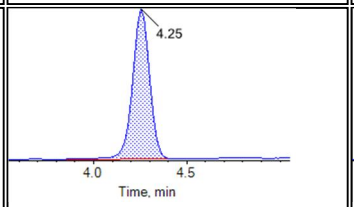
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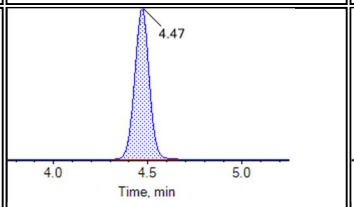
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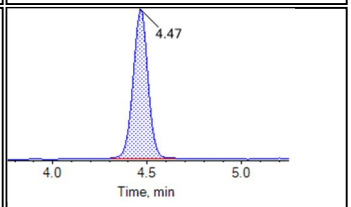
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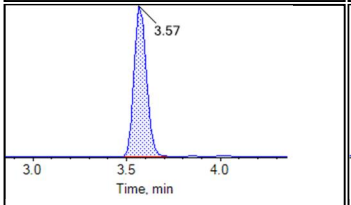
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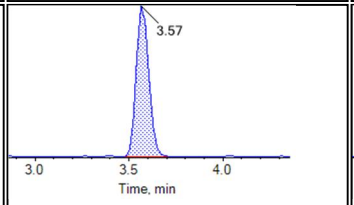
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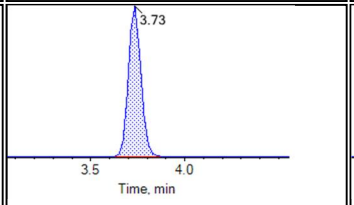
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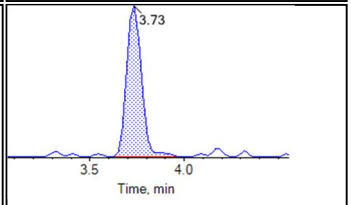
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NMeFOSAA_2

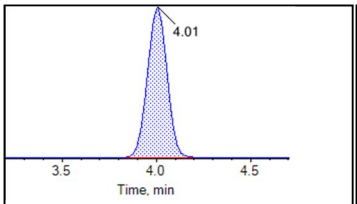


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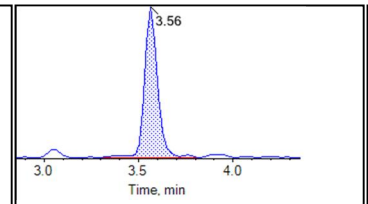


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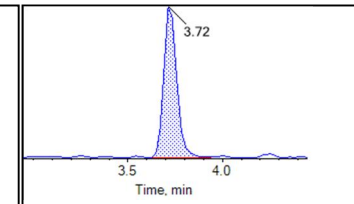
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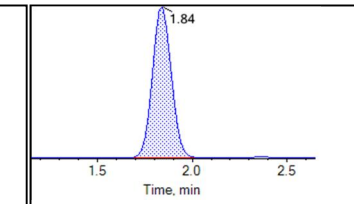
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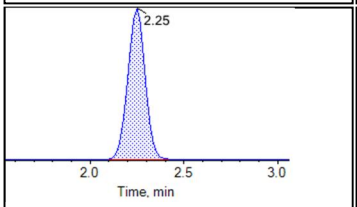
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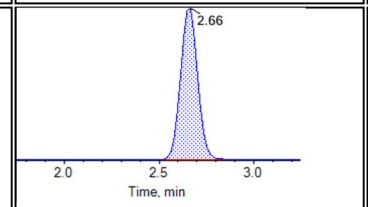
d5-EtFOSAA



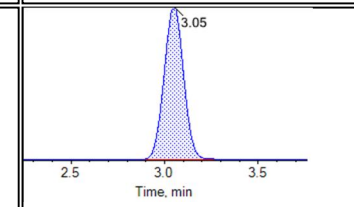
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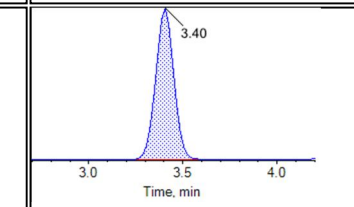
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13C8-PFOA



13C9-PFNA

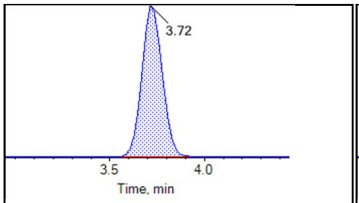


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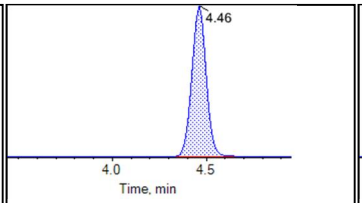
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Chromatogram Report

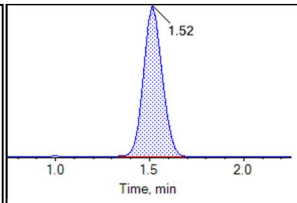
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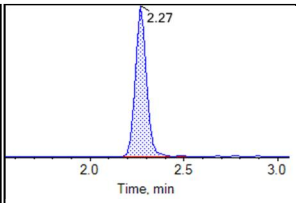
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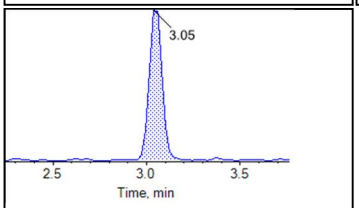
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13C3-PFBS



13C3-PFHxS



13C8-PFOS

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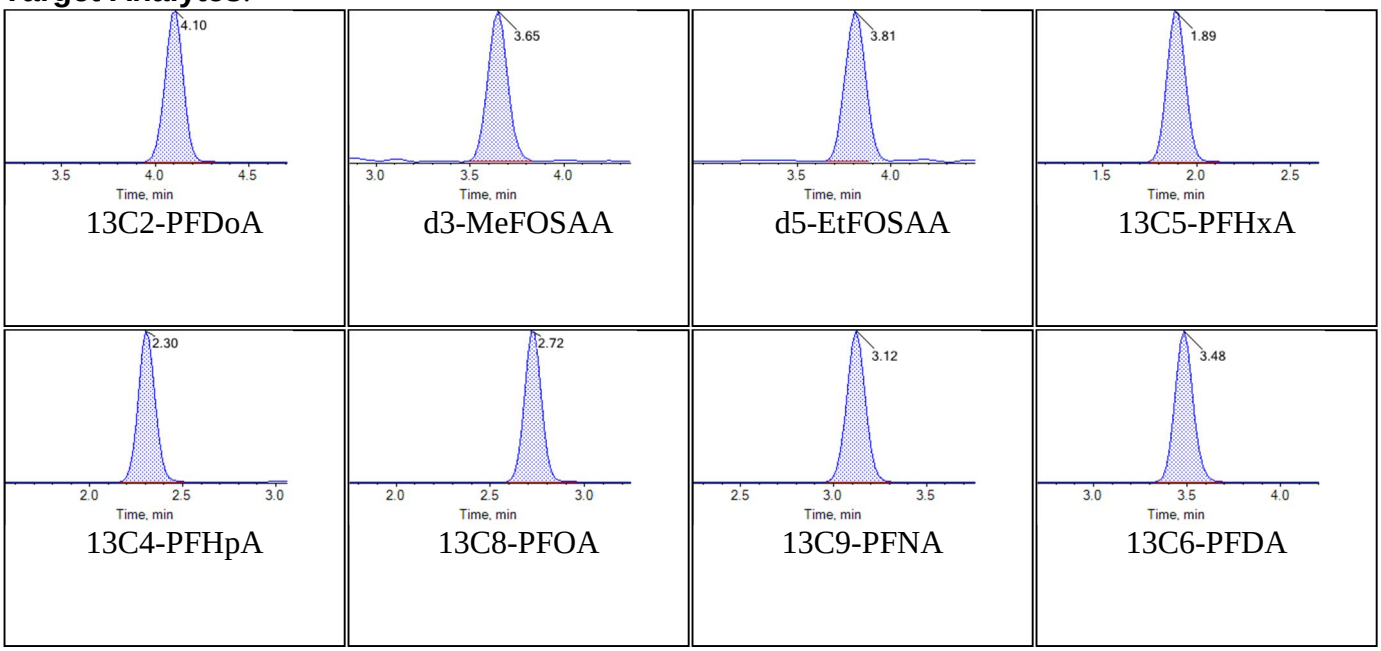
Chromatogram Report

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Printed: 25/10/2018 10:38:24 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**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

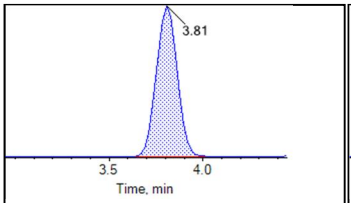
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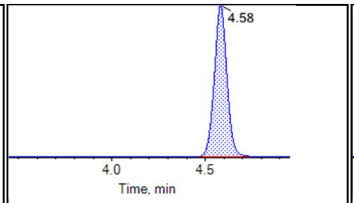
BATTELLE

Chromatogram Report

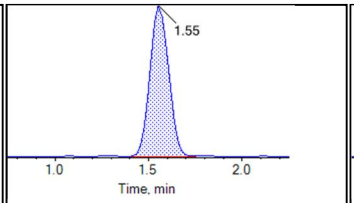
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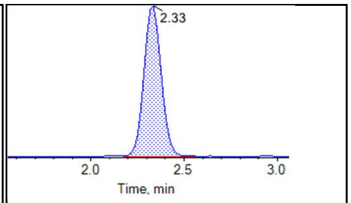
13C7-PFUnA



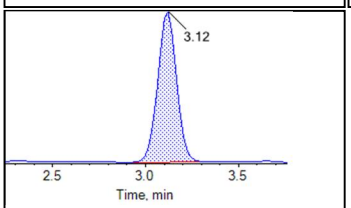
13C2-PFTeDA



13C3-PFBS

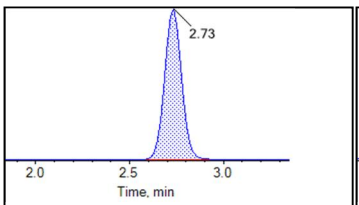


13C3-PFHxS

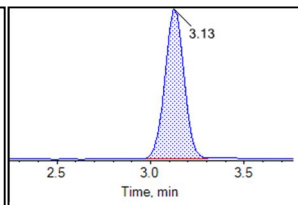


13C8-PFOS

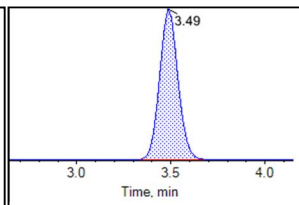
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

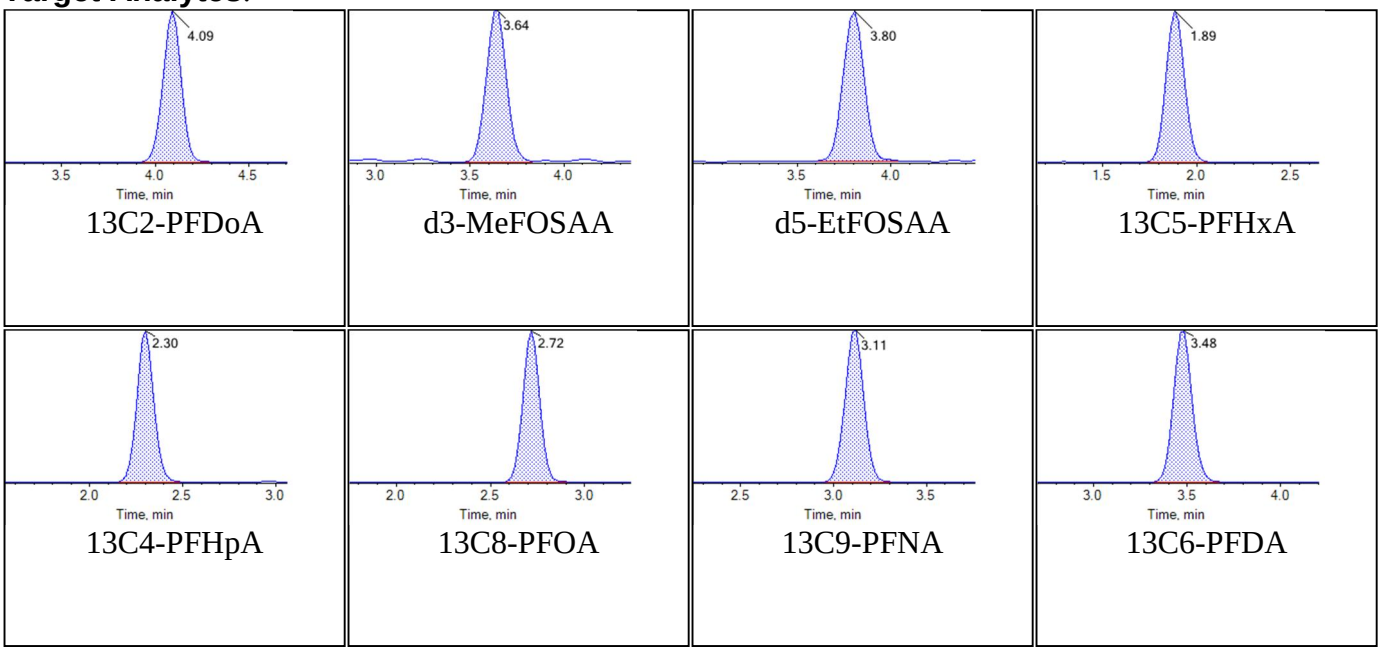
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 10:38:29 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**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

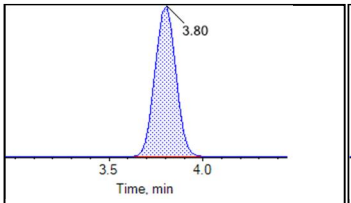
Target Analytes:



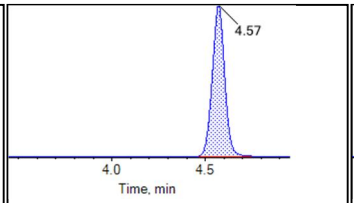
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Chromatogram Report

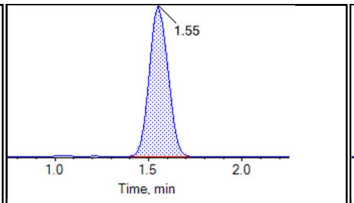
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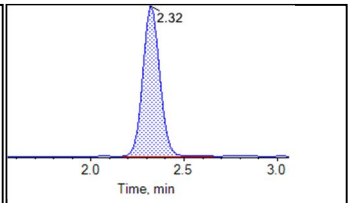
13C7-PFUnA



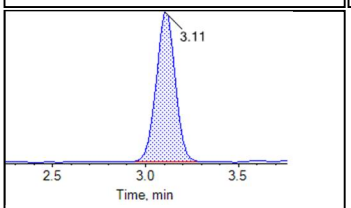
13C2-PFTeDA



13C3-PFBS

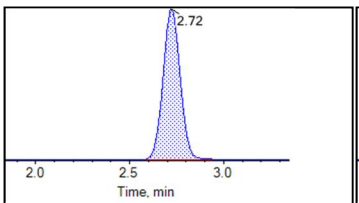


13C3-PFHxS

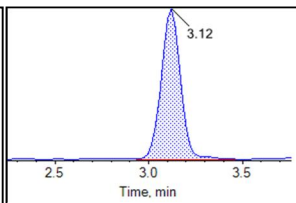


13C8-PFOS

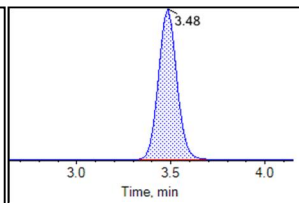
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

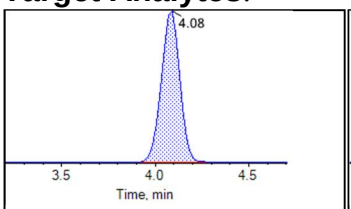
Chromatogram Report

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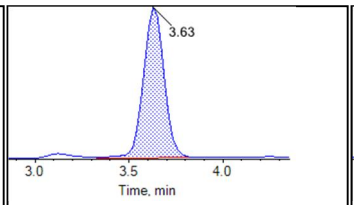
Sample Name	KB75	**Injection Vial**	4
Sample ID	L3	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T20:08:39	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

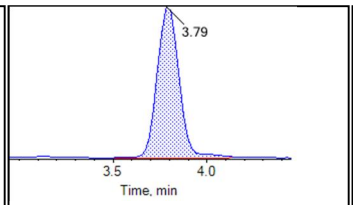
Target Analytes:



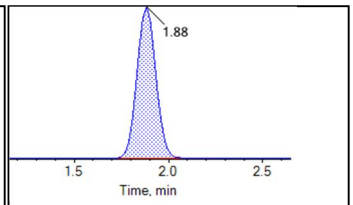
13C2-PFDoA



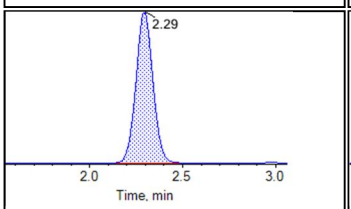
d3-MeFOSAA



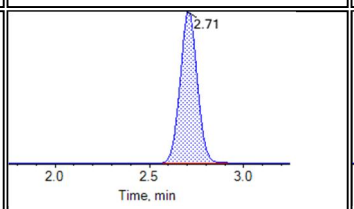
d5-EtFOSAA



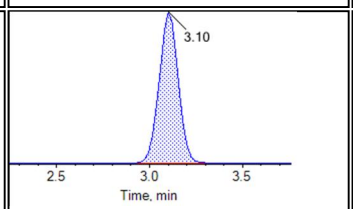
13C5-PFHxA



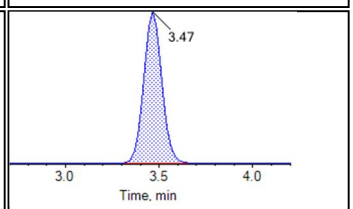
13C4-PFHpA



13C8-PFOA



13C9-PFNA

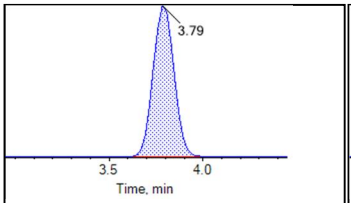


13C6-PFDA

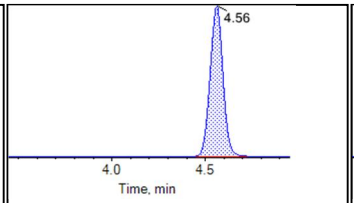
BATTELLE

Chromatogram Report

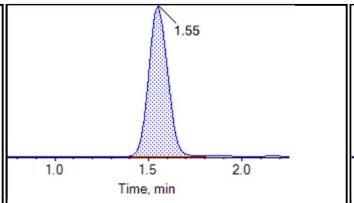
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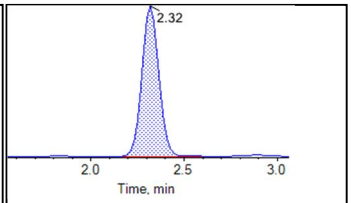
13C7-PFUnA



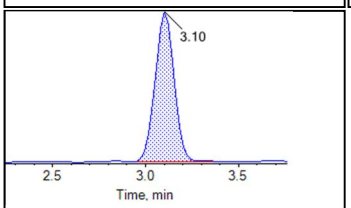
13C2-PFTeDA



13C3-PFBS

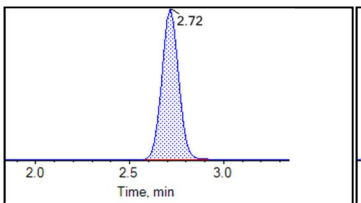


13C3-PFHxS

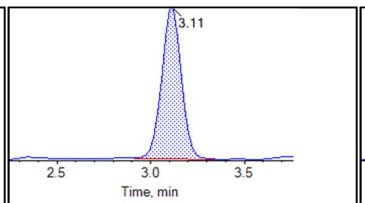


13C8-PFOS

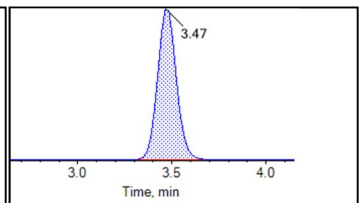
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

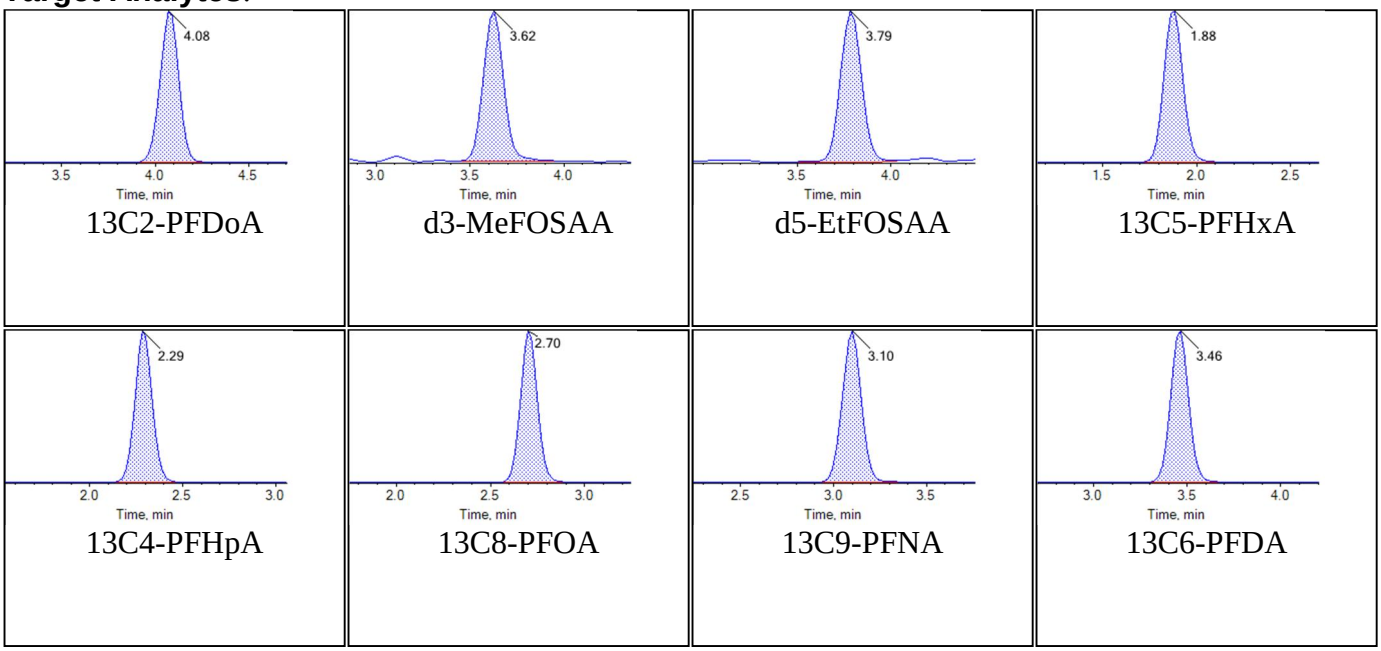
Chromatogram Report

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Printed: 25/10/2018 10:38:38 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**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

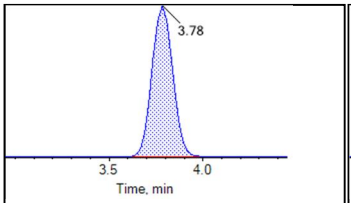
Target Analytes:



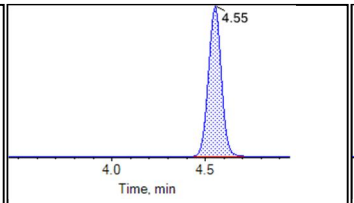
BATTELLE

Chromatogram Report

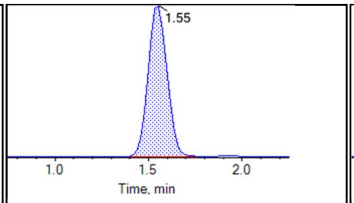
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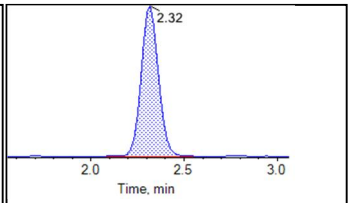
13C7-PFUnA



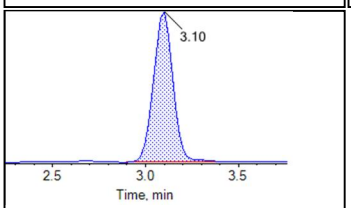
13C2-PFTeDA



13C3-PFBS

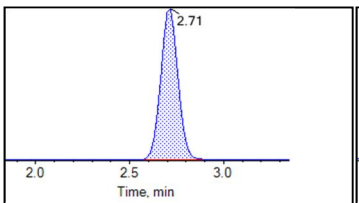


13C3-PFHxS

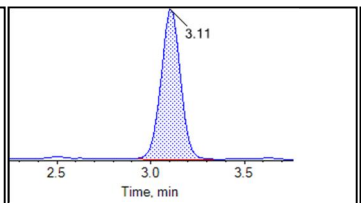


13C8-PFOS

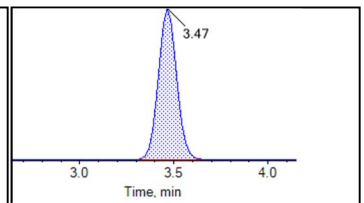
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

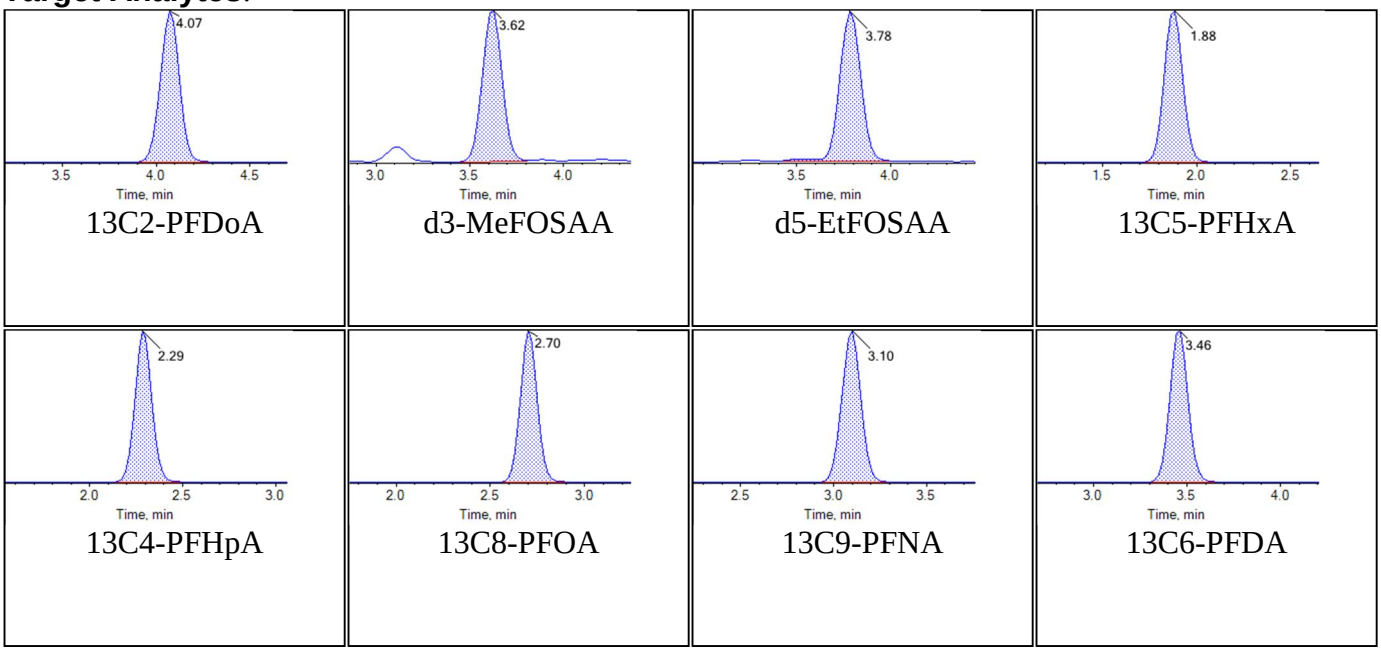
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 10:38:45 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**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

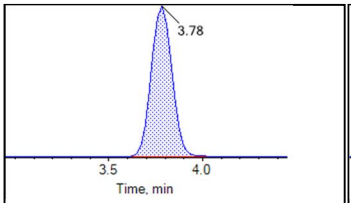
Target Analytes:



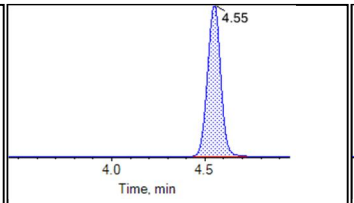
BATTELLE

Chromatogram Report

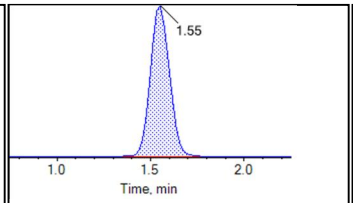
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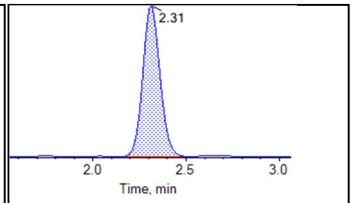
13C7-PFUnA



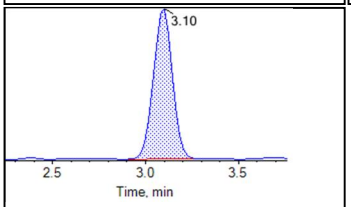
13C2-PFTeDA



13C3-PFBS

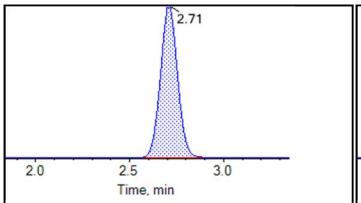


13C3-PFHxS

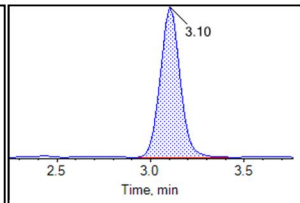


13C8-PFOS

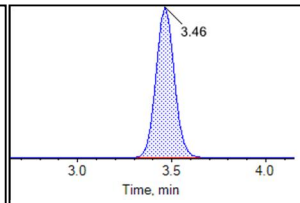
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

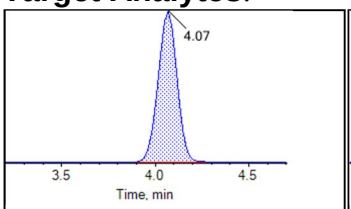
Chromatogram Report

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Printed: 25/10/2018 10:38:49 AM

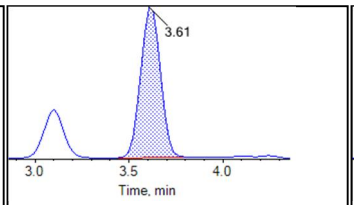
Sample Name	KB78	**Injection Vial**	7
Sample ID	L6	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T20:41:14	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

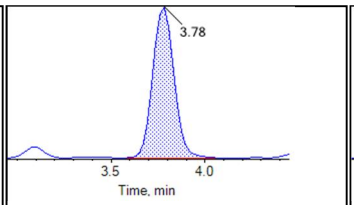
Target Analytes:



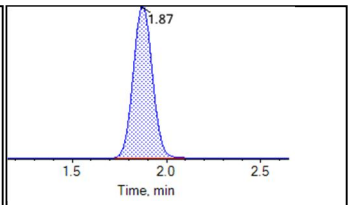
13C2-PFDoA



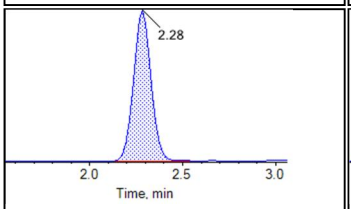
d3-MeFOSAA



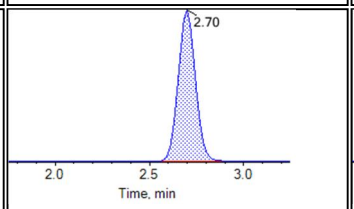
d5-EtFOSAA



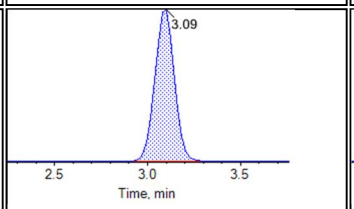
13C5-PFHxA



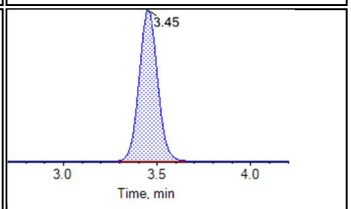
13C4-PFHpA



13C8-PFOA



13C9-PFNA

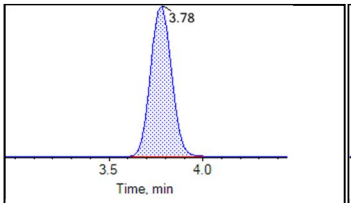


13C6-PFDA

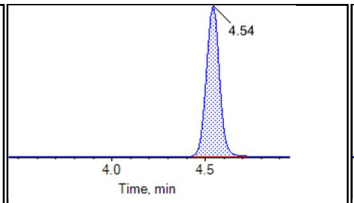
BATTELLE

Chromatogram Report

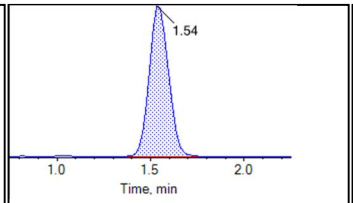
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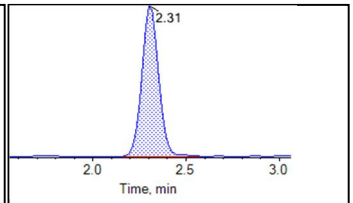
13C7-PFUnA



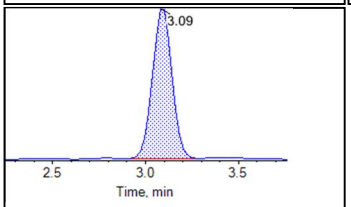
13C2-PFTeDA



13C3-PFBS

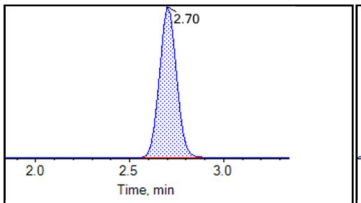


13C3-PFHxS

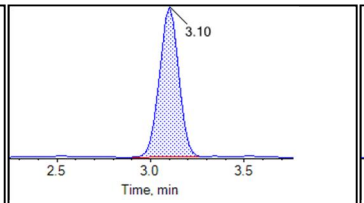


13C8-PFOS

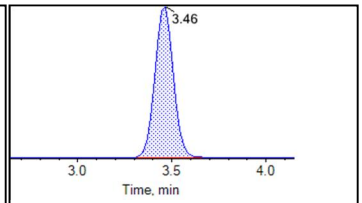
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

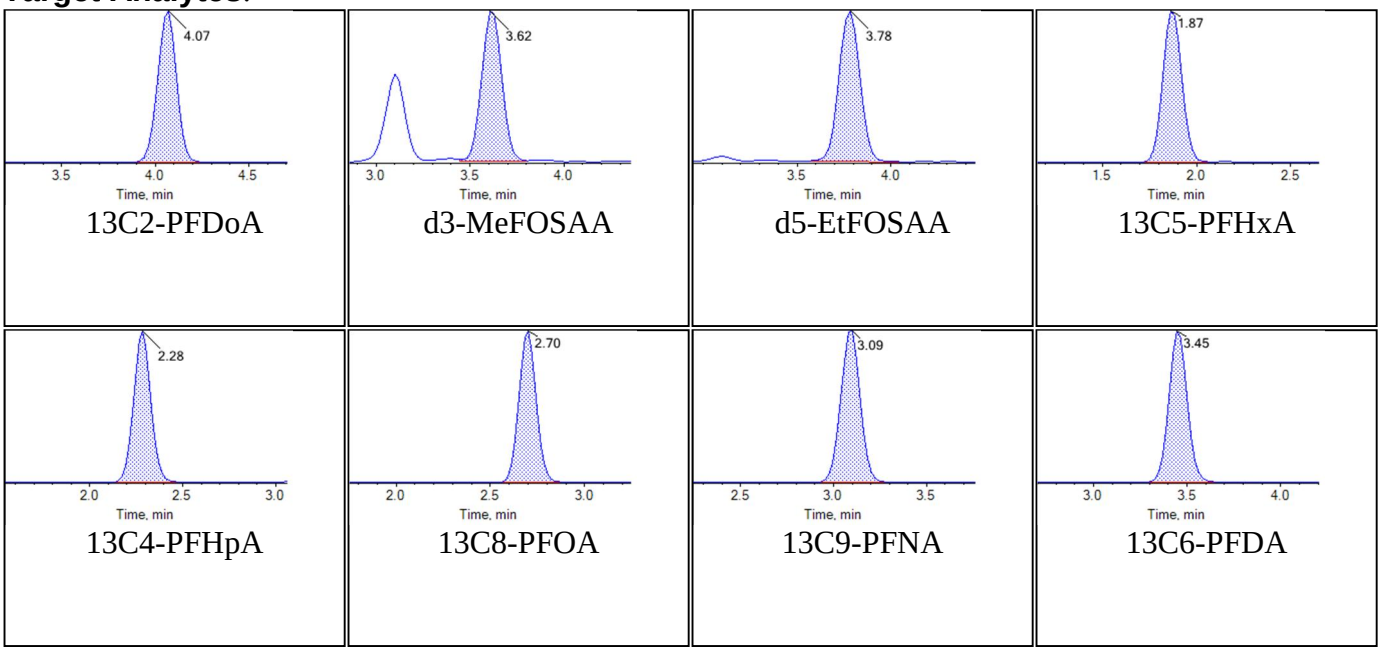
Chromatogram Report

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Sample Name	KB79	**Injection Vial**	8
Sample ID	L7	**Injection Volume**	10.00
Sample Type	Standard	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T20:52:06	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

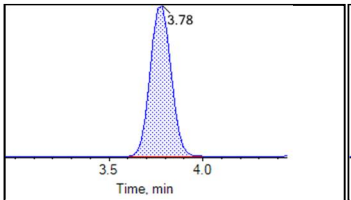
Target Analytes:



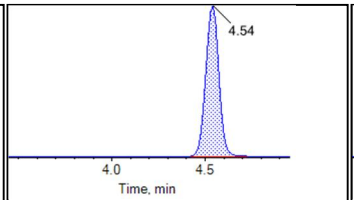
BATTELLE

Chromatogram Report

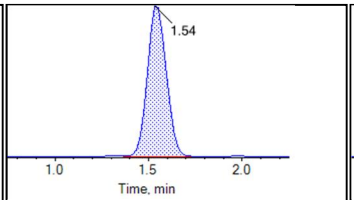
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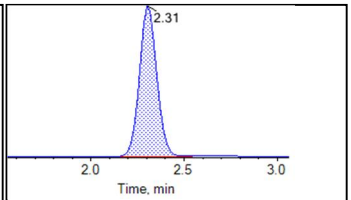
13C7-PFUnA



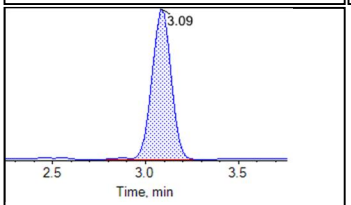
13C2-PFTeDA



13C3-PFBS

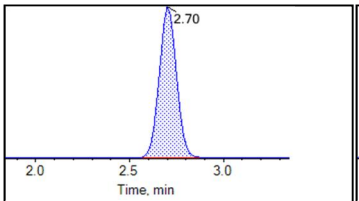


13C3-PFHxS

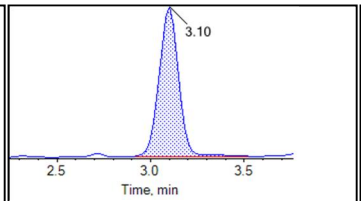


13C8-PFOS

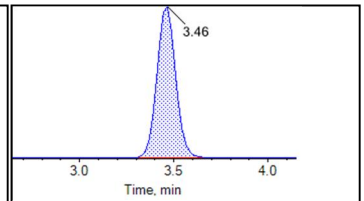
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

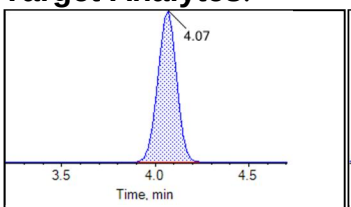
Chromatogram Report

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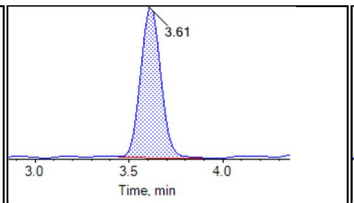
Sample Name	KB80 IB	**Injection Vial**	9
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:02:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

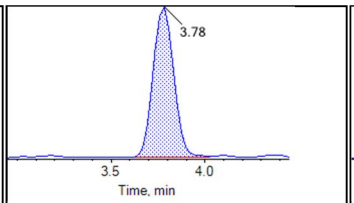
Target Analytes:



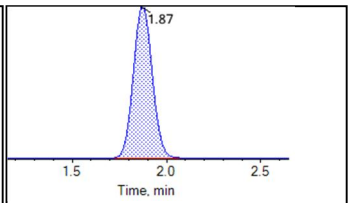
13C2-PFDoA



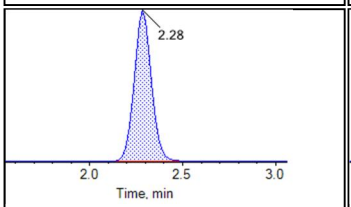
d3-MeFOSAA



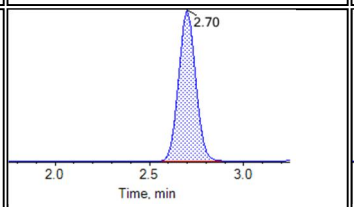
d5-EtFOSAA



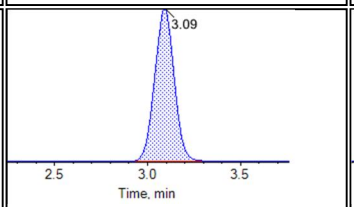
13C5-PFHxA



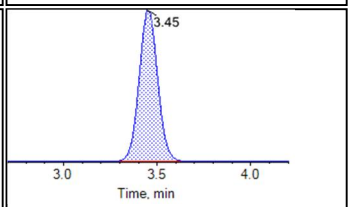
13C4-PFHpA



13C8-PFOA



13C9-PFNA

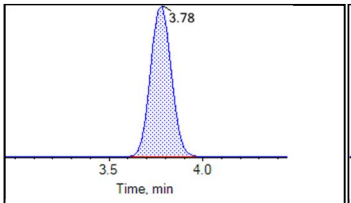


13C6-PFDA

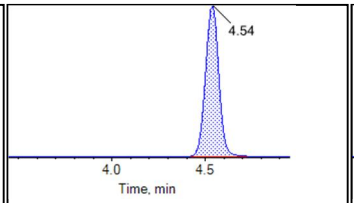
BATTELLE

Chromatogram Report

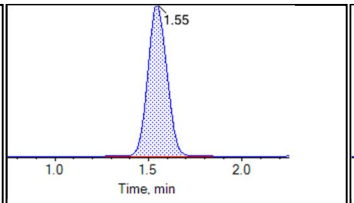
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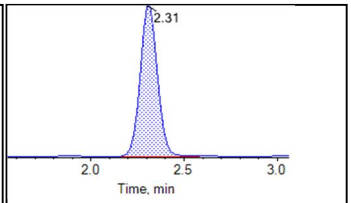
13C7-PFUnA



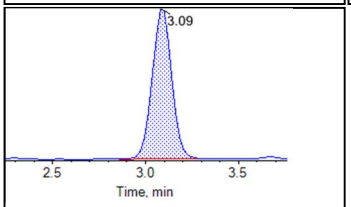
13C2-PFTeDA



13C3-PFBS

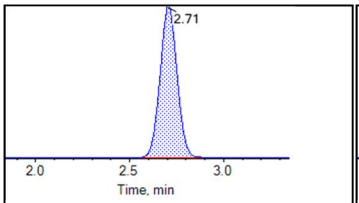


13C3-PFHxS

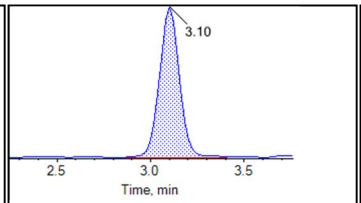


13C8-PFOS

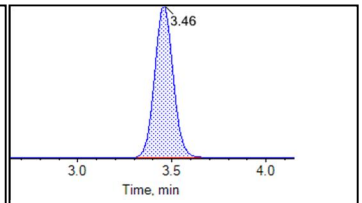
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

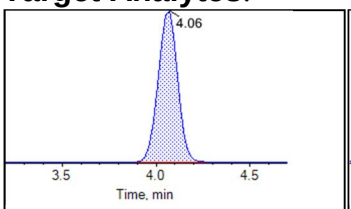
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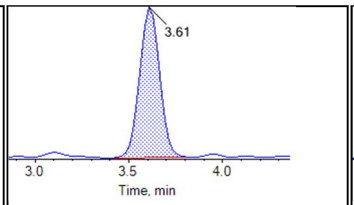
Sample Name	KB81 ICC	**Injection Vial**	10
Sample ID	ICC	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-17T21:13:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

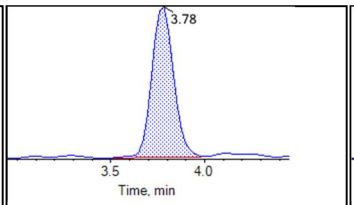
Target Analytes:



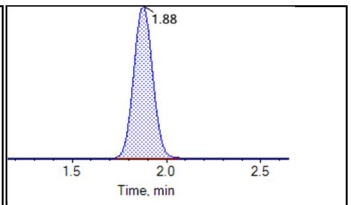
13C2-PFDoA



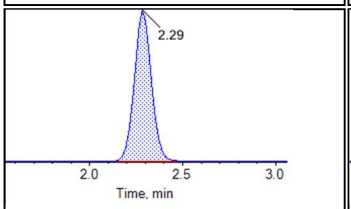
d3-MeFOSAA



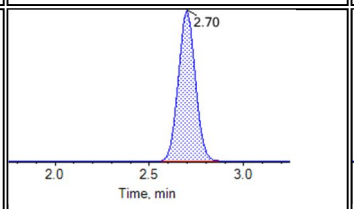
d5-EtFOSAA



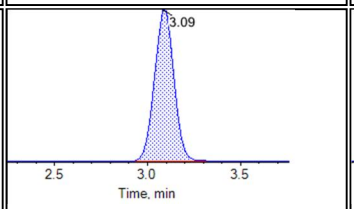
13C5-PFHxA



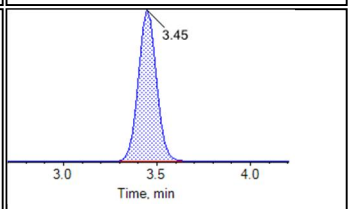
13C4-PFHpA



13C8-PFOA



13C9-PFNA

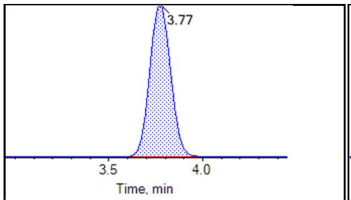


13C6-PFDA

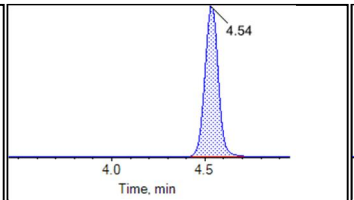
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Chromatogram Report

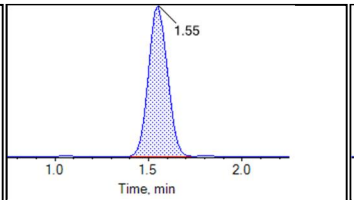
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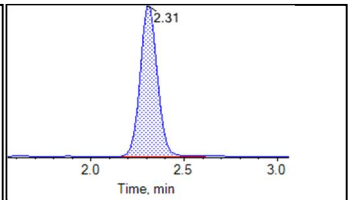
13C7-PFUnA



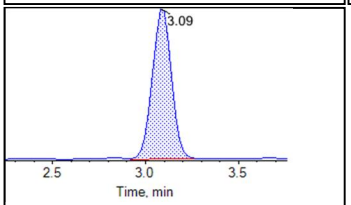
13C2-PFTeDA



13C3-PFBS

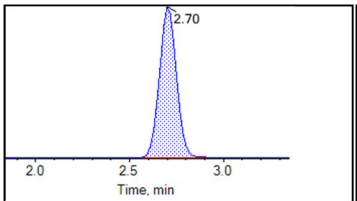


13C3-PFHxS

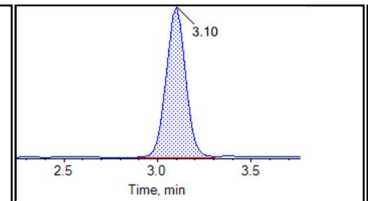


13C8-PFOS

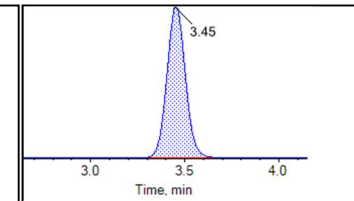
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

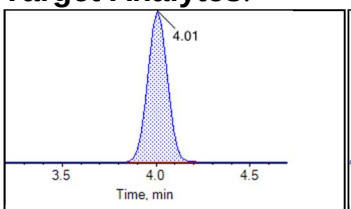
Chromatogram Report

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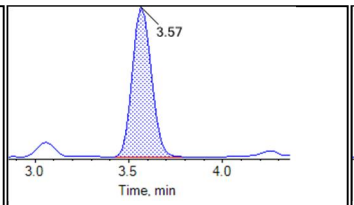
Sample Name	KB76 CCV	**Injection Vial**	33
Sample ID		**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:22:00	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

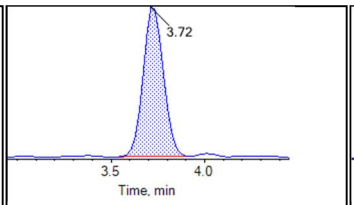
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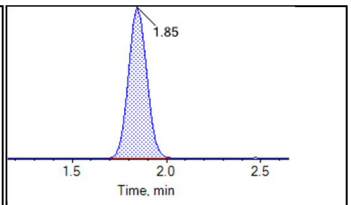
13C2-PFDoA



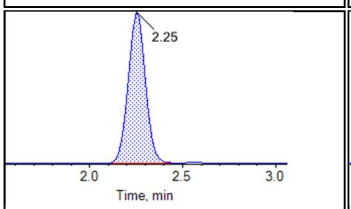
d3-MeFOSAA



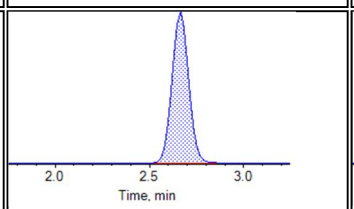
d5-EtFOSAA



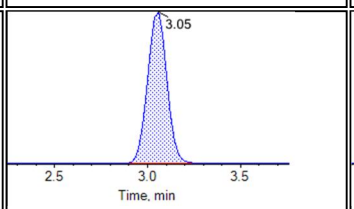
13C5-PFHxA



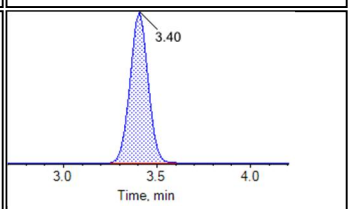
13C4-PFHpA



13C8-PFOA



13C9-PFNA

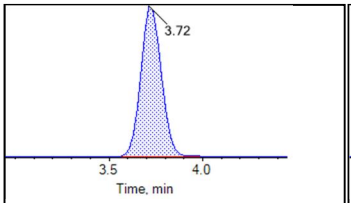


13C6-PFDA

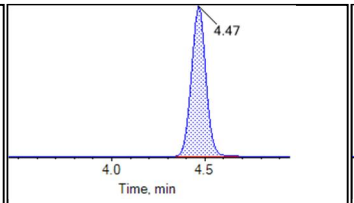
BATTELLE

Chromatogram Report

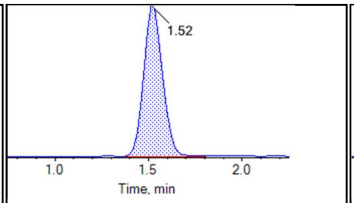
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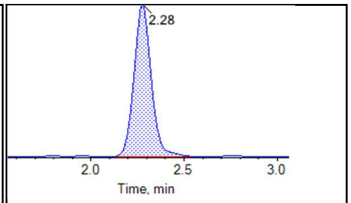
13C7-PFUnA



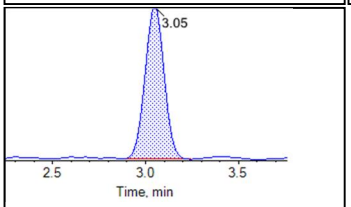
13C2-PFTeDA



13C3-PFBS

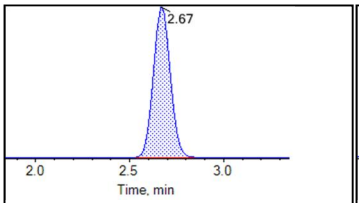


13C3-PFHxS

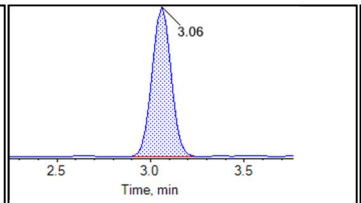


13C8-PFOS

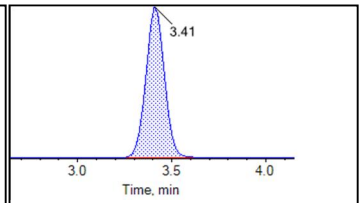
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

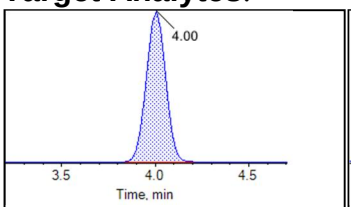
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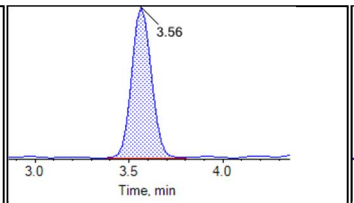
Sample Name	CR902PB-FS(3)	**Injection Vial**	35
Sample ID	Procedural Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:43:47	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

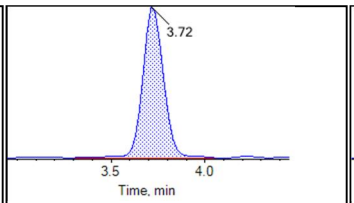
Target Analytes:



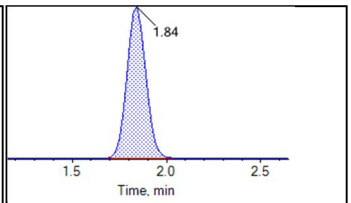
13C2-PFDoA



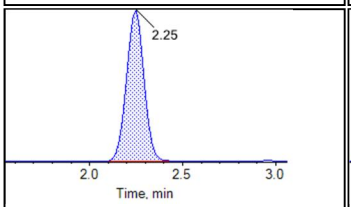
d3-MeFOSAA



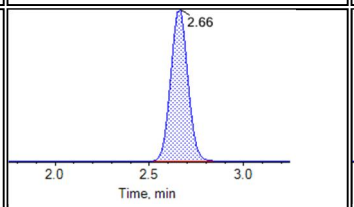
d5-EtFOSAA



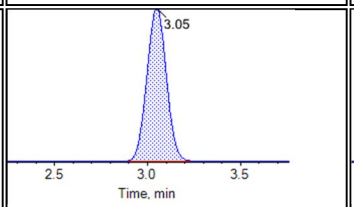
13C5-PFHxA



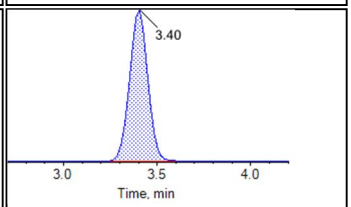
13C4-PFHpA



13C8-PFOA



13C9-PFNA

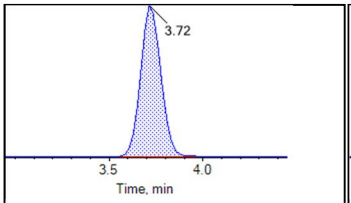


13C6-PFDA

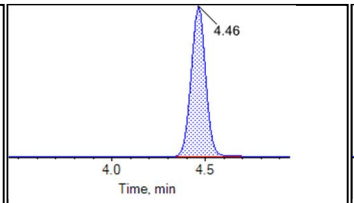
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Chromatogram Report

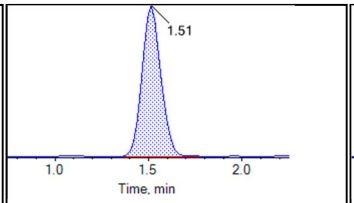
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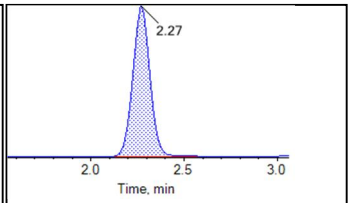
13C7-PFUnA



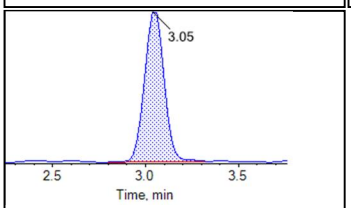
13C2-PFTeDA



13C3-PFBS

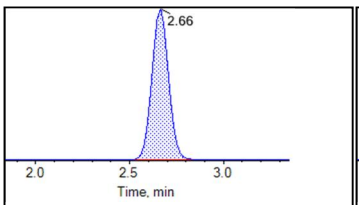


13C3-PFHxS

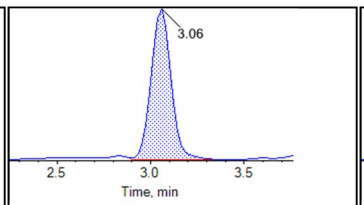


13C8-PFOS

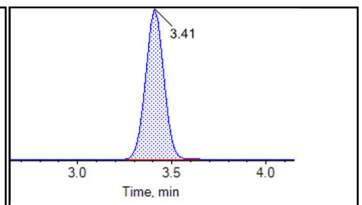
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

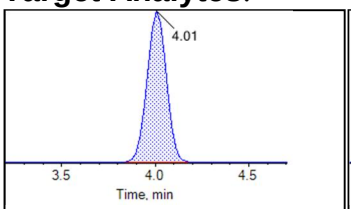
Chromatogram Report

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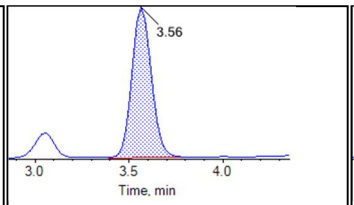
Sample Name	CR903LCS-FS(3)	**Injection Vial**	36
Sample ID	Laboratory Control Sample	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T11:54:39	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

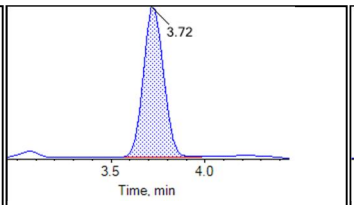
Target Analytes:



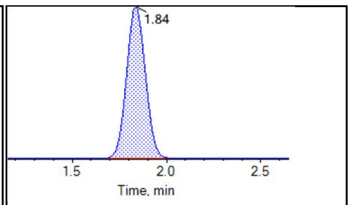
13C2-PFDoA



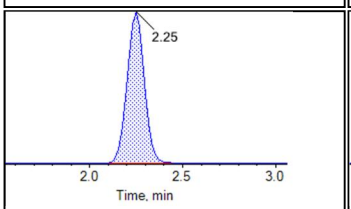
d3-MeFOSAA



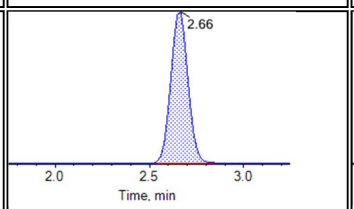
d5-EtFOSAA



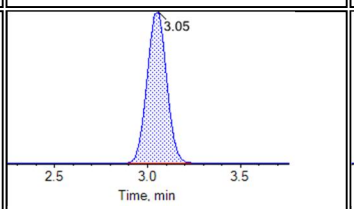
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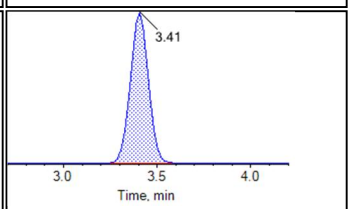
13C4-PFHpA



13C8-PFOA



13C9-PFNA

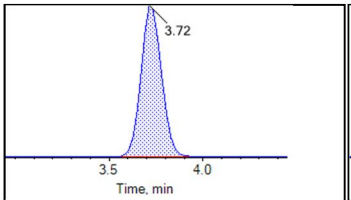


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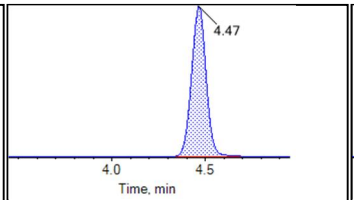
BATTELLE

Chromatogram Report

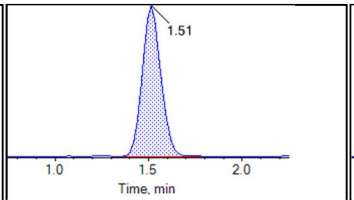
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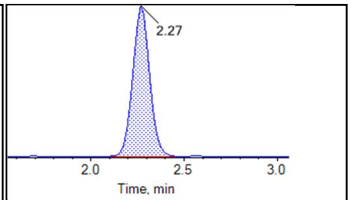
13C7-PFUnA



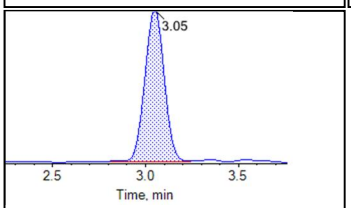
13C2-PFTeDA



13C3-PFBS

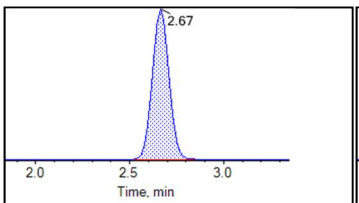


13C3-PFHxS

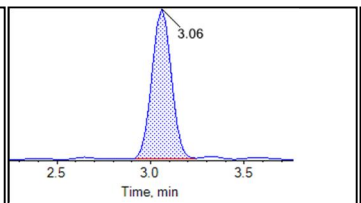


13C8-PFOS

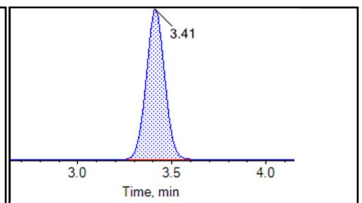
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

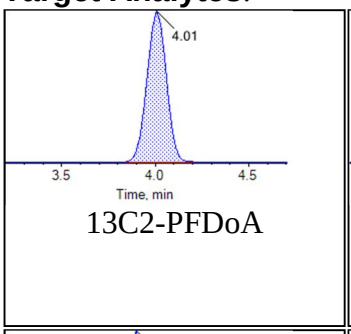
Chromatogram Report

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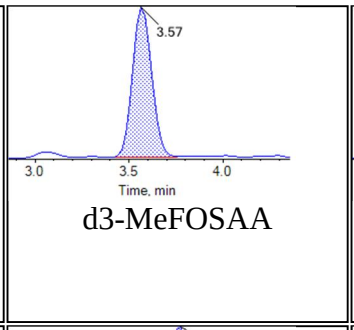
Sample Name	J8438-FS(3)	**Injection Vial**	37
Sample ID	VC-MS09-SS01-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:05:31	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

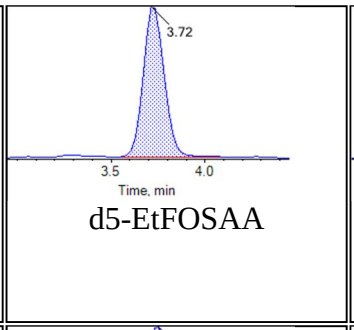
Target Analytes:



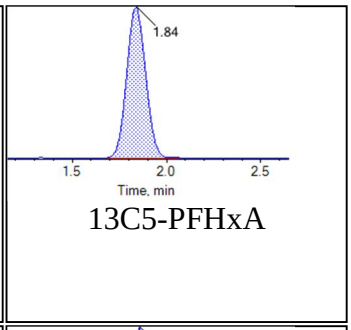
13C2-PFDoA



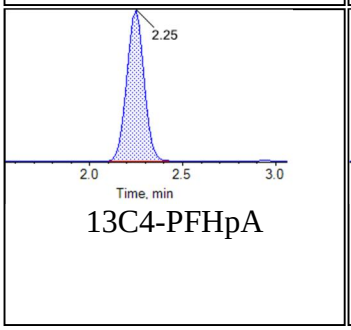
d3-MeFOSAA



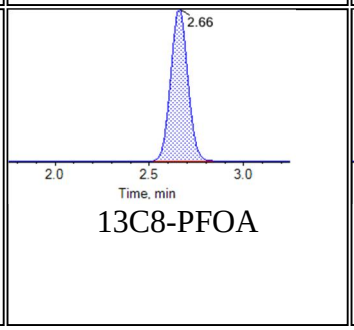
d5-EtFOSAA



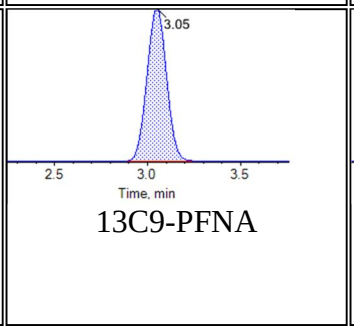
13C5-PFHxA



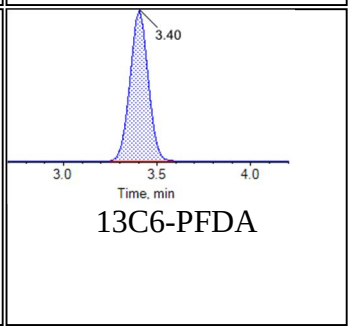
13C4-PFHpA



13C8-PFOA



13C9-PFNA

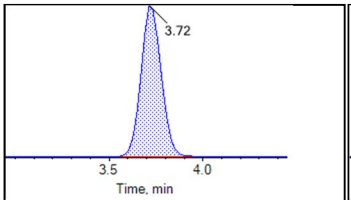


13C6-PFDA

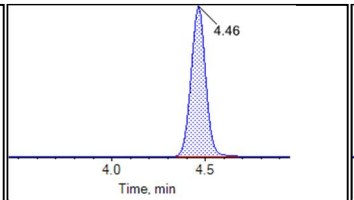
BATTELLE

Chromatogram Report

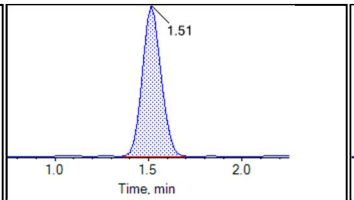
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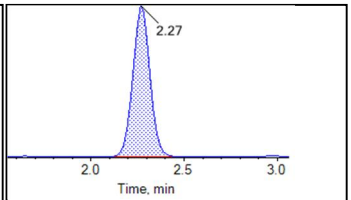
13C7-PFUnA



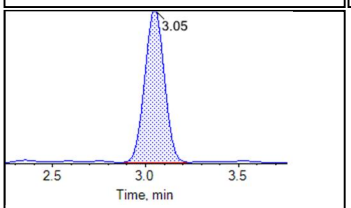
13C2-PFTeDA



13C3-PFBS

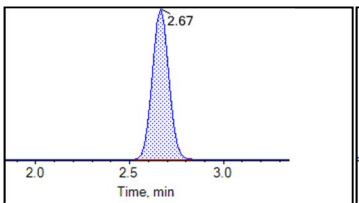


13C3-PFHxS

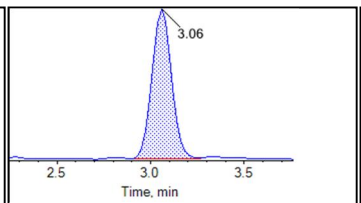


13C8-PFOS

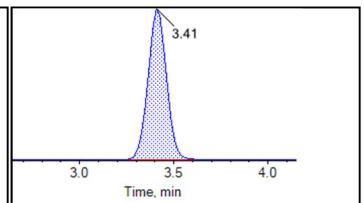
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

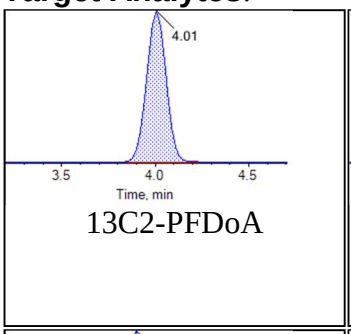
Chromatogram Report

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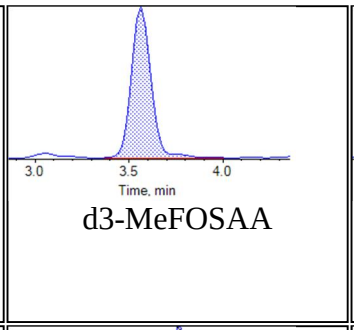
Sample Name	J8438-FS-D(5)	**Injection Vial**	38
Sample ID	VC-MS09-SS01-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:16:25	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

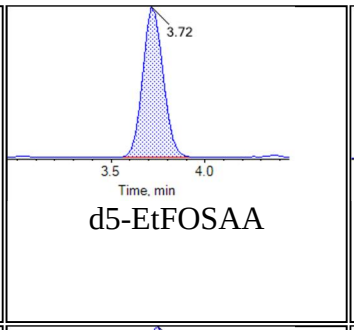
Target Analytes:



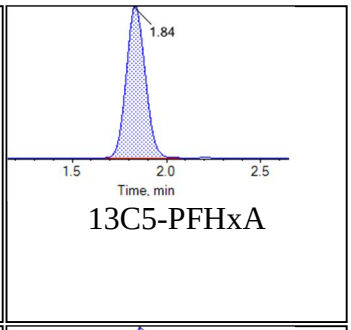
13C2-PFDoA



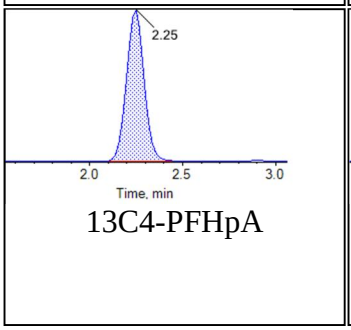
d3-MeFOSAA



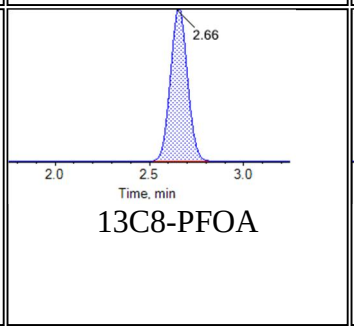
d5-EtFOSAA



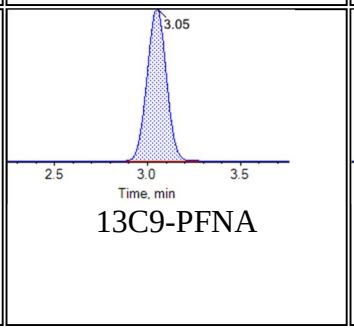
13C5-PFHxA



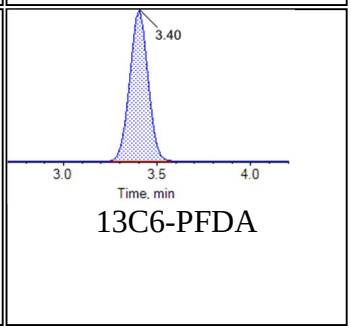
13C4-PFHpA



13C8-PFOA



13C9-PFNA

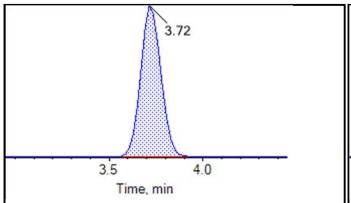


13C6-PFDA

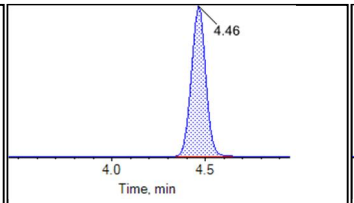
BATTELLE

Chromatogram Report

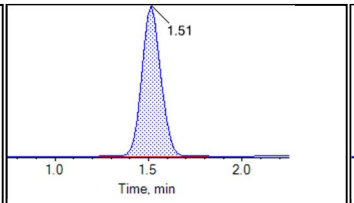
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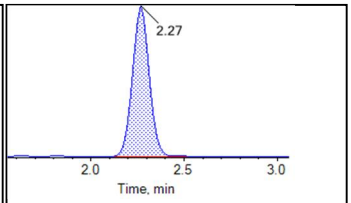
13C7-PFUnA



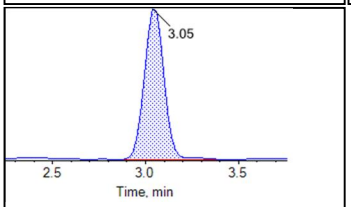
13C2-PFTeDA



13C3-PFBS

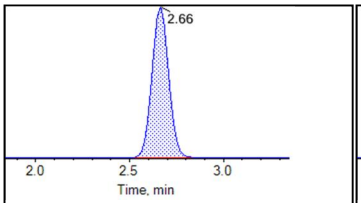


13C3-PFHxS

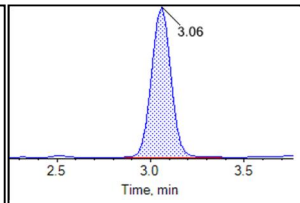


13C8-PFOS

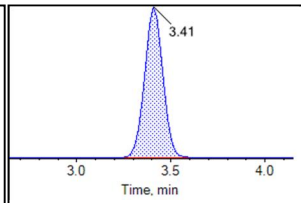
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

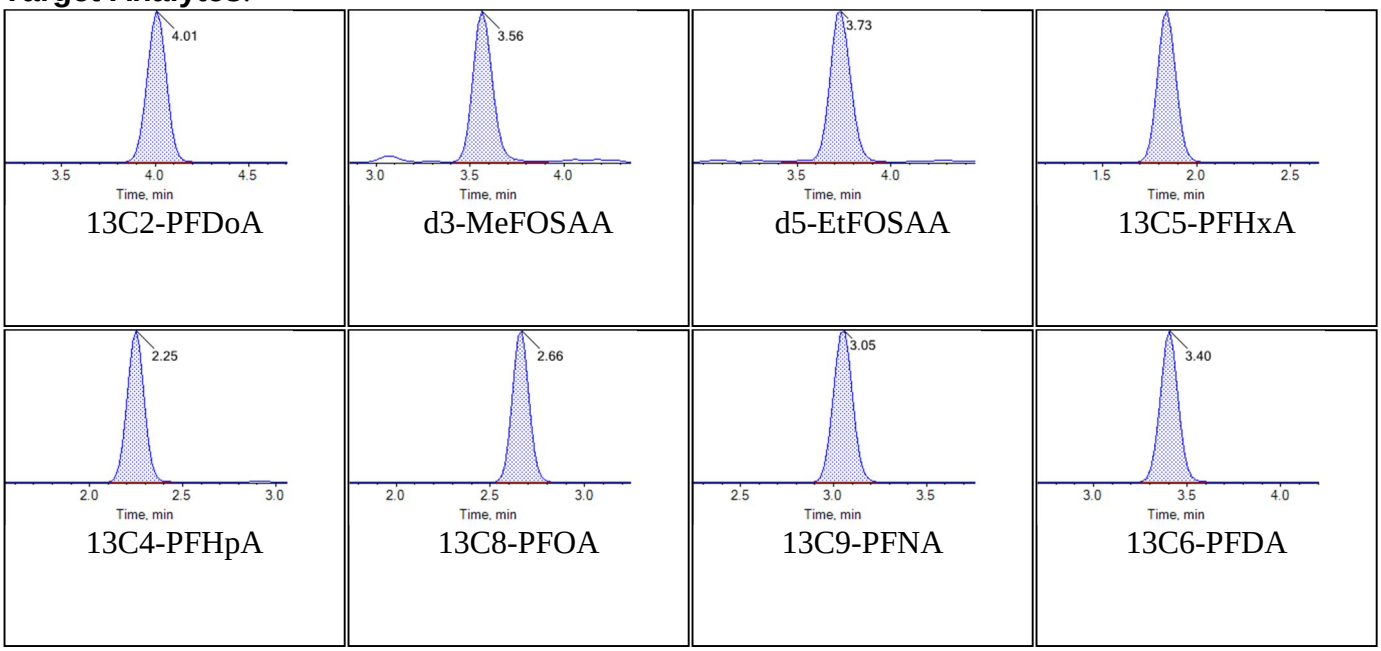
Chromatogram Report

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Sample Name	J8439-FS(3)	**Injection Vial**	39
Sample ID	VC-MS09-SB01-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:27:18	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

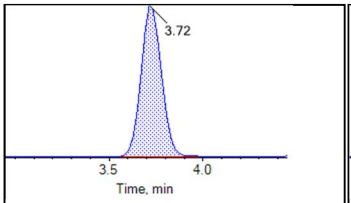
Target Analytes:



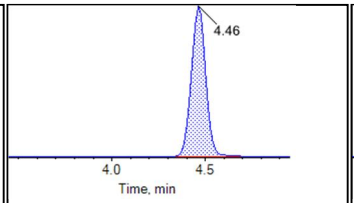
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Chromatogram Report

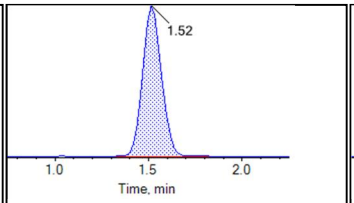
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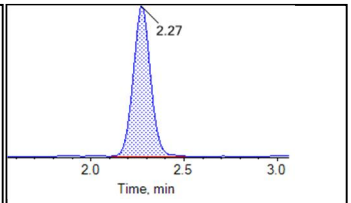
13C7-PFUnA



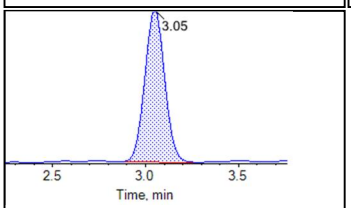
13C2-PFTeDA



13C3-PFBS

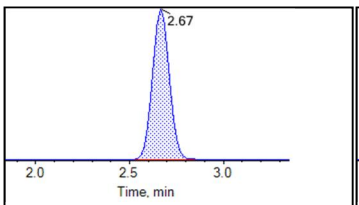


13C3-PFHxS

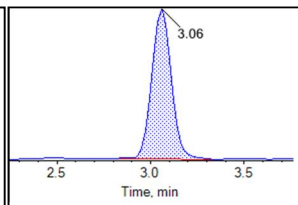


13C8-PFOS

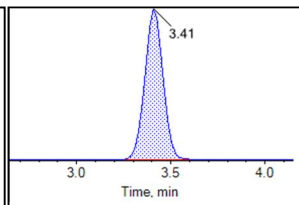
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

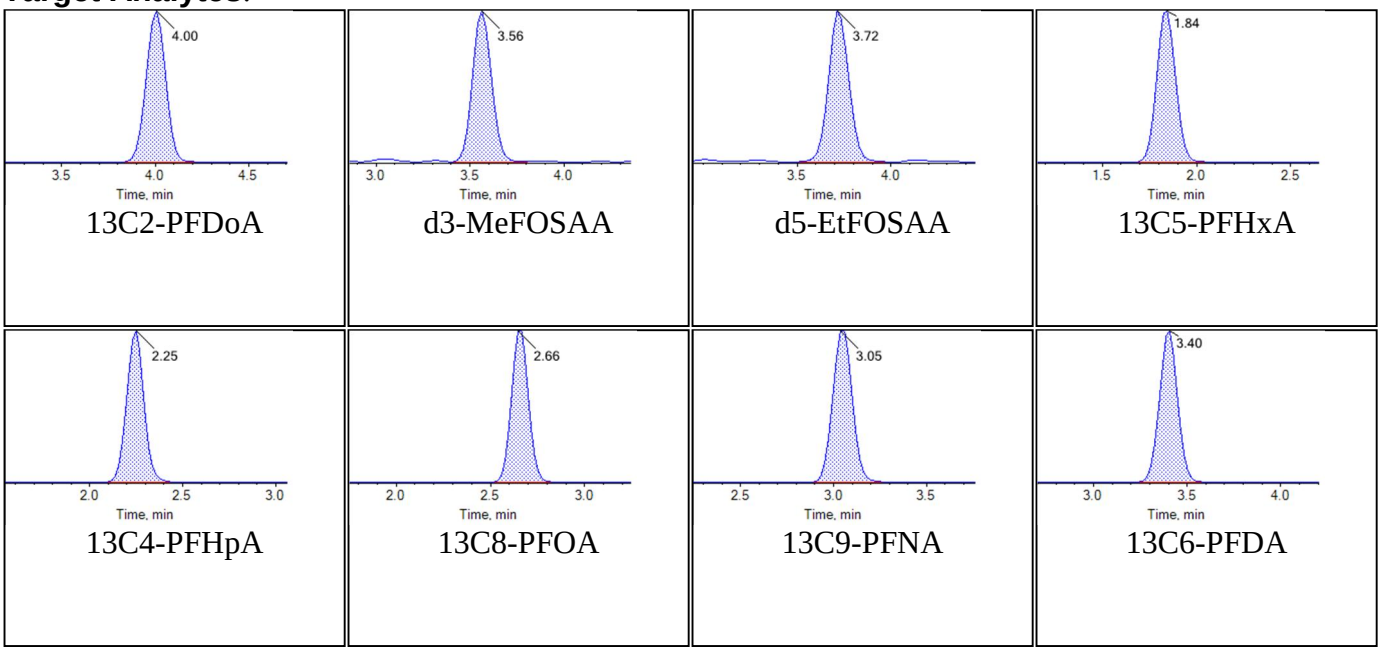
Chromatogram Report

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Sample Name	J8439-FS-D(5)	**Injection Vial**	40
Sample ID	VC-MS09-SB01-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:38:11	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

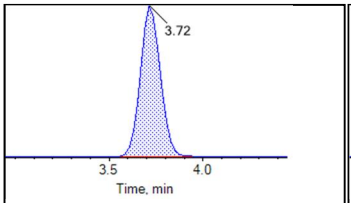
Target Analytes:



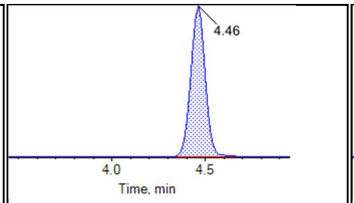
BATTELLE

Chromatogram Report

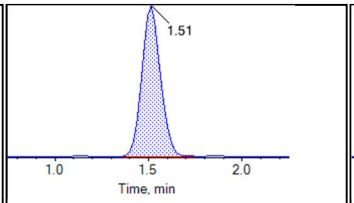
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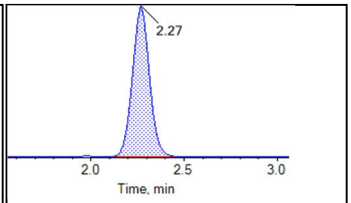
13C7-PFUnA



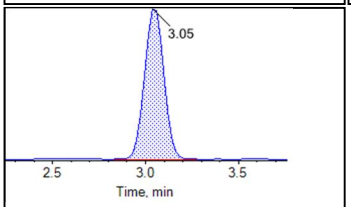
13C2-PFTeDA



13C3-PFBS

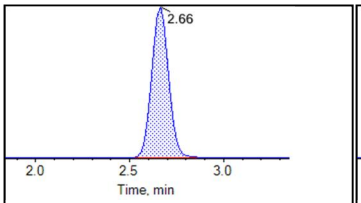


13C3-PFHxS

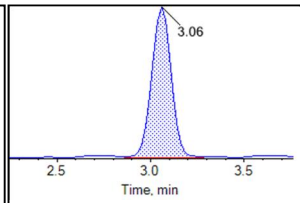


13C8-PFOS

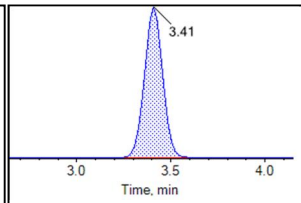
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

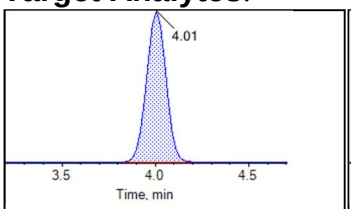
Chromatogram Report

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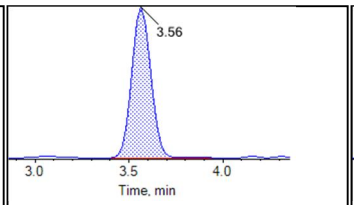
Sample Name	J8440-FS(3)	**Injection Vial**	41
Sample ID	VC-MS09-SB01-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:49:05	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

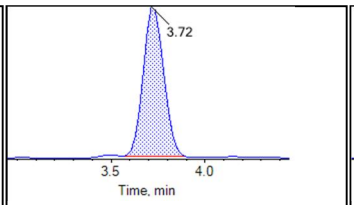
Target Analytes:



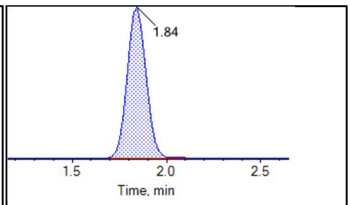
13C2-PFDoA



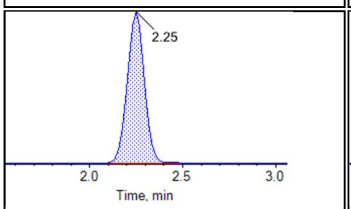
d3-MeFOSAA



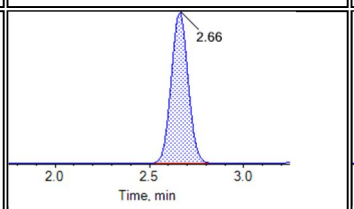
d5-EtFOSAA



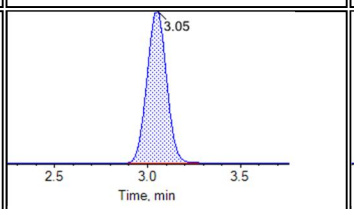
13C5-PFHxA



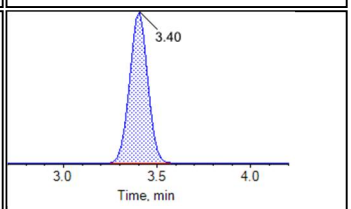
13C4-PFHpA



13C8-PFOA



13C9-PFNA

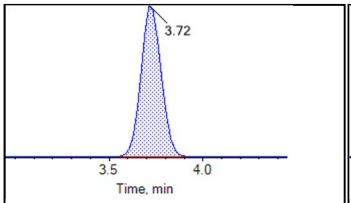


13C6-PFDA

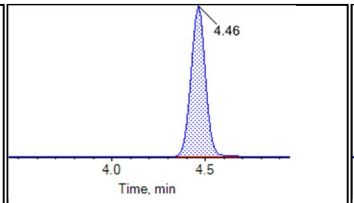
BATTELLE

Chromatogram Report

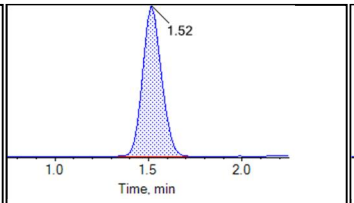
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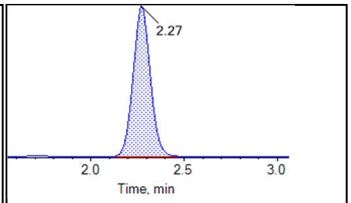
13C7-PFUnA



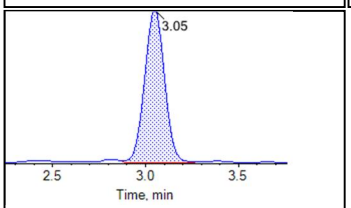
13C2-PFTeDA



13C3-PFBS

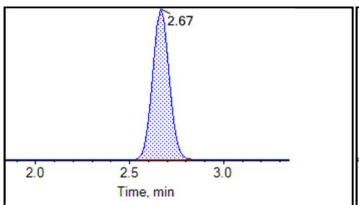


13C3-PFHxS

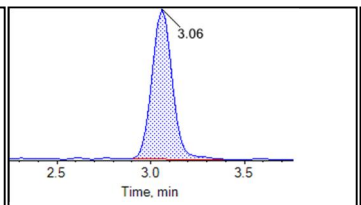


13C8-PFOS

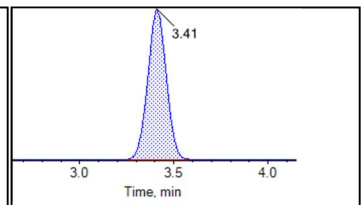
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

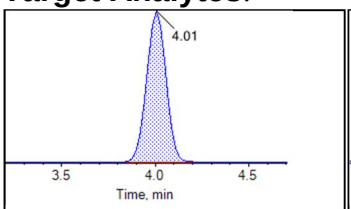
Chromatogram Report

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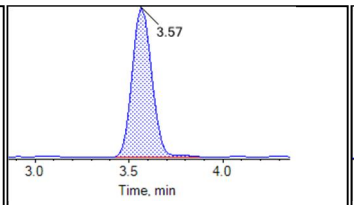
Sample Name	J8440-FS-D(5)	**Injection Vial**	42
Sample ID	VC-MS09-SB01-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T12:59:57	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

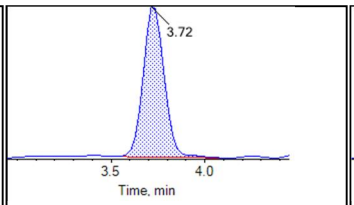
Target Analytes:



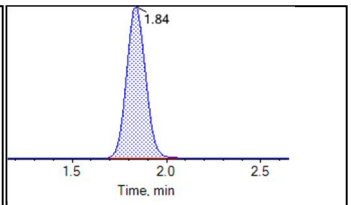
13C2-PFDoA



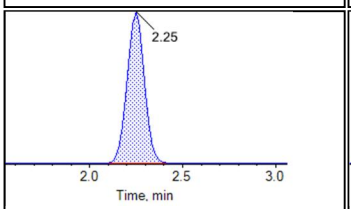
d3-MeFOSAA



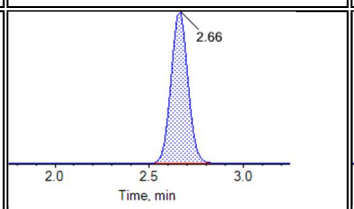
d5-EtFOSAA



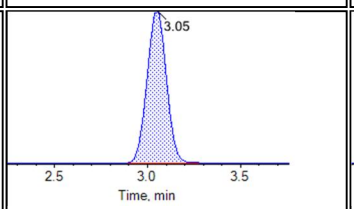
13C5-PFHxA



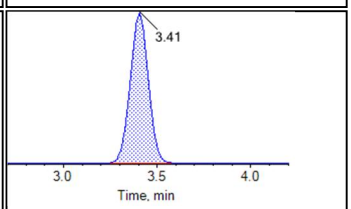
13C4-PFHpA



13C8-PFOA



13C9-PFNA

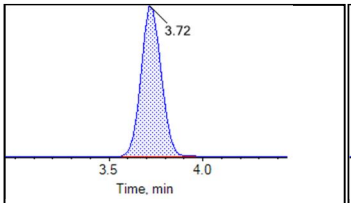


13C6-PFDA

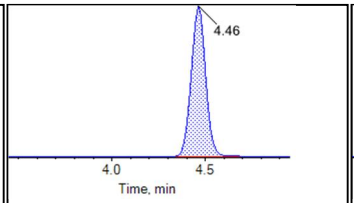
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Chromatogram Report

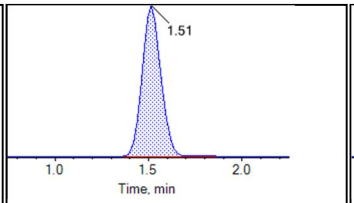
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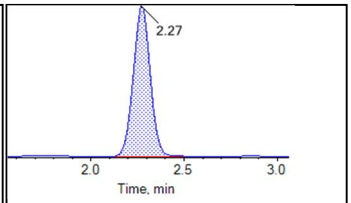
13C7-PFUnA



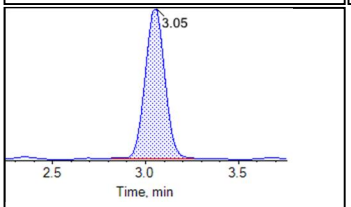
13C2-PFTeDA



13C3-PFBS

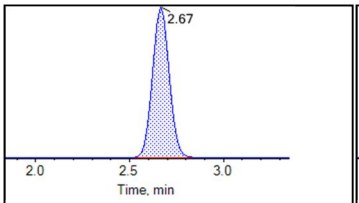


13C3-PFHxS

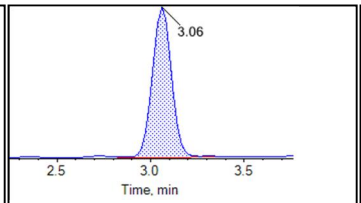


13C8-PFOS

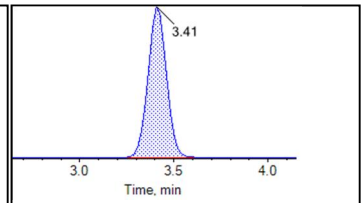
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

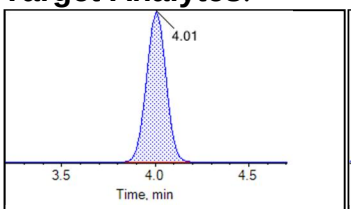
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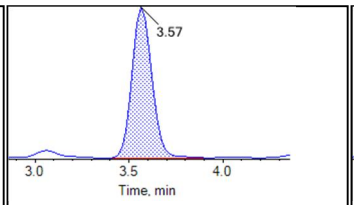
Sample Name	KB77 CCV	**Injection Vial**	43
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:10:49	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

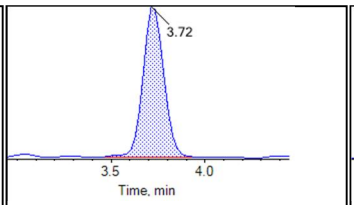
Target Analytes:



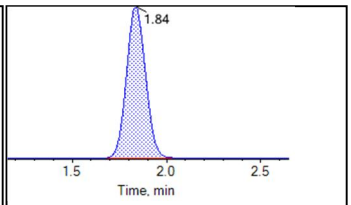
13C2-PFDoA



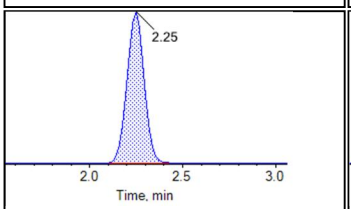
d3-MeFOSAA



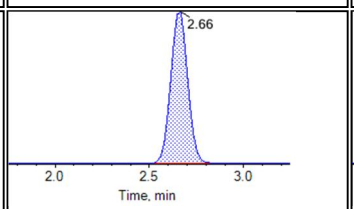
d5-EtFOSAA



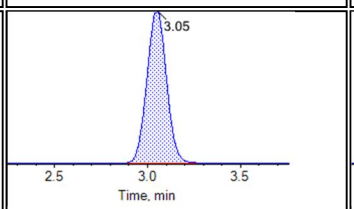
13C5-PFHxA



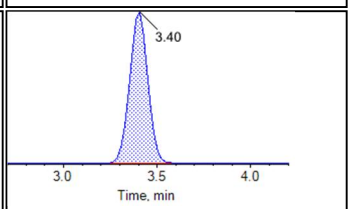
13C4-PFHpA



13C8-PFOA



13C9-PFNA

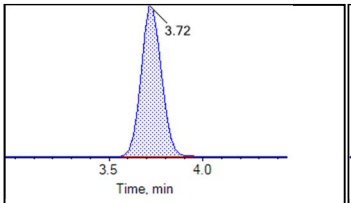


13C6-PFDA

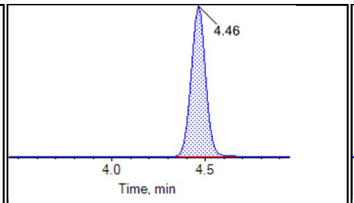
BATTELLE

Chromatogram Report

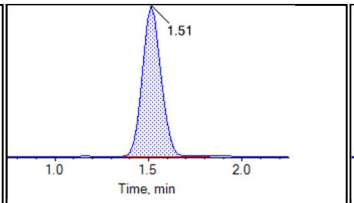
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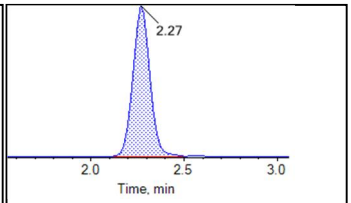
13C7-PFUnA



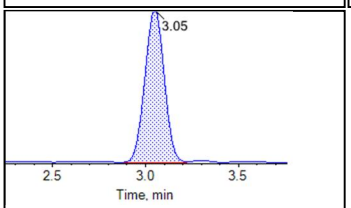
13C2-PFTeDA



13C3-PFBS

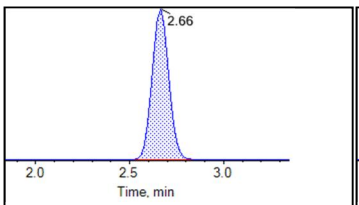


13C3-PFHxS

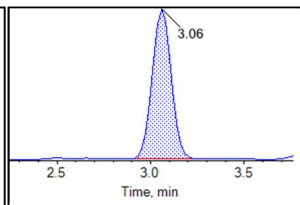


13C8-PFOS

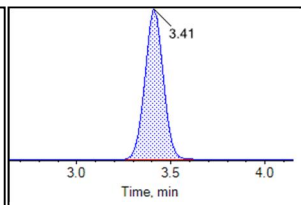
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

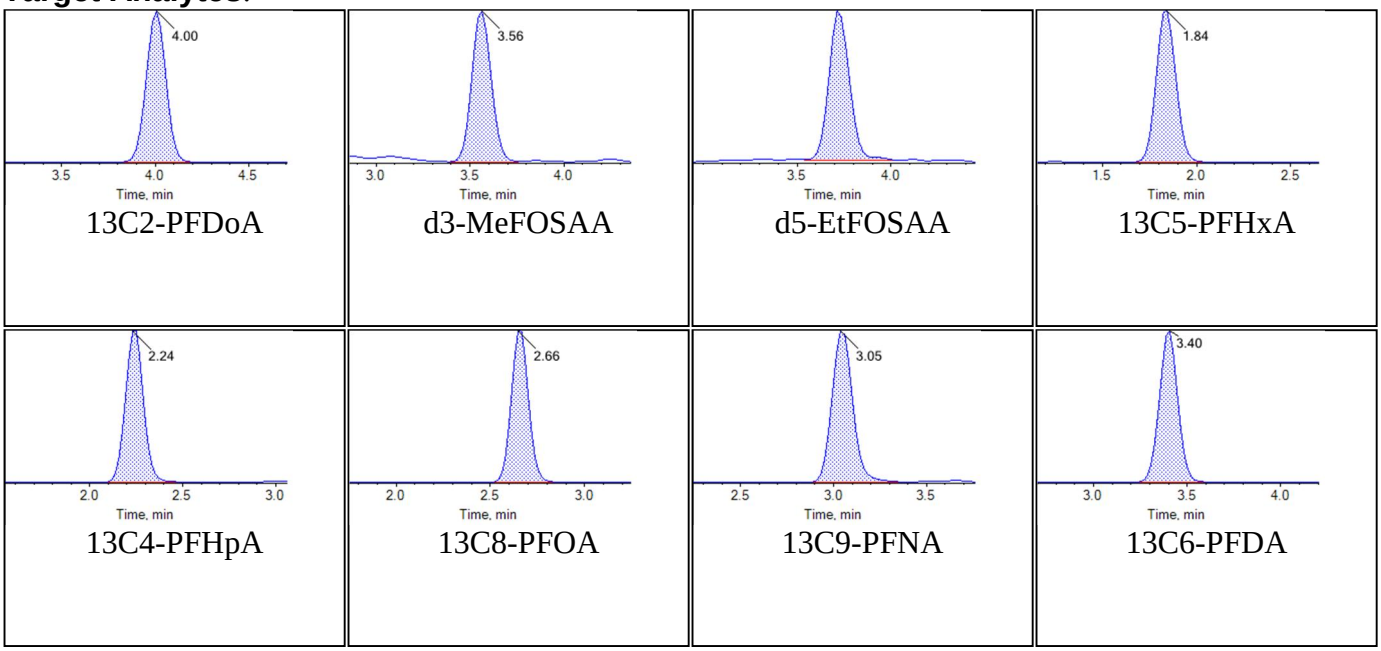
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 10:40:00 AM

Sample Name	J8441-FS(3)	**Injection Vial**	45
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:32:35	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

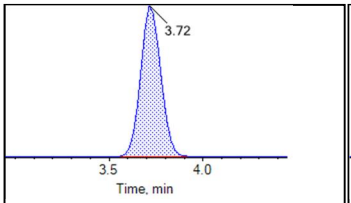
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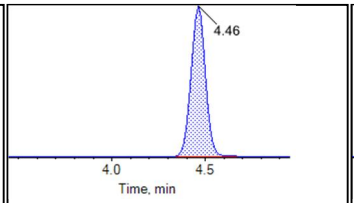
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Chromatogram Report

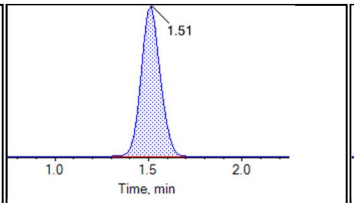
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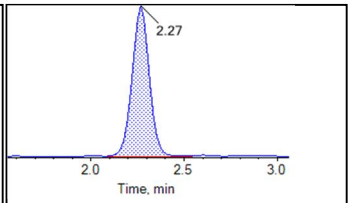
13C7-PFUnA



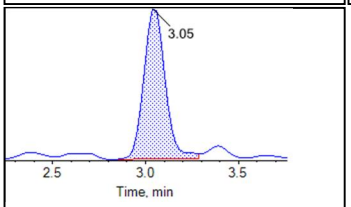
13C2-PFTeDA



13C3-PFBS

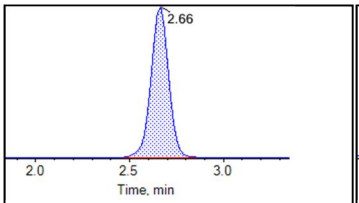


13C3-PFHxS

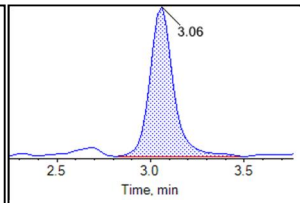


13C8-PFOS

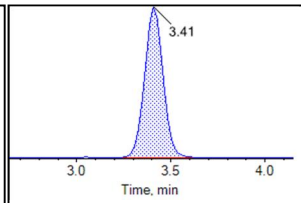
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

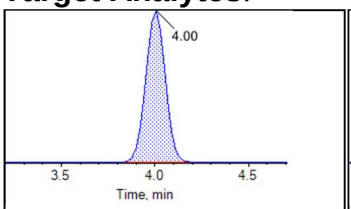
Chromatogram Report

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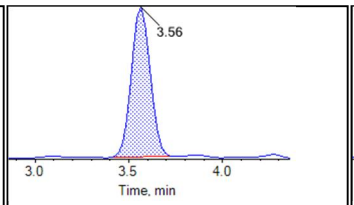
Sample Name	J8441-FS-D(5)	**Injection Vial**	46
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:43:28	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

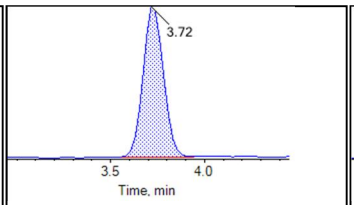
Target Analytes:



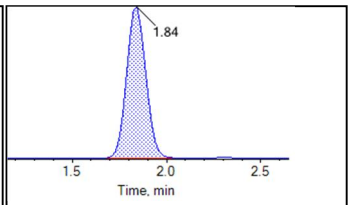
13C2-PFDoA



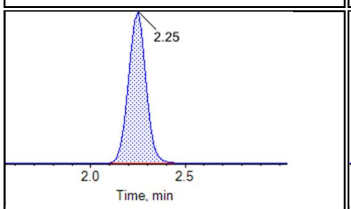
d3-MeFOSAA



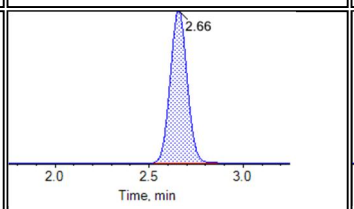
d5-EtFOSAA



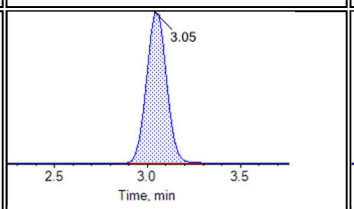
13C5-PFHxA



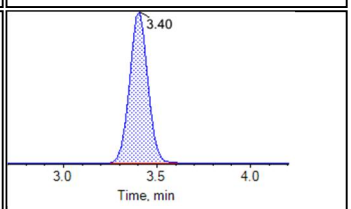
13C4-PFHpA



13C8-PFOA



13C9-PFNA

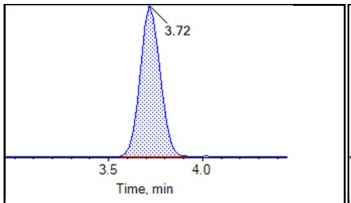


13C6-PFDA

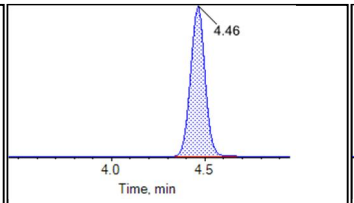
BATTELLE

Chromatogram Report

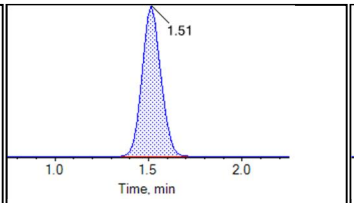
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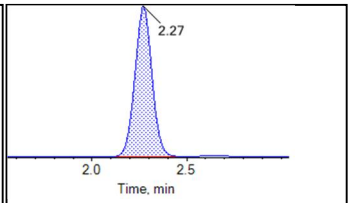
13C7-PFUnA



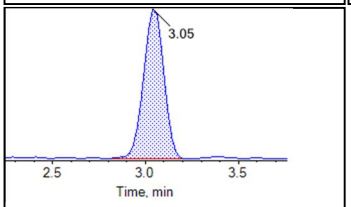
13C2-PFTeDA



13C3-PFBS

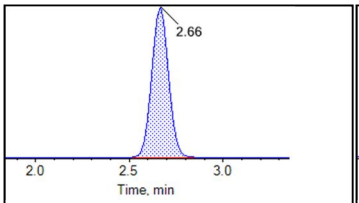


13C3-PFHxS

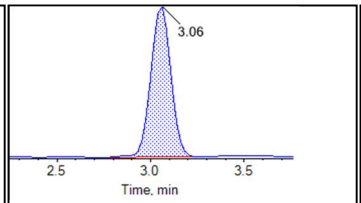


13C8-PFOS

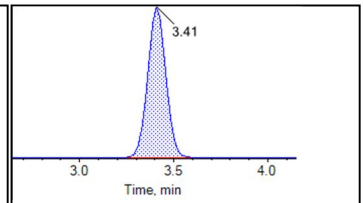
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

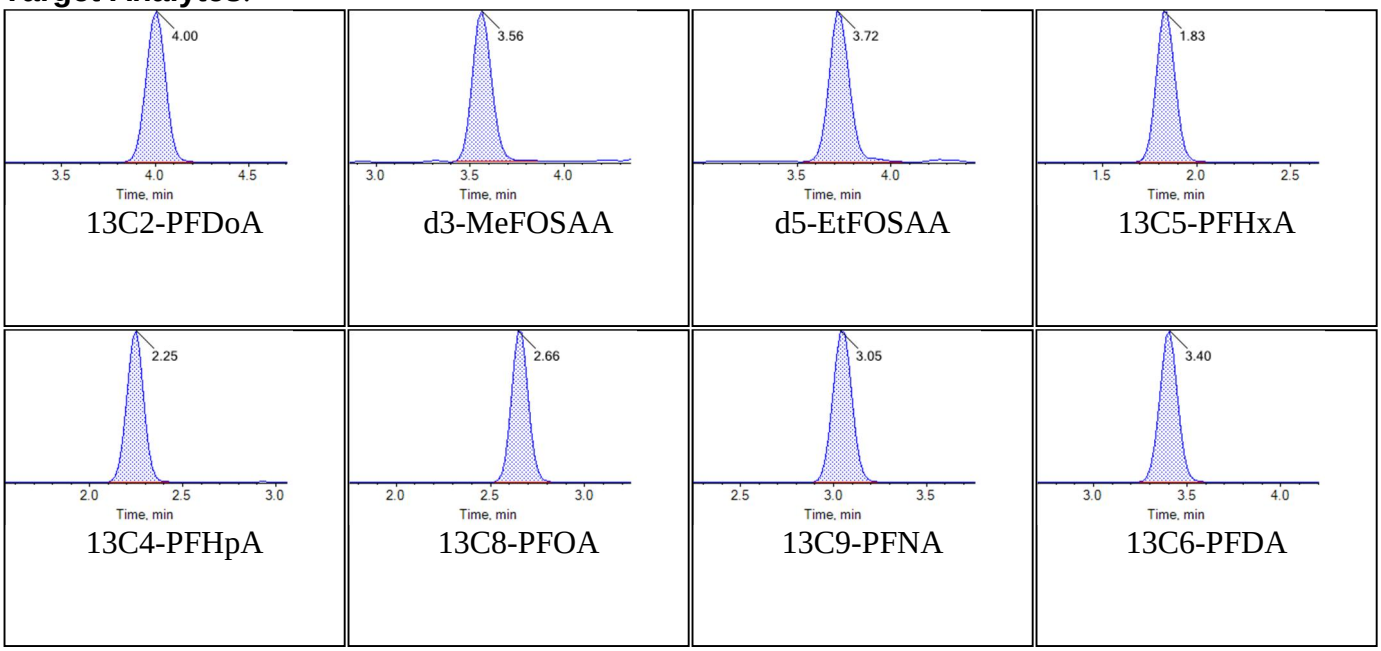
Chromatogram Report

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Sample Name	J8441-FS-D(7)	**Injection Vial**	47
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T13:54:21	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

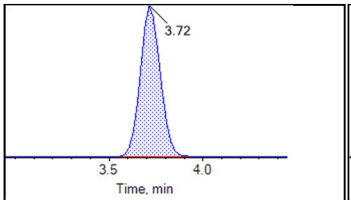
Target Analytes:



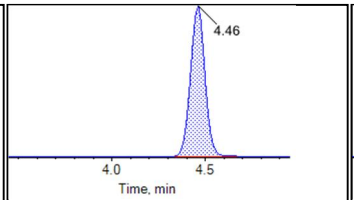
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Chromatogram Report

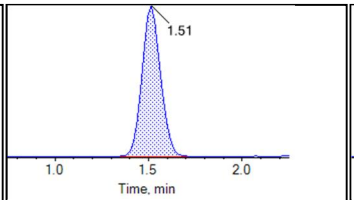
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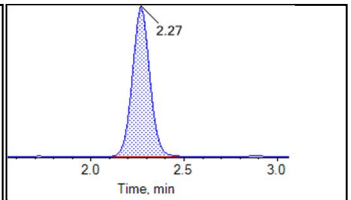
13C7-PFUnA



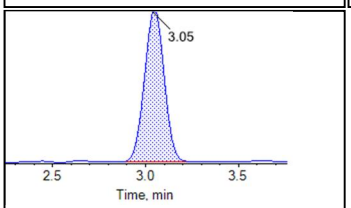
13C2-PFTeDA



13C3-PFBS

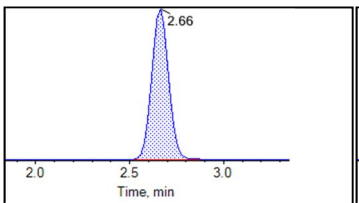


13C3-PFHxS

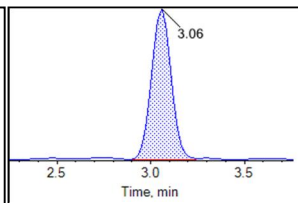


13C8-PFOS

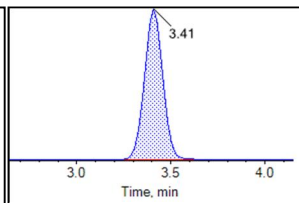
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

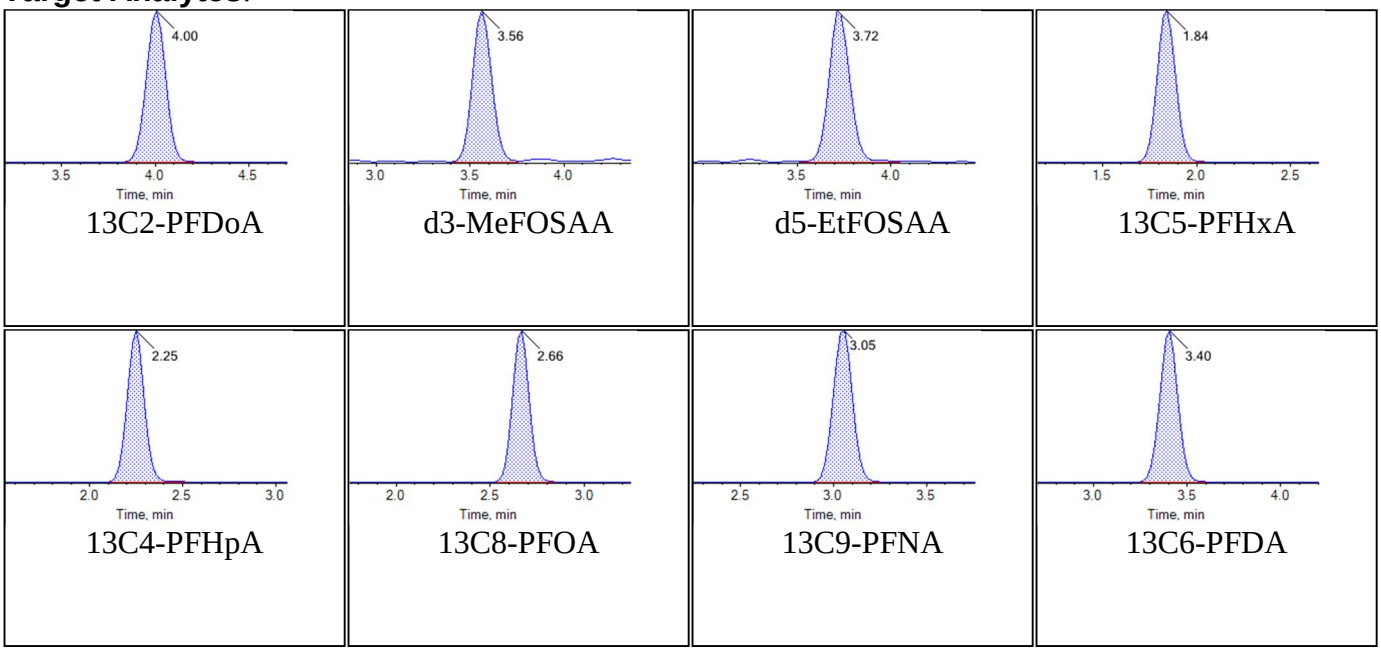
Chromatogram Report

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Printed: 25/10/2018 10:40:17 AM

Sample Name	J8441-FS-D(9)	**Injection Vial**	48
Sample ID	VC-MS09-SS02-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:05:14	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

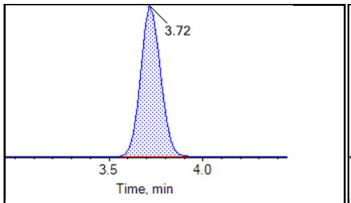
Target Analytes:



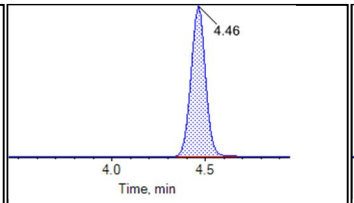
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Chromatogram Report

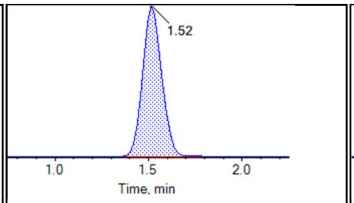
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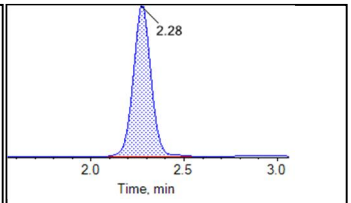
13C7-PFUnA



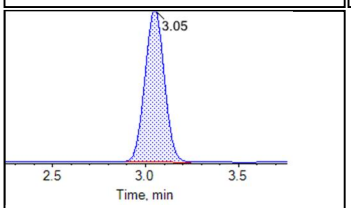
13C2-PFTeDA



13C3-PFBS

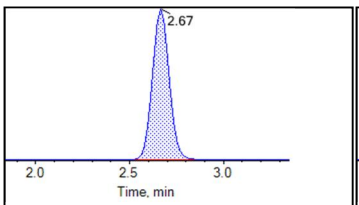


13C3-PFHxS

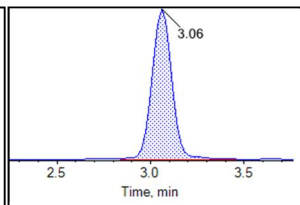


13C8-PFOS

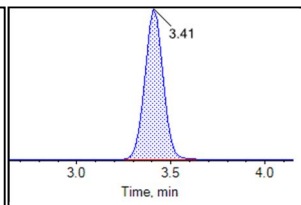
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

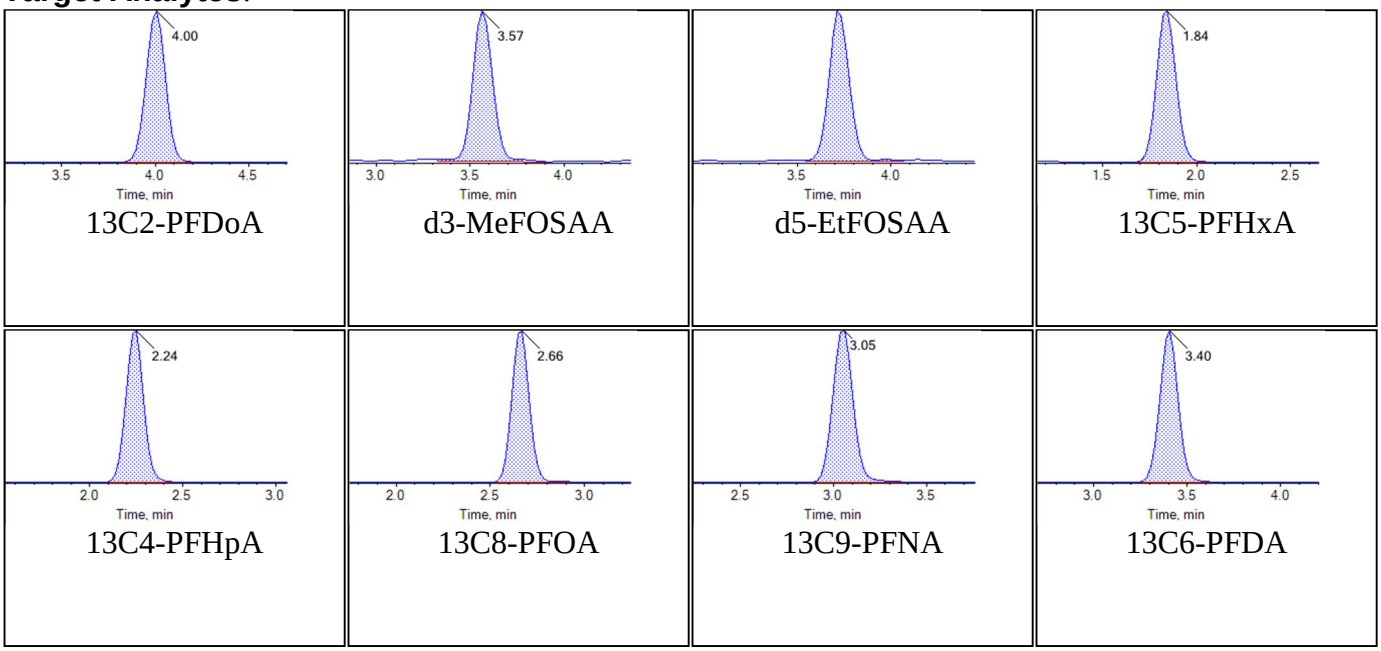
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 10:40:22 AM

Sample Name	J8442-FS(3)	**Injection Vial**	49
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:48:44	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

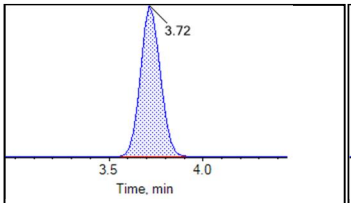
Target Analytes:



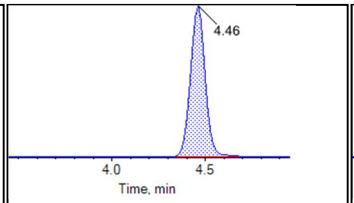
BATTELLE

Chromatogram Report

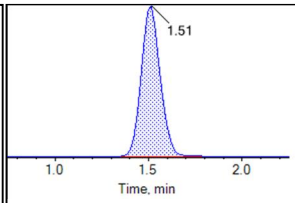
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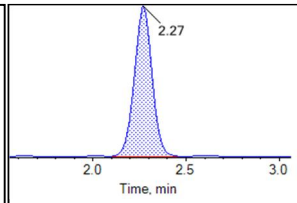
13C7-PFUnA



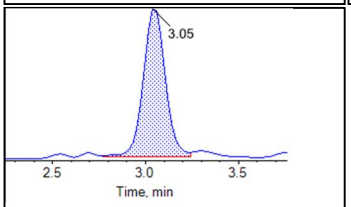
13C2-PFTeDA



13C3-PFBS

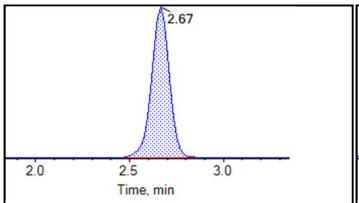


13C3-PFHxS

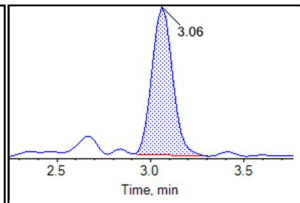


13C8-PFOS

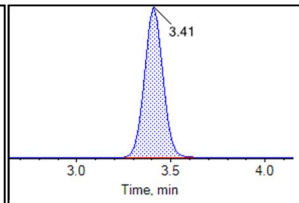
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

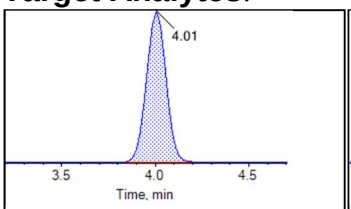
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 10:40:26 AM

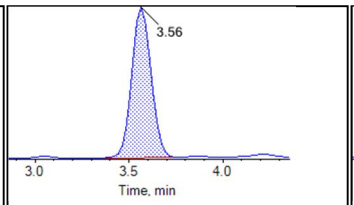
Sample Name	J8442-FS-D(5)	**Injection Vial**	50
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T14:59:38	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

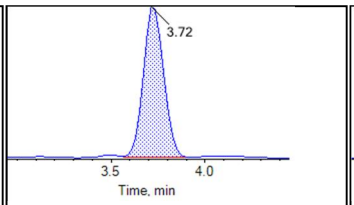
Target Analytes:



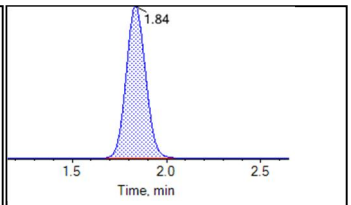
13C2-PFDoA



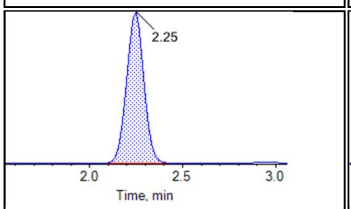
d3-MeFOSAA



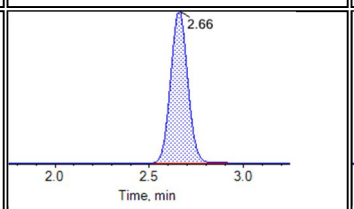
d5-EtFOSAA



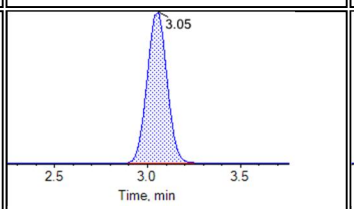
13C5-PFHxA



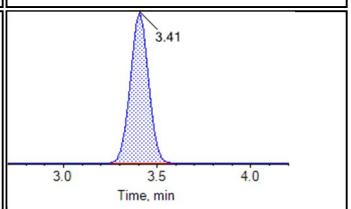
13C4-PFHpA



13C8-PFOA



13C9-PFNA

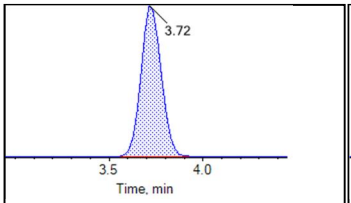


13C6-PFDA

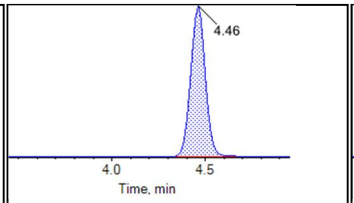
BATTELLE

Chromatogram Report

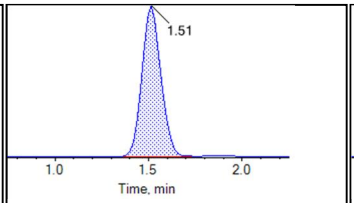
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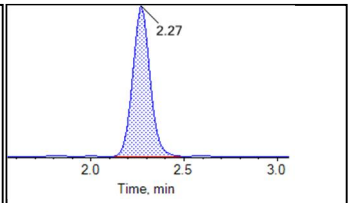
13C7-PFUnA



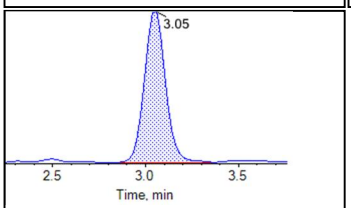
13C2-PFTeDA



13C3-PFBS

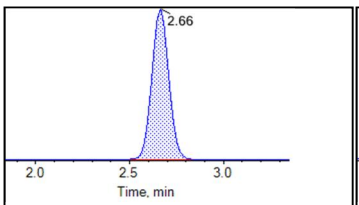


13C3-PFHxS

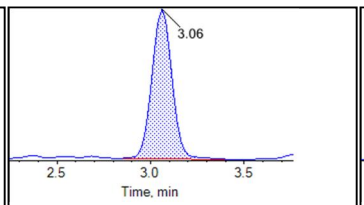


13C8-PFOS

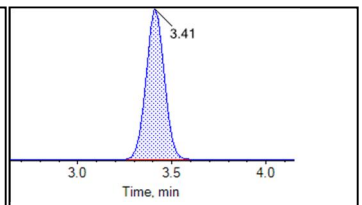
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

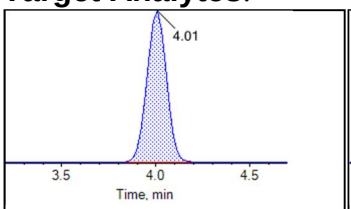
Chromatogram Report

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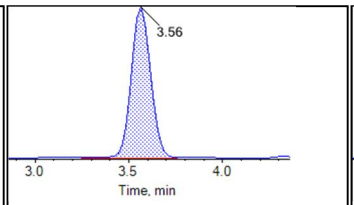
Sample Name	J8442-FS-D(7)	**Injection Vial**	51
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:10:33	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

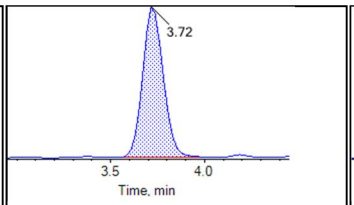
Target Analytes:



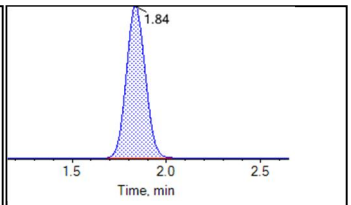
13C2-PFDoA



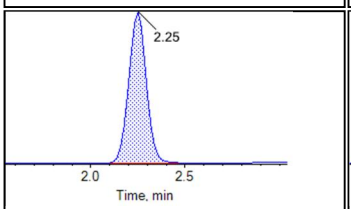
d3-MeFOSAA



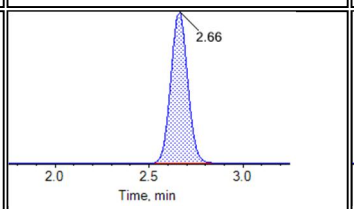
d5-EtFOSAA



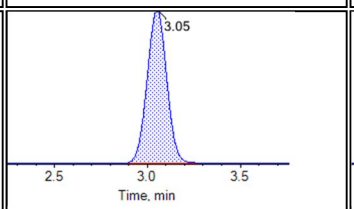
13C5-PFHxA



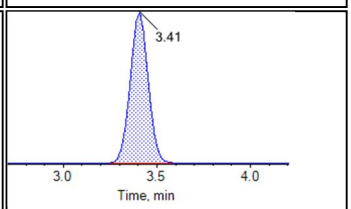
13C4-PFHpA



13C8-PFOA



13C9-PFNA

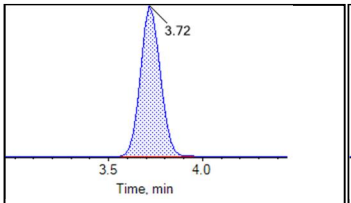


13C6-PFDA

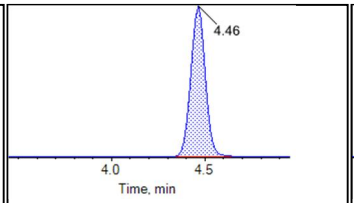
BATTELLE

Chromatogram Report

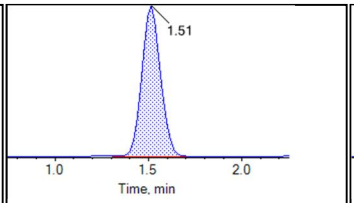
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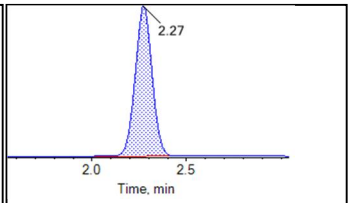
13C7-PFUnA



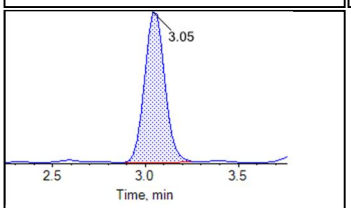
13C2-PFTeDA



13C3-PFBS

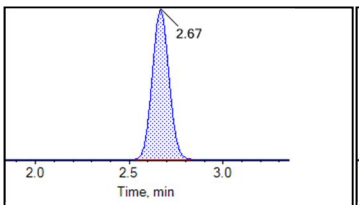


13C3-PFHxS

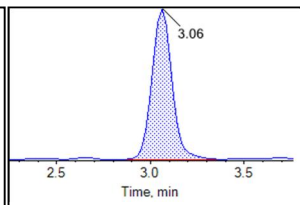


13C8-PFOS

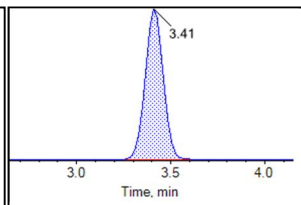
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

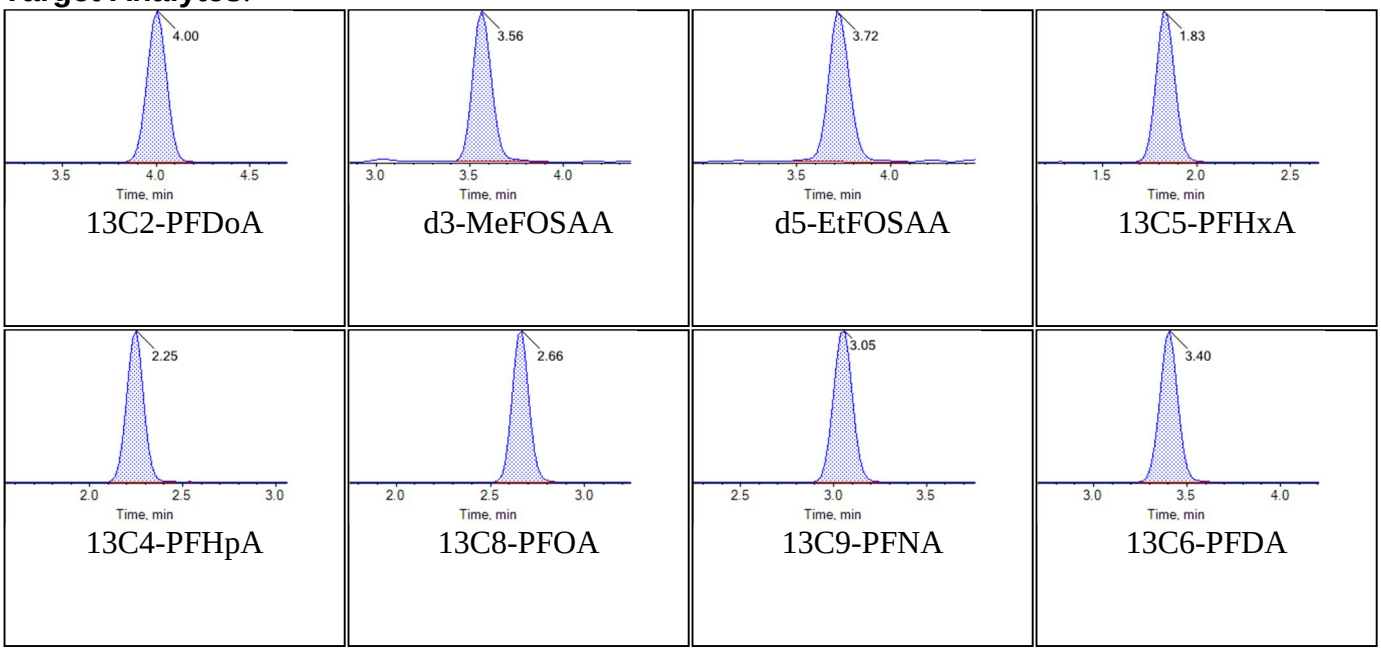
Chromatogram Report

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Printed: 25/10/2018 10:40:34 AM

Sample Name	J8442-FS-D(9)	**Injection Vial**	52
Sample ID	VC-MS09-SB02-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:21:26	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

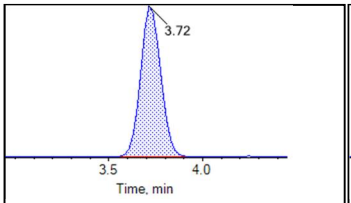
Target Analytes:



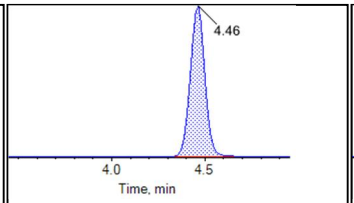
BATTELLE

Chromatogram Report

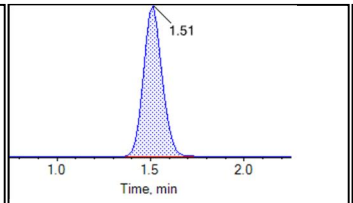
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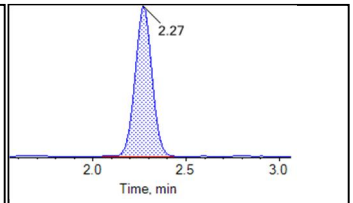
13C7-PFUnA



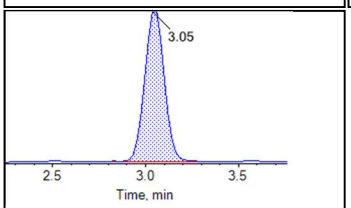
13C2-PFTeDA



13C3-PFBS

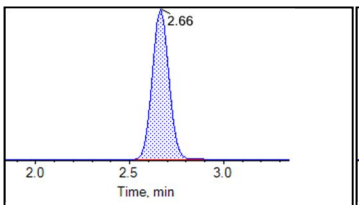


13C3-PFHxS

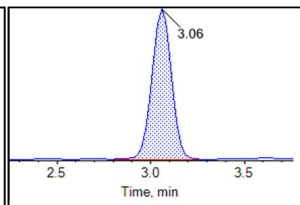


13C8-PFOS

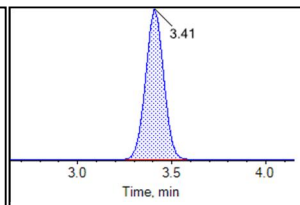
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

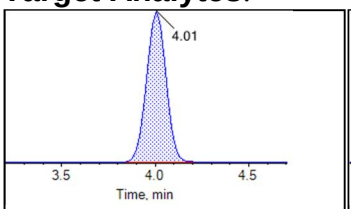
Chromatogram Report

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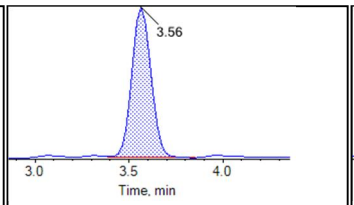
Sample Name	KB76 CCV	**Injection Vial**	53
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:32:19	**Data File**	Data18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

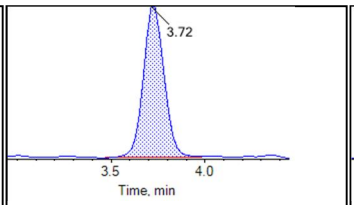
Target Analytes:



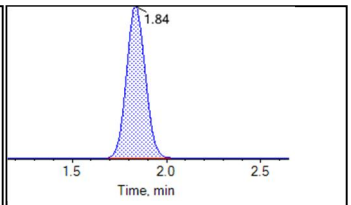
13C2-PFDoA



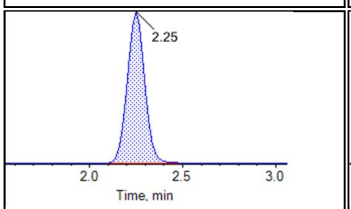
d3-MeFOSAA



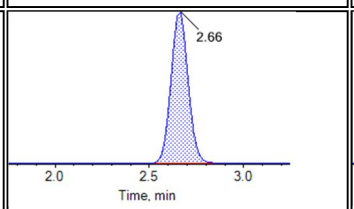
d5-EtFOSAA



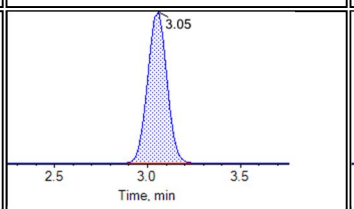
13C5-PFHxA



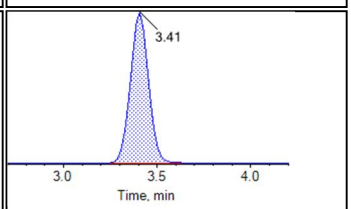
13C4-PFHpA



13C8-PFOA



13C9-PFNA

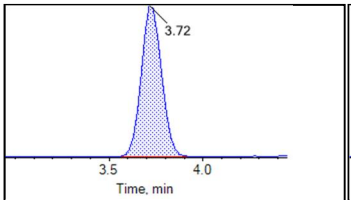


13C6-PFDA

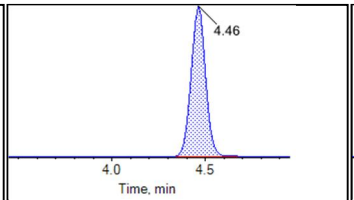
BATTELLE

Chromatogram Report

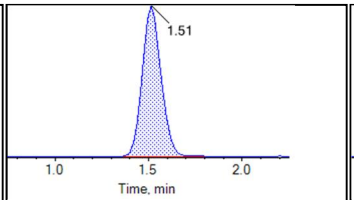
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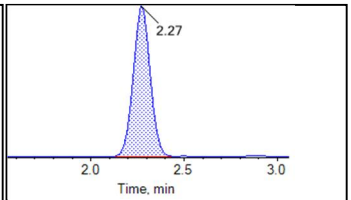
13C7-PFUnA



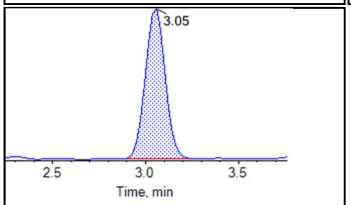
13C2-PFTeDA



13C3-PFBS

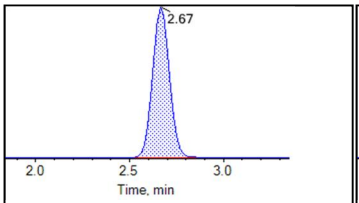


13C3-PFHxS

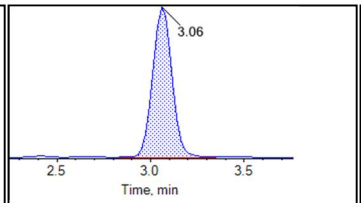


13C8-PFOS

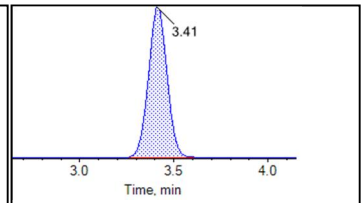
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

BATTELLE

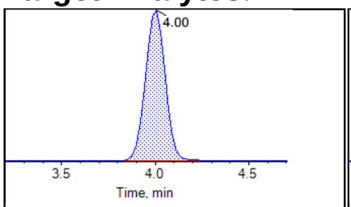
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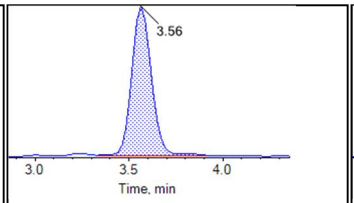
Sample Name	J8443-FS(3)	**Injection Vial**	1
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T15:54:05	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

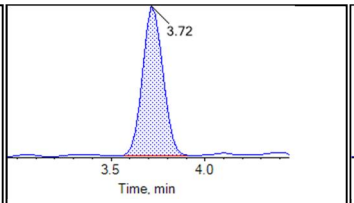
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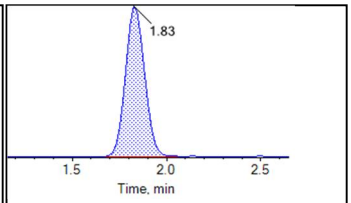
13C2-PFDoA



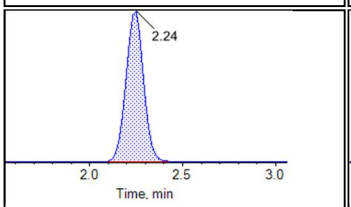
d3-MeFOSAA



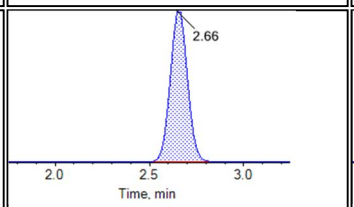
d5-EtFOSAA



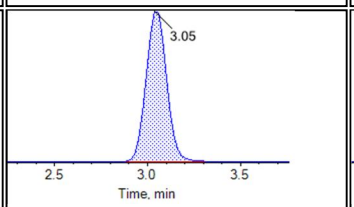
13C5-PFHxA



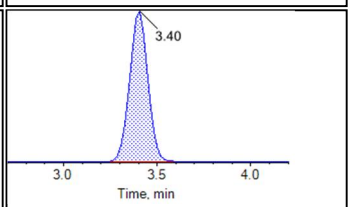
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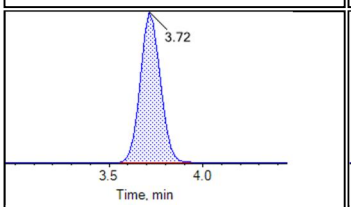
13C8-PFOA



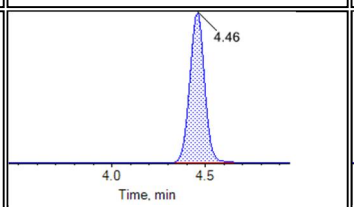
13C9-PFNA



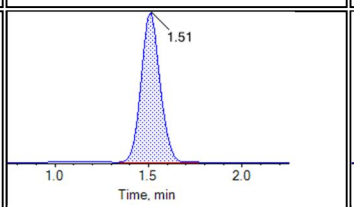
13C6-PFDA



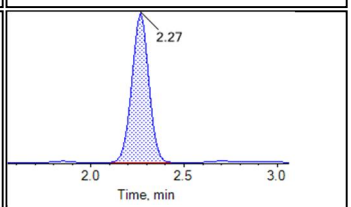
13C7-PFUnA



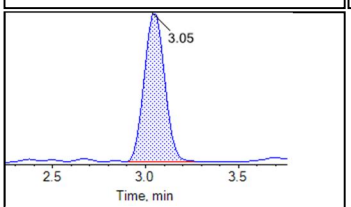
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



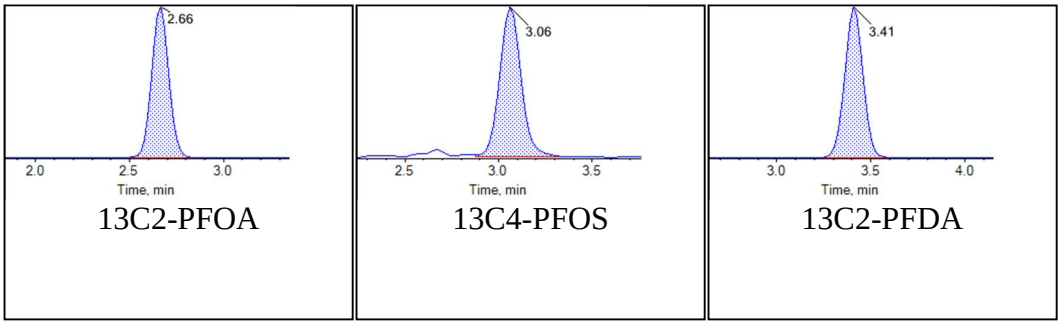
13C8-PFOS

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Internal Standards:



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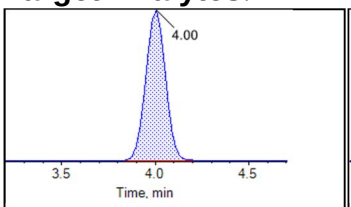
Chromatogram Report

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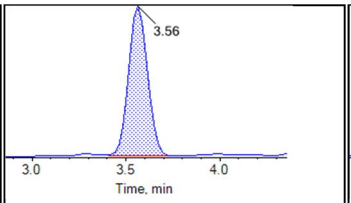
Sample Name	J8443-FS-D(5)	**Injection Vial**	2
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:04:56	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

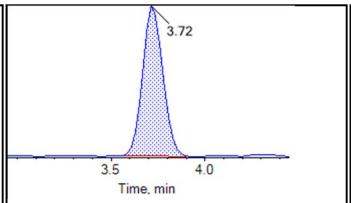
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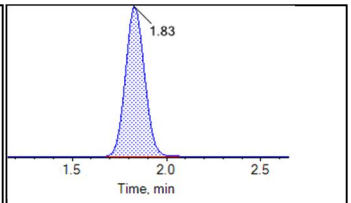
13C2-PFDoA



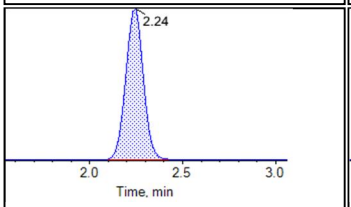
d3-MeFOSAA



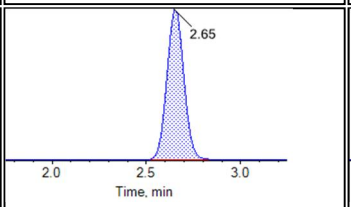
d5-EtFOSAA



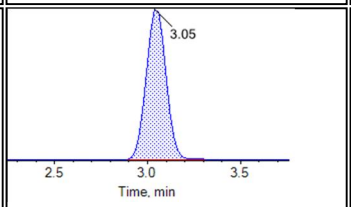
13C5-PFHxA



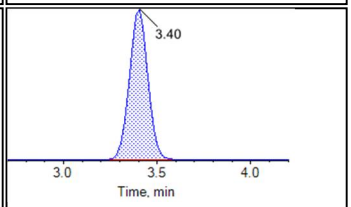
13C4-PFHpA



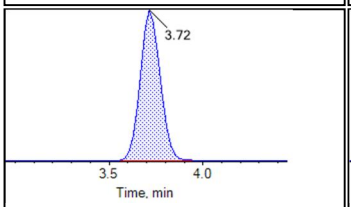
13C8-PFOA



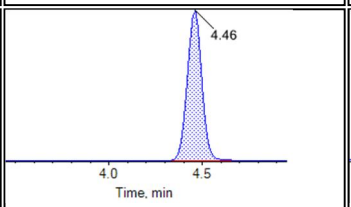
13C9-PFNA



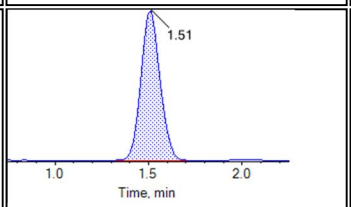
13C6-PFDA



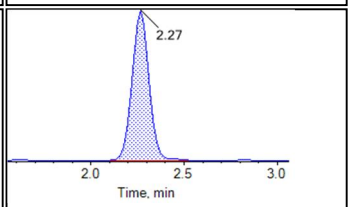
13C7-PFUnA



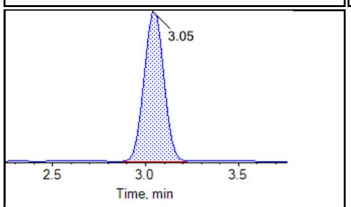
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



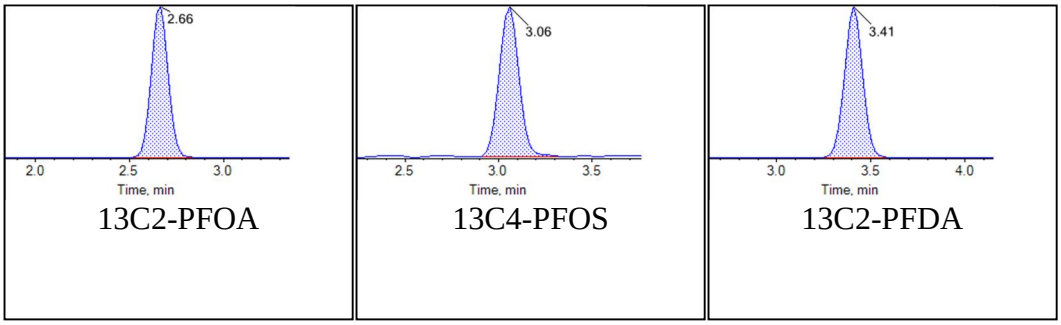
13C8-PFOS

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Internal Standards:



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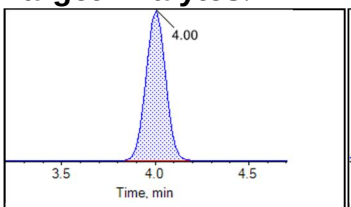
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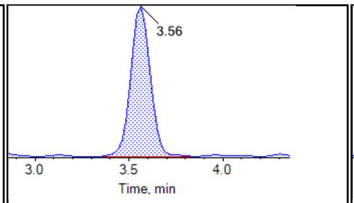
Sample Name	J8443-FS-D(7)	**Injection Vial**	3
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:15:48	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

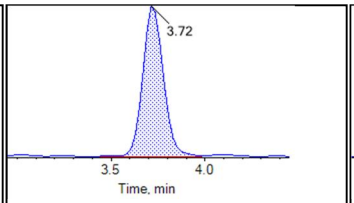
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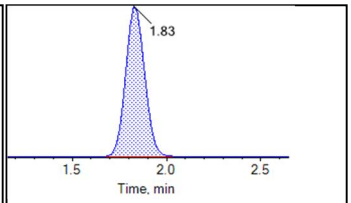
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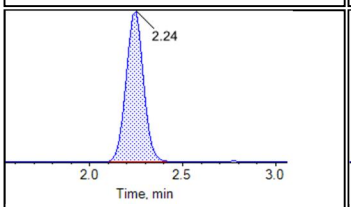
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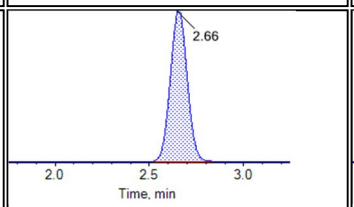
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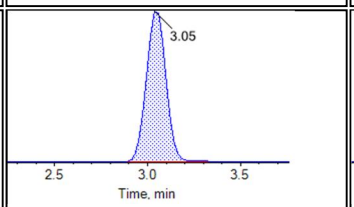
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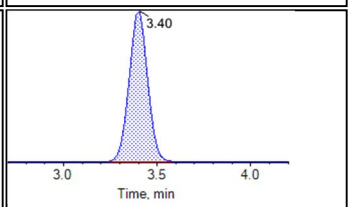
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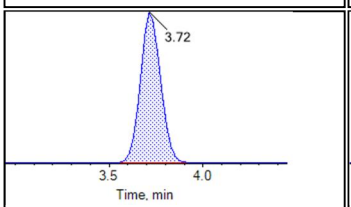
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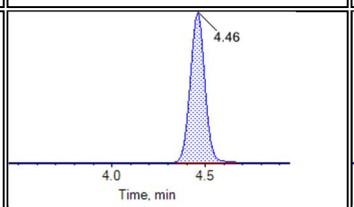
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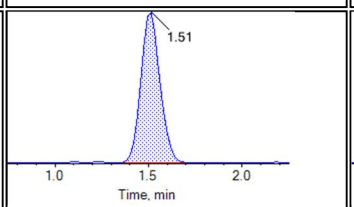
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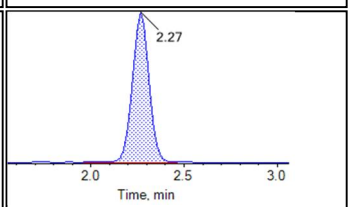
13C7-PFUnA



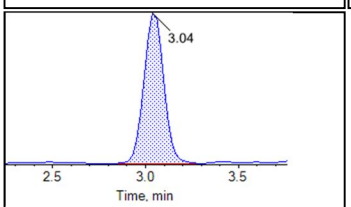
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



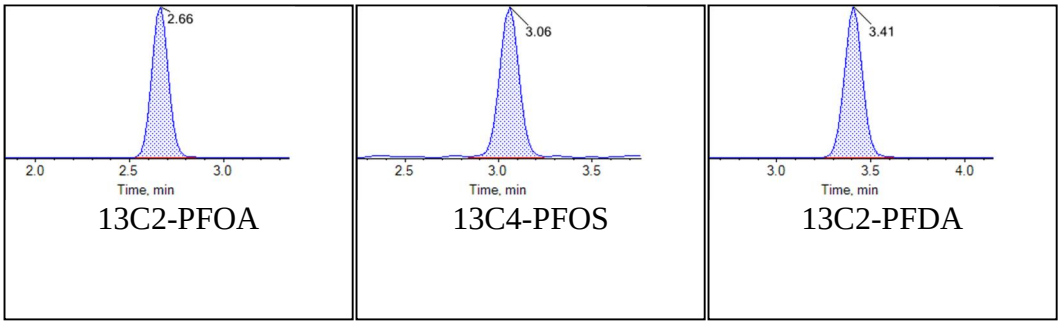
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Chromatogram Report

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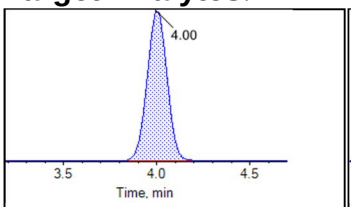
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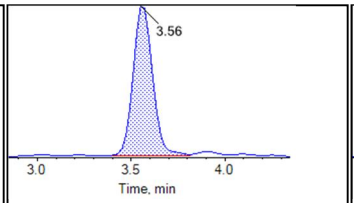
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Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:26:39	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

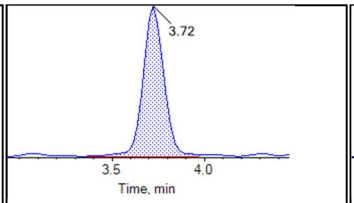
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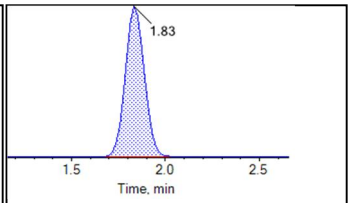
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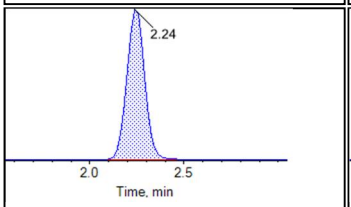
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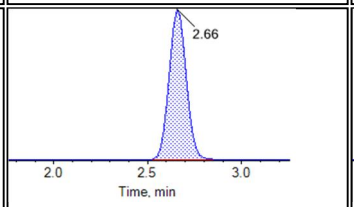
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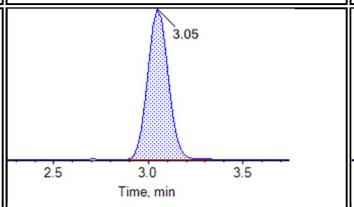
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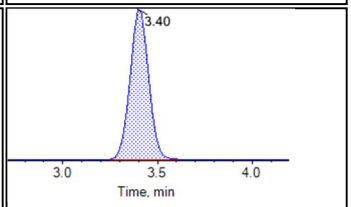
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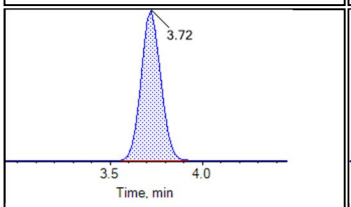
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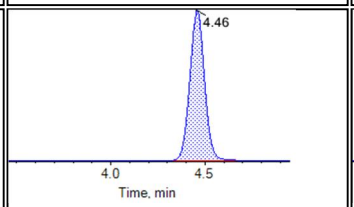
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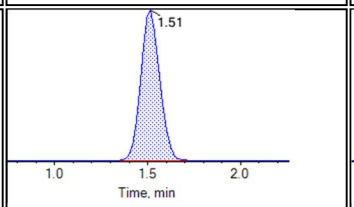
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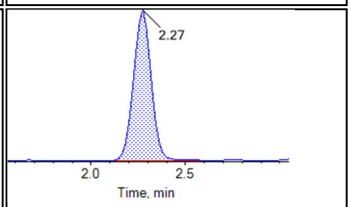
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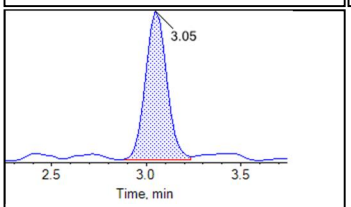
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



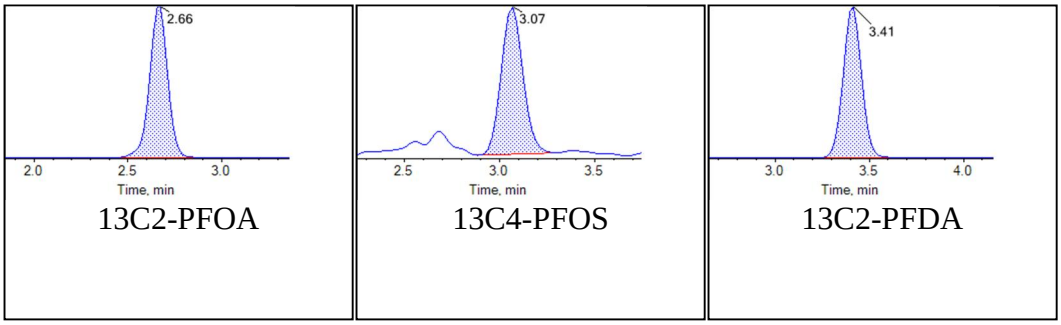
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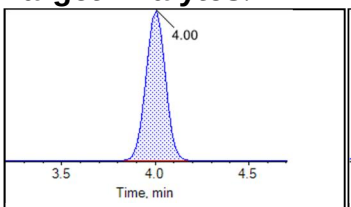
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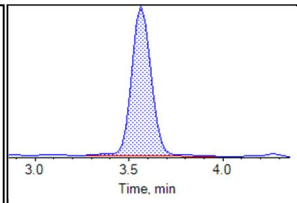
Sample Name	J8444-FS-D(9)	**Injection Vial**	5
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:37:32	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

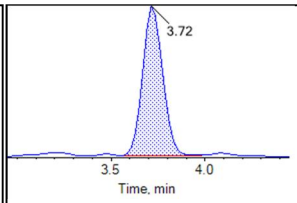
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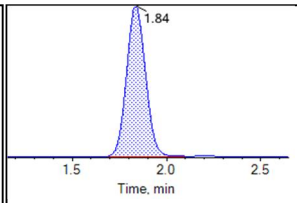
13C2-PFDoA



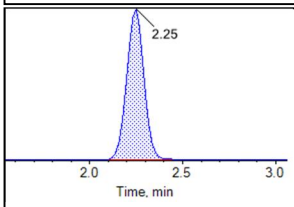
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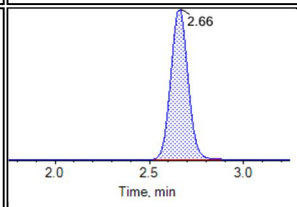
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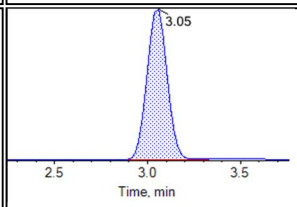
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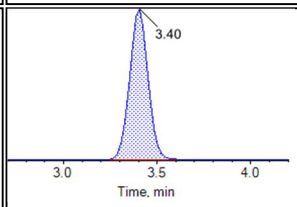
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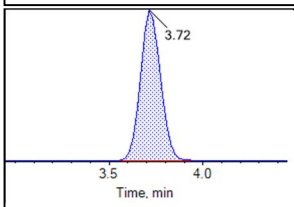
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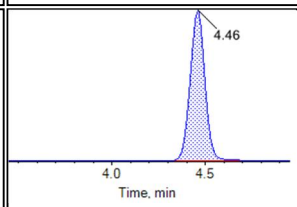
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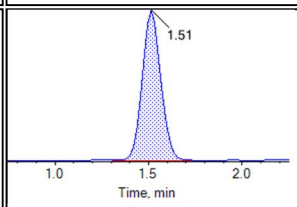
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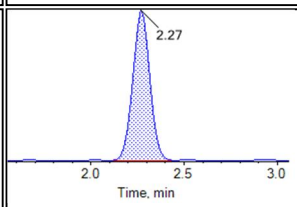
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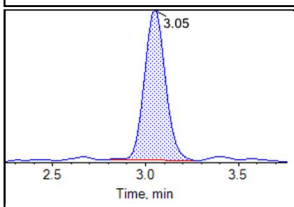
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



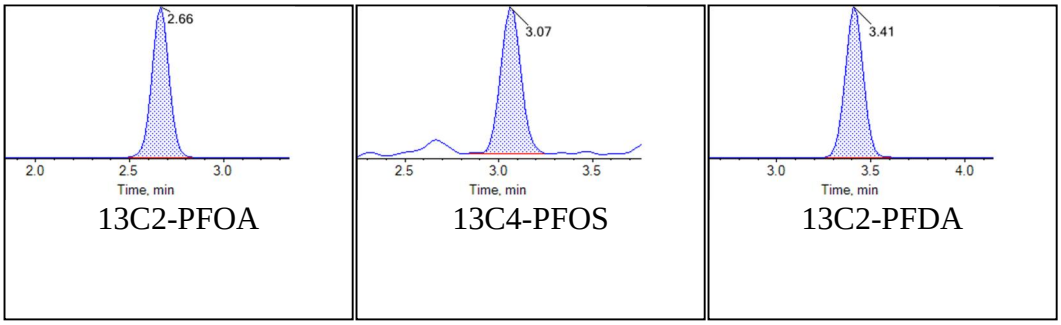
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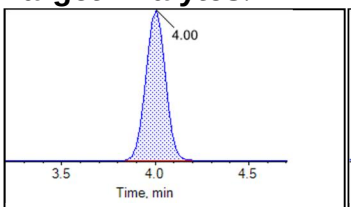
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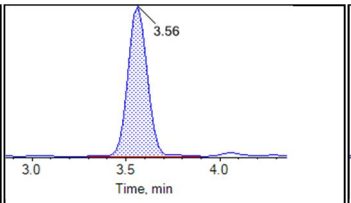
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Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:48:24	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

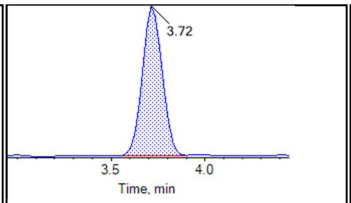
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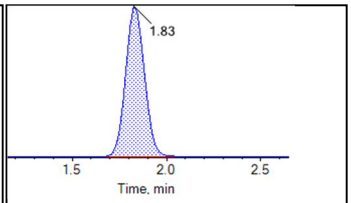
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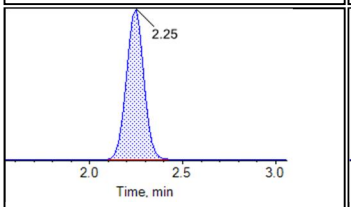
d3-MeFOSAA



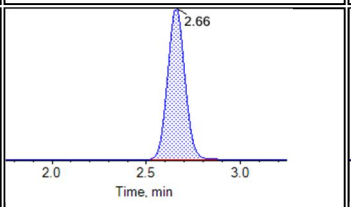
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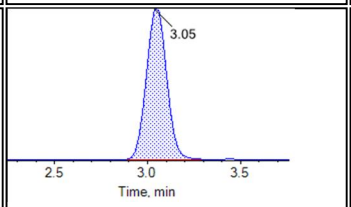
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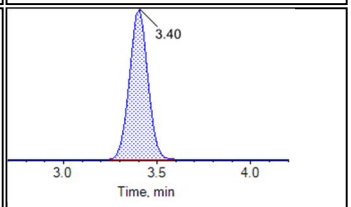
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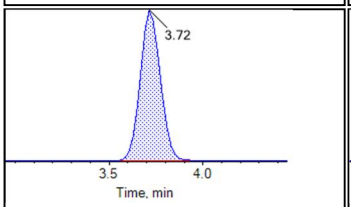
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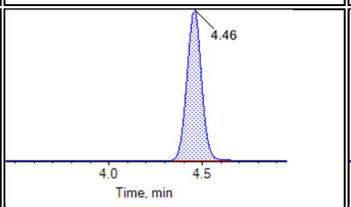
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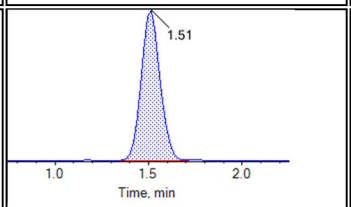
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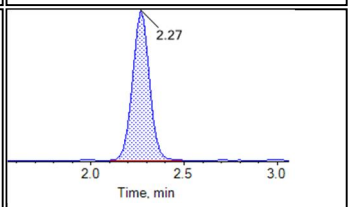
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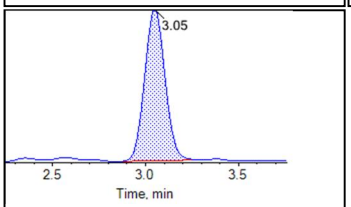
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



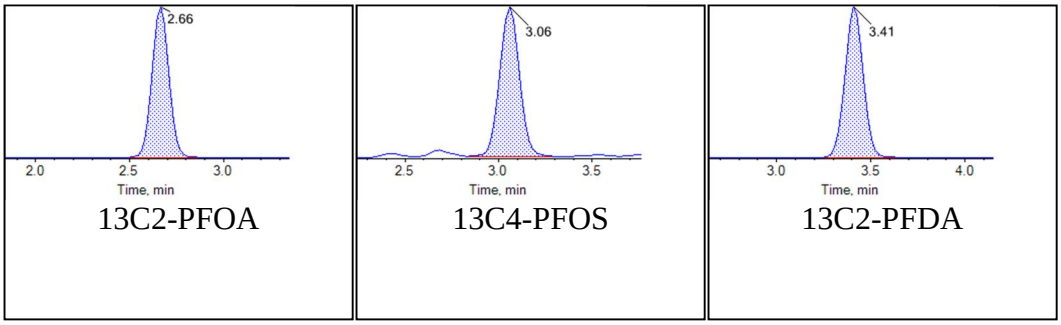
13C8-PFOS

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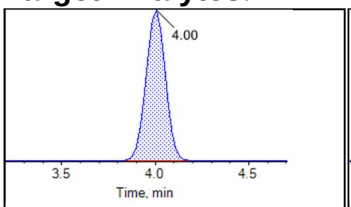
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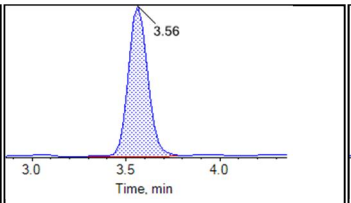
Sample Name	J8444-FS-D(13)	**Injection Vial**	7
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T16:59:16	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

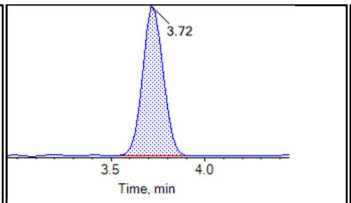
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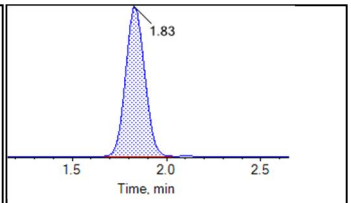
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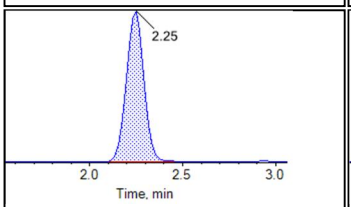
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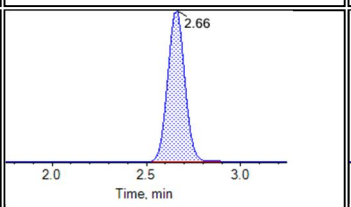
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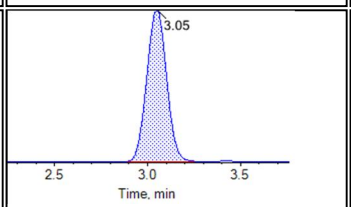
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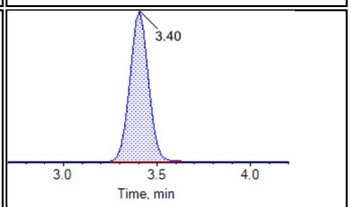
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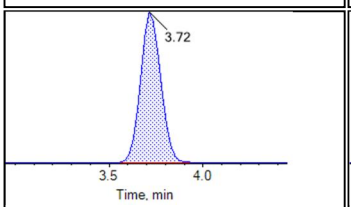
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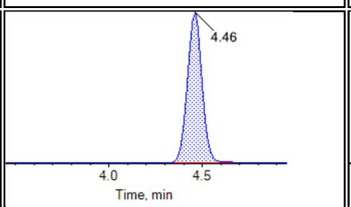
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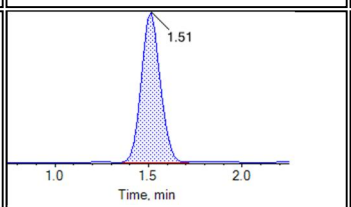
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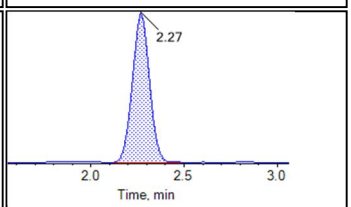
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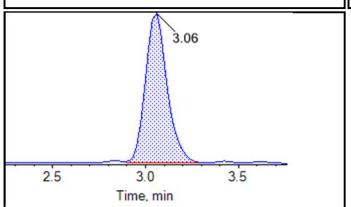
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



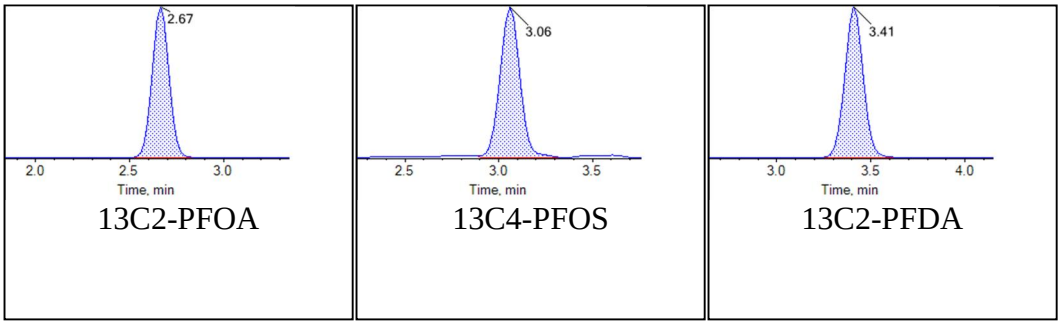
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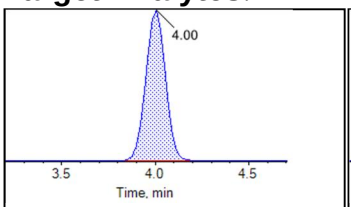
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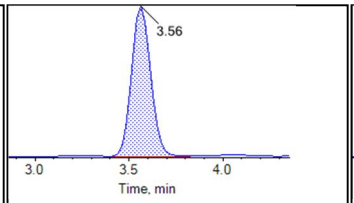
Sample Name	J8444-FS-D(15	**Injection Vial**	8
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:10:08	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

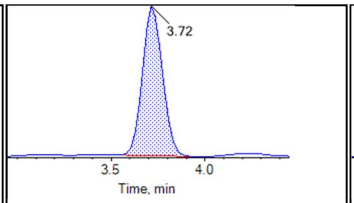
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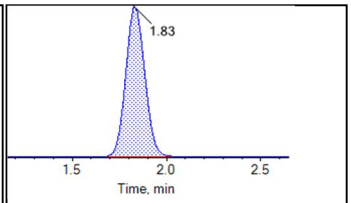
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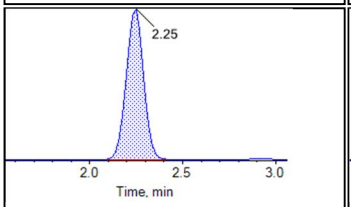
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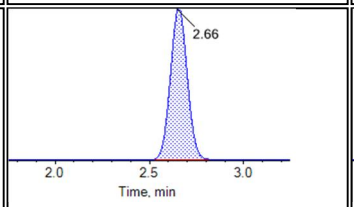
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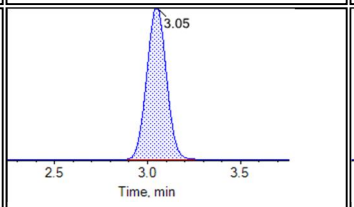
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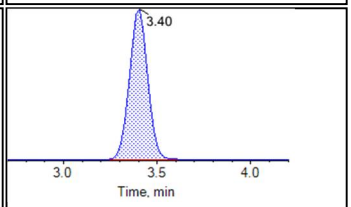
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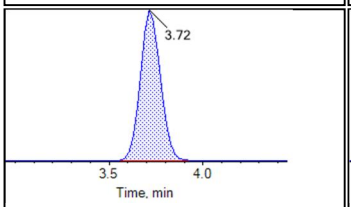
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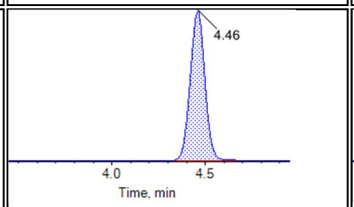
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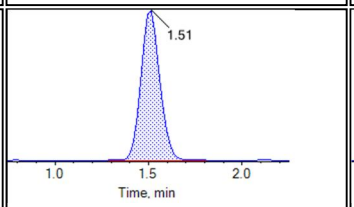
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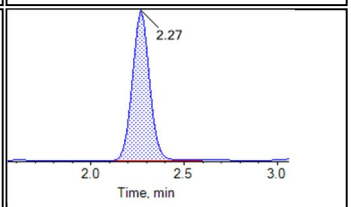
13C7-PFUnA



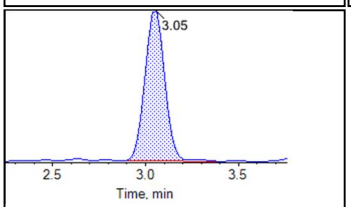
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



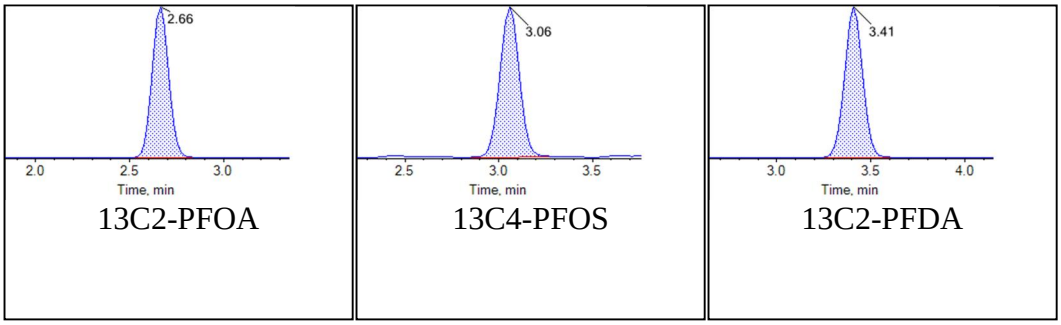
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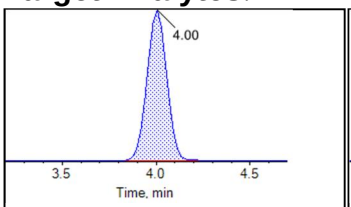
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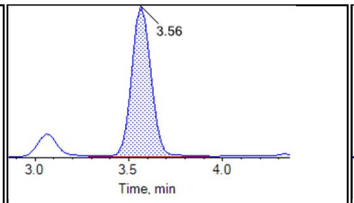
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Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:20:59	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

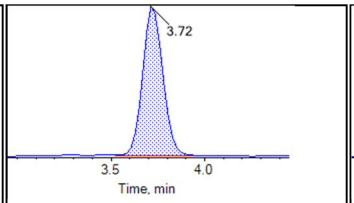
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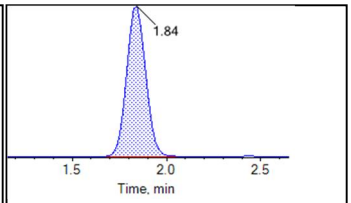
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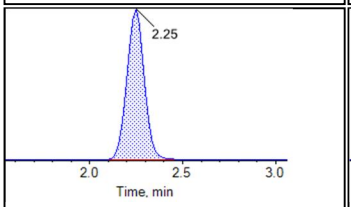
d3-MeFOSAA



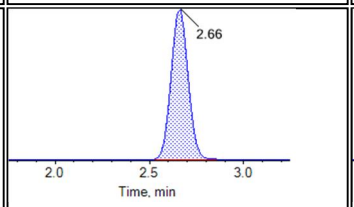
d5-EtFOSAA



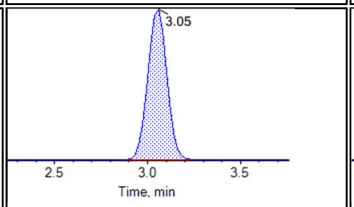
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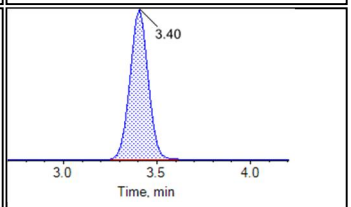
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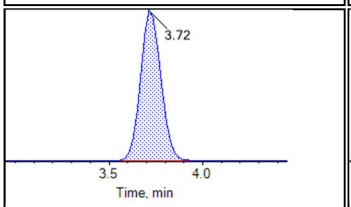
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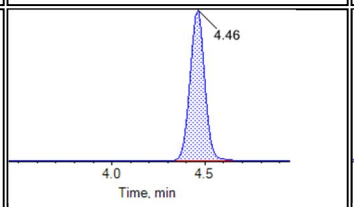
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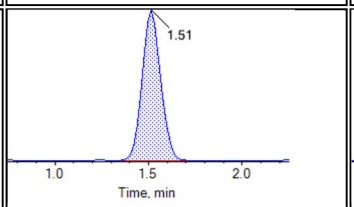
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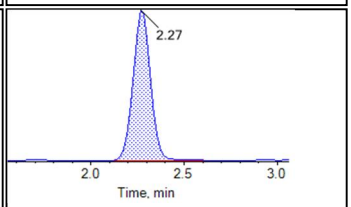
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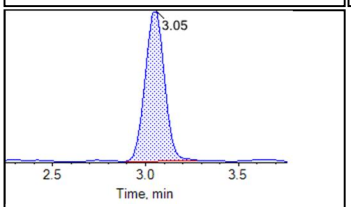
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

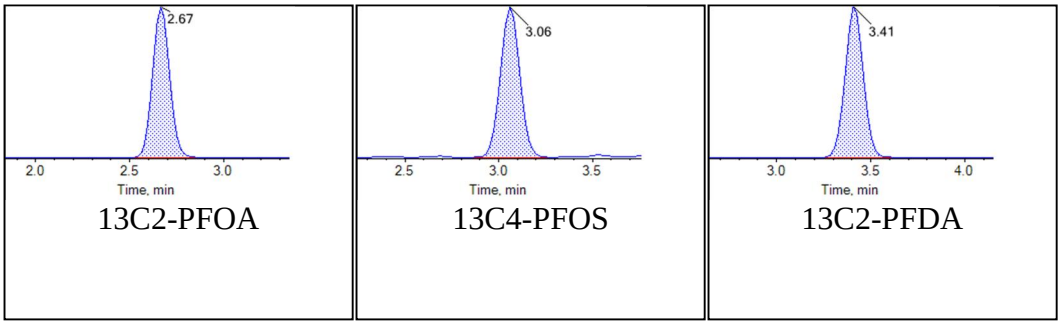


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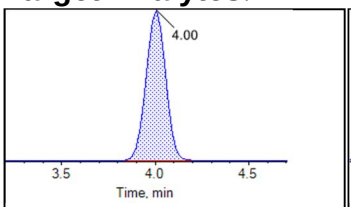
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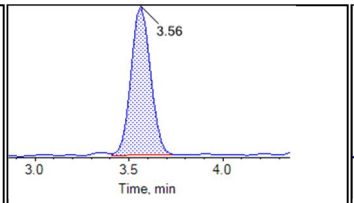
Sample Name	J8445-FS(3)	**Injection Vial**	11
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:42:42	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

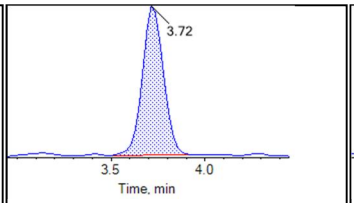
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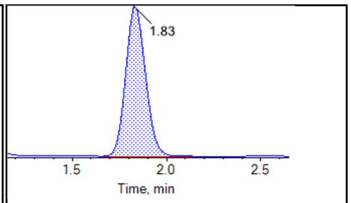
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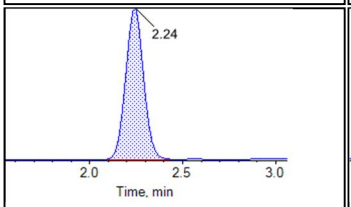
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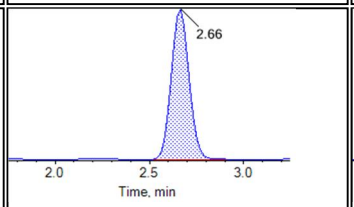
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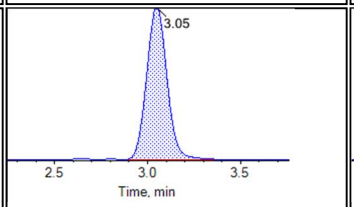
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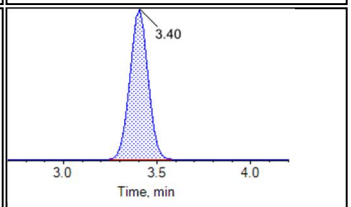
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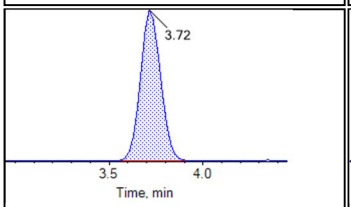
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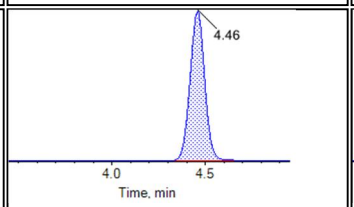
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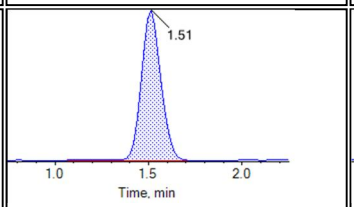
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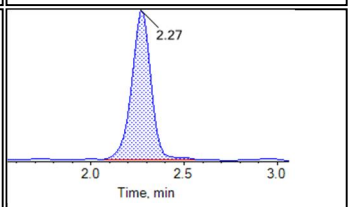
13C7-PFUnA



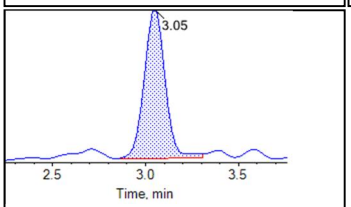
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



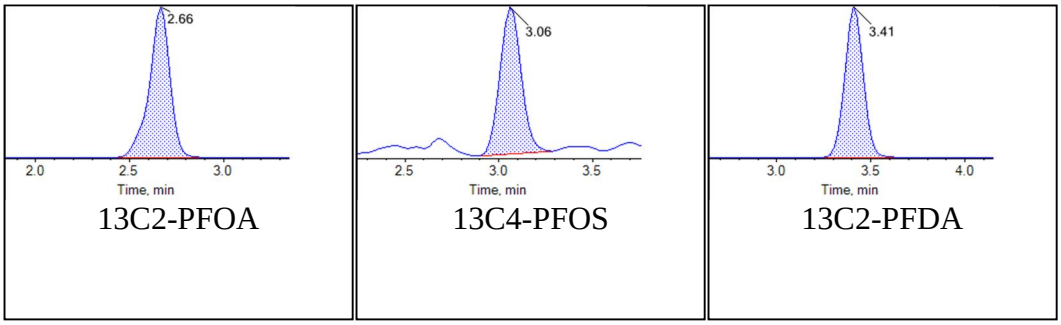
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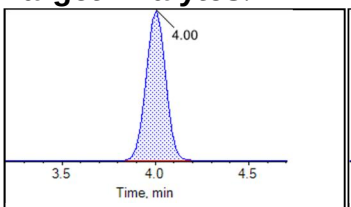
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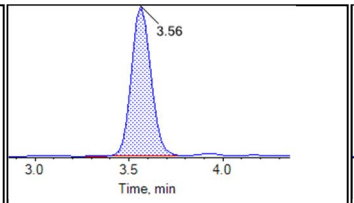
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Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T17:53:34	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

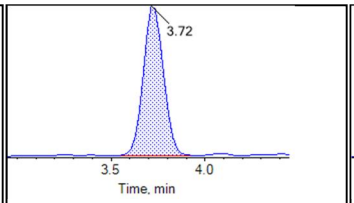
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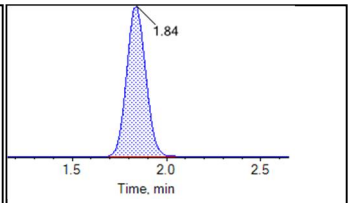
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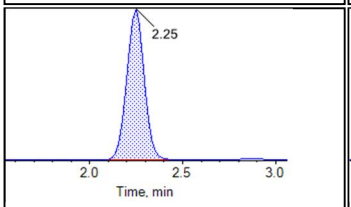
d3-MeFOSAA



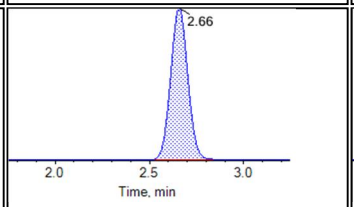
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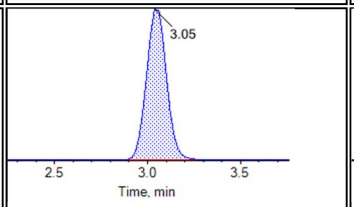
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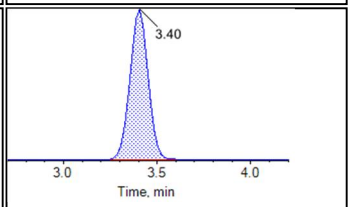
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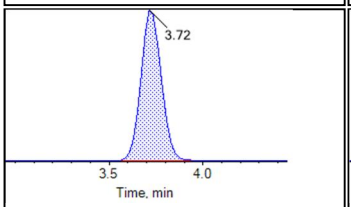
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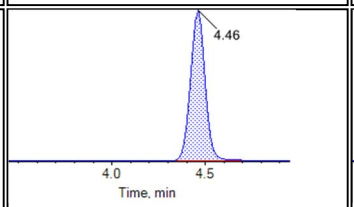
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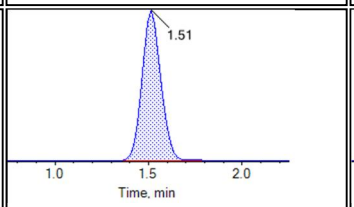
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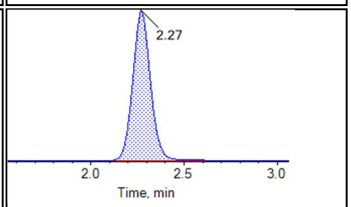
13C7-PFUnA



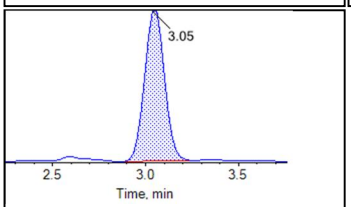
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



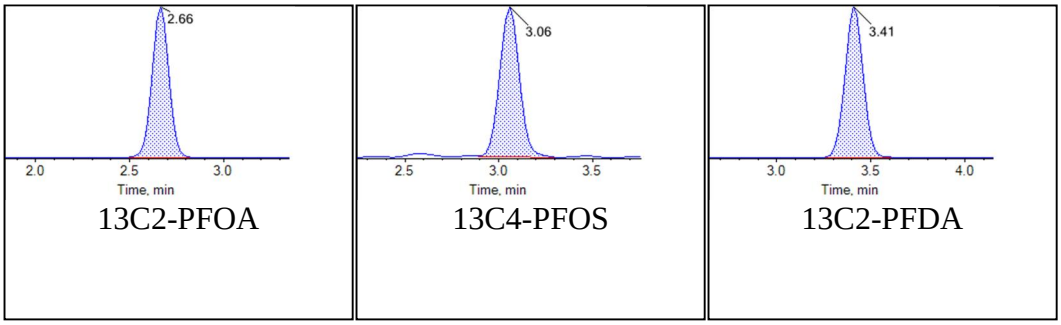
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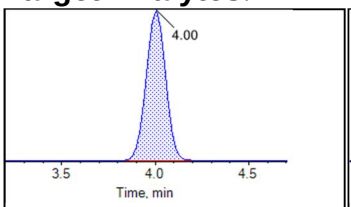
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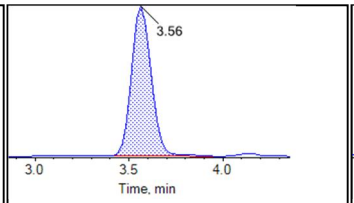
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Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:04:26	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

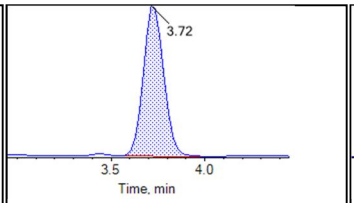
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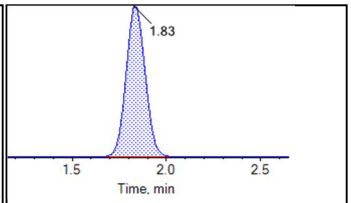
13C2-PFDoA



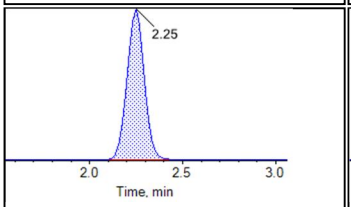
d3-MeFOSAA



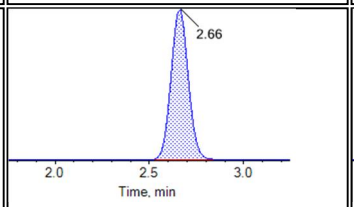
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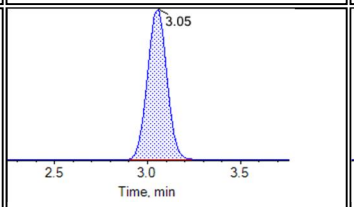
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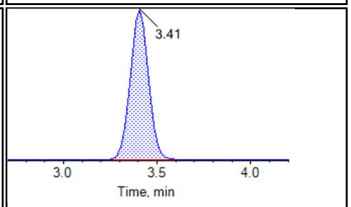
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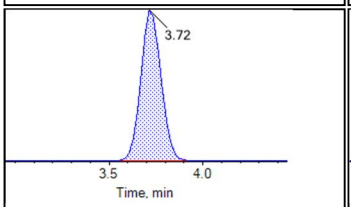
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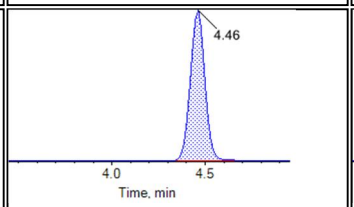
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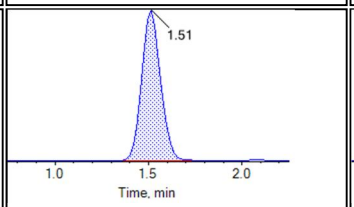
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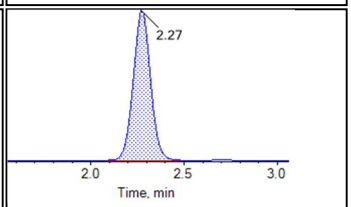
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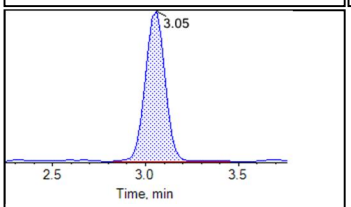
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



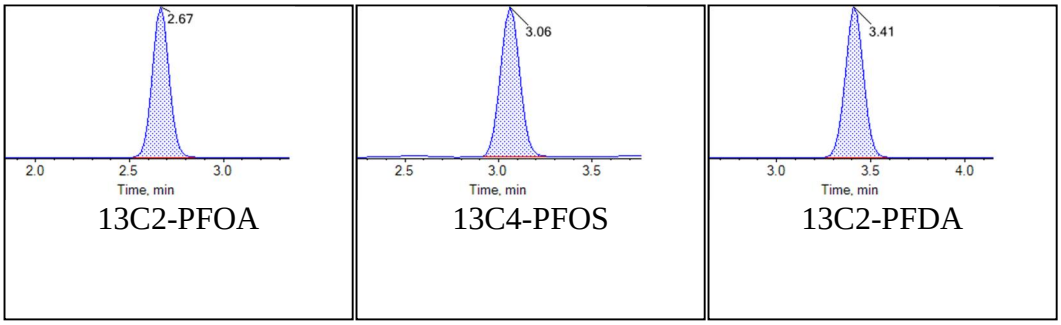
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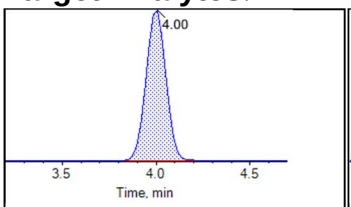
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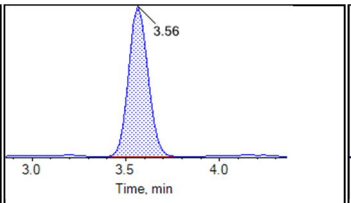
Sample Name	J8445-FS-D(9)	**Injection Vial**	14
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:15:17	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

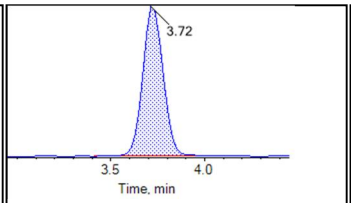
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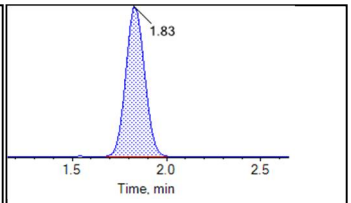
13C2-PFDoA



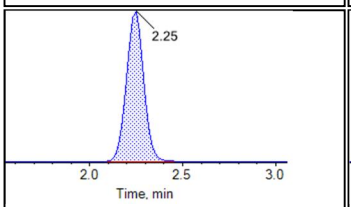
d3-MeFOSAA



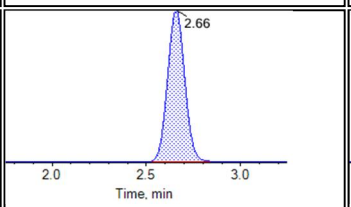
d5-EtFOSAA



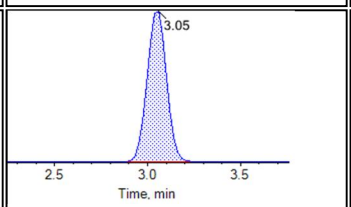
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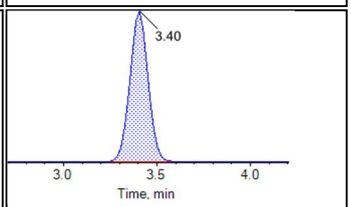
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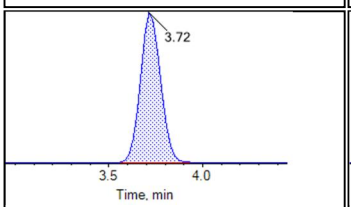
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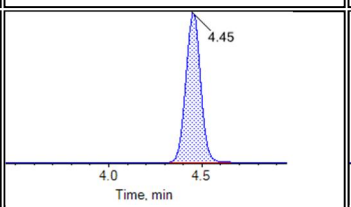
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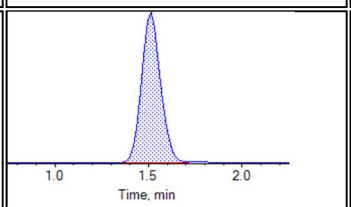
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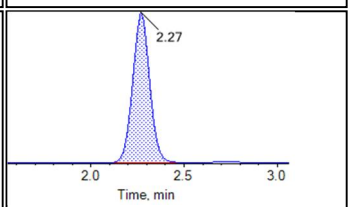
13C7-PFUnA



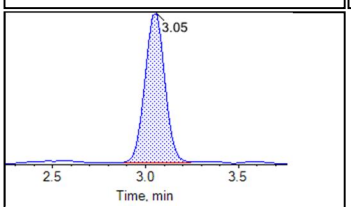
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



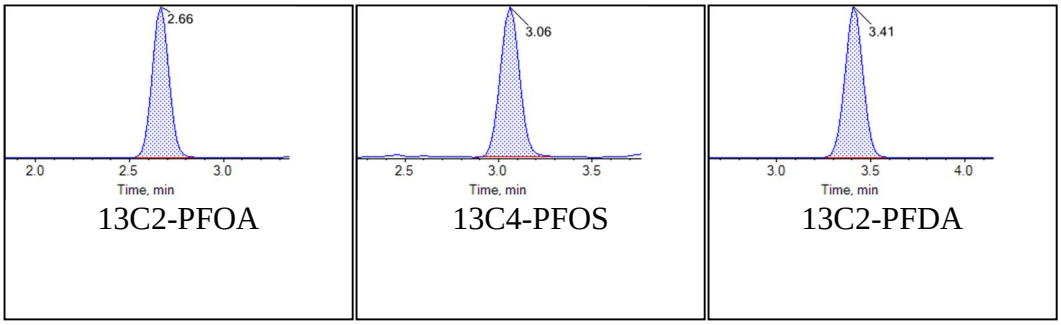
13C8-PFOS

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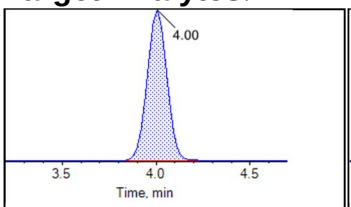
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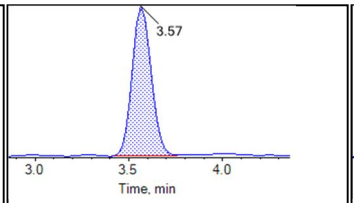
Sample Name	J8446-FS(3)	**Injection Vial**	15
Sample ID	VC-MS09-SB03-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:26:09	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

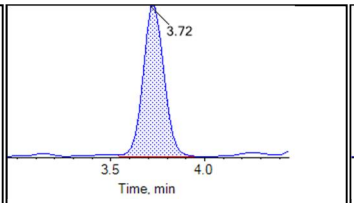
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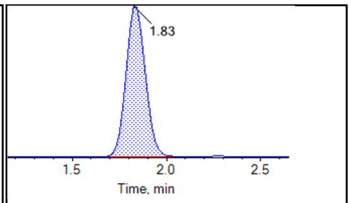
13C2-PFDoA



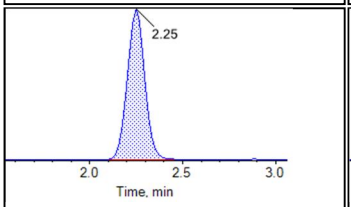
d3-MeFOSAA



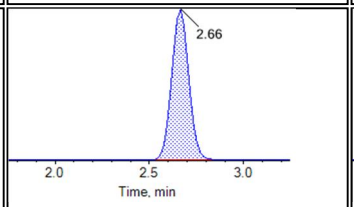
d5-EtFOSAA



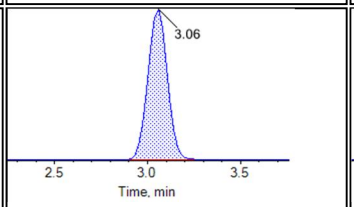
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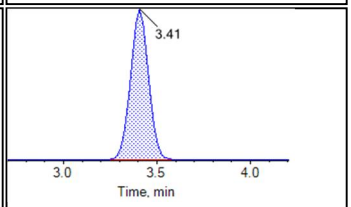
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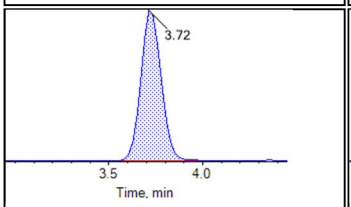
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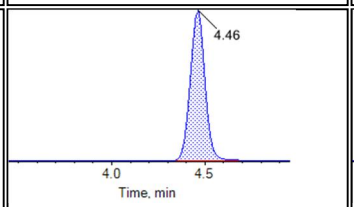
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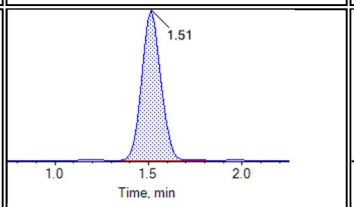
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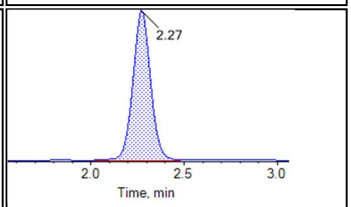
13C7-PFUnA



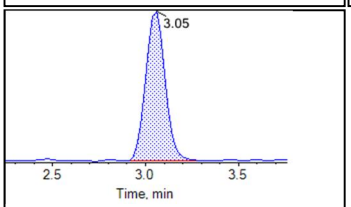
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

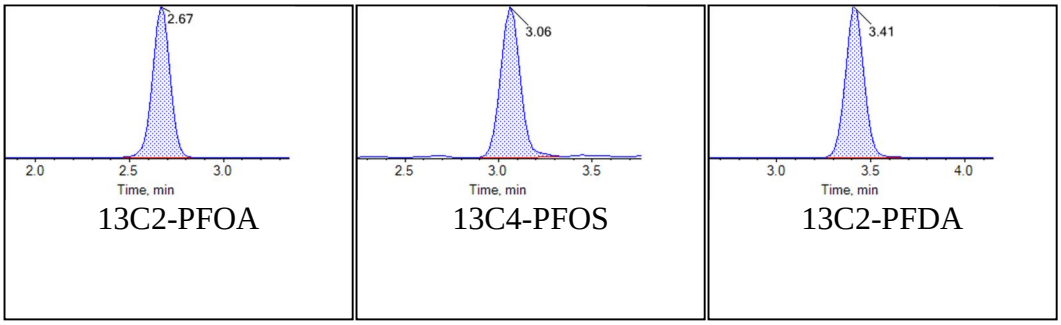


13C8-PFOS

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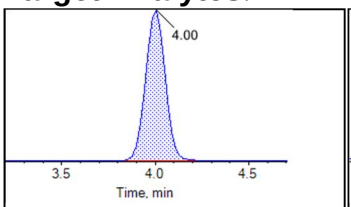
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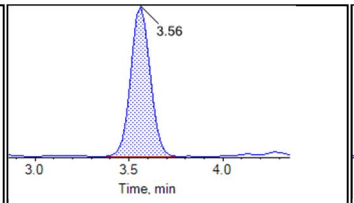
Sample Name	J8446-FS-D(5)	**Injection Vial**	16
Sample ID	VC-MS09-SB03-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:37:01	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

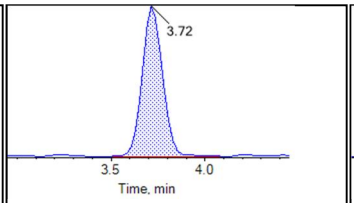
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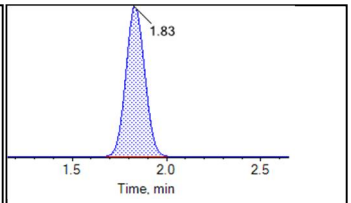
13C2-PFDoA



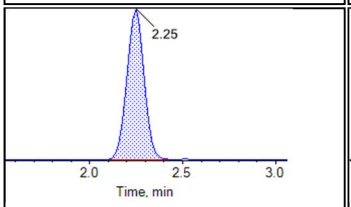
d3-MeFOSAA



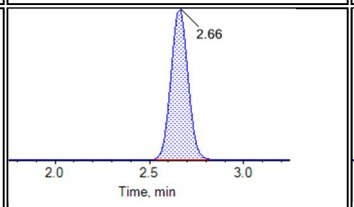
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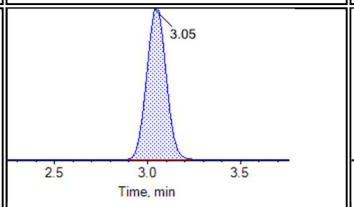
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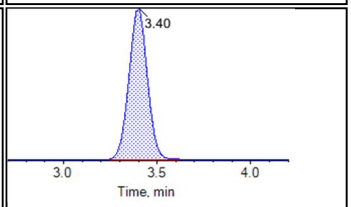
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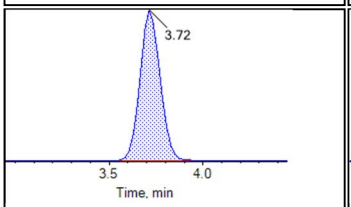
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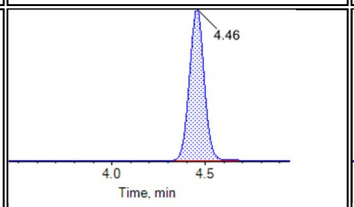
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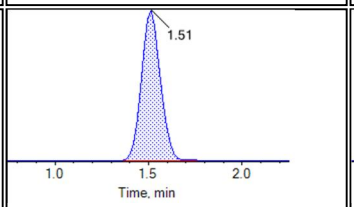
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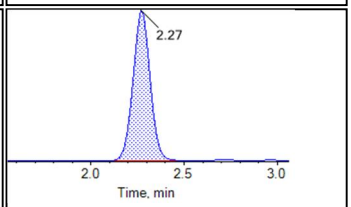
13C7-PFUnA



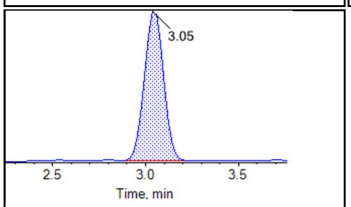
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

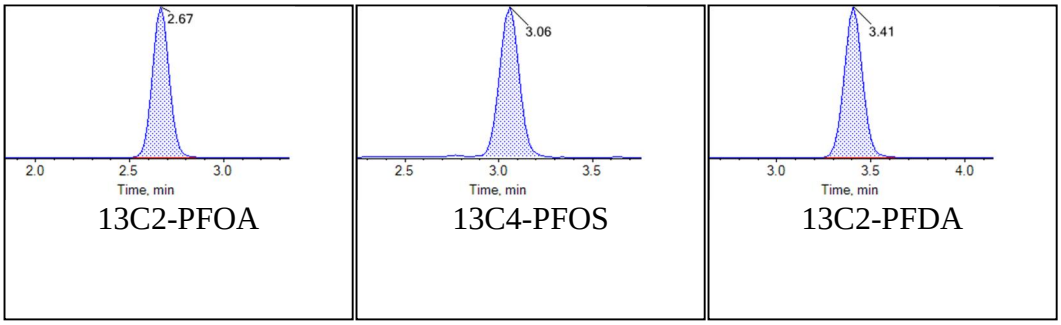


13C8-PFOS

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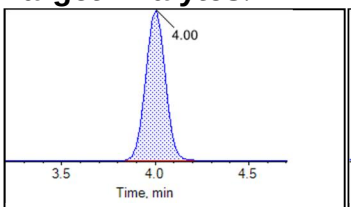
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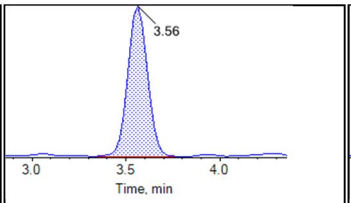
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Sample ID	VC-MS09-SS04-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:47:52	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

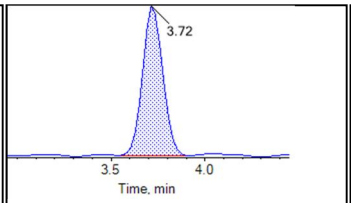
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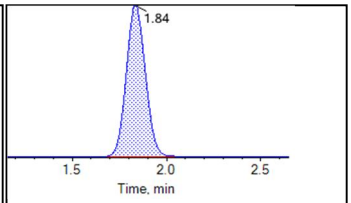
13C2-PFDoA



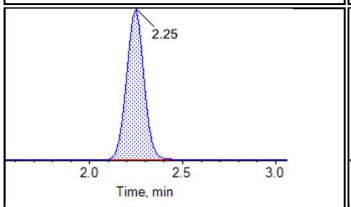
d3-MeFOSAA



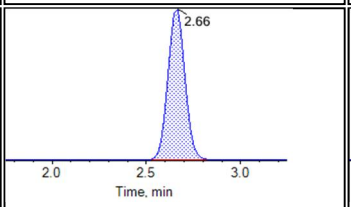
d5-EtFOSAA



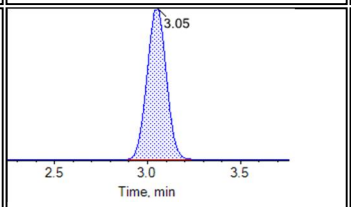
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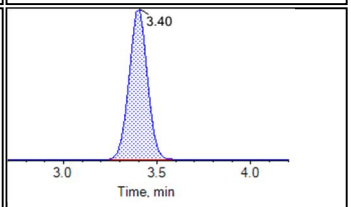
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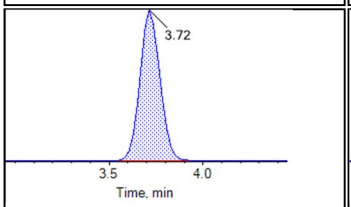
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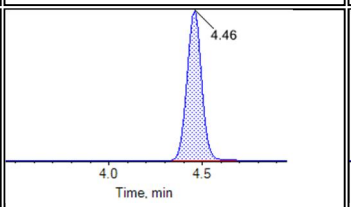
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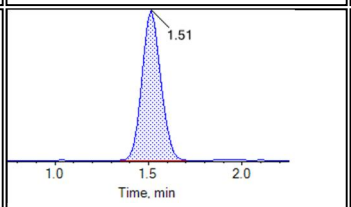
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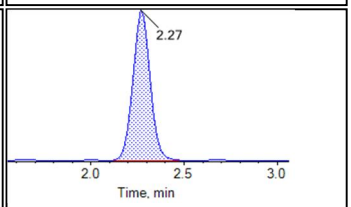
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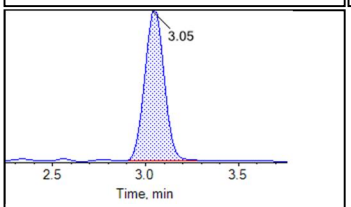
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

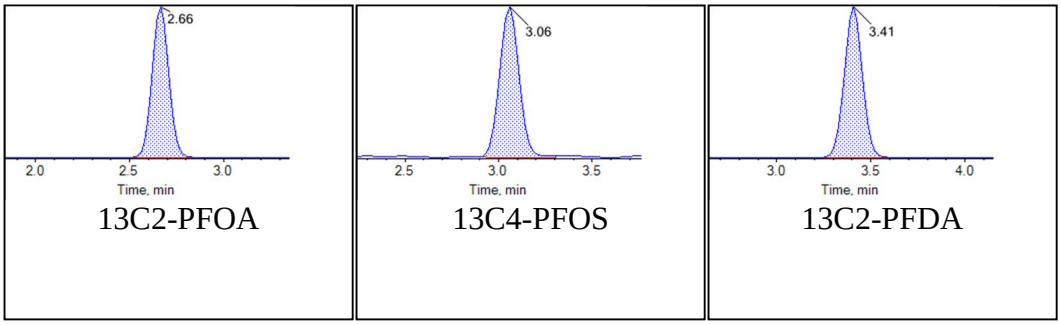


13C8-PFOS

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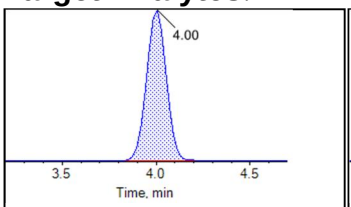
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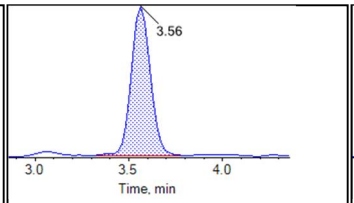
Sample Name	J8448-FS(3)	**Injection Vial**	18
Sample ID	VC-MS09-SB04-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T18:58:43	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

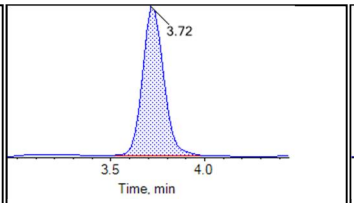
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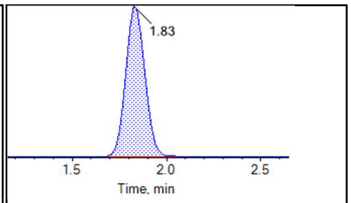
13C2-PFDoA



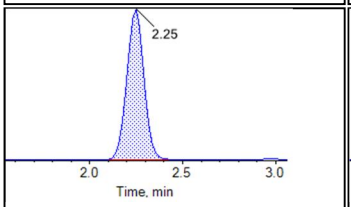
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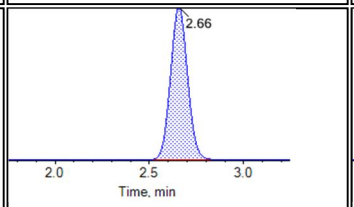
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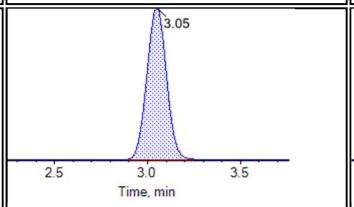
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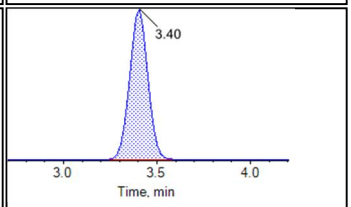
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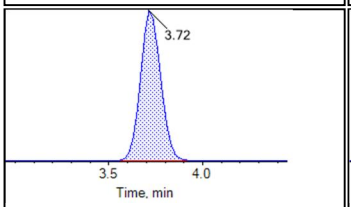
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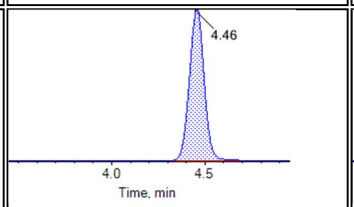
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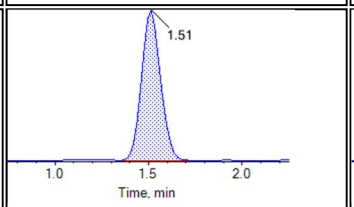
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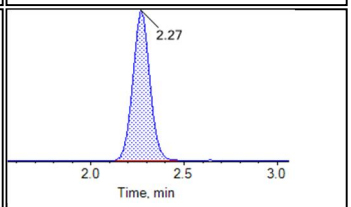
13C7-PFUnA



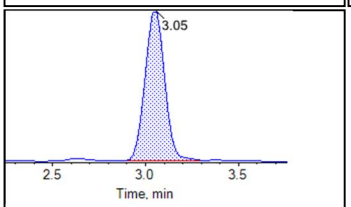
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

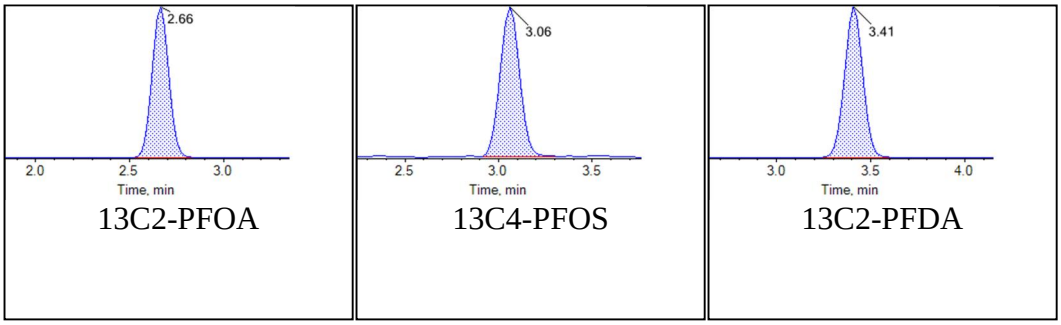


13C8-PFOS

Chromatogram Report

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Printed: 25/10/2018 10:42:00 AM

Internal Standards:



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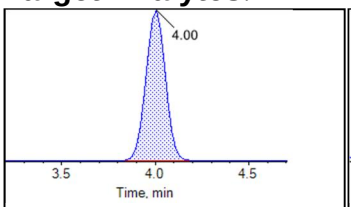
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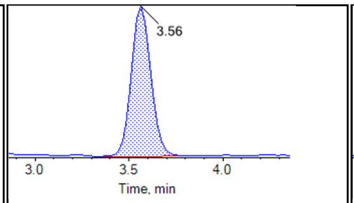
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Sample ID	VC-MS09-SB04-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:09:33	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

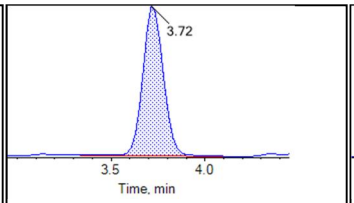
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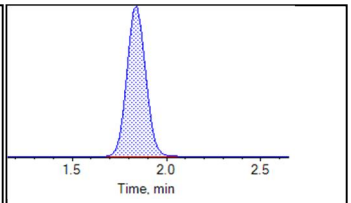
13C2-PFDoA



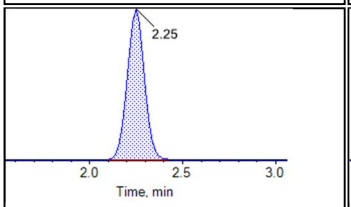
d3-MeFOSAA



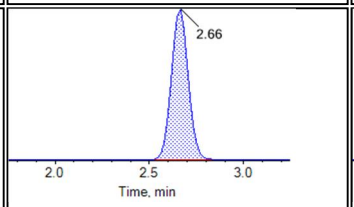
d5-EtFOSAA



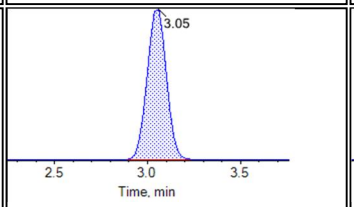
13C5-PFHxA



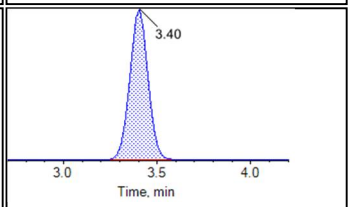
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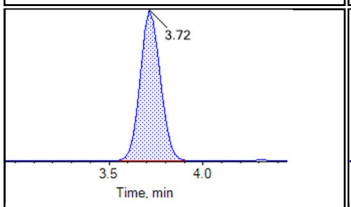
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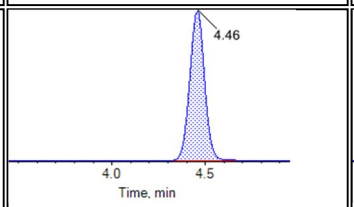
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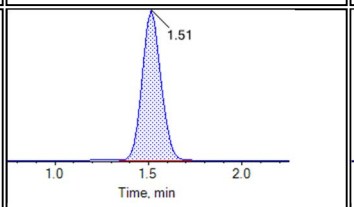
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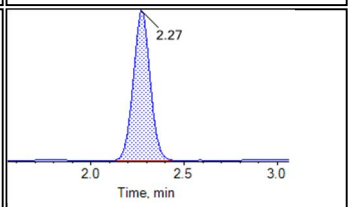
13C7-PFUnA



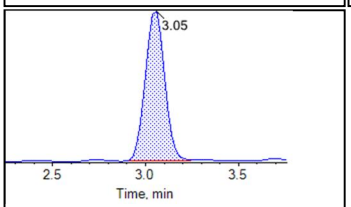
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

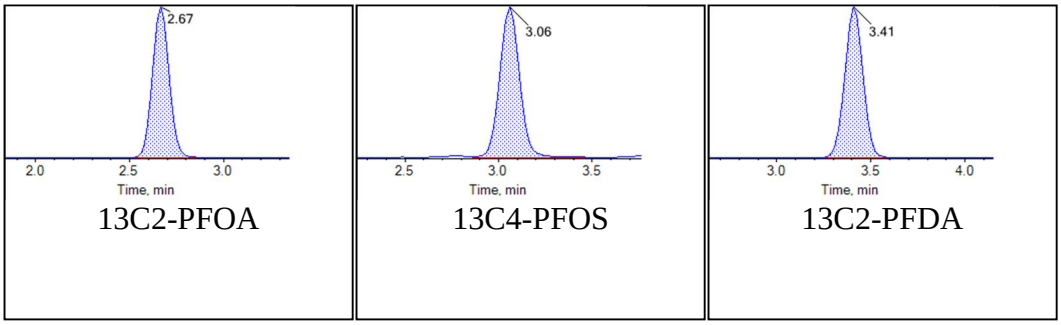


13C8-PFOS

Chromatogram Report

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Internal Standards:



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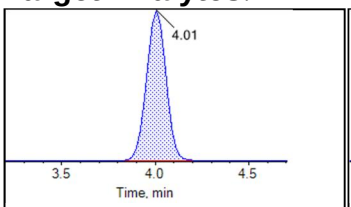
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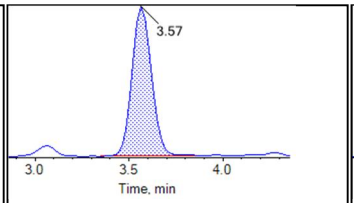
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Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:20:24	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

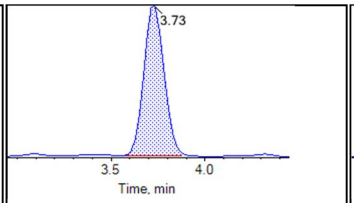
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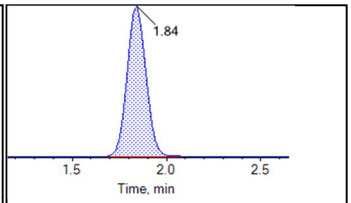
13C2-PFDoA



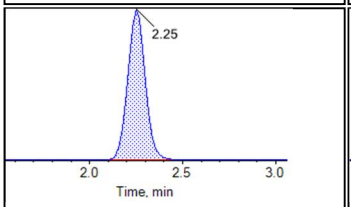
d3-MeFOSAA



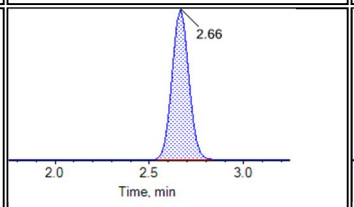
d5-EtFOSAA



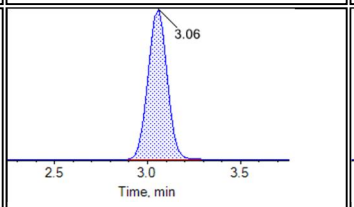
13C5-PFHxA



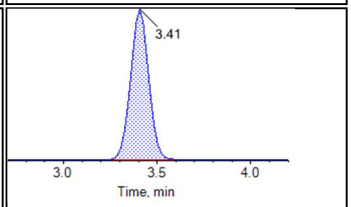
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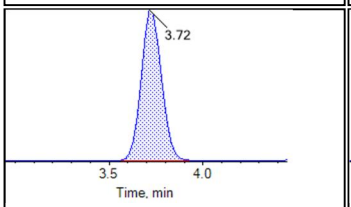
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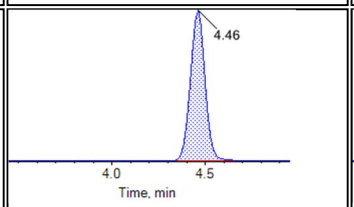
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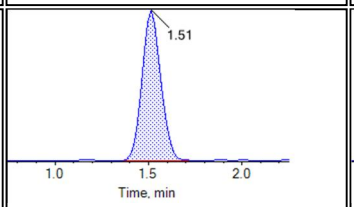
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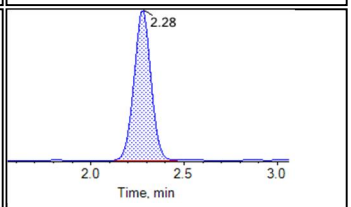
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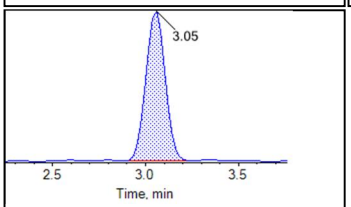
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



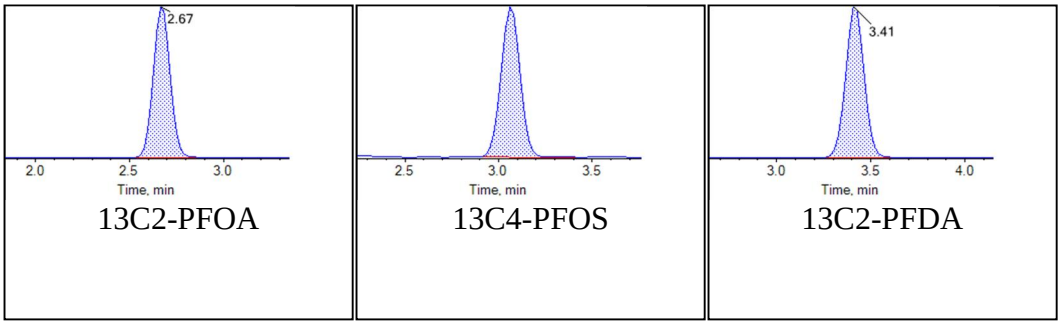
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Internal Standards:



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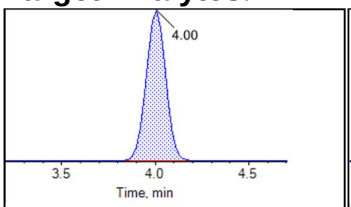
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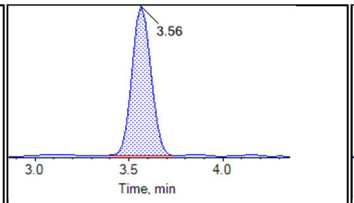
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Sample ID	VC-MS09-SB04-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:42:10	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

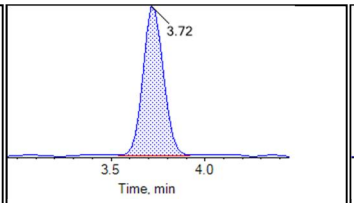
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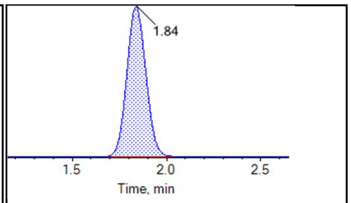
13C2-PFDoA



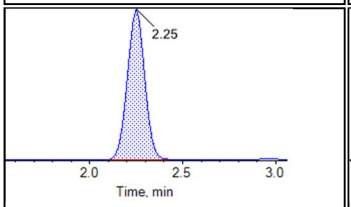
d3-MeFOSAA



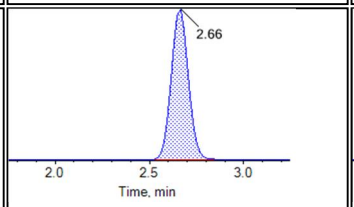
d5-EtFOSAA



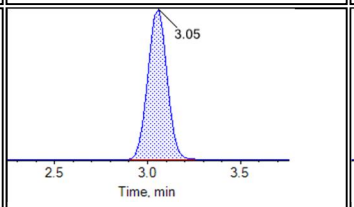
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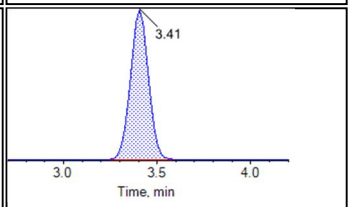
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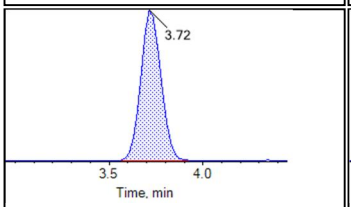
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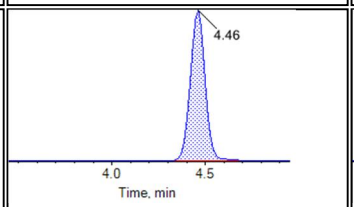
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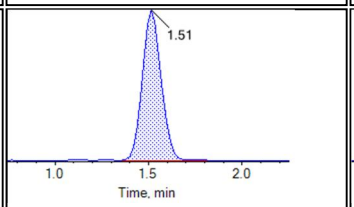
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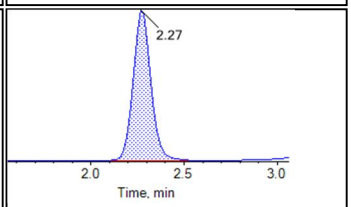
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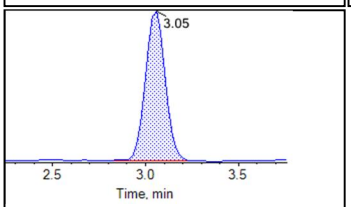
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

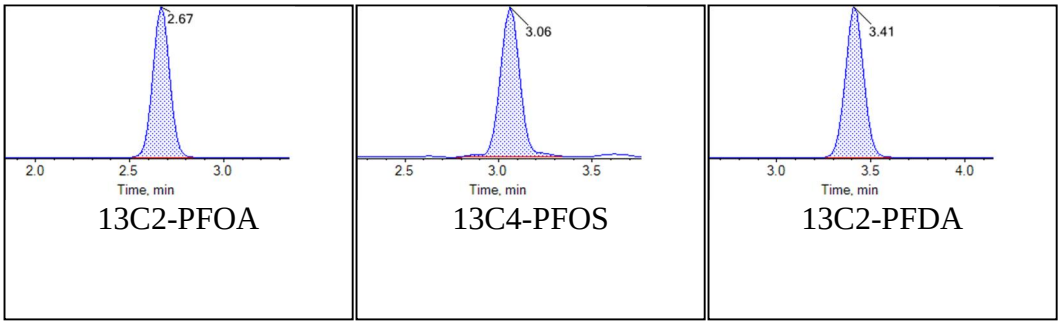


13C8-PFOS

Chromatogram Report

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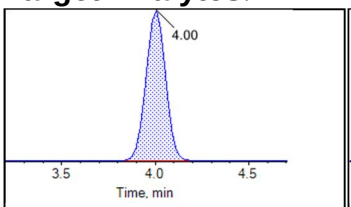
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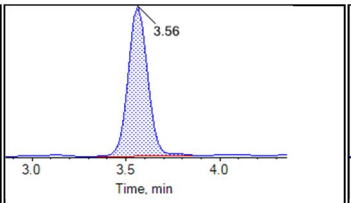
Sample Name	J8449-FS-D(5)	**Injection Vial**	23
Sample ID	VC-MS09-SB04-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T19:53:03	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

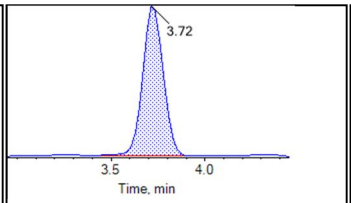
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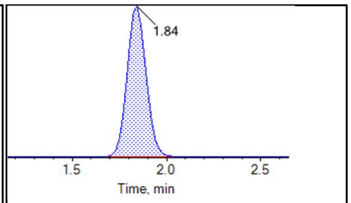
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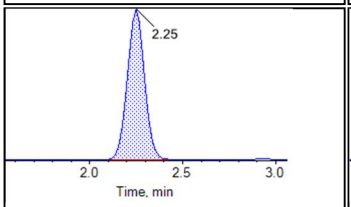
d3-MeFOSAA



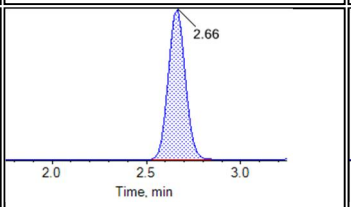
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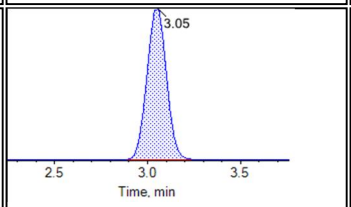
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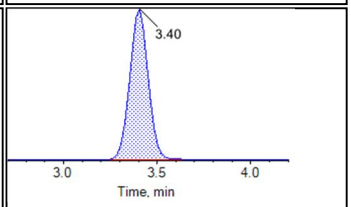
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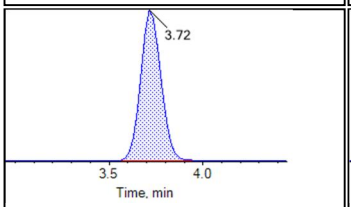
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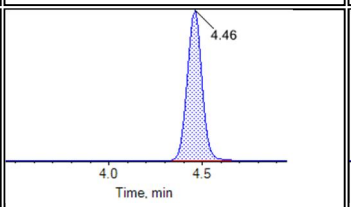
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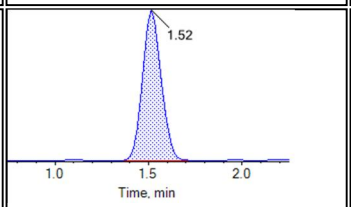
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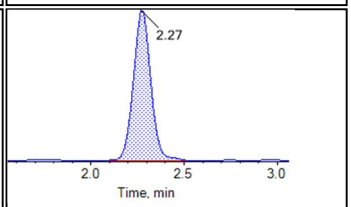
13C7-PFUnA



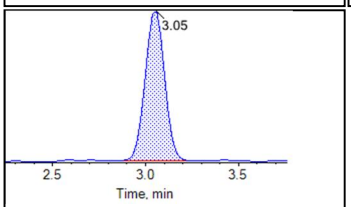
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



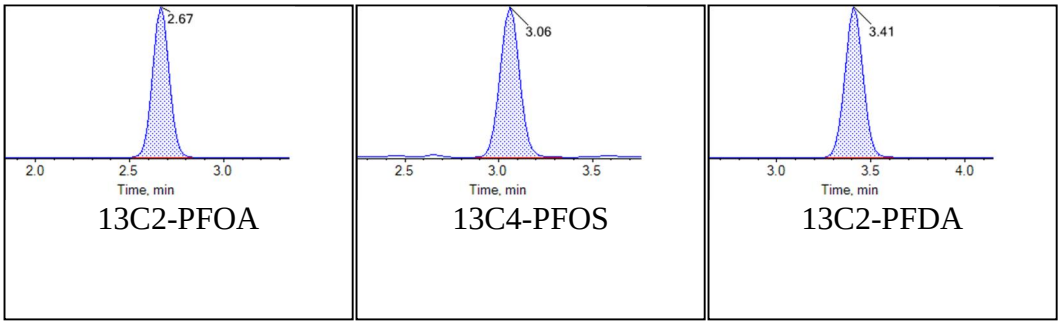
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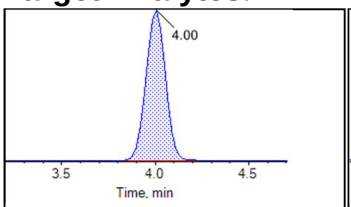
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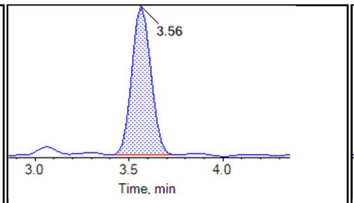
Sample Name	J8450-FS(3)	**Injection Vial**	24
Sample ID	VC-MS09-SS05-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:03:55	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

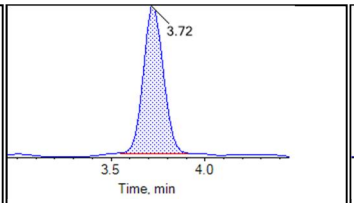
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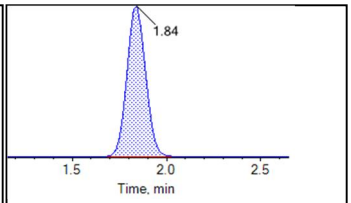
13C2-PFDoA



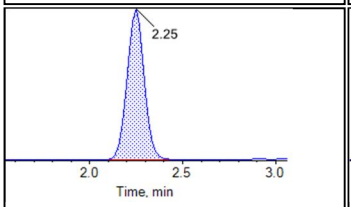
d3-MeFOSAA



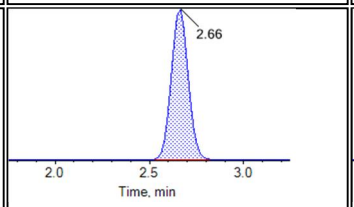
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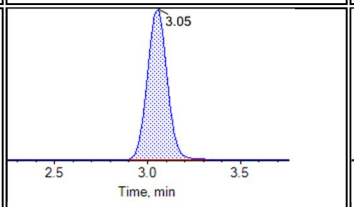
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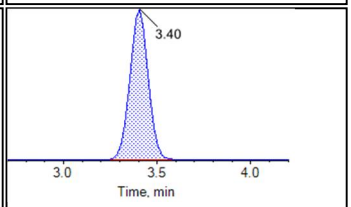
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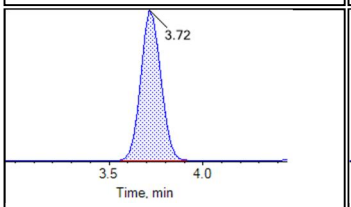
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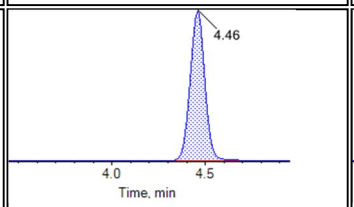
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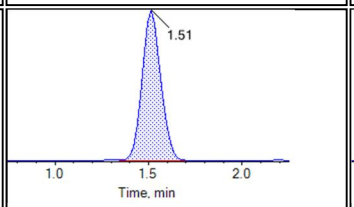
13C6-PFDA



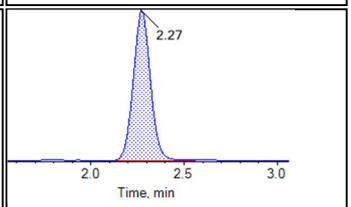
13C7-PFUnA



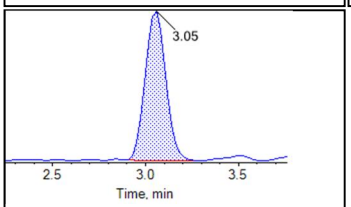
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



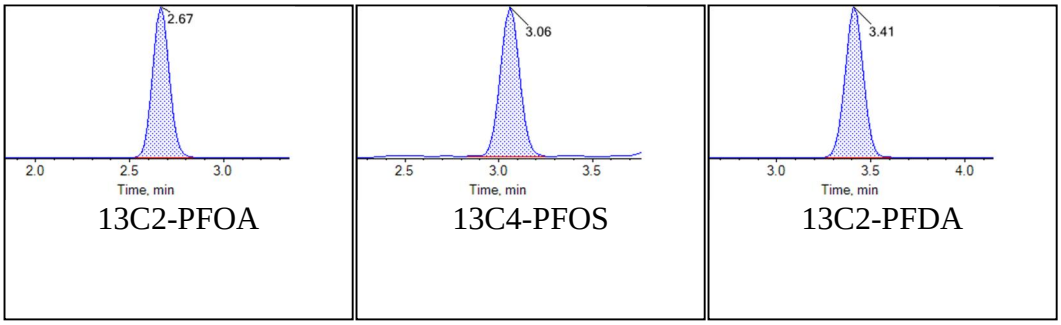
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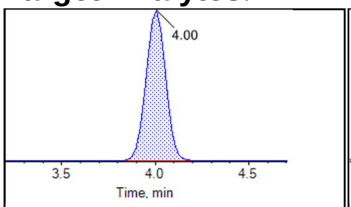
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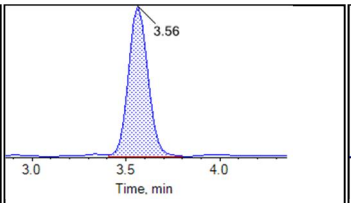
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Sample ID	VC-MS09-SS05-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:14:47	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

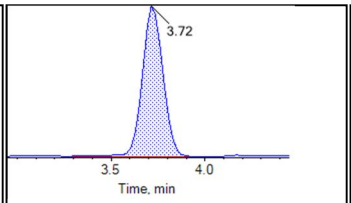
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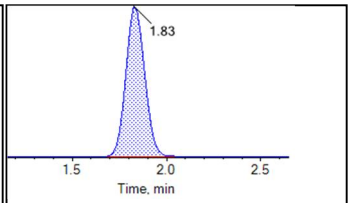
13C2-PFDoA



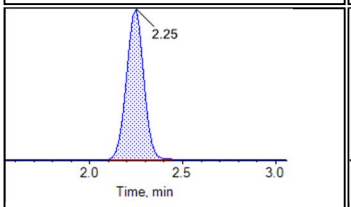
d3-MeFOSAA



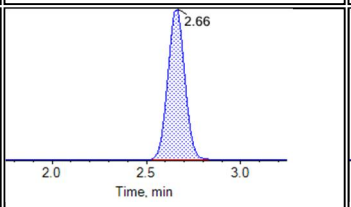
d5-EtFOSAA



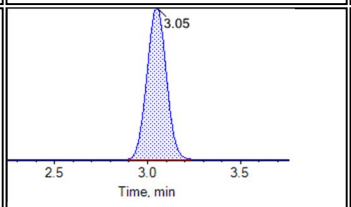
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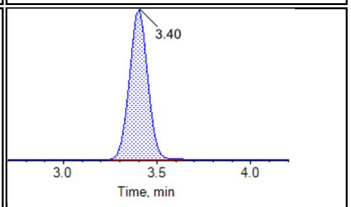
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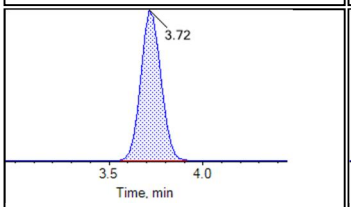
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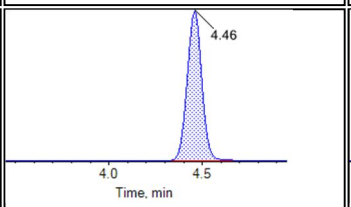
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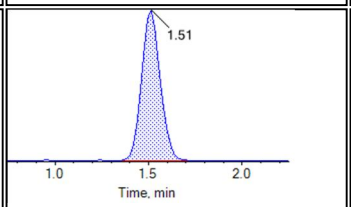
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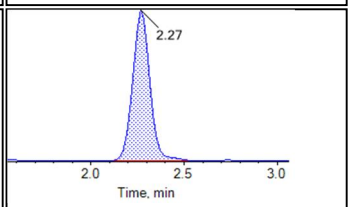
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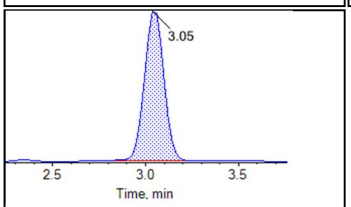
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



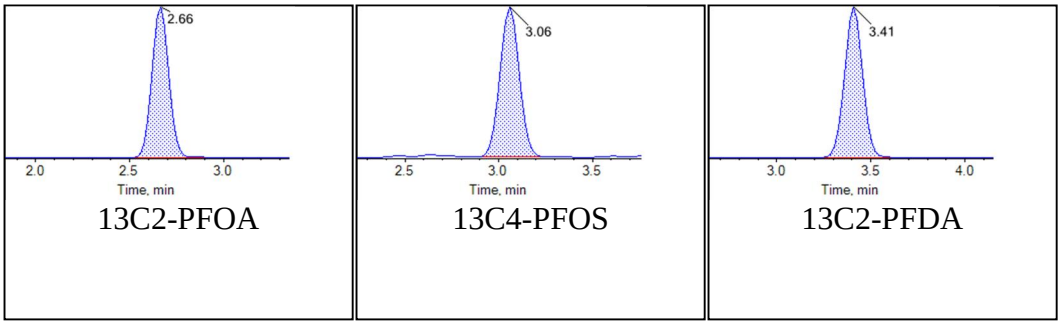
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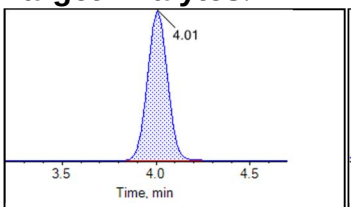
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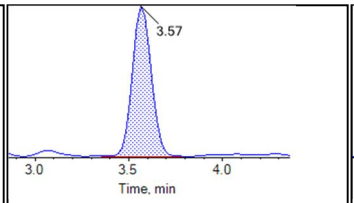
Sample Name	J8451-FS(3)	**Injection Vial**	26
Sample ID	VC-MS09-SB05-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:25:38	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

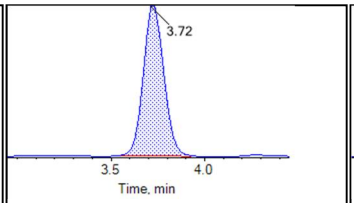
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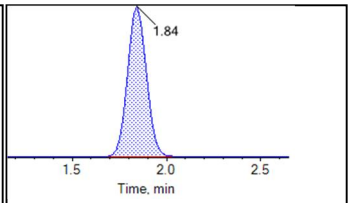
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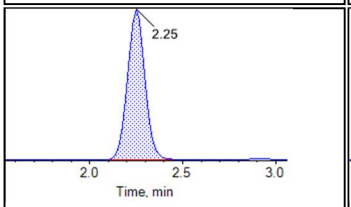
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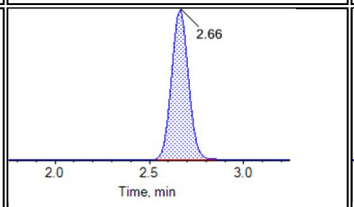
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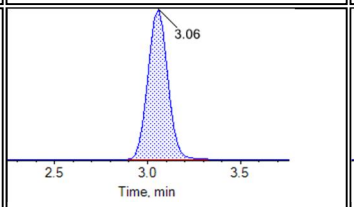
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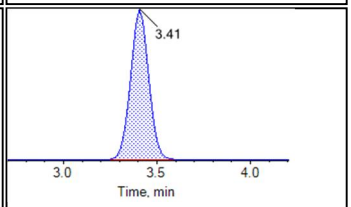
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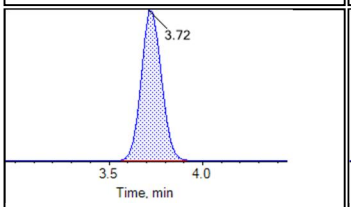
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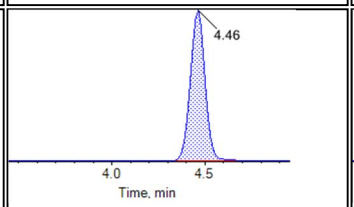
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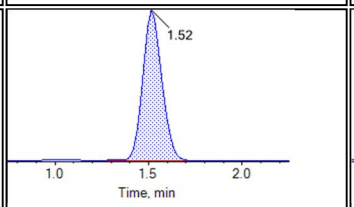
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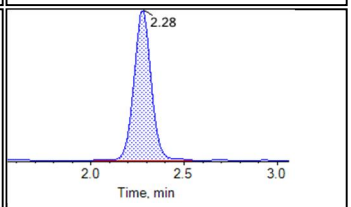
13C7-PFUnA



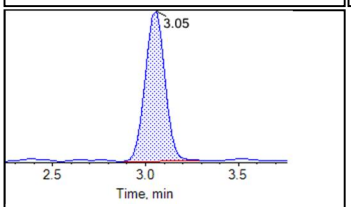
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



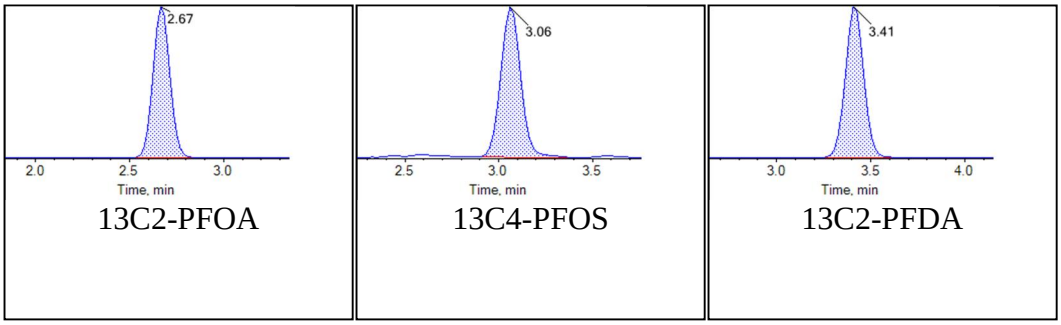
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Chromatogram Report

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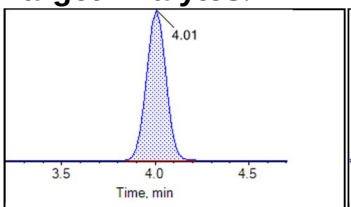
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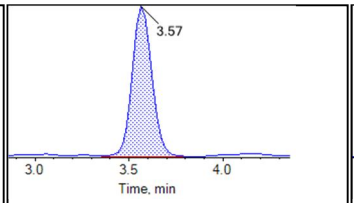
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Sample ID	VC-MS09-SB05-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:36:29	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

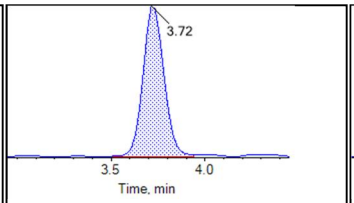
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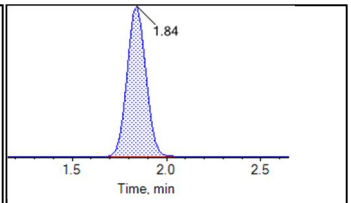
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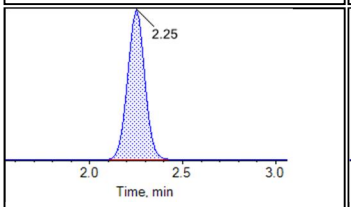
d3-MeFOSAA



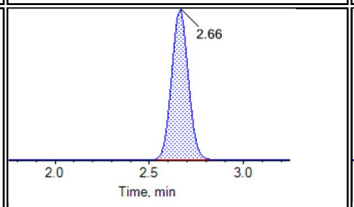
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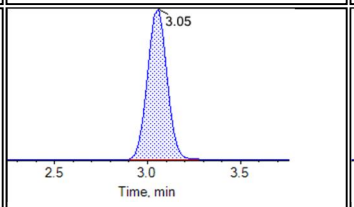
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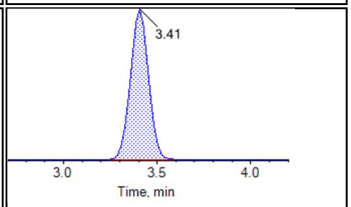
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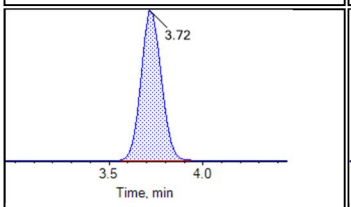
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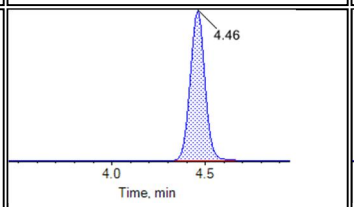
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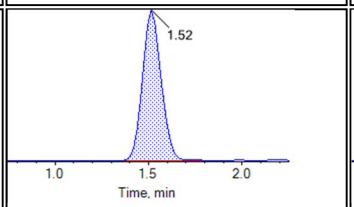
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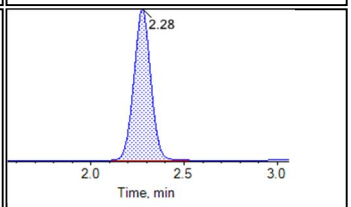
13C7-PFUnA



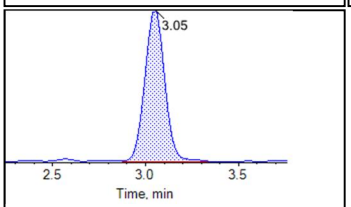
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



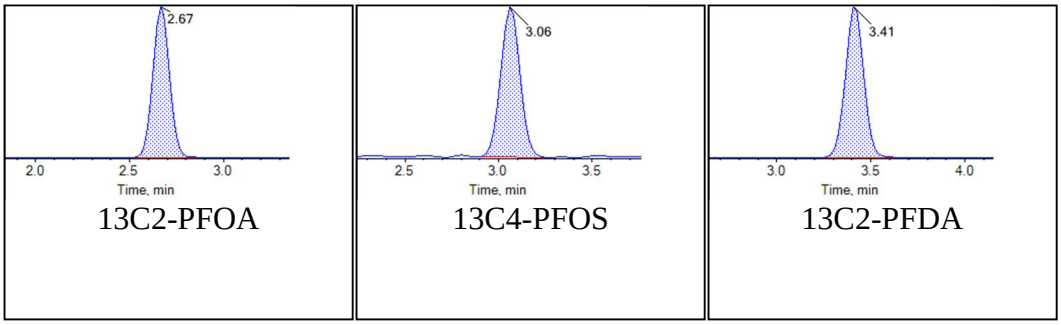
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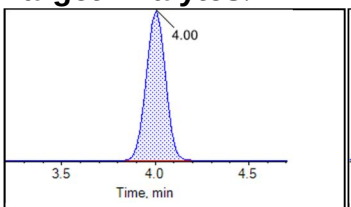
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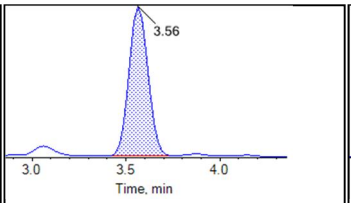
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Sample ID	VC-MS09-SB05-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:47:20	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

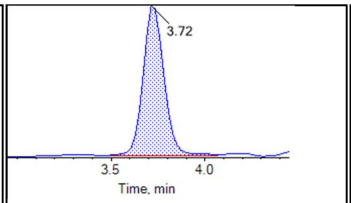
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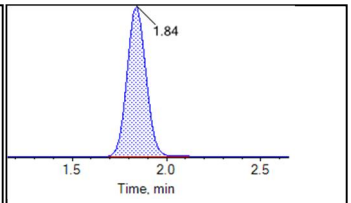
13C2-PFDoA



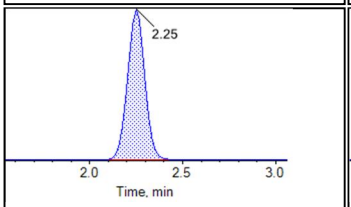
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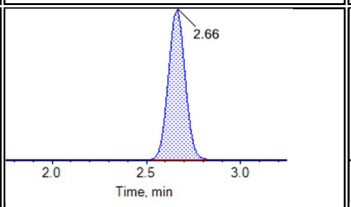
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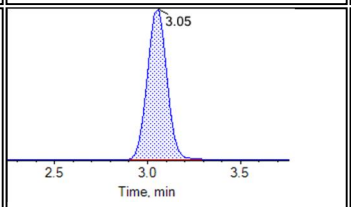
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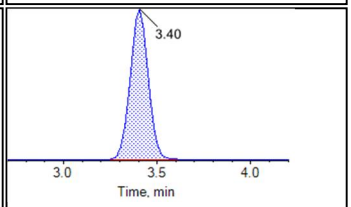
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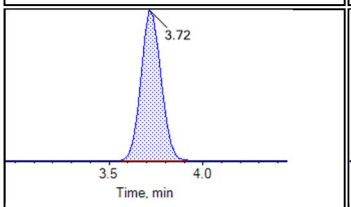
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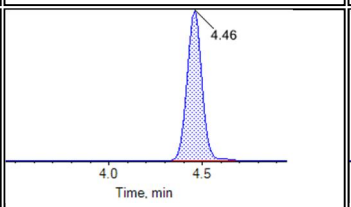
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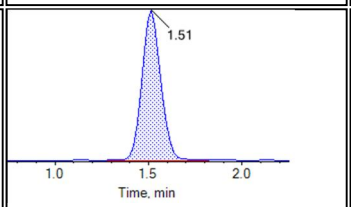
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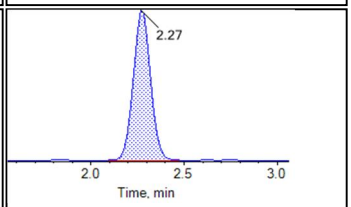
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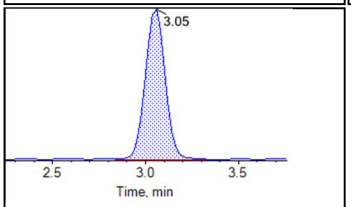
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



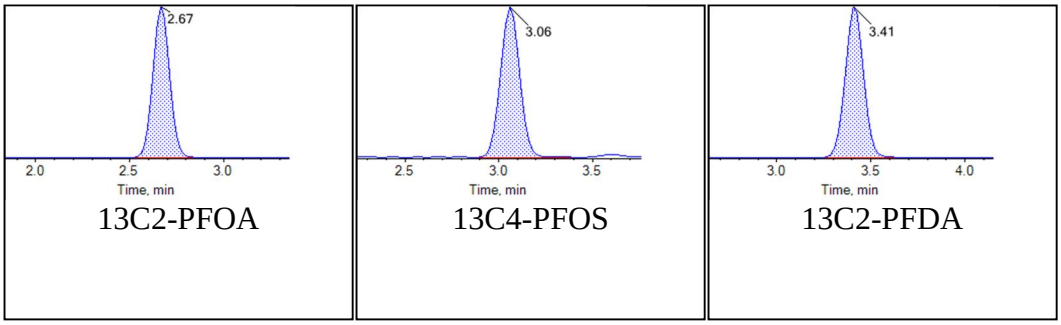
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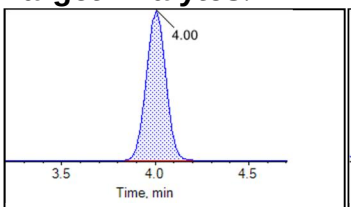
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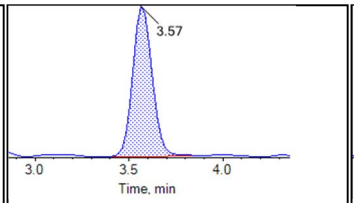
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Sample ID	VC-MS09-SB05-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T20:58:12	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

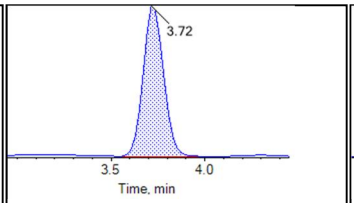
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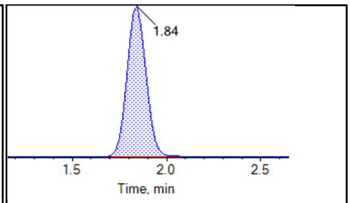
13C2-PFDoA



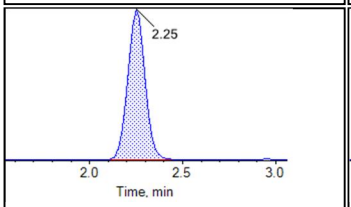
d3-MeFOSAA



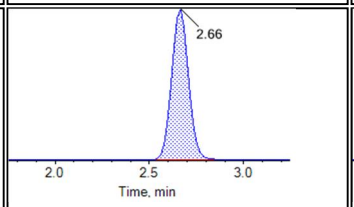
d5-EtFOSAA



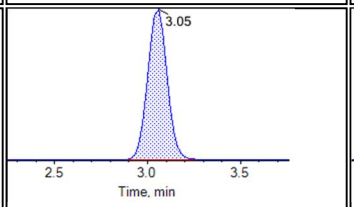
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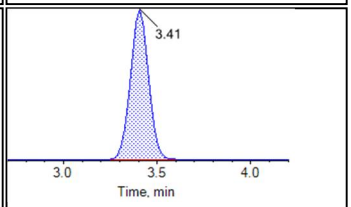
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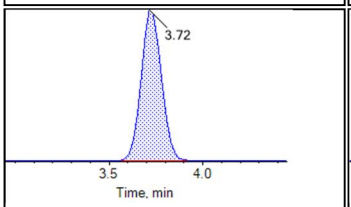
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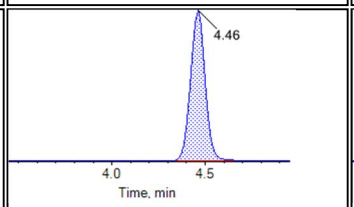
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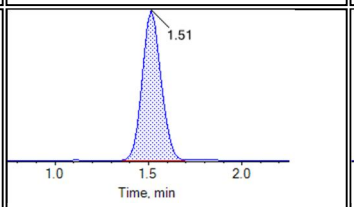
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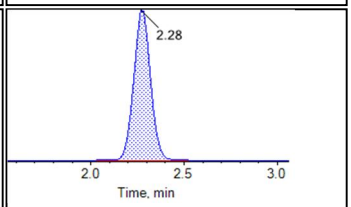
13C7-PFUnA



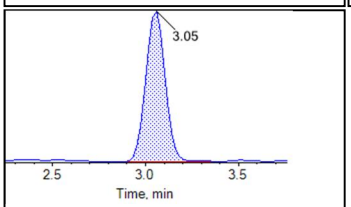
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



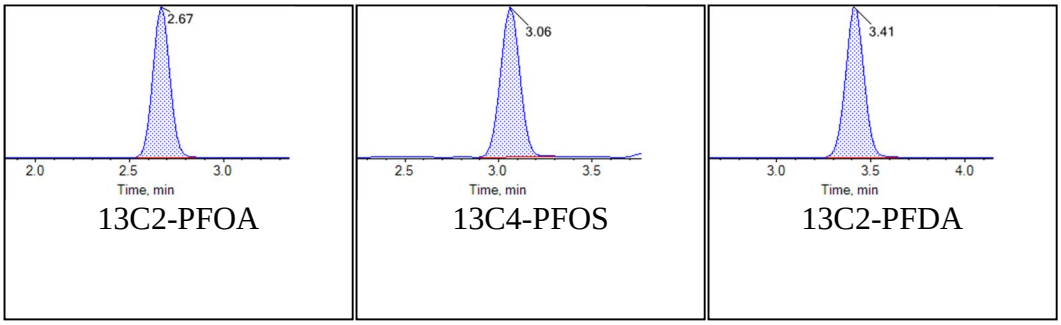
13C8-PFOS

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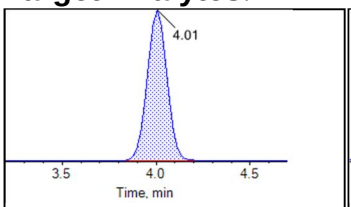
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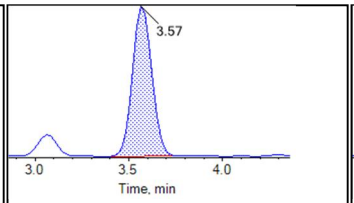
Sample Name	KB77 CCV	**Injection Vial**	30
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:09:03	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

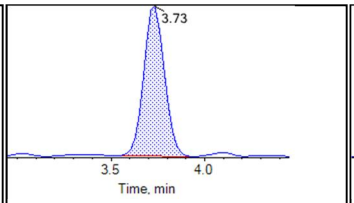
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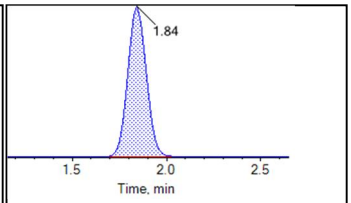
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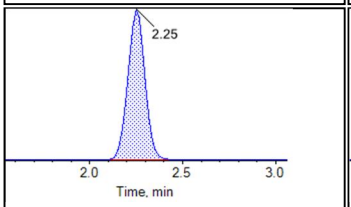
d3-MeFOSAA



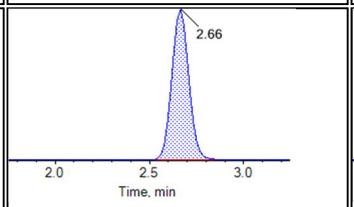
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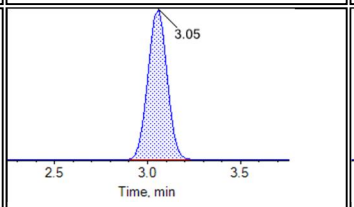
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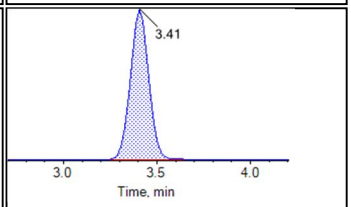
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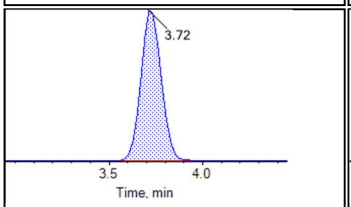
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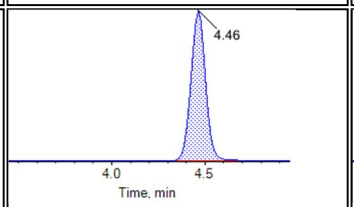
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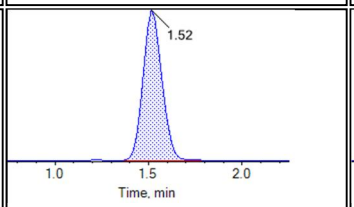
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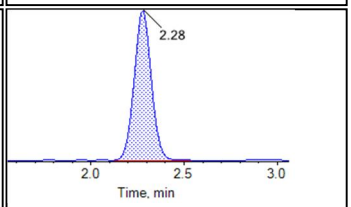
13C7-PFUnA



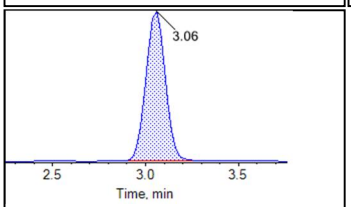
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



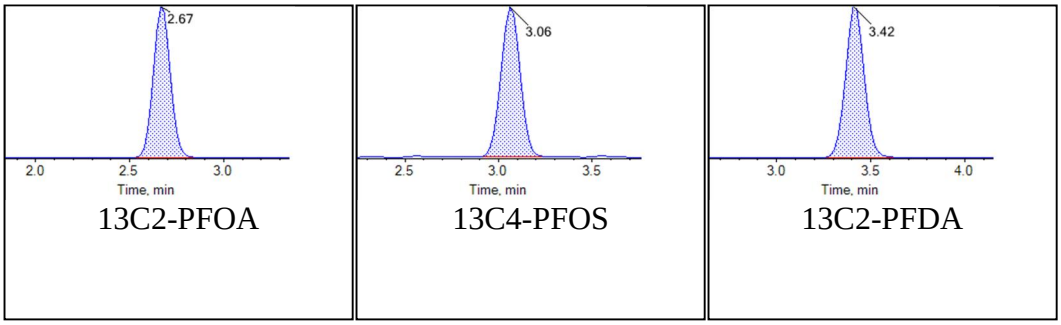
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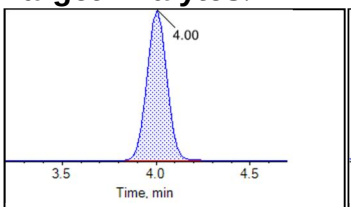
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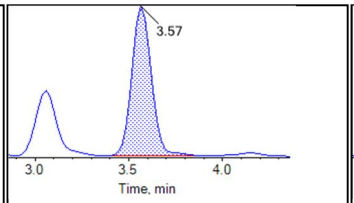
Sample Name	J8453MS-FS(3)	**Injection Vial**	32
Sample ID	VC-MS09-SB04-0102-MS	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:30:47	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

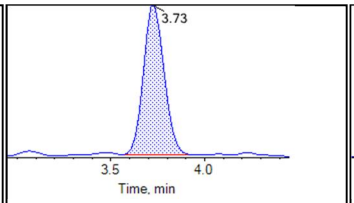
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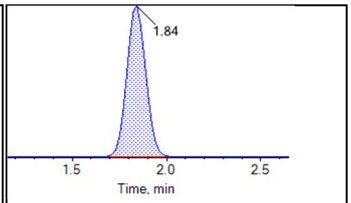
13C2-PFDoA



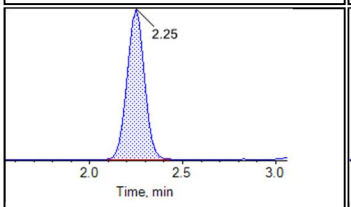
d3-MeFOSAA



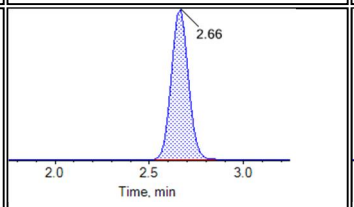
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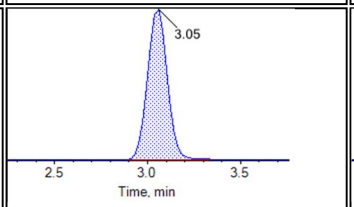
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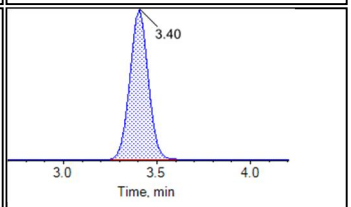
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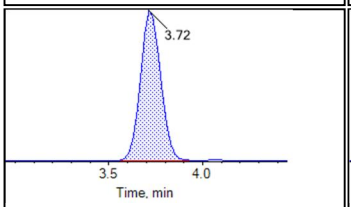
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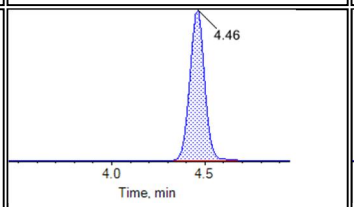
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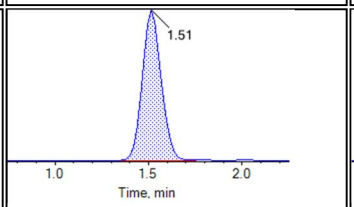
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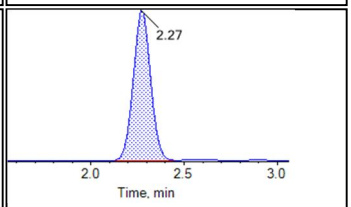
13C7-PFUnA



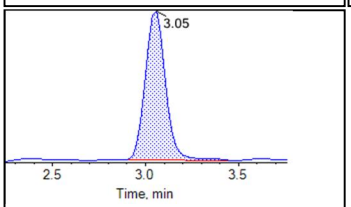
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



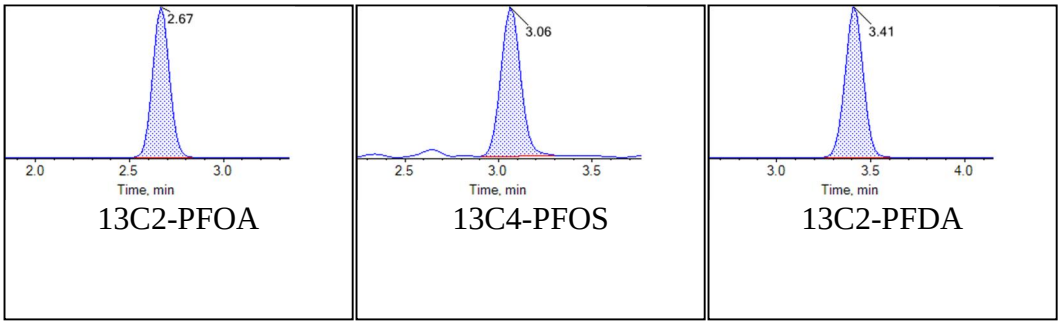
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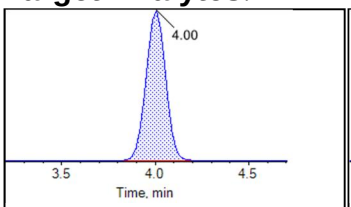
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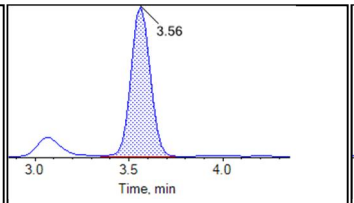
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Sample ID	VC-MS09-SB04-0102-MS	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:41:39	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

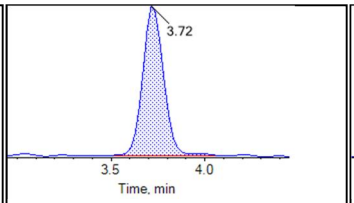
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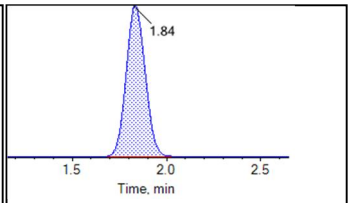
13C2-PFDoA



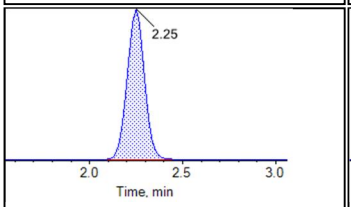
d3-MeFOSAA



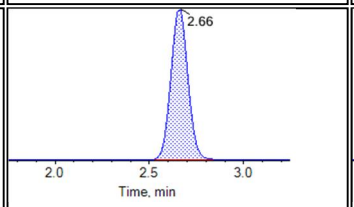
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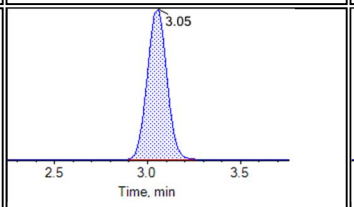
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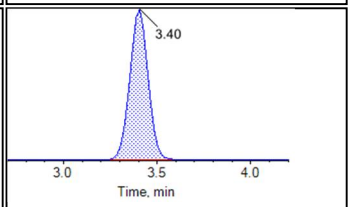
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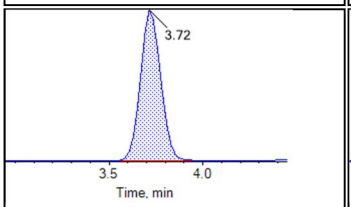
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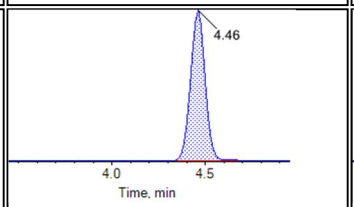
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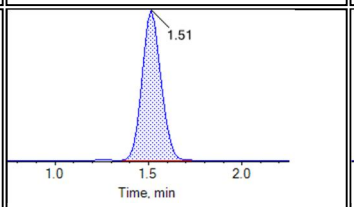
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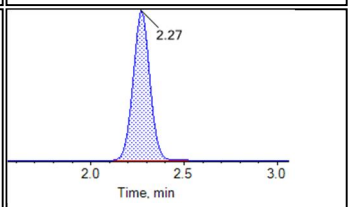
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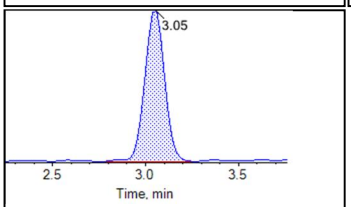
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

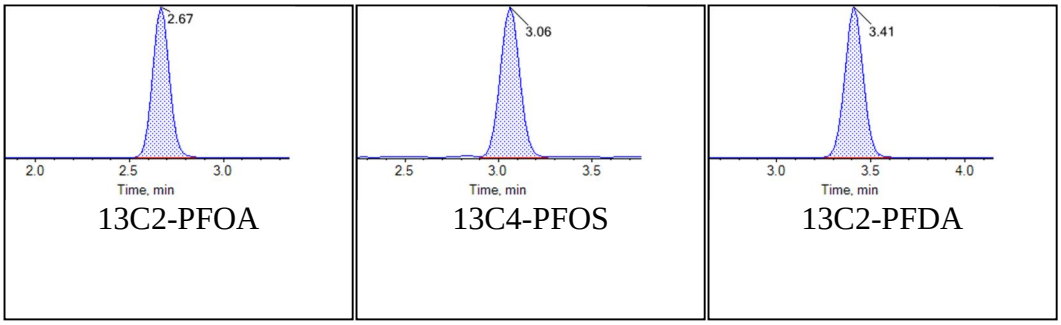


13C8-PFOS

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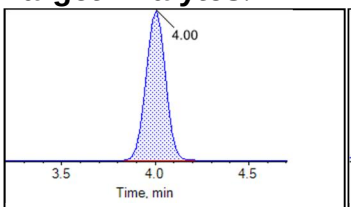
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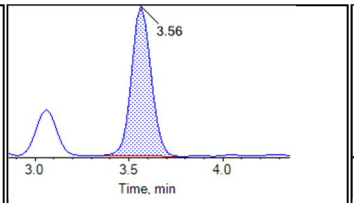
Sample Name	J8454MSD-FS(3)	**Injection Vial**	34
Sample ID	VC-MS09-SB04-0102-MSD	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T21:52:29	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

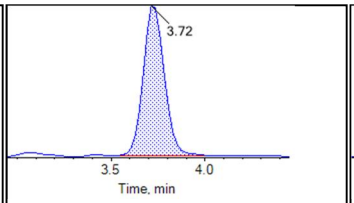
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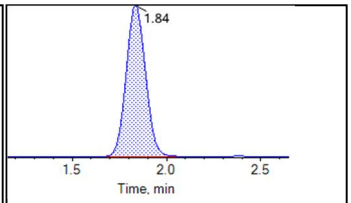
13C2-PFDoA



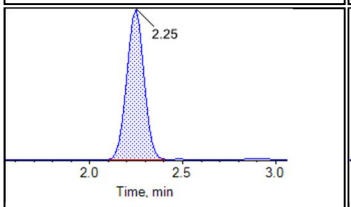
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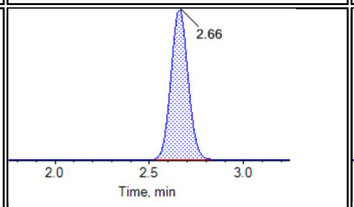
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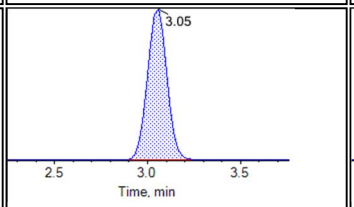
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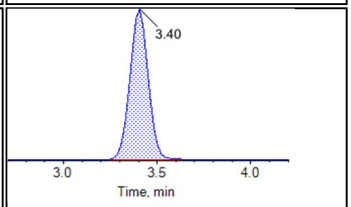
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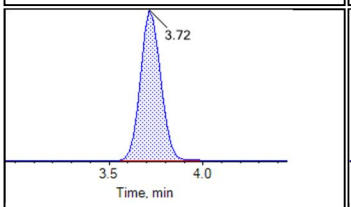
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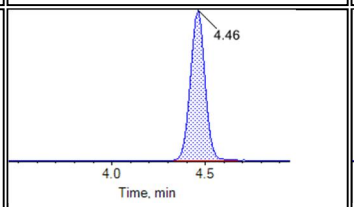
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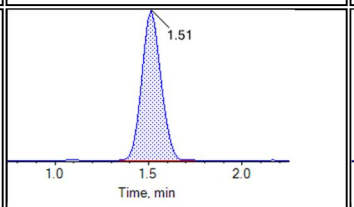
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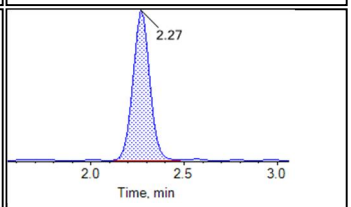
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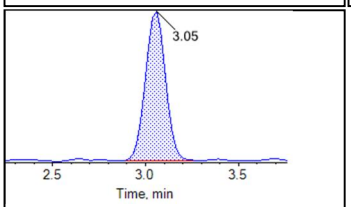
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



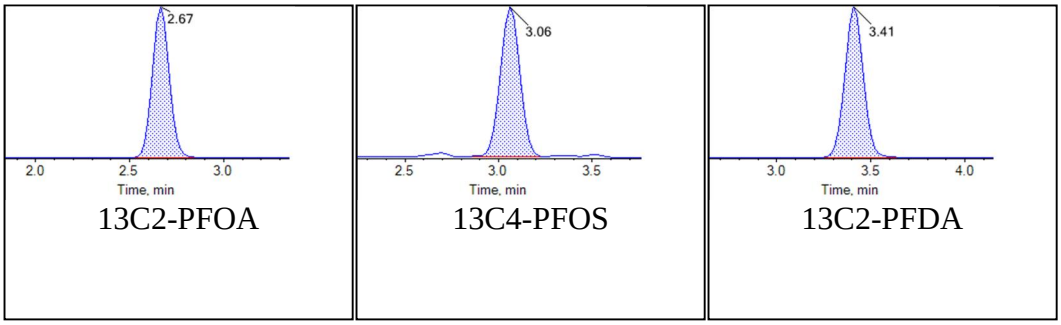
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Chromatogram Report

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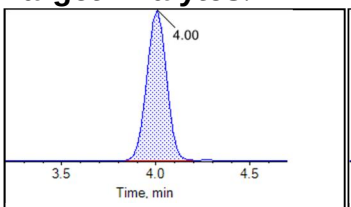
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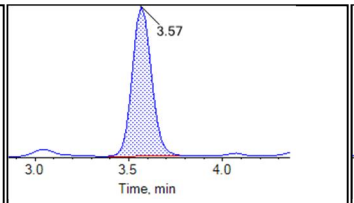
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Sample ID	VC-MS09-SB04-0102-MSD	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:03:21	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

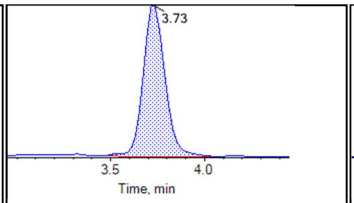
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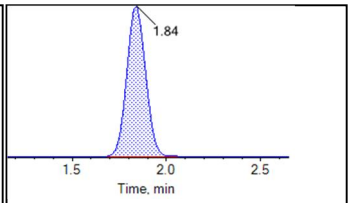
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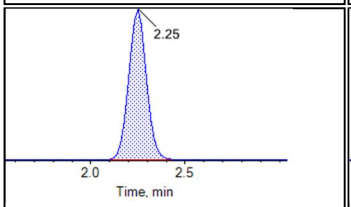
d3-MeFOSAA



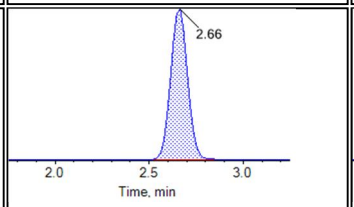
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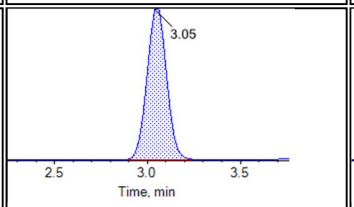
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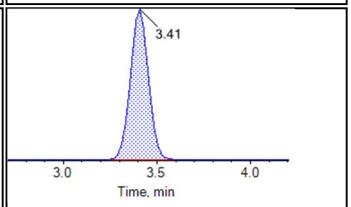
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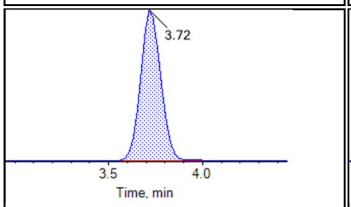
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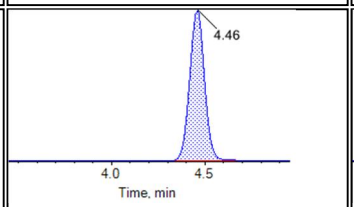
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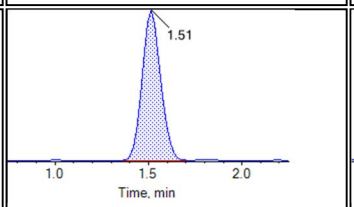
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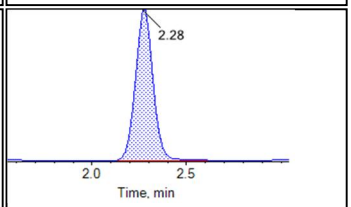
13C7-PFUnA



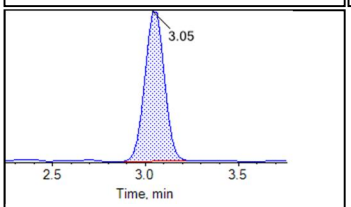
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



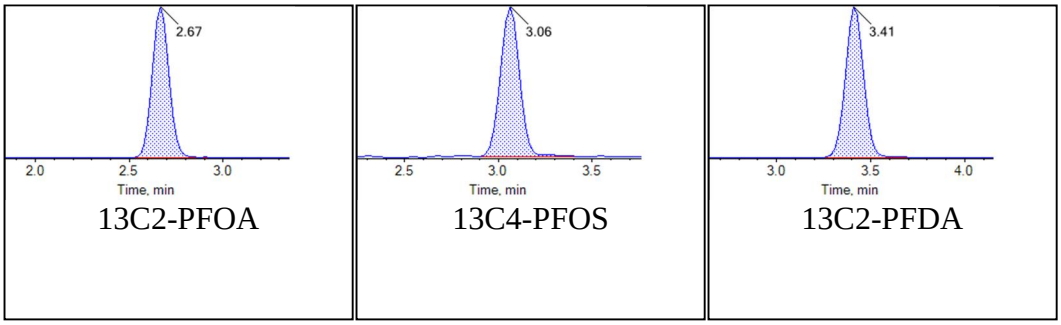
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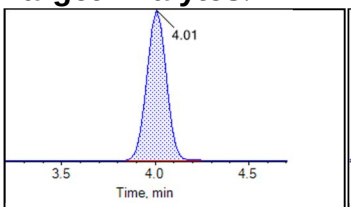
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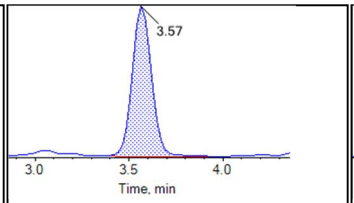
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Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:14:13	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

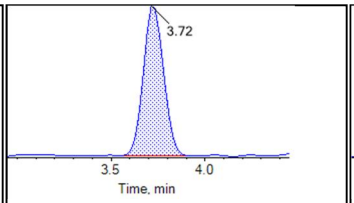
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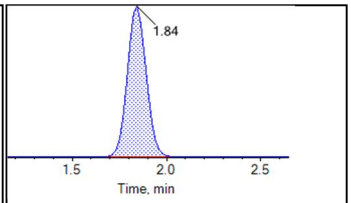
13C2-PFDoA



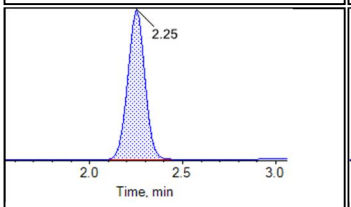
d3-MeFOSAA



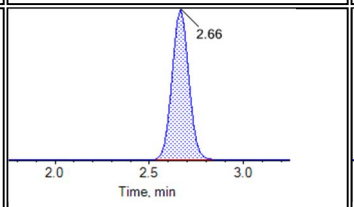
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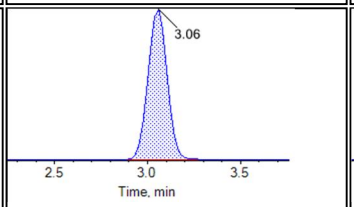
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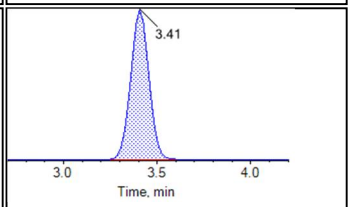
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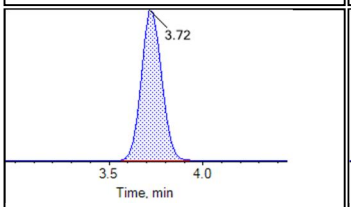
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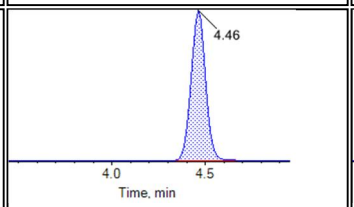
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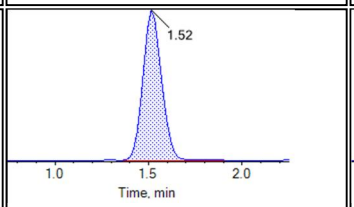
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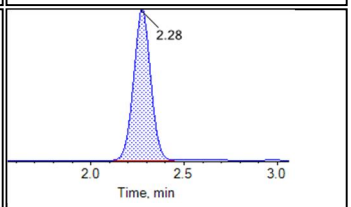
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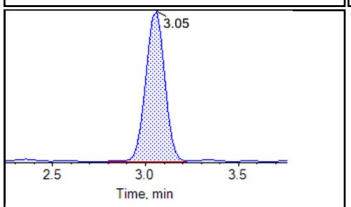
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



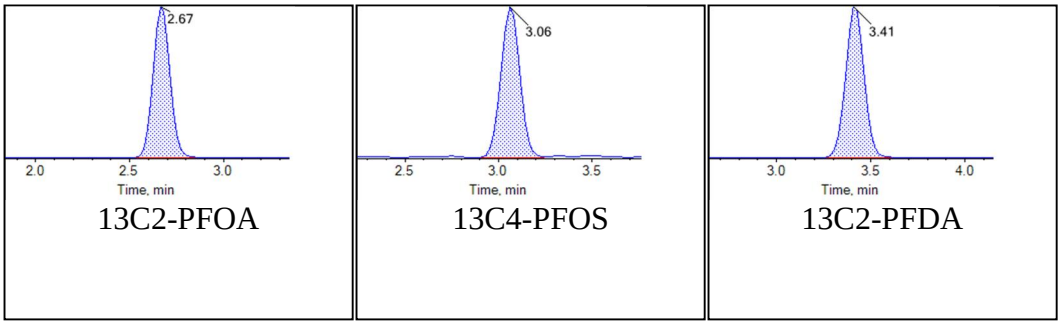
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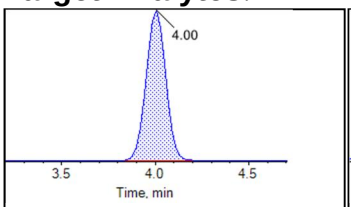
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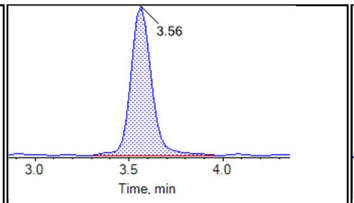
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Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-18T22:35:56	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

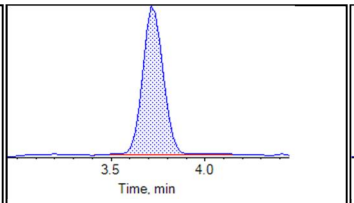
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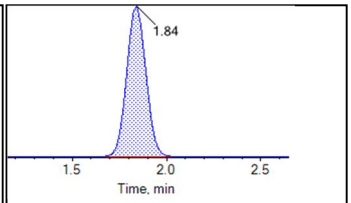
13C2-PFDoA



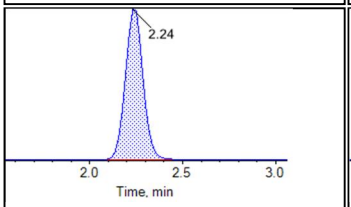
d3-MeFOSAA



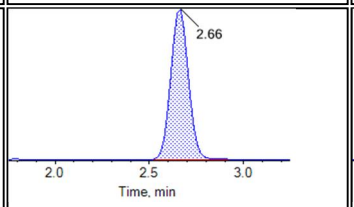
d5-EtFOSAA



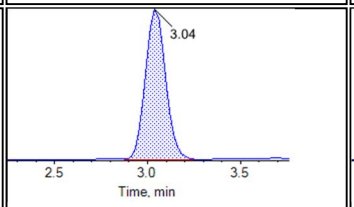
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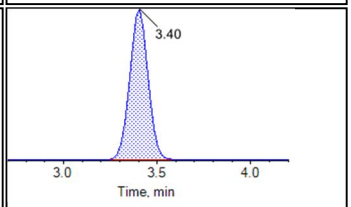
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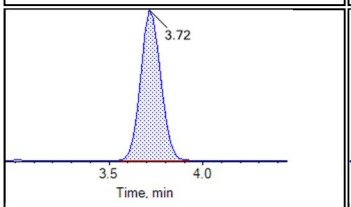
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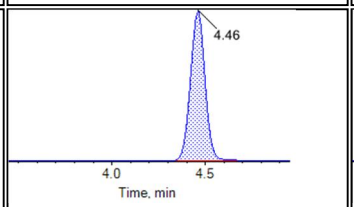
13C9-PFNA



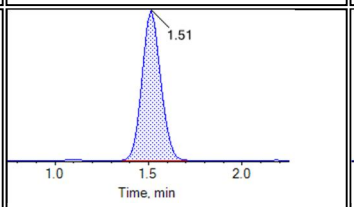
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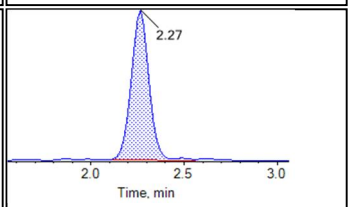
13C7-PFUnA



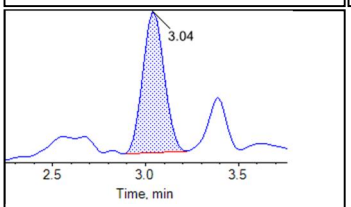
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



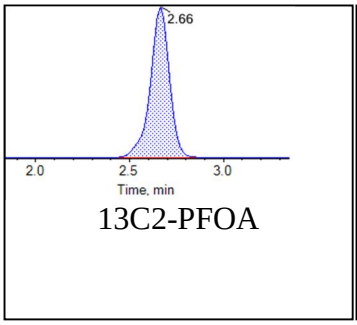
13C8-PFOS

BATTELLE

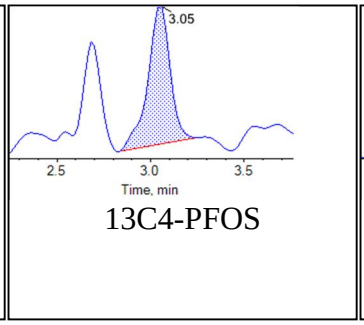
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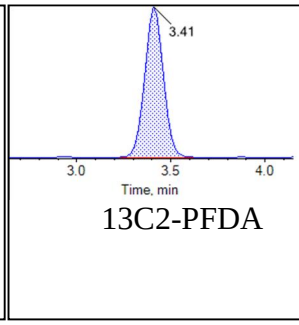
Internal Standards:



13C2-PFOA



13C4-PFOS



13C2-PFDA

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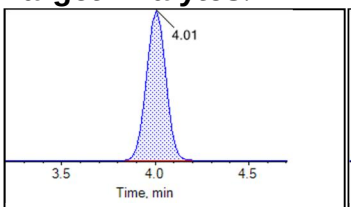
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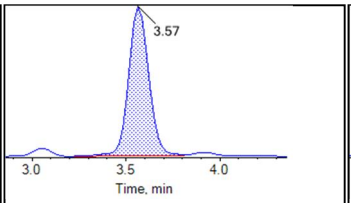
Sample Name	KB76 CCV	**Injection Vial**	10
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T01:29:53	**Data File**	18-0590_18-01588_18-0589.wiff
Acquisition Method	5-0369.dam	**Result Table**	18-0590_18-0588_18-0589_SIS
Sample Comment			

Chromatograms

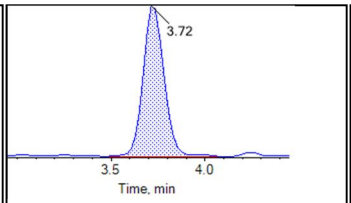
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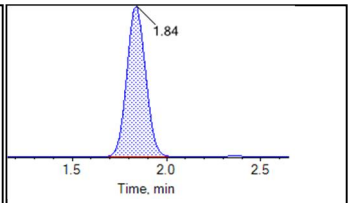
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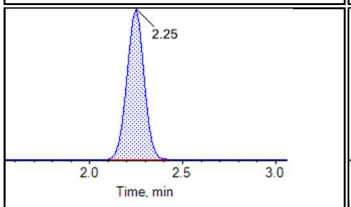
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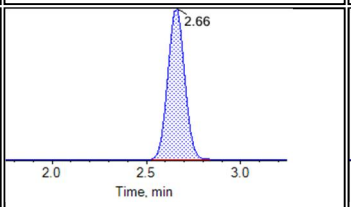
d5-EtFOSAA



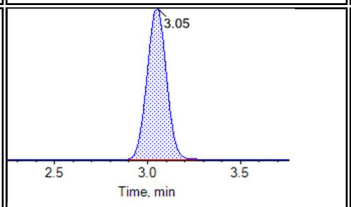
13C5-PFHxA



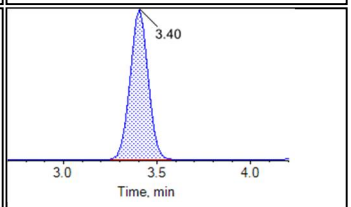
13C4-PFHpA



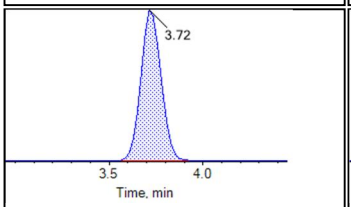
13C8-PFOA



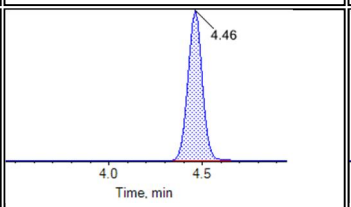
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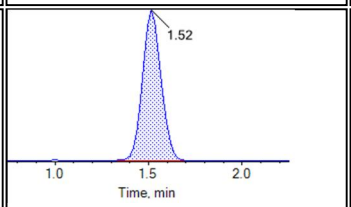
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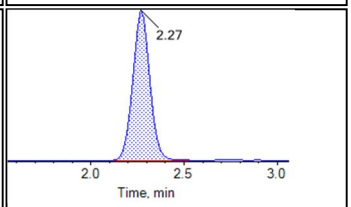
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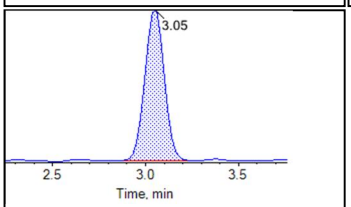
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS

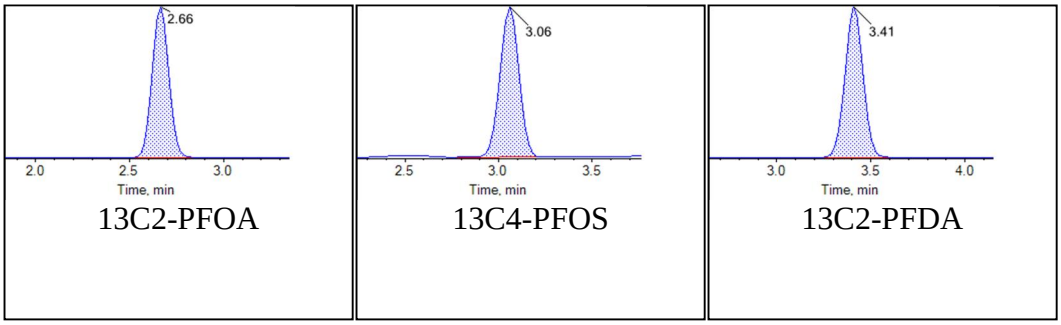


13C8-PFOS

Chromatogram Report

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Internal Standards:



BATTELLE

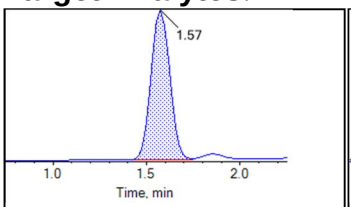
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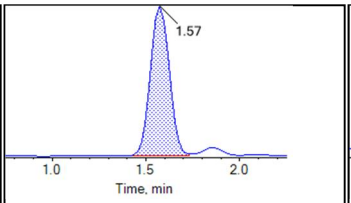
Sample Name	KB75 ISC	**Injection Vial**	1
Sample ID	Instrument Sensitivity Check	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T18:16:51	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Chromatograms

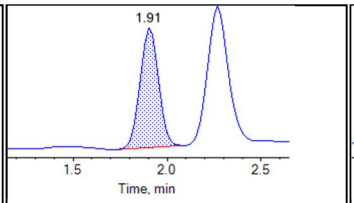
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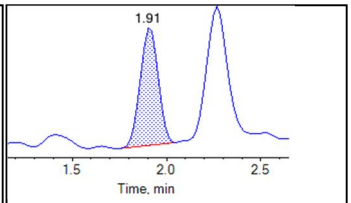
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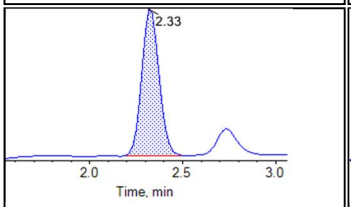
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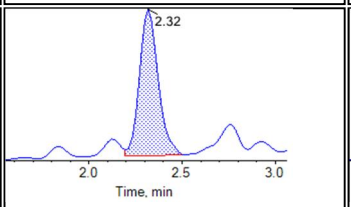
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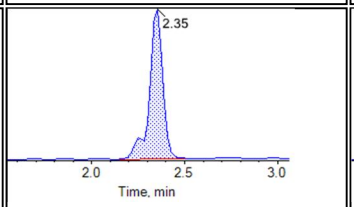
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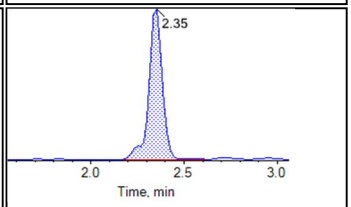
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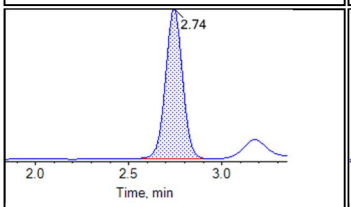
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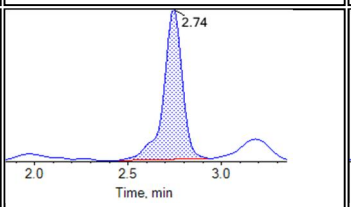
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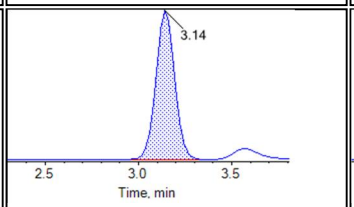
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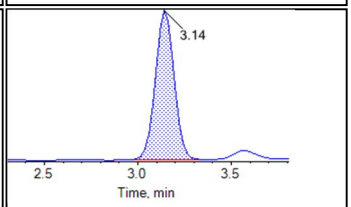
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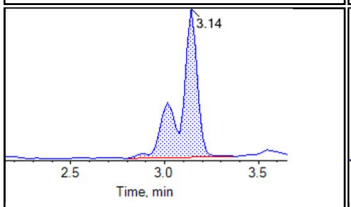
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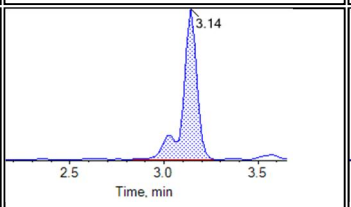
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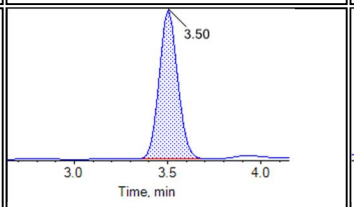
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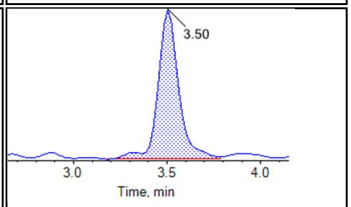
PFOS_1



PFOS_2



PFDA_1

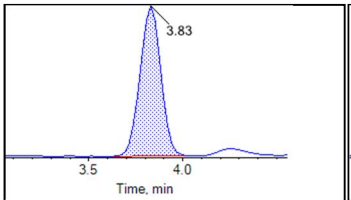


PFDA_2

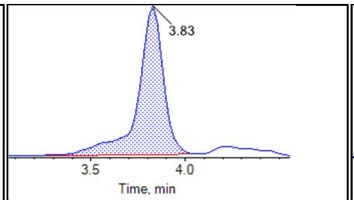
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Chromatogram Report

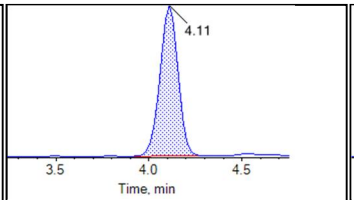
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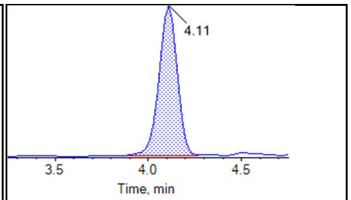
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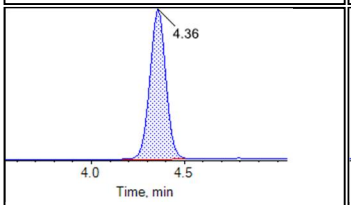
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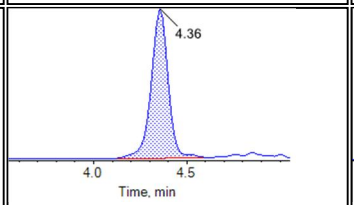
PFDoA_1



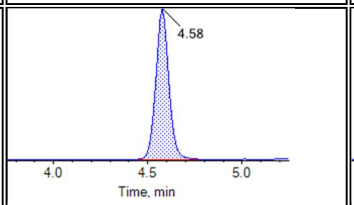
PFDoA_2



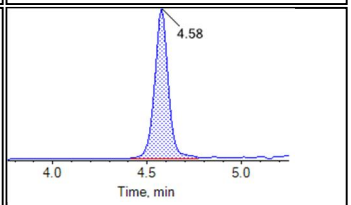
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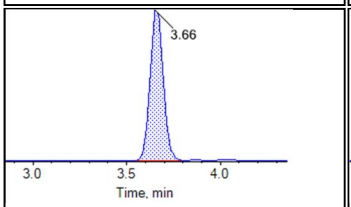
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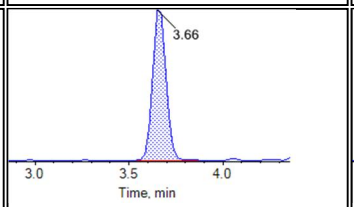
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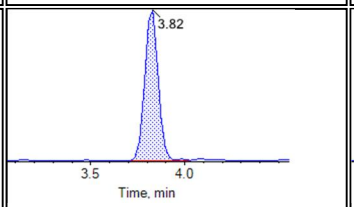
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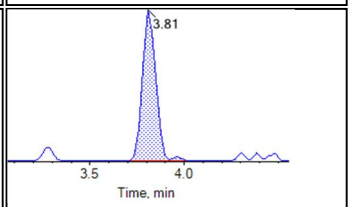
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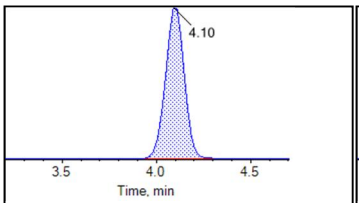


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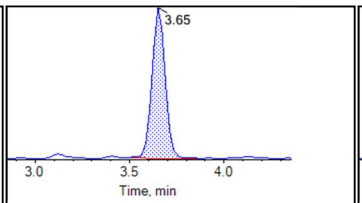


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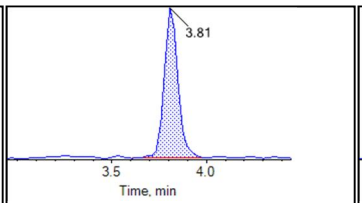
Internal Standards:



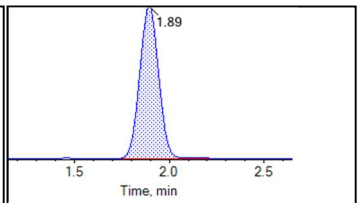
13C2-PFDoA



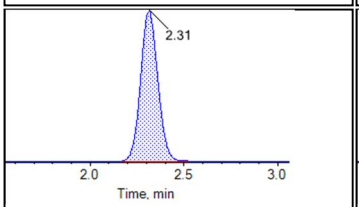
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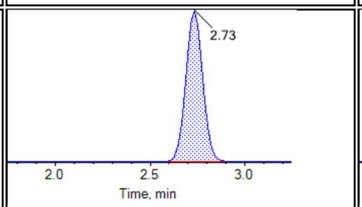
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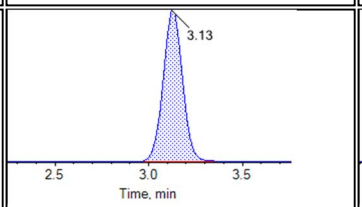
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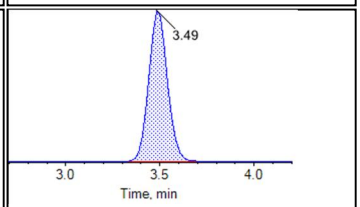
13C4-PFHpA



13C8-PFOA



13C9-PFNA

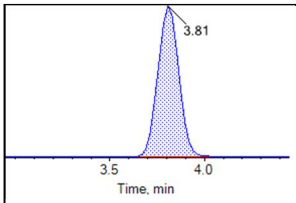


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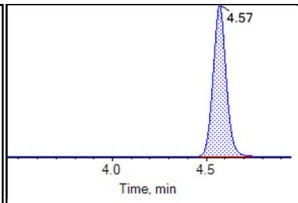
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Chromatogram Report

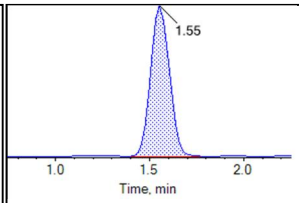
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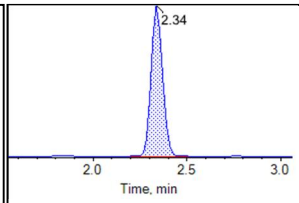
13C7-PFUnA



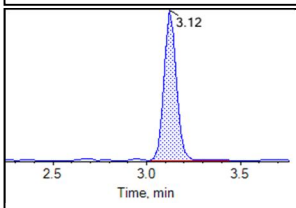
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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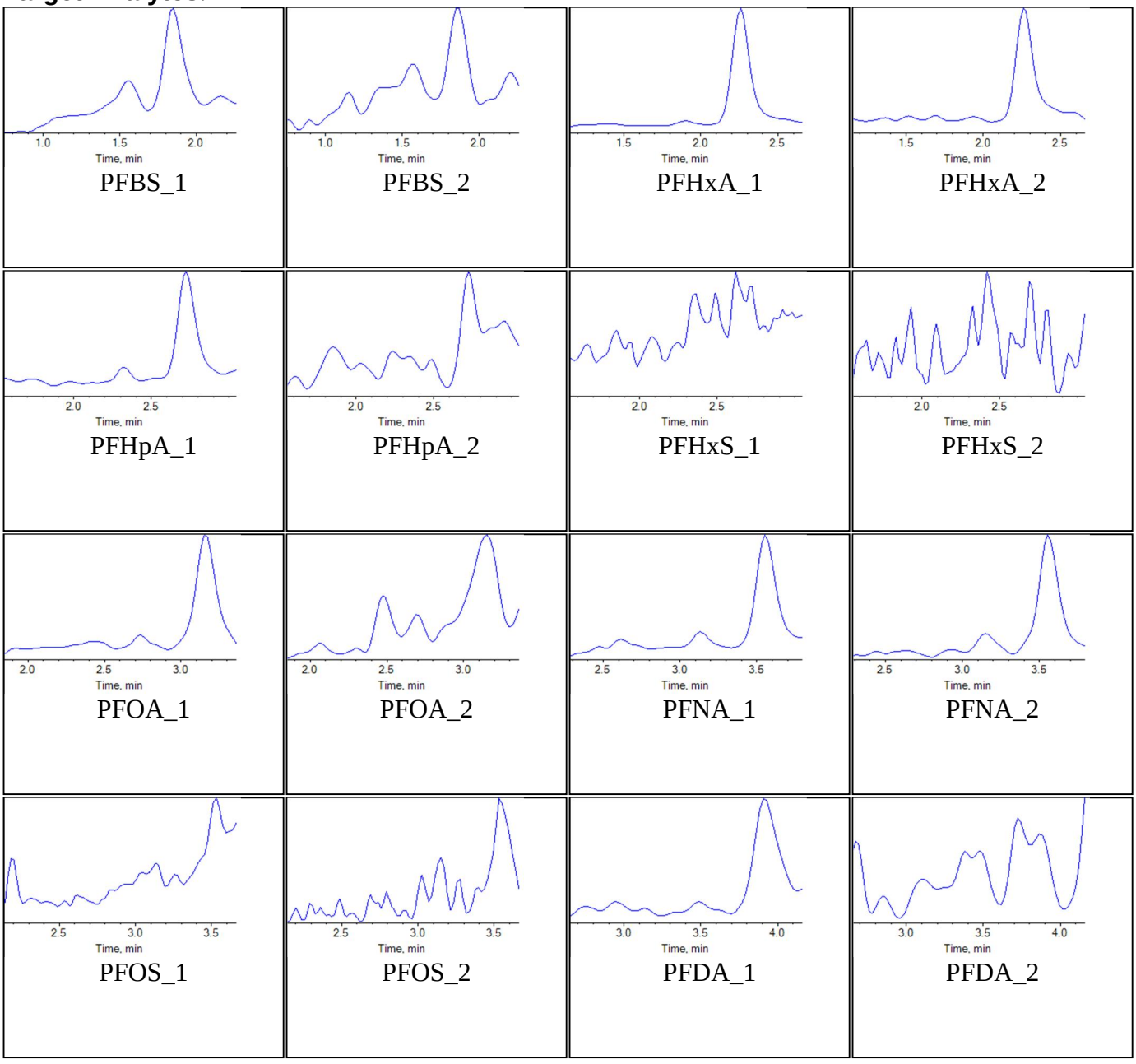
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 10:34:38 AM

Sample Name	KB80 IB	**Injection Vial**	2
Sample ID	Instrument Blank	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T18:27:43	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Chromatograms

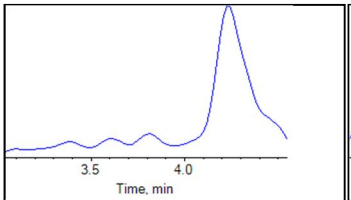
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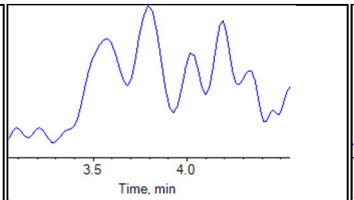
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Chromatogram Report

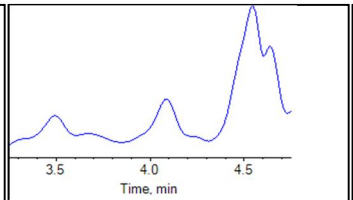
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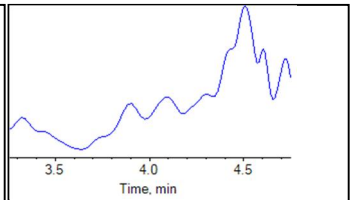
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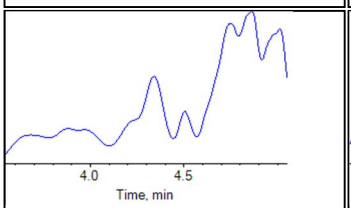
PFUnA_2



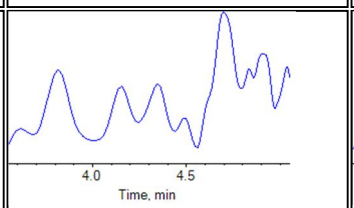
PFDoA_1



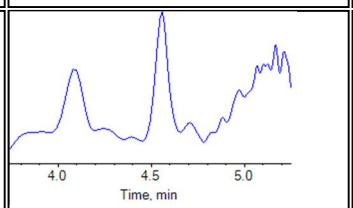
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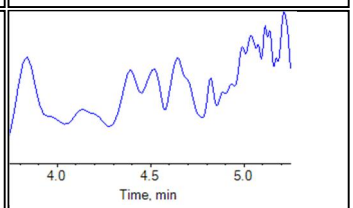
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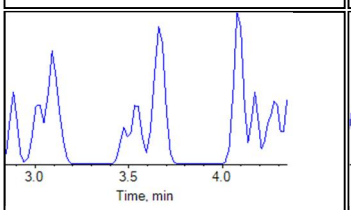
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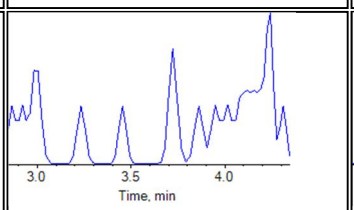
PFTeDA_1



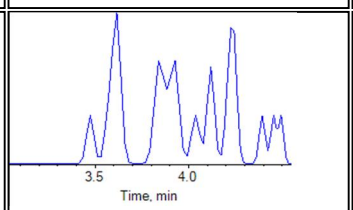
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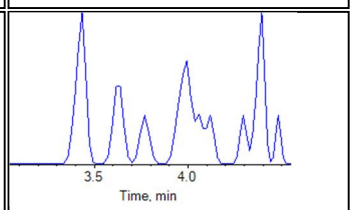
NMeFOSAA_1



NMeFOSAA_2

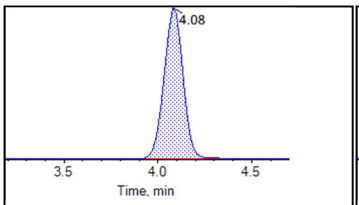


NEtFOSAA_1

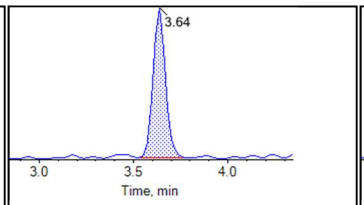


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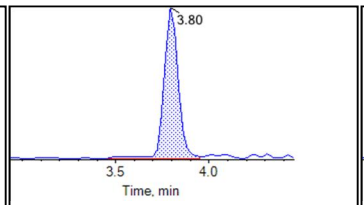
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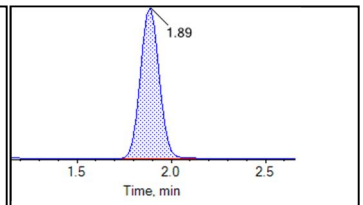
13C2-PFDoA



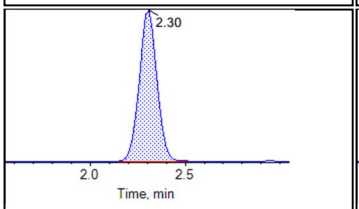
d3-MeFOSAA



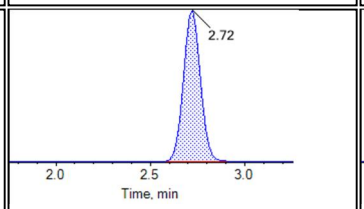
d5-EtFOSAA



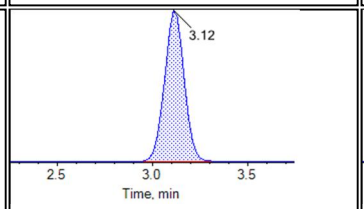
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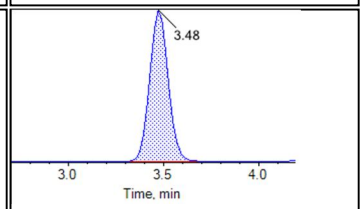
13C4-PFHpA



13C8-PFOA



13C9-PFNA

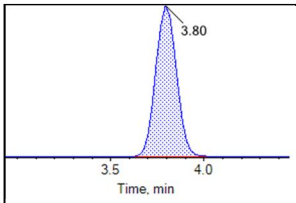


13C6-PFDA

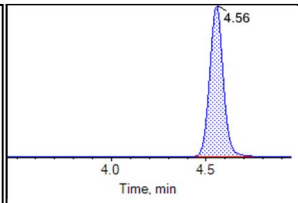
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Chromatogram Report

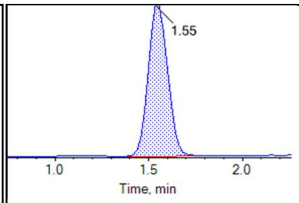
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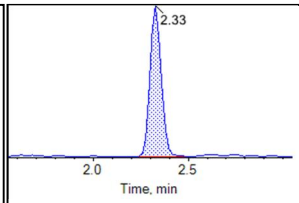
13C7-PFUnA



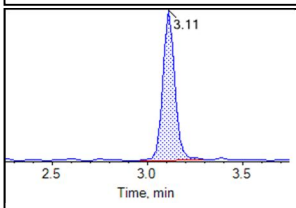
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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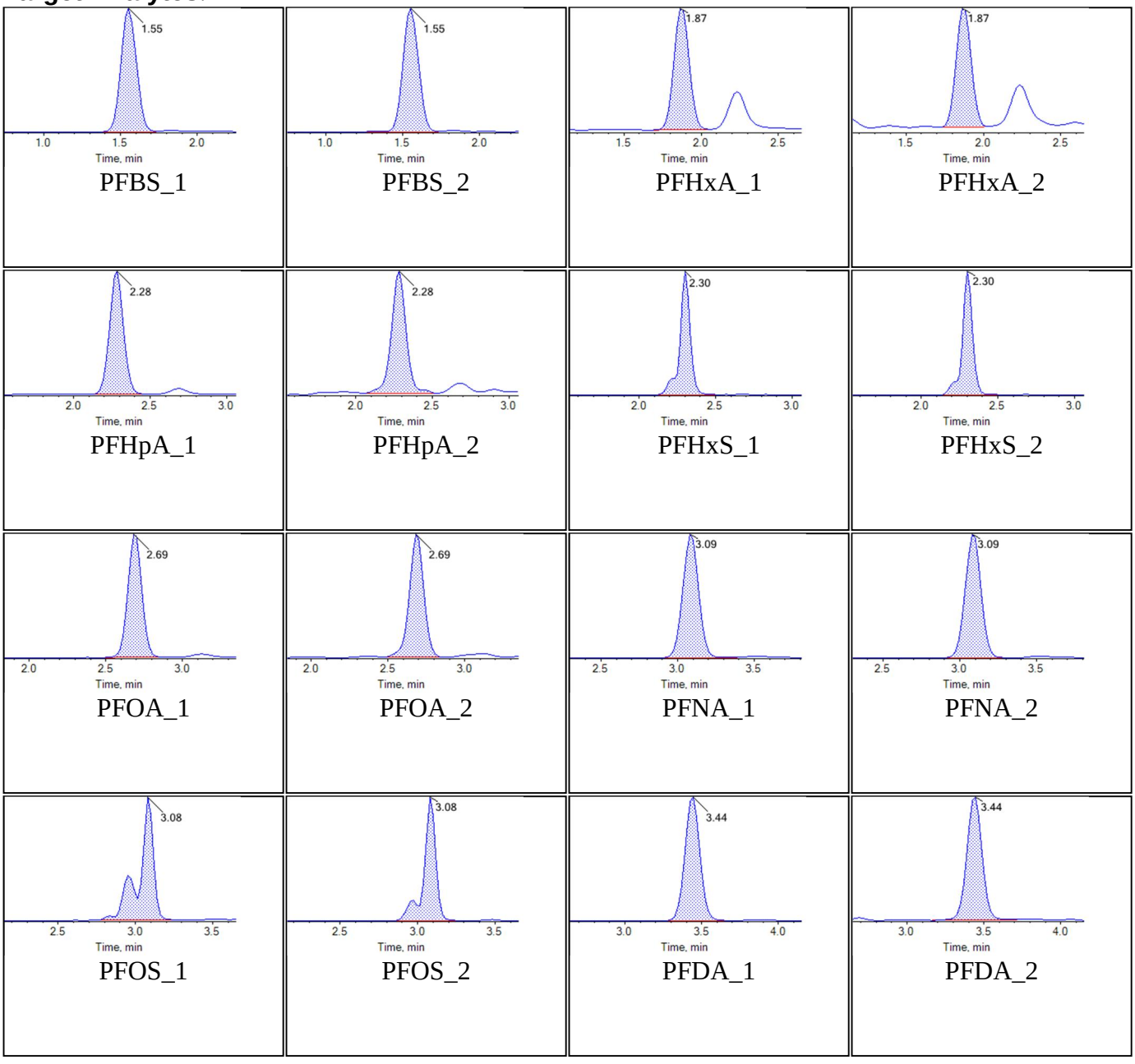
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 10:34:43 AM

Sample Name	KB77 CCV	**Injection Vial**	22
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T22:26:52	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Chromatograms

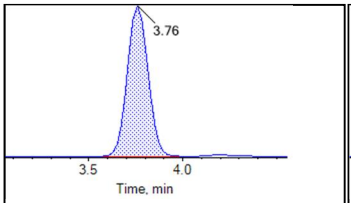
Target Analytes:



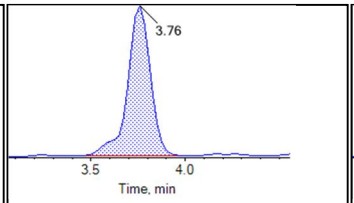
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Chromatogram Report

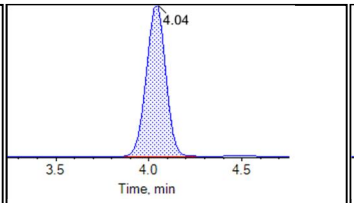
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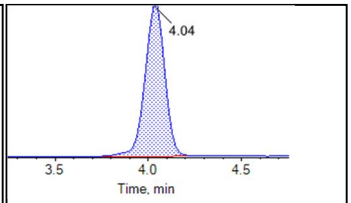
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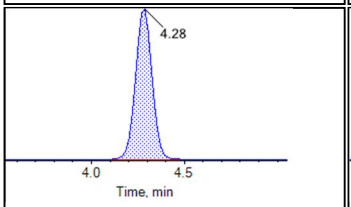
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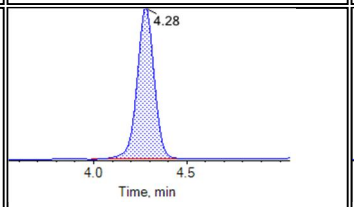
PFDoA_1



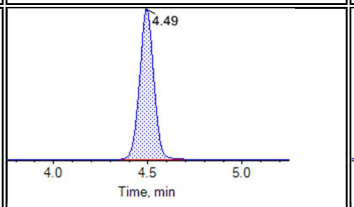
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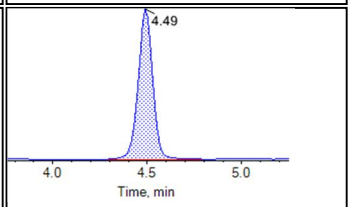
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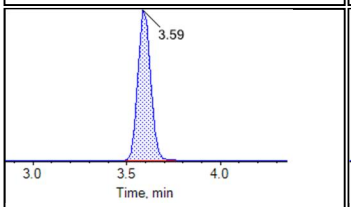
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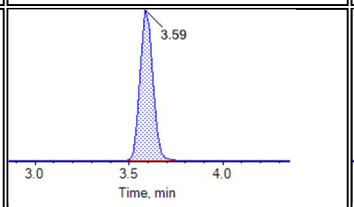
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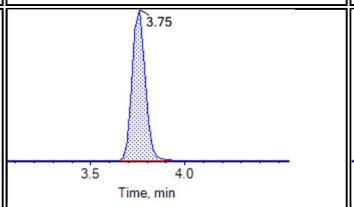
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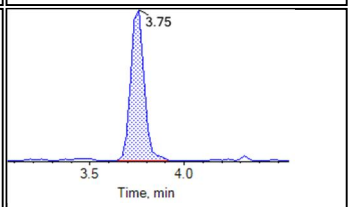
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NMeFOSAA_2

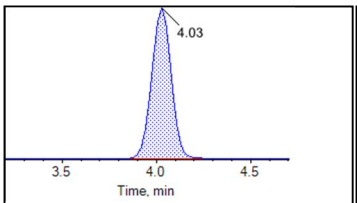


NEtFOSAA_1

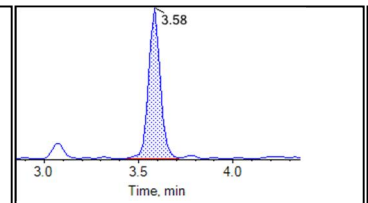


NEtFOSAA_2

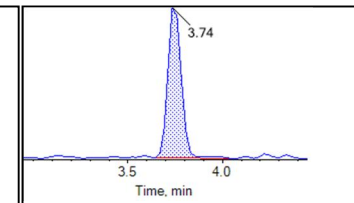
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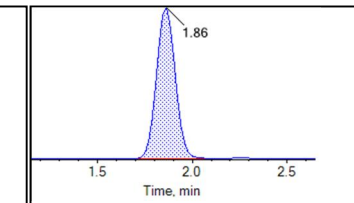
13C2-PFDoA



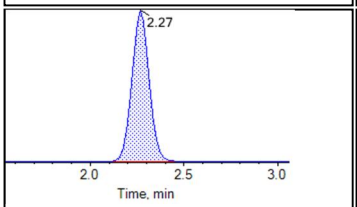
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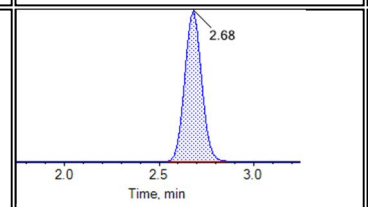
d5-EtFOSAA



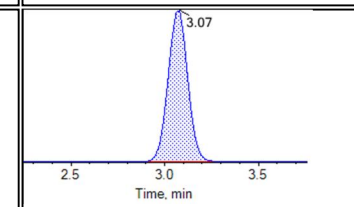
13C5-PFHxA



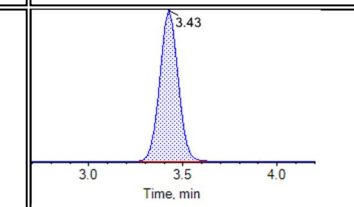
13C4-PFHpA



13C8-PFOA



13C9-PFNA

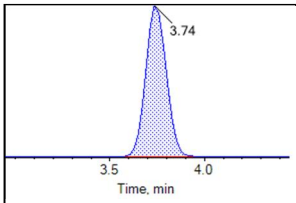


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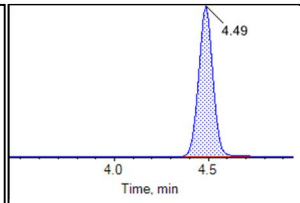
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Chromatogram Report

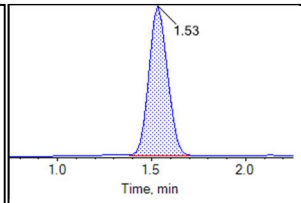
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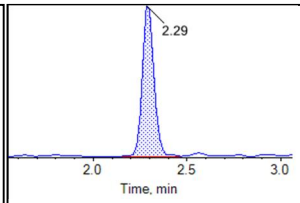
13C7-PFUnA



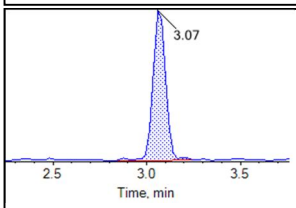
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

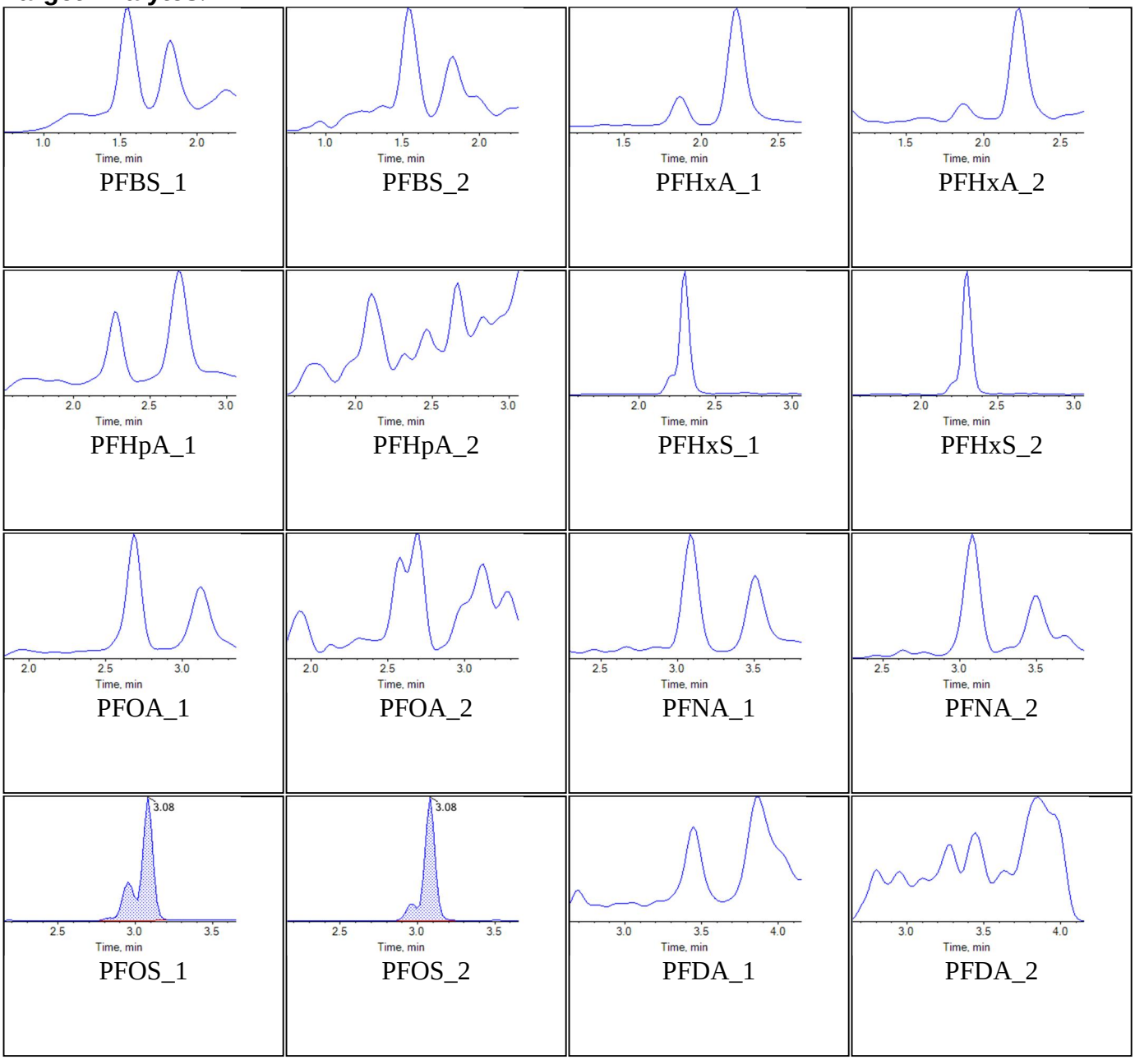
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 10:34:49 AM

Sample Name	J8440-FS-D(7)	**Injection Vial**	23
Sample ID	VC-MS09-SB01-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T22:48:35	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Chromatograms

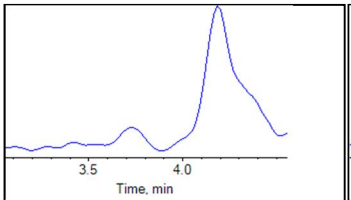
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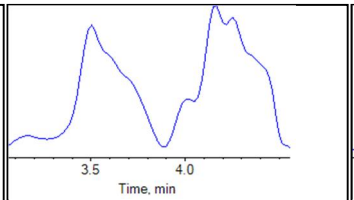
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Chromatogram Report

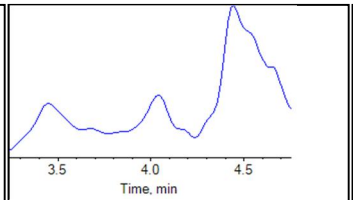
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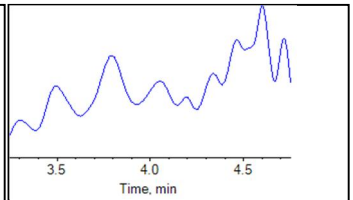
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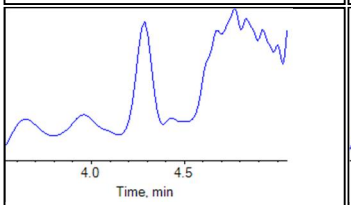
PFUnA_2



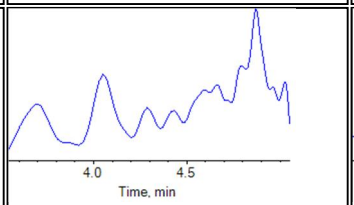
PFDoA_1



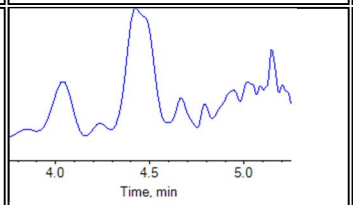
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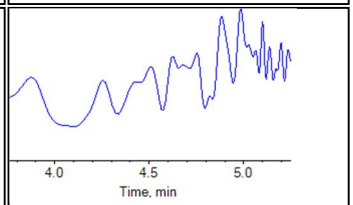
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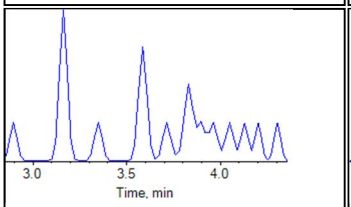
PFTrDA_2



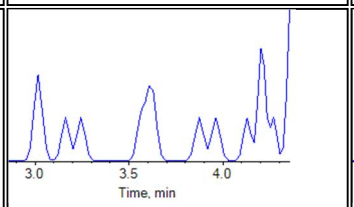
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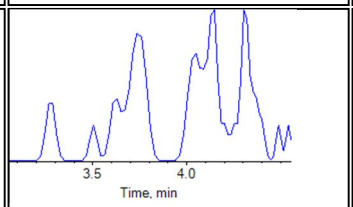
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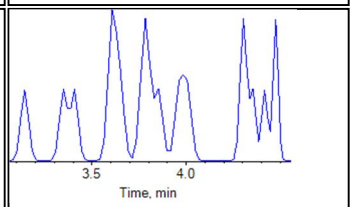
NMeFOSAA_1



NMeFOSAA_2

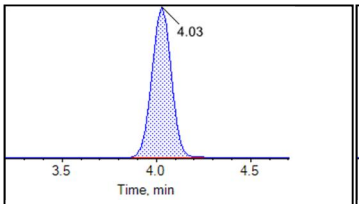


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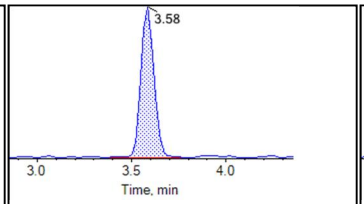


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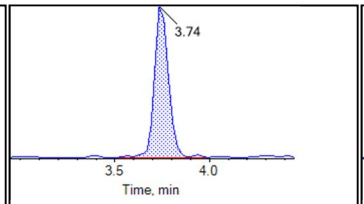
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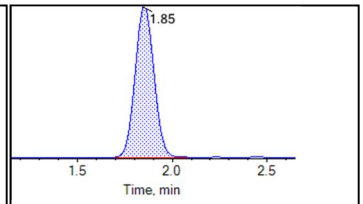
13C2-PFDoA



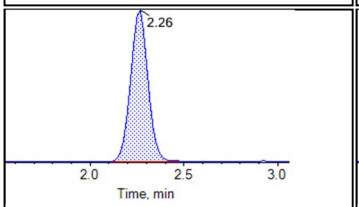
d3-MeFOSAA



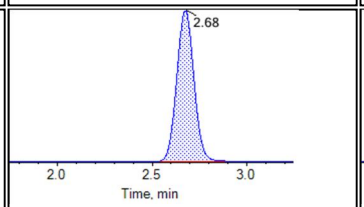
d5-EtFOSAA



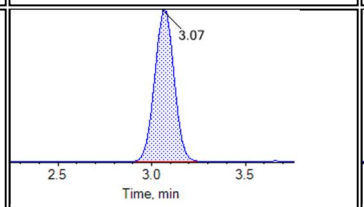
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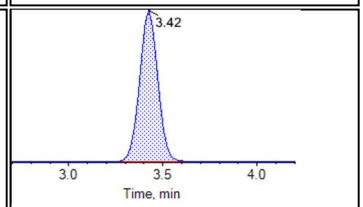
13C4-PFHpA



13C8-PFOA



13C9-PFNA

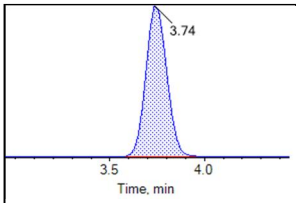


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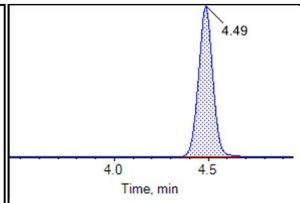
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Chromatogram Report

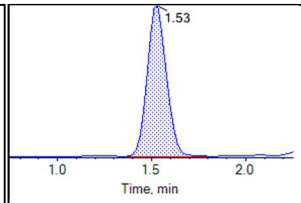
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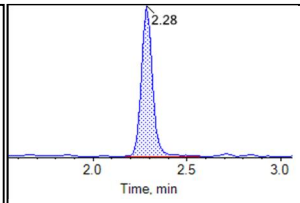
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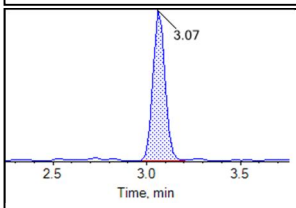
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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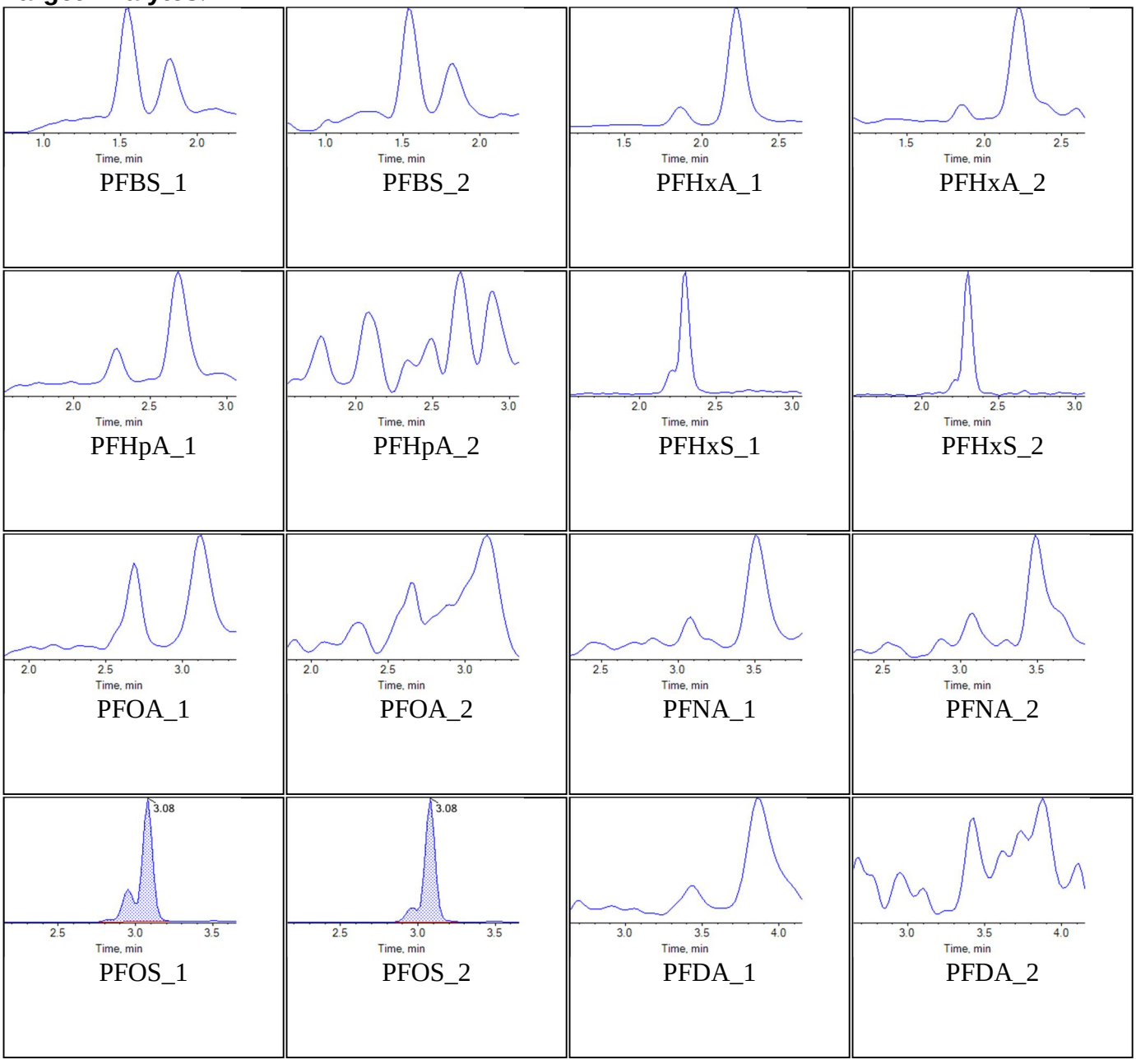
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 10:34:54 AM

Sample Name	J8443-FS-D(9)	**Injection Vial**	24
Sample ID	VC-MS09-SB02-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T22:59:28	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Chromatograms

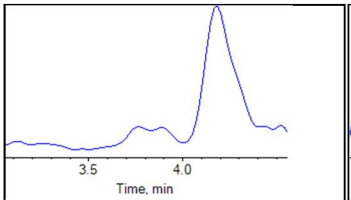
Target Analytes:



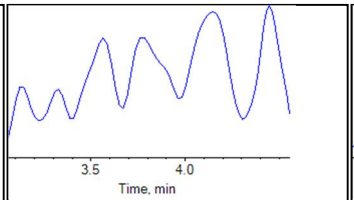
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Chromatogram Report

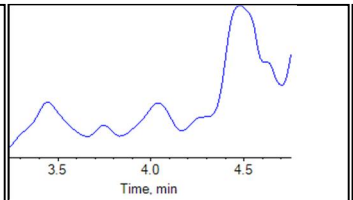
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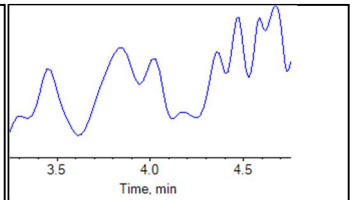
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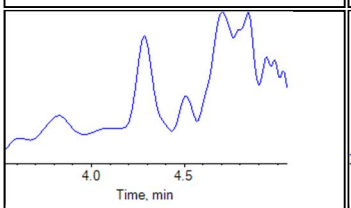
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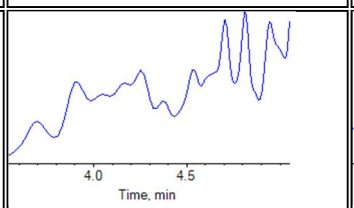
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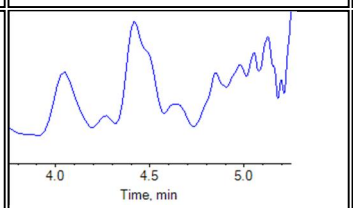
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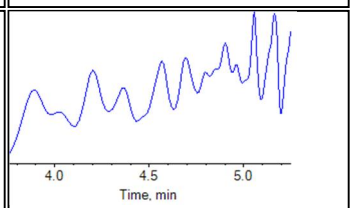
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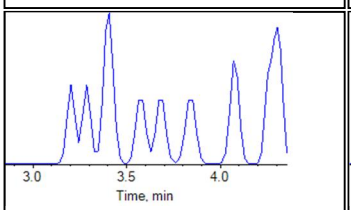
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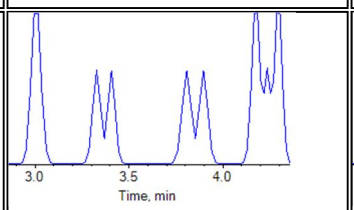
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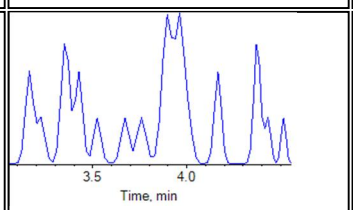
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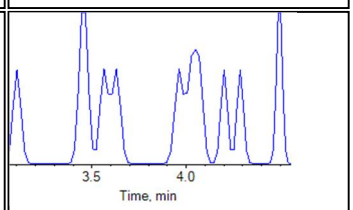
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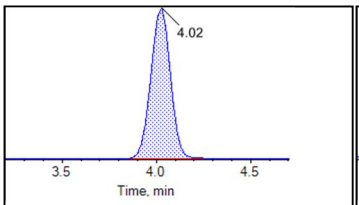


NEtFOSAA_1

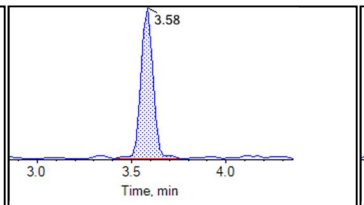


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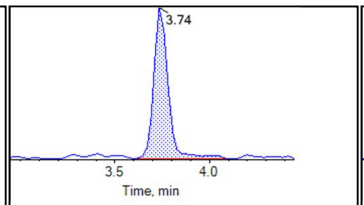
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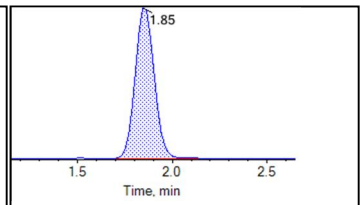
13C2-PFDoA



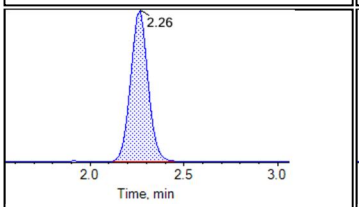
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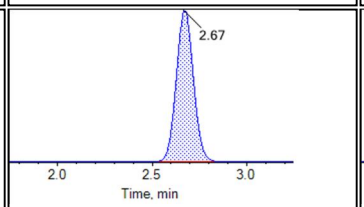
d5-EtFOSAA



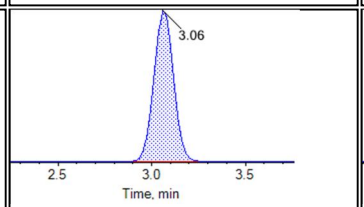
13C5-PFHxA



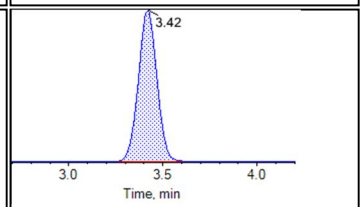
13C4-PFHpA



13C8-PFOA



13C9-PFNA

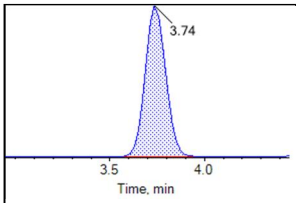


13C6-PFDA

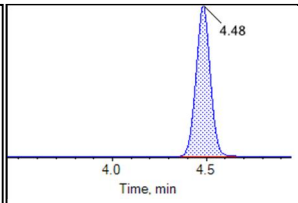
BATTELLE

Chromatogram Report

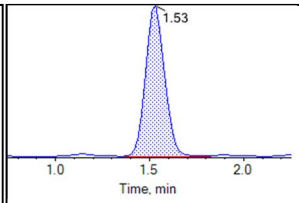
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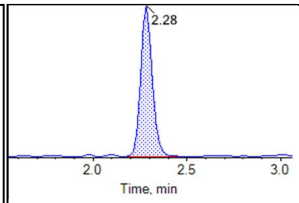
13C7-PFUnA



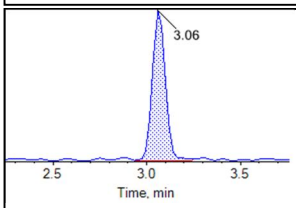
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

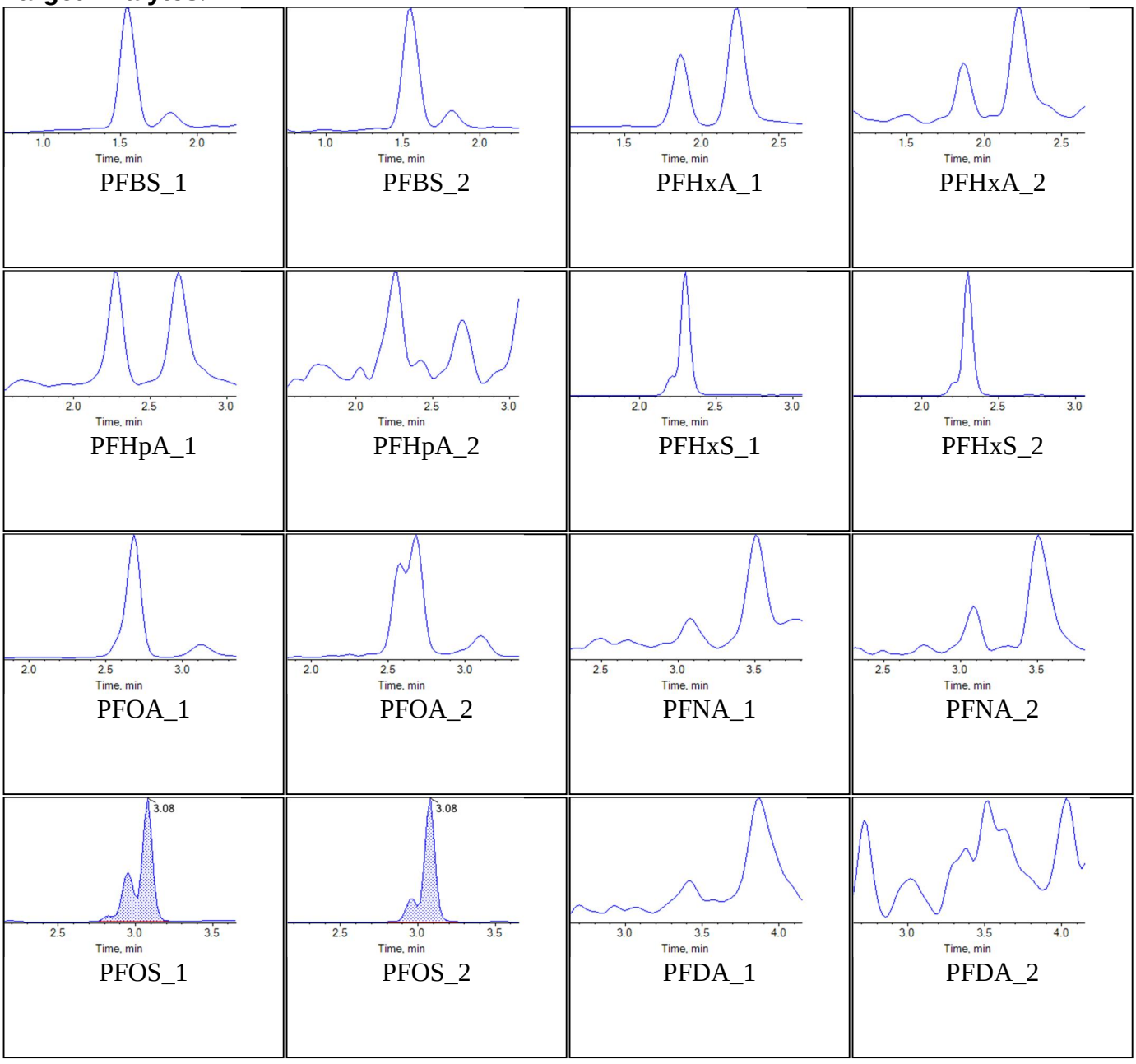
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 10:35:02 AM

Sample Name	J8445-FS-D(11)	**Injection Vial**	25
Sample ID	VC-MS09-SB03-0102	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:10:20	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Chromatograms

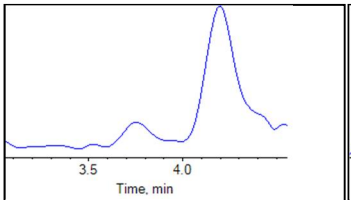
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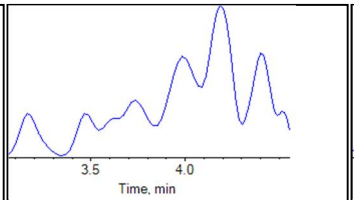
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Chromatogram Report

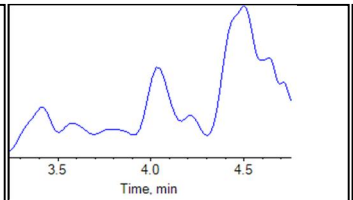
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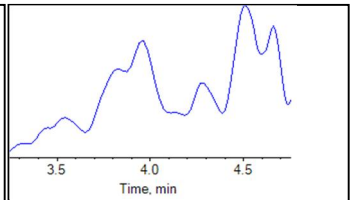
PFUnA_1



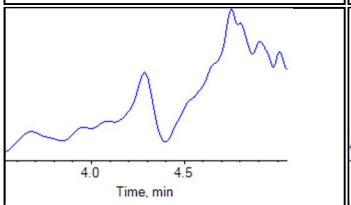
PFUnA_2



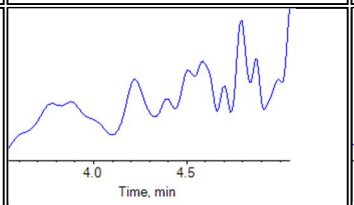
PFDoA_1



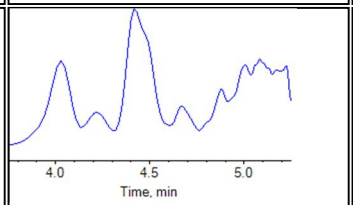
PFDoA_2



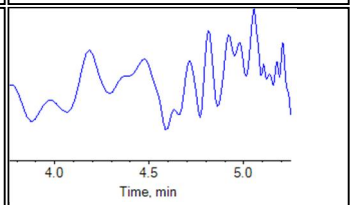
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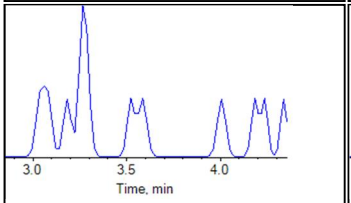
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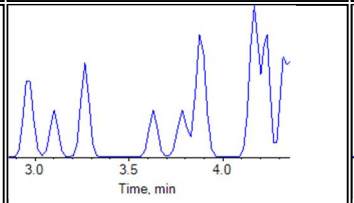
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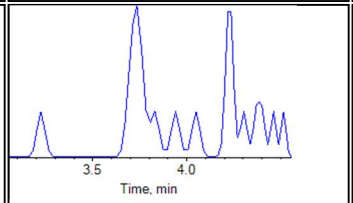
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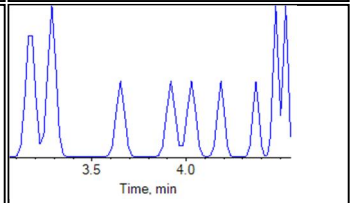
NMeFOSAA_1



NMeFOSAA_2

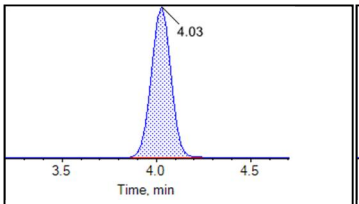


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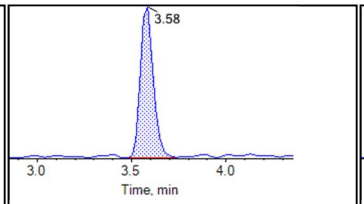


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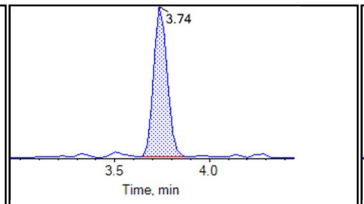
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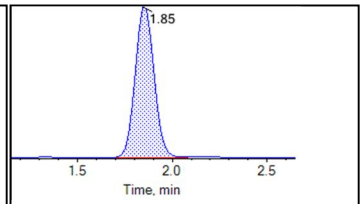
13C2-PFDoA



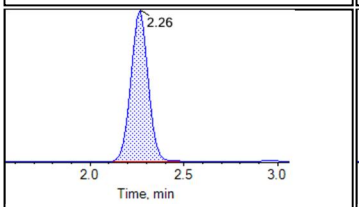
d3-MeFOSAA



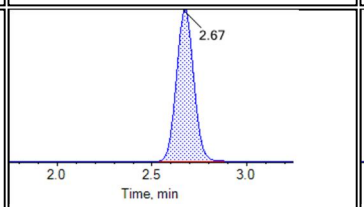
d5-EtFOSAA



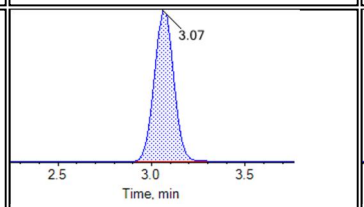
13C5-PFHxA



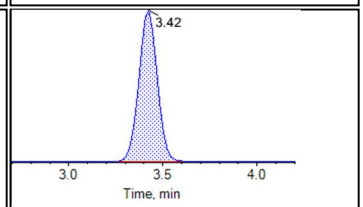
13C4-PFHpA



13C8-PFOA



13C9-PFNA

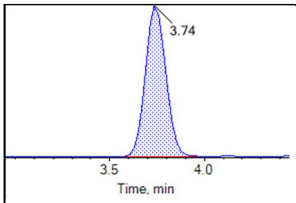


13C6-PFDA

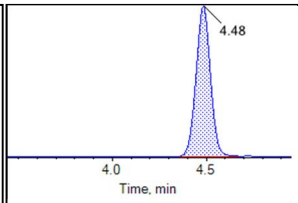
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Chromatogram Report

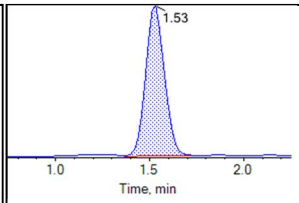
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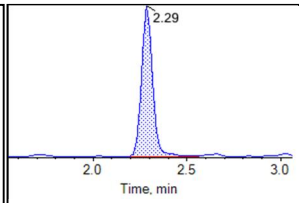
13C7-PFUnA



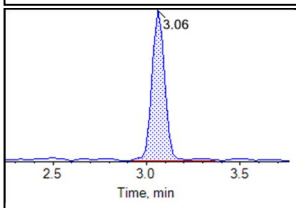
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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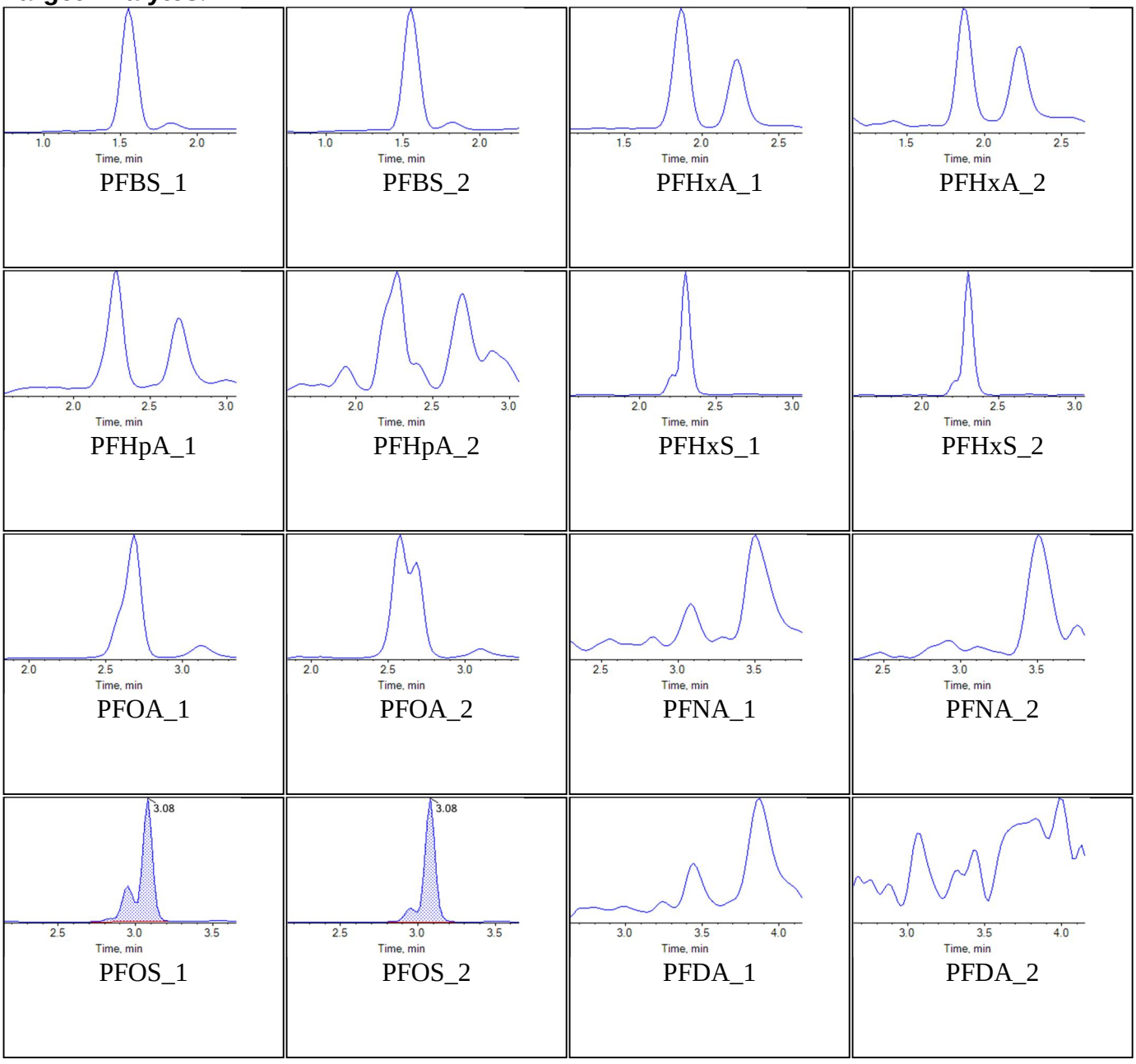
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 10:35:07 AM

Sample Name	J8446-FS-D(7)	**Injection Vial**	26
Sample ID	VC-MS09-SB03-0506	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:21:12	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Chromatograms

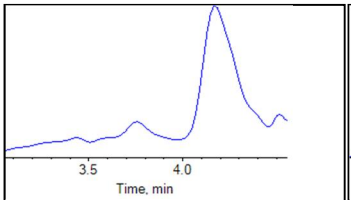
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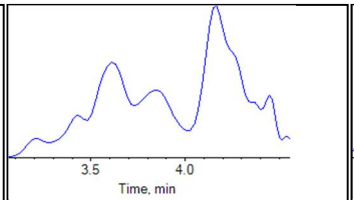
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Chromatogram Report

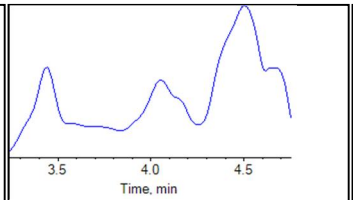
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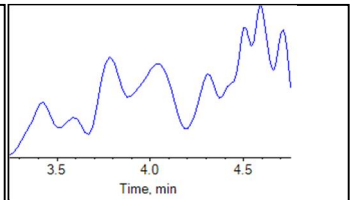
PFUnA_1



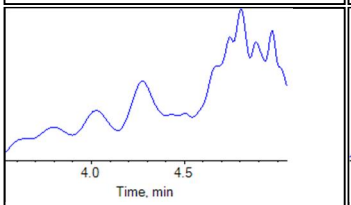
PFUnA_2



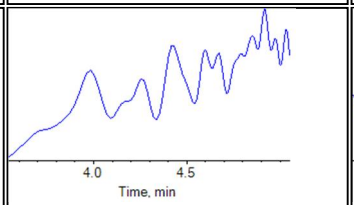
PFDoA_1



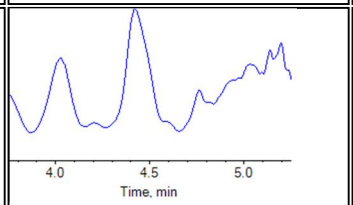
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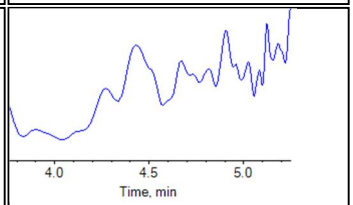
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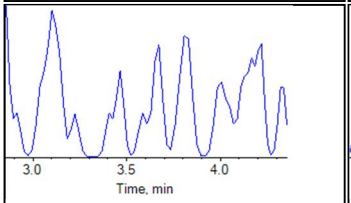
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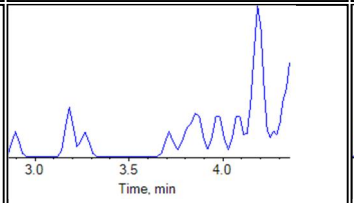
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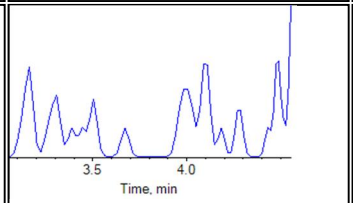
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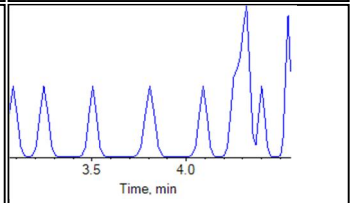
NMeFOSAA_1



NMeFOSAA_2

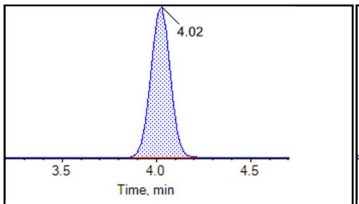


NEtFOSAA_1

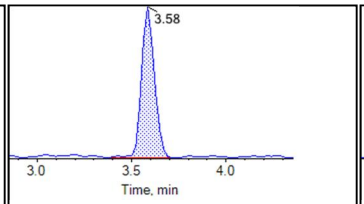


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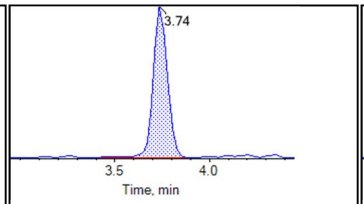
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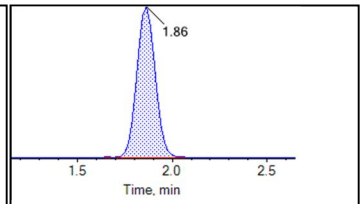
13C2-PFDoA



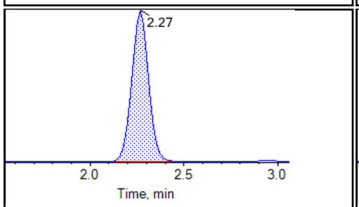
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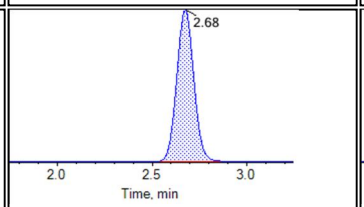
d5-EtFOSAA



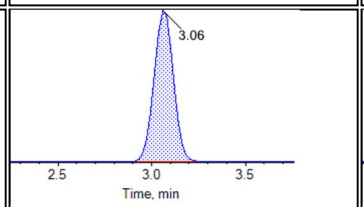
13C5-PFHxA



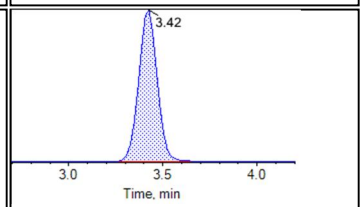
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13C8-PFOA



13C9-PFNA

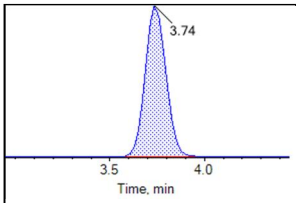


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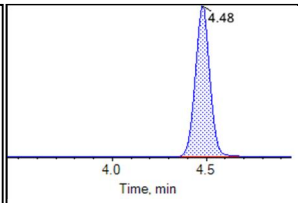
BATTELLE

Chromatogram Report

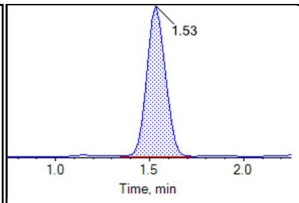
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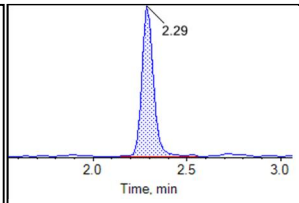
13C7-PFUnA



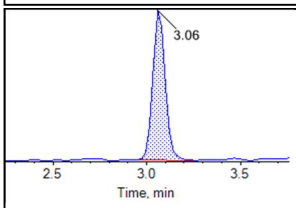
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

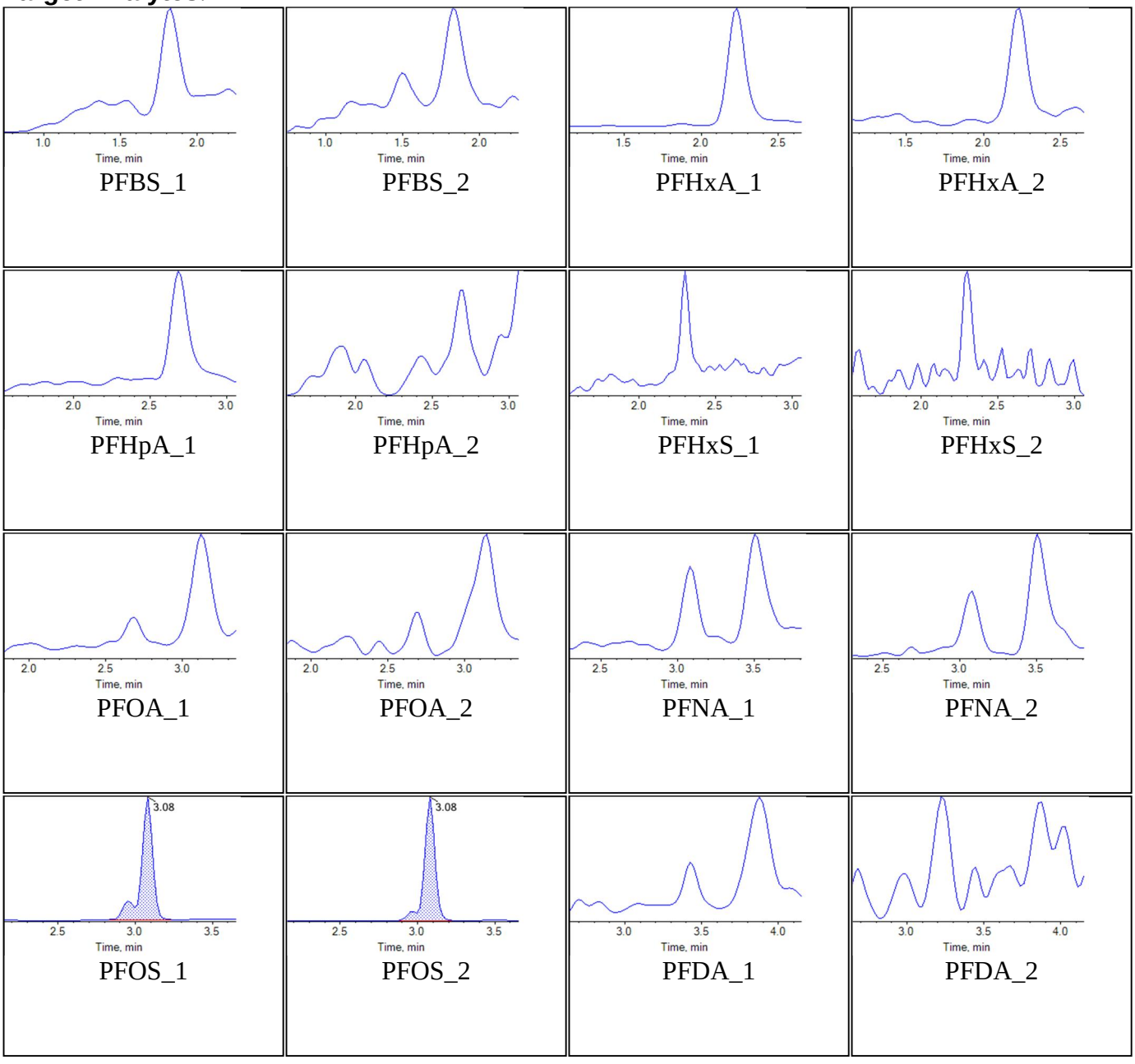
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 10:35:13 AM

Sample Name	J8450-FS-D(7)	**Injection Vial**	27
Sample ID	VC-MS09-SS05-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:32:04	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Chromatograms

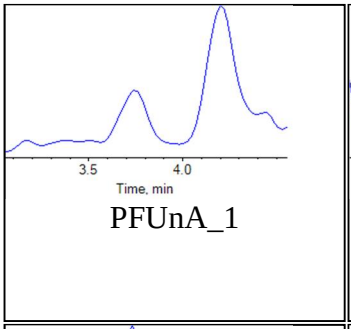
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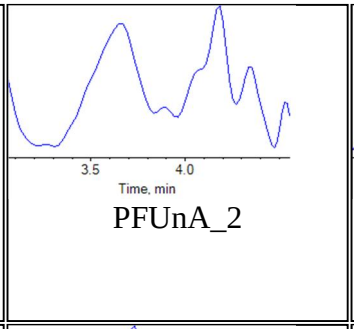
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Chromatogram Report

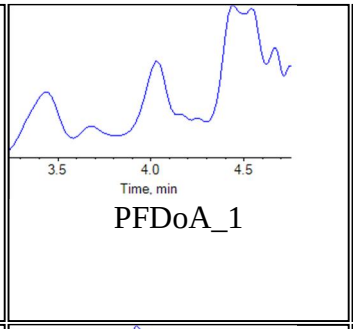
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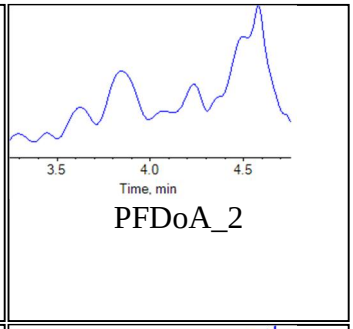
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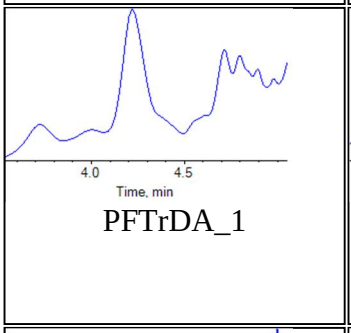
PFUnA_2



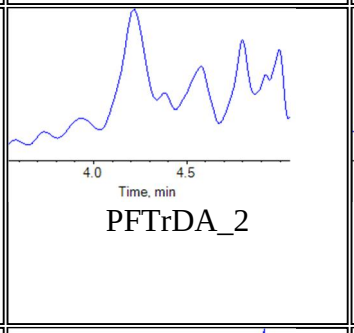
PFDoA_1



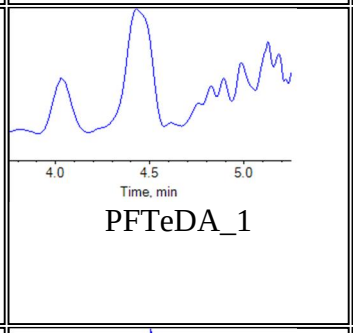
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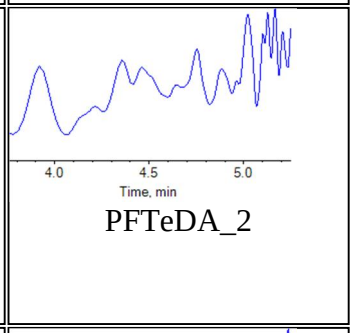
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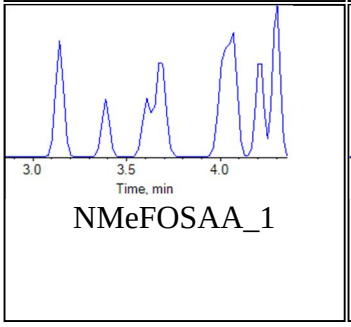
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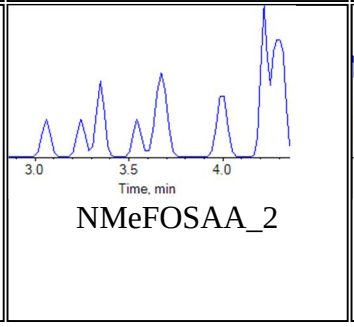
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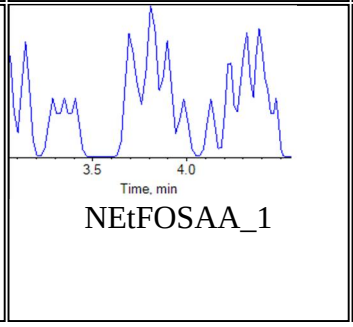
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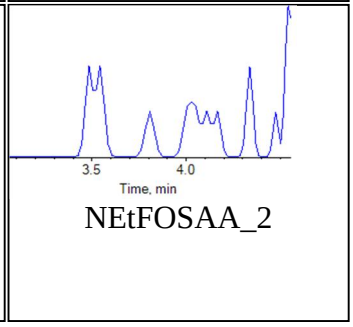
NMeFOSAA_1



NMeFOSAA_2

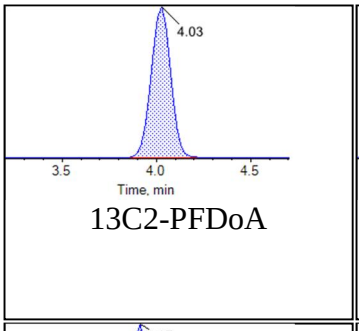


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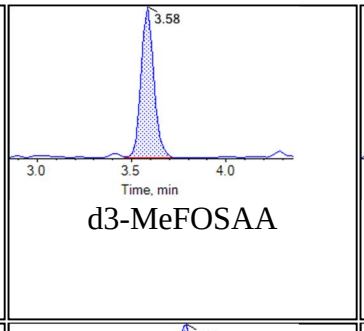


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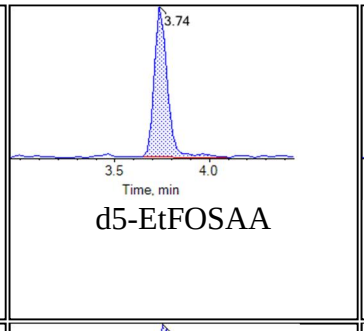
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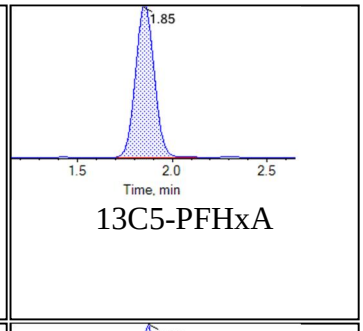
13C2-PFDoA



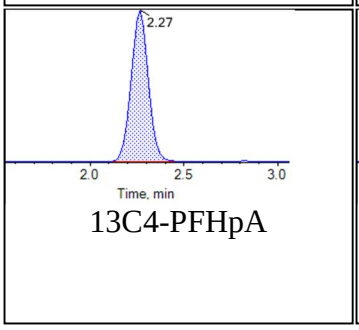
d3-MeFOSAA



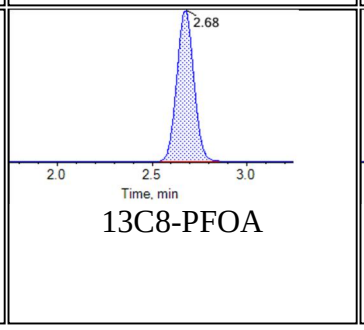
d5-EtFOSAA



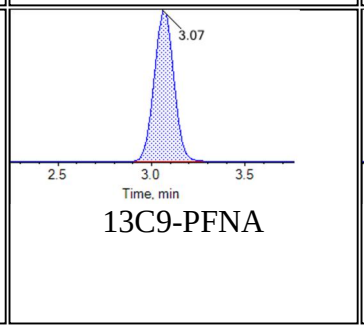
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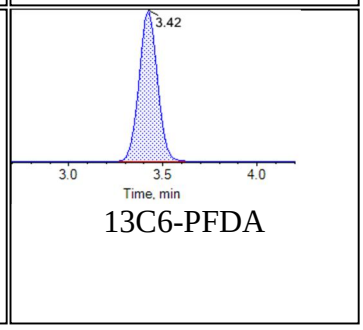
13C4-PFHpA



13C8-PFOA



13C9-PFNA

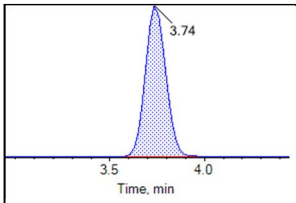


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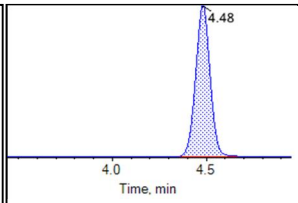
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Chromatogram Report

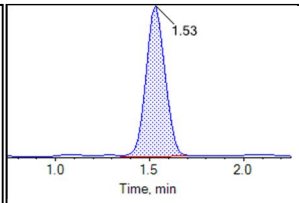
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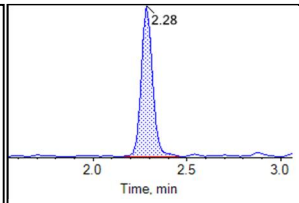
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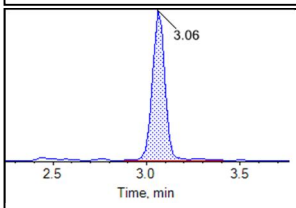
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

BATTELLE

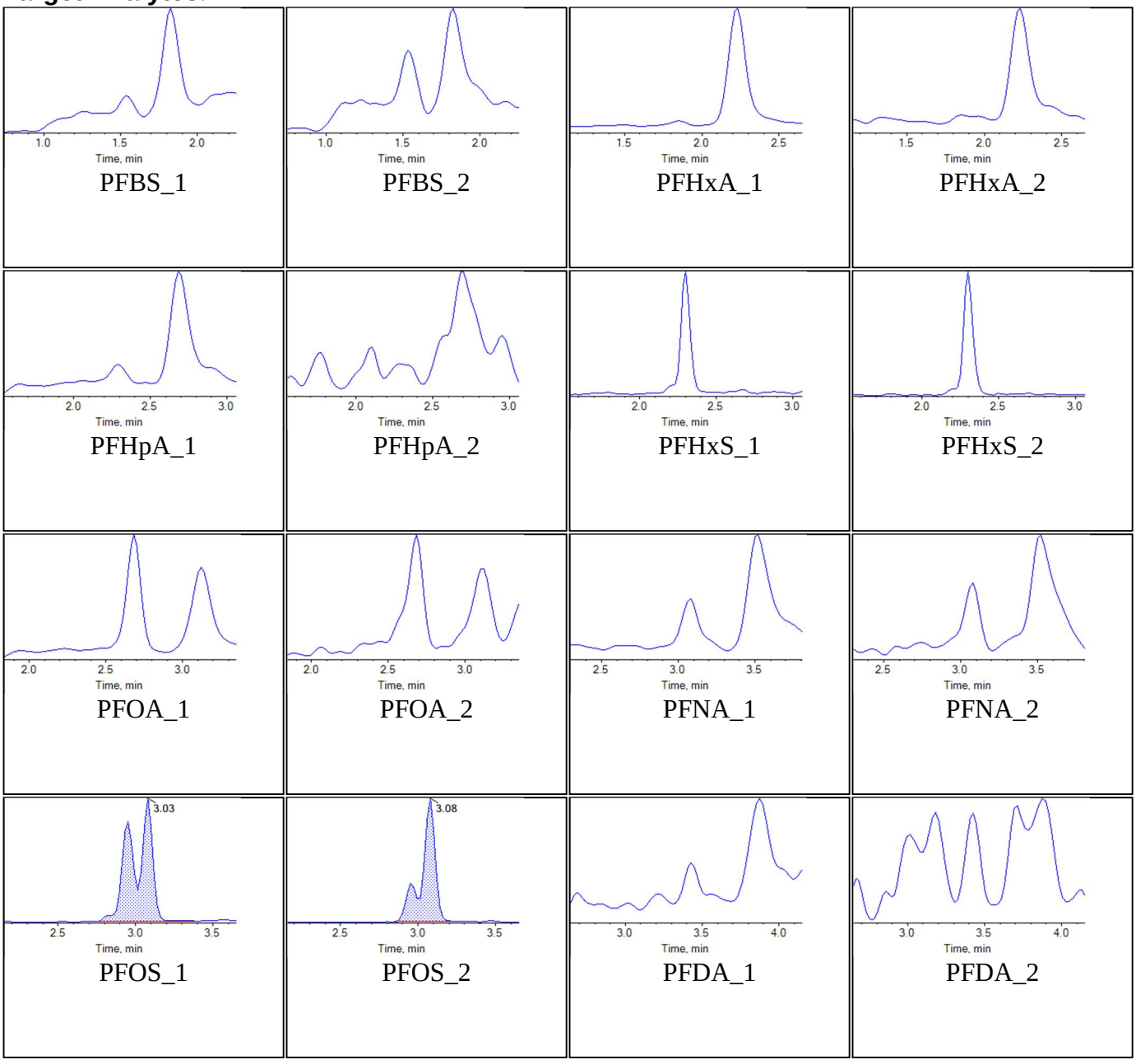
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 10:35:19 AM

Sample Name	J8444-FS-D(17)	**Injection Vial**	28
Sample ID	VC-MS09-SS03-000H	**Injection Volume**	10.00
Sample Type	Unknown	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:42:56	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Chromatograms

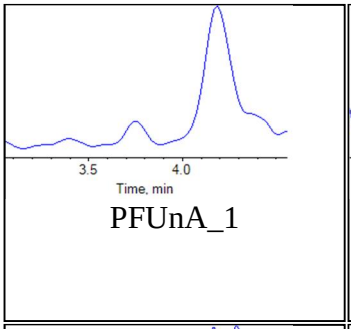
Target Analytes:



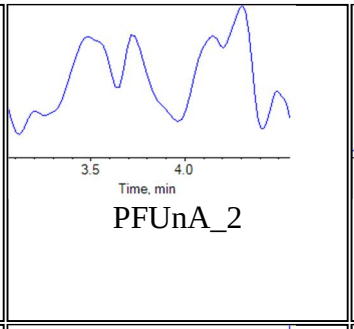
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Chromatogram Report

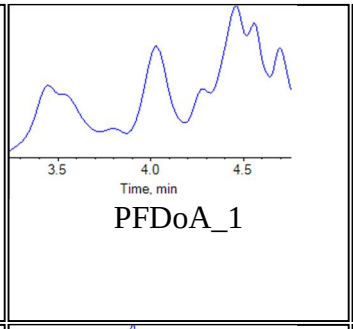
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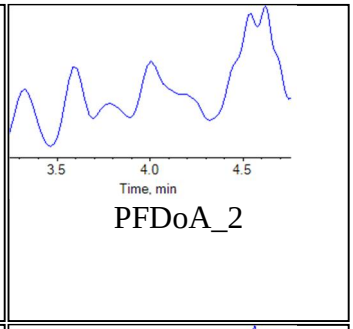
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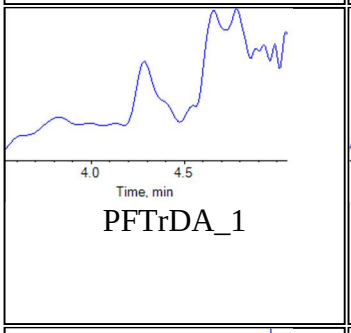
PFUnA_2



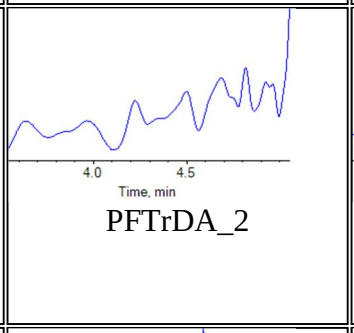
PFDoA_1



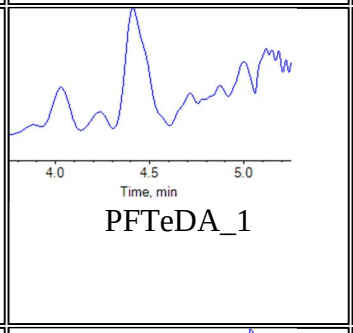
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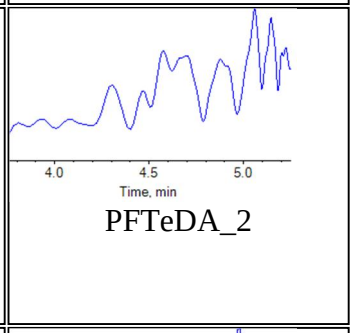
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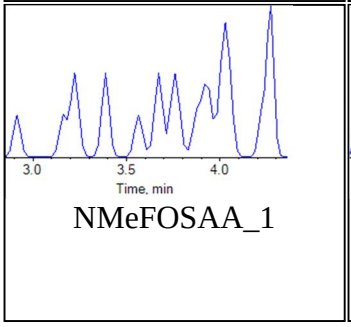
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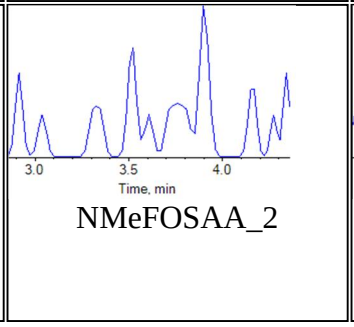
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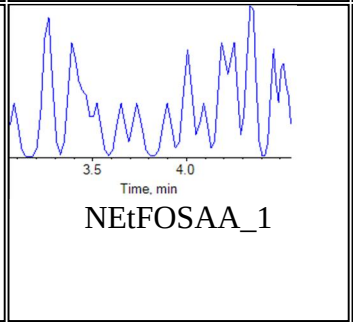
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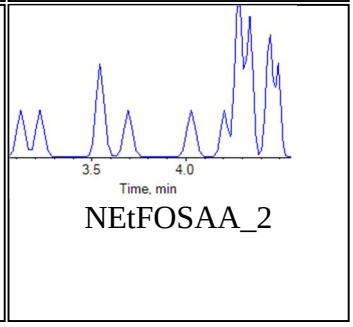
NMeFOSAA_1



NMeFOSAA_2

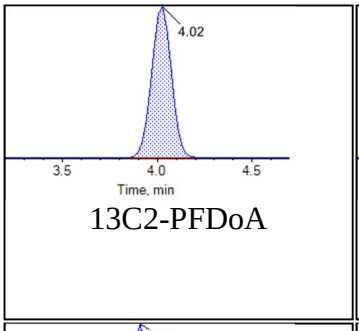


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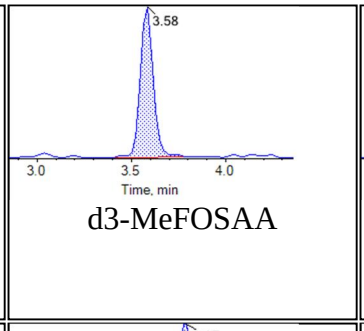


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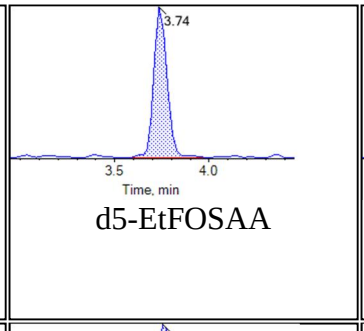
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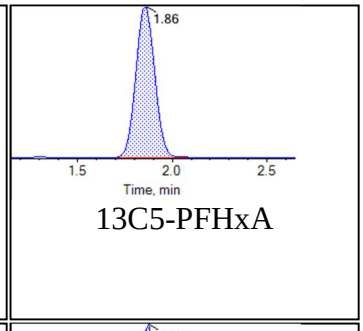
13C2-PFDoA



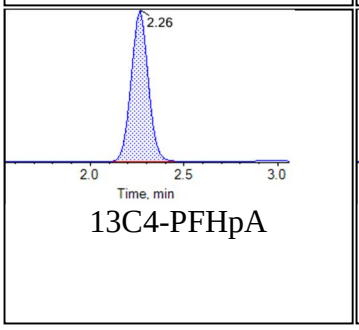
d3-MeFOSAA



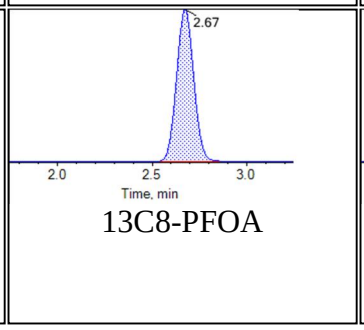
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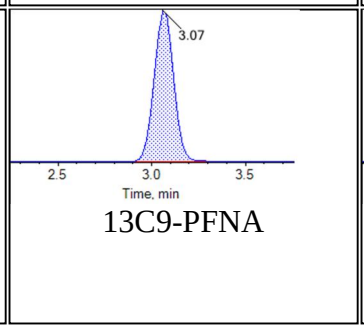
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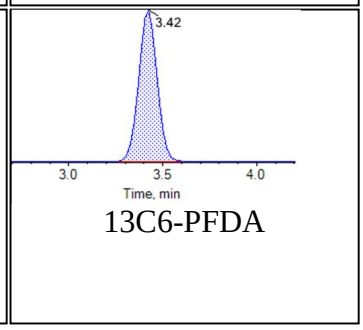
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13C8-PFOA



13C9-PFNA

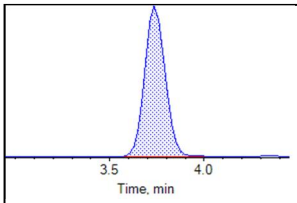


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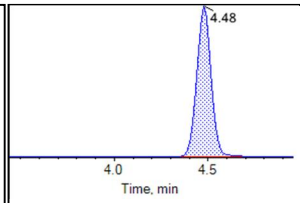
BATTELLE

Chromatogram Report

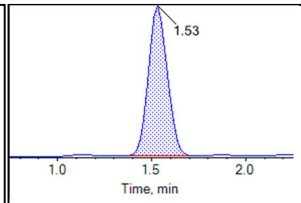
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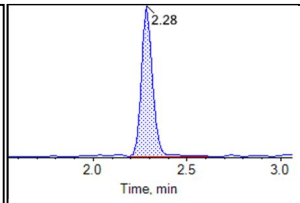
13C7-PFUnA



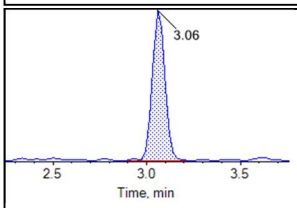
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

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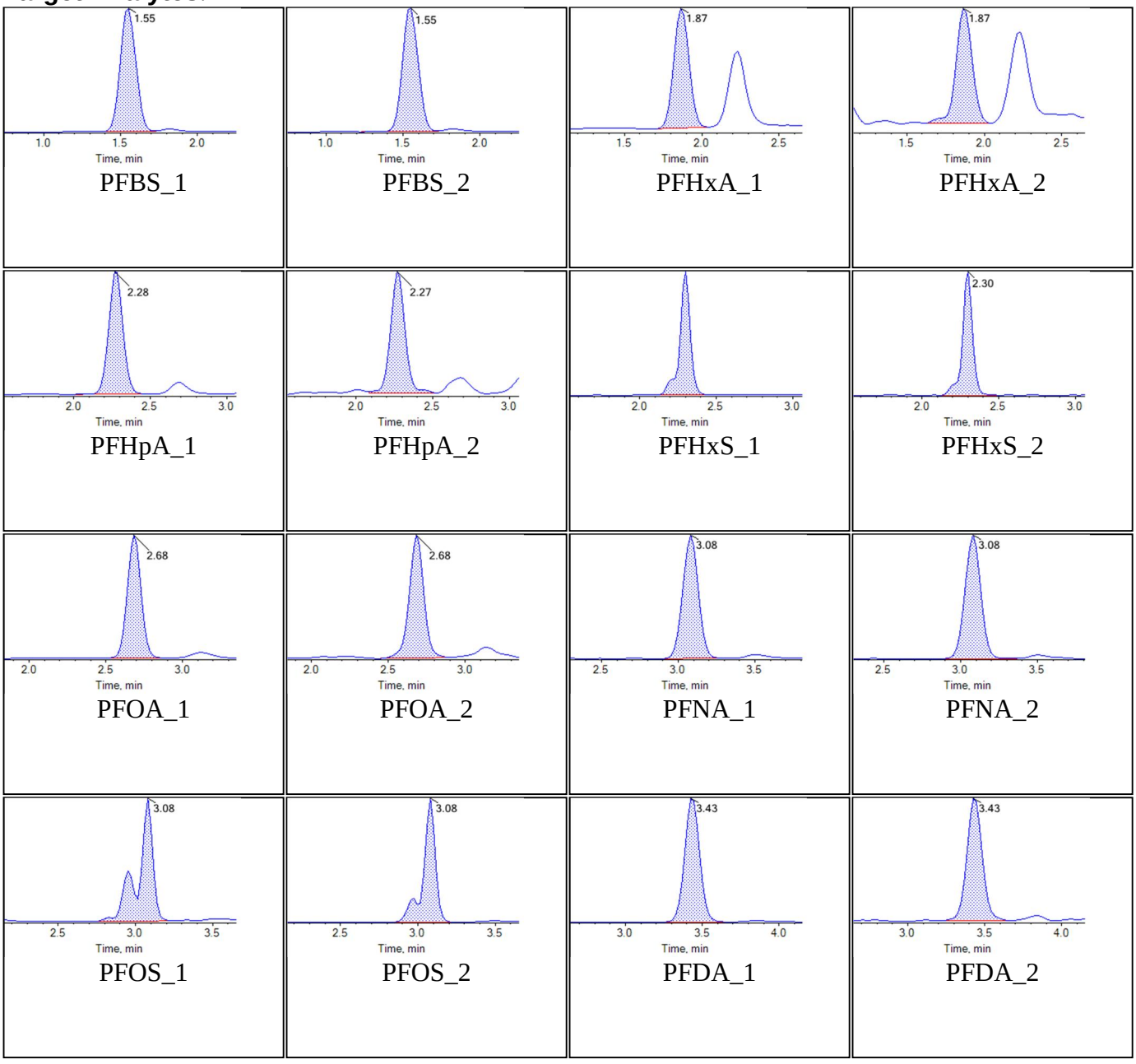
Chromatogram Report

Created with Analyst Reporter
Printed: 25/10/2018 10:35:24 AM

Sample Name	KB76 CCV	**Injection Vial**	29
Sample ID	CCV	**Injection Volume**	10.00
Sample Type	Quality Control	**Instrument Name**	QTRAP 5500
Acquisition Date	2018-10-19T23:53:48	**Data File**	10192018.wiff
Acquisition Method	5-0369.dam	**Result Table**	18222018_D
Sample Comment			

Chromatograms

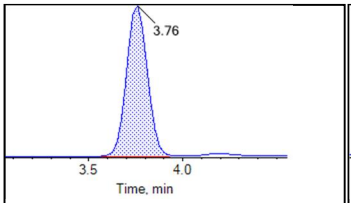
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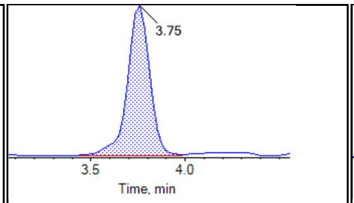
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Chromatogram Report

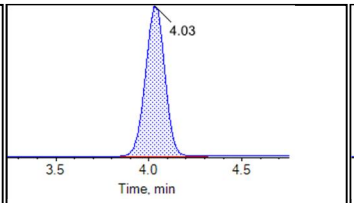
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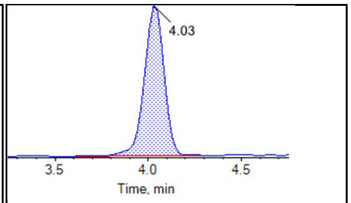
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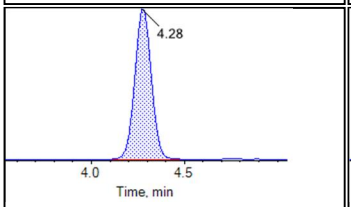
PFUnA_2



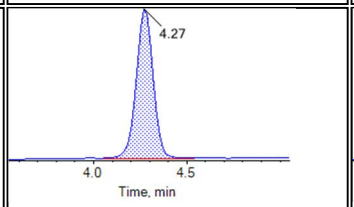
PFDoA_1



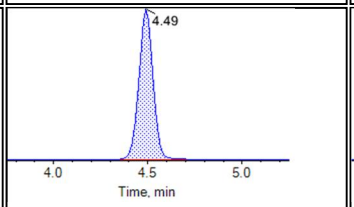
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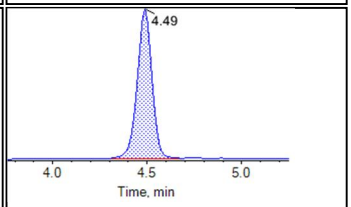
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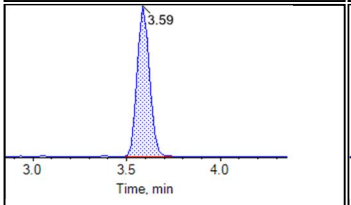
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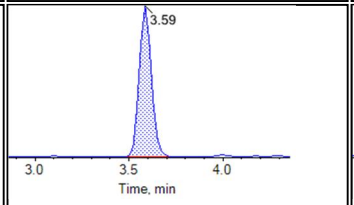
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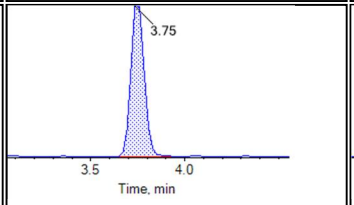
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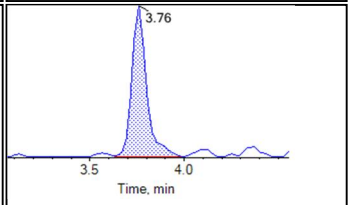
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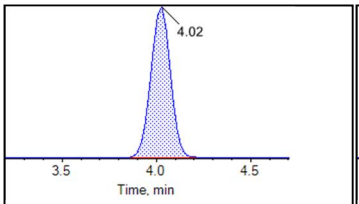


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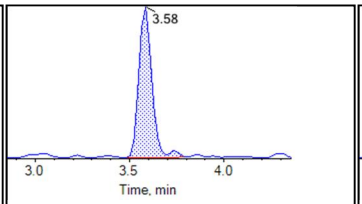


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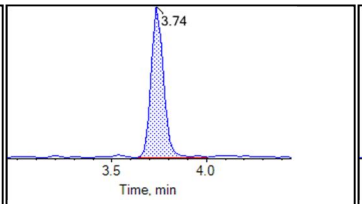
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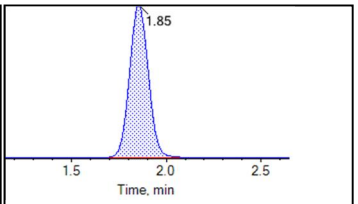
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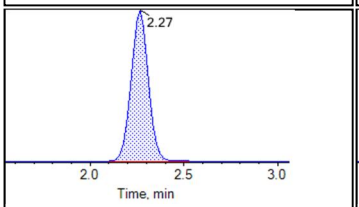
d3-MeFOSAA



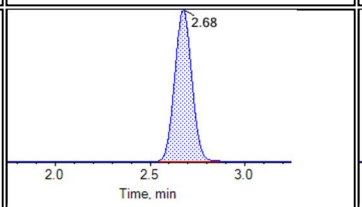
d5-EtFOSAA



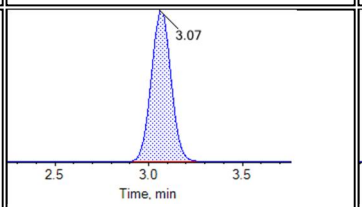
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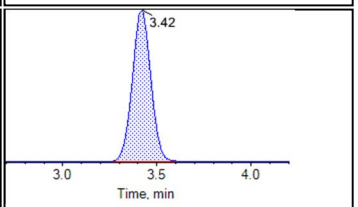
13C4-PFHpA



13C8-PFOA



13C9-PFNA

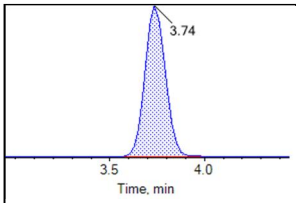


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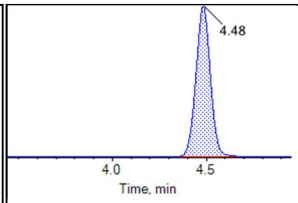
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Chromatogram Report

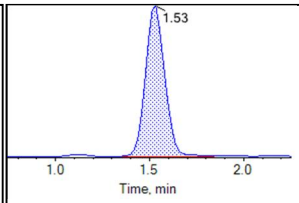
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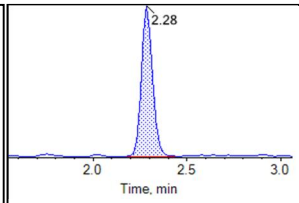
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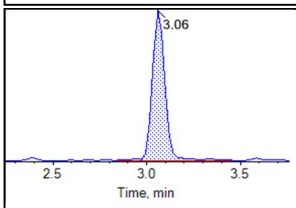
13C2-PFTeDA



13C3-PFBS



13C3-PFHxS



13C8-PFOS

Contract_I	DO_CTO_T	Phase	Installatior	Sample_Name	CH2M_Coc	Analysis_G	Analytical_	PRC_Code	Lab_Code	Lab_Name	Leachate_I	SAMPLE_B	Extraction_	Result_Typ	Lab_QC_ty	SAMPLE_N	QC_Level	DateTime_Collected	Date_Received	Leachate_I	Leachate_T	Extraction_	Extraction_	Analysis_D	Analysis_T	Lab_Sampl	Dilution	Run_Numt	PERCENT_I	PERCENT_I	Chem_Nar	Analyte_ID	Analyte_Vi	Original_A	Result_Uni	Lab_Qualif	Validator_	GC_Colum	Analysis_R	Result_Nat	QC_Contrc	QC_Accura	QC_Accura	Control_Lii	QC_Narrat	MDL	Detection_	QSM_Vers	DL	LOD	LOQ	SDG	Analysis_B	Validator_	Val_Date
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N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	13:32:35	J8441-FS	10	1	19.1	Perfluoro	t 376-06-7		2.45	NG_G	U		TRG			20171116		0.77	0.77	5.1	70	2.45	6.13	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	13:32:35	J8441-FS	10	1	19.1	N-Methyl	I 2355-31-9		3.27	NG_G	J		TRG			20171116		1.37	1.37	5.1	70	3.07	6.13	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	13:32:35	J8441-FS	10	1	19.1	N-Ethyl P	e 2991-50-6		2.45	NG_G	U		TRG			20171116		0.7	0.7	5.1	70	2.45	6.13	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	13:43:28	J8441-FS	100	1	19.1	Perfluoro	b 375-73-5		350.25	NG_G	D		TRG			20171116		4.42	4.42	5.1	70	12.27	61.35	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	13:54:21	J8441-FS	500	1	19.1	Perfluoro	h 355-46-4		4137.38	NG_G	D		TRG			20171116		13.5	13.5	5.1	70	30.67	306.75	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	14:05:14	J8441-FS	2500	1	19.1	Perfluoro	o 1763-23-1		21060.99	NG_G	D		TRG			20171116		82.82	82.82	5.1	70	306.75	1533.74	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	14:05:14	J8441-FS	2500	1	19.1	13C5-PFH	x BDO-2217		102	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	14:05:14	J8441-FS	2500	1	19.1	13C4-PFH	p BDO-2218		103	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	14:05:14	J8441-FS	2500	1	19.1	13C8-PFO	A BDO-2219		111	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	14:05:14	J8441-FS	2500	1	19.1	13C9-PFN	A BDO-2221		96	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	13:32:35	J8441-FS	10	1	19.1	13C6-PFD	A BDO-2222		105	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	13:32:35	J8441-FS	10	1	19.1	13C7-PFU	r BDO-2223		147	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	13:32:35	J8441-FS	10	1	19.1	13C2-PFD	c BDO-2112		134	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	13:32:35	J8441-FS	10	1	19.1	13C2-PFT	e BDO-2224		146	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	14:05:14	J8441-FS	2500	1	19.1	d3-MeFOS	BDO-1838		91	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	14:05:14	J8441-FS	2500	1	19.1	d5-EtFOSA	BDO-1839		105	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	14:05:14	J8441-FS	2500	1	19.1	13C3-PFB	S BDO-2226		102	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	14:05:14	J8441-FS	2500	1	19.1	13C3-PFH	x BDO-2227		104	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS02-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SS	4	09/26/2018 09:30	09/28/2018			20181008	13:30:00	20181018	14:05:14	J8441-FS	2500	1	19.1	13C8-PFO	S BDO-2228		90	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	15:10:33	J8442-FS	500	1	26.91	Perfluoro	h 307-24-4		1843.14	NG_G	D		TRG			20171116		23.08	23.08	5.1	70	69.93	349.65	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	14:59:38	J8442-FS	100	1	26.91	Perfluoro	h 375-85-9		641.48	NG_G	D		TRG			20171116		6.15	6.15	5.1	70	13.99	69.93	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	15:10:33	J8442-FS	500	1	26.91	Perfluoro	o 335-67-1		1125.7	NG_G	D		TRG			20171116		34.97	34.97	5.1	70	69.93	349.65	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	14:48:44	J8442-FS	10	1	26.91	Perfluoro	n 375-95-1		35.49	NG_G			TRG			20171116		0.6	0.6	5.1	70	1.4	6.99	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	14:48:44	J8442-FS	10	1	26.91	Perfluoro	d 335-76-2		2.18	NG_G	J		TRG			20171116		0.38	0.38	5.1	70	1.4	6.99	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	14:48:44	J8442-FS	10	1	26.91	Perfluoro	u 2058-94-8		1.4	NG_G	U		TRG			20171116		0.57	0.57	5.1	70	1.4	6.99	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	14:48:44	J8442-FS	10	1	26.91	Perfluoro	d 307-55-1		0.7	NG_G	U		TRG			20171116		0.34	0.34	5.1	70	0.7	6.99	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	14:48:44	J8442-FS	10	1	26.91	Perfluoro	t 72629-94-8		1.4	NG_G	U		TRG			20171116		0.39	0.39	5.1	70	1.4	6.99	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	14:48:44	J8442-FS	10	1	26.91	Perfluoro	t 376-06-7		2.8	NG_G	U		TRG			20171116		0.88	0.88	5.1	70	2.8	6.99	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	14:48:44	J8442-FS	10	1	26.91	N-Methyl	I 2355-31-9		3.5	NG_G	U		TRG			20171116		1.57	1.57	5.1	70	3.5	6.99	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	14:48:44	J8442-FS	10	1	26.91	N-Ethyl P	e 2991-50-6		2.8	NG_G	U		TRG			20171116		0.8	0.8	5.1	70	2.8	6.99	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	14:59:38	J8442-FS	100	1	26.91	Perfluoro	b 375-73-5		722.52	NG_G	D		TRG			20171116		5.03	5.03	5.1	70	13.99	69.93	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	15:21:26	J8442-FS	2500	1	26.91	Perfluoro	h 355-46-4		8517.97	NG_G	D		TRG			20171116		76.92	76.92	5.1	70	174.83	1748.25	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	15:21:26	J8442-FS	2500	1	26.91	Perfluoro	o 1763-23-1		25041.58	NG_G	D		TRG			20171116		94.41	94.41	5.1	70	349.65	1748.25	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	15:21:26	J8442-FS	2500	1	26.91	13C5-PFH	x BDO-2217		99	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	15:21:26	J8442-FS	2500	1	26.91	13C4-PFH	p BDO-2218		88	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	15:21:26	J8442-FS	2500	1	26.91	13C8-PFO	A BDO-2219		100	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	15:21:26	J8442-FS	2500	1	26.91	13C9-PFN	A BDO-2221		88	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	14:48:44	J8442-FS	10	1	26.91	13C6-PFD	A BDO-2222		103	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	14:48:44	J8442-FS	10	1	26.91	13C7-PFU	r BDO-2223		117	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	14:48:44	J8442-FS	10	1	26.91	13C2-PFD	c BDO-2112		111	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	14:48:44	J8442-FS	10	1	26.91	13C2-PFT	e BDO-2224		110	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	15:21:26	J8442-FS	2500	1	26.91	d3-MeFOS	BDO-1838		109	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	15:21:26	J8442-FS	2500	1	26.91	d5-EtFOSA	BDO-1839		127	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	15:21:26	J8442-FS	2500	1	26.91	13C3-PFB	S BDO-2226		119	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	15:21:26	J8442-FS	2500	1	26.91	13C3-PFH	x BDO-2227		106	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SB02-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:34	09/28/2018			20181008	13:30:00	20181018	15:21:26	J8442-FS	2500	1	26.91	13C8-PFO	S BDO-2228		118	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS01-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018 09:41	09/28/2018			20181008	13:30:00	20181018	12:05:31	J8438-FS	10	1	11.93	Perfluoro	h 307-24-4		8.44	NG_G			TRG			20171116		0.36	0.36	5.1	70	1.1	5.49	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS01-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018 09:41	09/28/2018			20181008	13:30:00	20181018	12:05:31	J8438-FS	10	1	11.93	Perfluoro	h 375-85-9		1.77	NG_G	J		TRG			20171116		0.48	0.48	5.1	70	1.1	5.49	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS01-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018 09:41	09/28/2018			20181008	13:30:00	20181018	12:05:31	J8438-FS	10	1	11.93	Perfluoro	o 335-67-1		8.05	NG_G			TRG			20171116		0.55	0.55	5.1	70	1.1	5.49	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS01-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018 09:41	09/28/2018			20181008	13:30:00	20181018	12:05:31	J8438-FS	10	1	11.93	Perfluoro	n 375-95-1		16.73	NG_G			TRG			20171116		0.47	0.47	5.1	70	1.1	5.49	18-0589	DP-18-0295		
N6247016(41464			POINT_MLVC-MS09-SS01-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018 09:41	09/28/2018			20181008	13:30:00	20181018	12:05:31	J8438-FS	10	1	11.93	Perfluoro

Contract_I	DO_CTO_N	Phase	Installatior	Sample_Name	CH2M_Coc	Analysis_G	Analytical_	PRC_Code	Lab_Code	Lab_Name	Leachate_I	SAMPLE_B	Extraction	Result_Typ	Lab_QC_ty	SAMPLE_N	QC_Level	DateTime_Collected	Date_Received	Leachate_I	Leachate_I	Extraction_	Extraction_	Analysis_D	Analysis_T	Lab_Sampl	Dilution	Run_Numt	PERCENT_M	PERCENT_I	Chem_Nar	Analyte_ID	Analyte_Vi	Original_A	Result_Uni	Lab_Qualif	Validator_	GC_Colum	Analysis_R	Result_Nat	QC_Contrc	QC_Accura	QC_Accura	Control_Lii	QC_Narrat	MDL	Detection_	QSM_Vers	DL	LOD	LOQ	SDG	Analysis_B	Validator_	Val_Date
N6247016(4164			POINT_MLVC-MS09-SB01-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:43	09/28/2018			20181008	13:30:00	20181018	12:27:18	J8439-FS	10	1	14.53		Perfluoroh	355-46-4		61.38	NG_G			TRG					20171116		0.26	0.26	5.1	70	0.6	5.95	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:43	09/28/2018			20181008	13:30:00	20181018	12:38:11	J8439-FS	50	1	14.53		Perfluoroo	1763-23-1		461.3	NG_G	D		TRG					20171116		1.61	1.61	5.1	70	5.95	29.76	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:43	09/28/2018			20181008	13:30:00	20181018	12:27:18	J8439-FS	10	1	14.53		13C5-PFH	x BDO-2217		102	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:43	09/28/2018			20181008	13:30:00	20181018	12:27:18	J8439-FS	10	1	14.53		13C4-PFH	g BDO-2218		97	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:43	09/28/2018			20181008	13:30:00	20181018	12:27:18	J8439-FS	10	1	14.53		13C8-PFO	J BDO-2219		116	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:43	09/28/2018			20181008	13:30:00	20181018	12:27:18	J8439-FS	10	1	14.53		13C9-PFN	J BDO-2221		85	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:43	09/28/2018			20181008	13:30:00	20181018	12:27:18	J8439-FS	10	1	14.53		13C6-PFD	J BDO-2222		107	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:43	09/28/2018			20181008	13:30:00	20181018	12:27:18	J8439-FS	10	1	14.53		13C7-PFU	r BDO-2223		112	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:43	09/28/2018			20181008	13:30:00	20181018	12:27:18	J8439-FS	10	1	14.53		13C2-PFD	c BDO-2112		105	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:43	09/28/2018			20181008	13:30:00	20181018	12:27:18	J8439-FS	10	1	14.53		13C2-PFT	e BDO-2224		96	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:43	09/28/2018			20181008	13:30:00	20181018	12:27:18	J8439-FS	10	1	14.53		d3-MeFOS	BDO-1838		114	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:43	09/28/2018			20181008	13:30:00	20181018	12:27:18	J8439-FS	10	1	14.53		d5-EtFOS	A BDO-1839		127	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:43	09/28/2018			20181008	13:30:00	20181018	12:27:18	J8439-FS	10	1	14.53		13C3-PFB	S BDO-2226		130	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:43	09/28/2018			20181008	13:30:00	20181018	12:27:18	J8439-FS	10	1	14.53		13C3-PFH	x BDO-2227		120	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0102		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:43	09/28/2018			20181008	13:30:00	20181018	12:27:18	J8439-FS	10	1	14.53		13C8-PFO	S BDO-2228		114	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		Perfluoroh	307-24-4		21.58	NG_G			TRG					20171116		0.43	0.43	5.1	70	1.29	6.45	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		Perfluoroh	375-85-9		6.09	NG_G	J		TRG					20171116		0.57	0.57	5.1	70	1.29	6.45	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		Perfluoroo	335-67-1		12.9	NG_G			TRG					20171116		0.65	0.65	5.1	70	1.29	6.45	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		Perfluoron	375-95-1		4.88	NG_G	J		TRG					20171116		0.55	0.55	5.1	70	1.29	6.45	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		Perfluoro	d 335-76-2		1.29	NG_G	U		TRG					20171116		0.35	0.35	5.1	70	1.29	6.45	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		Perfluorou	2058-94-8		1.29	NG_G	U		TRG					20171116		0.53	0.53	5.1	70	1.29	6.45	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		Perfluoro	d 307-55-1		0.65	NG_G	U		TRG					20171116		0.31	0.31	5.1	70	0.65	6.45	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		Perfluoro	t 72629-94-8		1.29	NG_G	U		TRG					20171116		0.36	0.36	5.1	70	1.29	6.45	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		Perfluoro	t 376-06-7		2.58	NG_G	U		TRG					20171116		0.81	0.81	5.1	70	2.58	6.45	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		N-Methyl	f 2355-31-9		3.23	NG_G	U		TRG					20171116		1.45	1.45	5.1	70	3.23	6.45	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		N-Ethyl Pe	2991-50-6		2.58	NG_G	U		TRG					20171116		0.74	0.74	5.1	70	2.58	6.45	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		Perfluorob	375-73-5		3.1	NG_G	J		TRG					20171116		0.46	0.46	5.1	70	1.29	6.45	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		Perfluoro	355-46-4		62.49	NG_G			TRG					20171116		0.28	0.28	5.1	70	0.65	6.45	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181019	22:48:35	J8440-FS	250	1	20.73		Perfluoroo	1763-23-1		658.47	NG_G	D		TRG					20171116		8.71	8.71	5.1	70	32.26	161.29	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		13C5-PFH	x BDO-2217		124	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		13C4-PFH	g BDO-2218		123	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		13C8-PFO	J BDO-2219		123	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		13C9-PFN	J BDO-2221		104	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		13C6-PFD	J BDO-2222		125	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		13C7-PFU	r BDO-2223		134	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		13C2-PFD	c BDO-2112		117	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:49:05	J8440-FS	10	1	20.73		13C2-PFT	e BDO-2224		116	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:59:57	J8440-FS	50	1	20.73		d3-MeFOS	BDO-1838		109	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:59:57	J8440-FS	50	1	20.73		d5-EtFOS	A BDO-1839		113	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:59:57	J8440-FS	50	1	20.73		13C3-PFB	S BDO-2226		123	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:59:57	J8440-FS	50	1	20.73		13C3-PFH	x BDO-2227		102	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SB01-0506		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	DL1	REG	SB	4	09/26/2018 09:52	09/28/2018			20181008	13:30:00	20181018	12:59:57	J8440-FS	50	1	20.73		13C8-PFO	S BDO-2228		108	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SS03-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	DL1	REG	SS	4	09/26/2018 10:15	09/28/2018			20181008	13:30:00	20181018	16:48:24	J8444-FS	333.33	1	2.5		Perfluoroh	307-24-4		1253.05	NG_G	D		TRG					20171116		11.28	11.28	5.1	70	34.19	170.94	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SS03-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	DL1	REG	SS	4	09/26/2018 10:15	09/28/2018			20181008	13:30:00	20181018	16:26:39	J8444-FS	50	1	2.5		Perfluoroh	375-85-9		257.25	NG_G	D		TRG					20171116		2.26	2.26	5.1	70	5.13	25.64	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SS03-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	DL1	REG	SS	4	09/26/2018 10:15	09/28/2018			20181008	13:30:00	20181018	16:59:16	J8444-FS	1111.11	1	2.5		Perfluoroo	335-67-1		4992.08	NG_G	D		TRG					20171116		56.98	56.98	5.1	70	113.96	569.8	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SS03-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SS	4	09/26/2018 10:15	09/28/2018			20181008	13:30:00	20181018	22:35:56	J8444-FS	10	1	2.5		Perfluoron	375-95-1		178.06	NG_G			TRG					20171116		0.44	0.44	5.1	70	1.03	5.13	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SS03-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SS	4	09/26/2018 10:15	09/28/2018			20181008	13:30:00	20181018	22:35:56	J8444-FS	10	1	2.5		Perfluoro	d 335-76-2		14.53	NG_G			TRG					20171116		0.28	0.28	5.1	70	1.03	5.13	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SS03-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SS	4	09/26/2018 10:15	09/28/2018			20181008	13:30:00	20181018	22:35:56	J8444-FS	10	1	2.5		Perfluorou	2058-94-8		1.73	NG_G	J		TRG					20171116		0.42	0.42	5.1	70	1.03	5.13	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SS03-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SS	4	09/26/2018 10:15	09/28/2018			20181008	13:30:00	20181018	22:35:56	J8444-FS	10	1	2.5		Perfluoro	d 307-55-1		1.08	NG_G	J		TRG					20171116		0.25	0.25	5.1	70	0.51	5.13	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SS03-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SS	4	09/26/2018 10:15	09/28/2018			20181008	13:30:00	20181018	22:35:56	J8444-FS	10	1	2.5		Perfluoro	t 72629-94-8		0.31	NG_G	J		TRG					20171116		0.29	0.29	5.1	70	1.03	5.13	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SS03-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SS	4	09/26/2018 10:15	09/28/2018			20181008	13:30:00	20181018	22:35:56	J8444-FS	10	1	2.5		Perfluoro	t 376-06-7		2.05	NG_G	U		TRG					20171116		0.65	0.65	5.1	70	2.05	5.13	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SS03-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SS	4	09/26/2018 10:15	09/28/2018			20181008	13:30:00	20181018	22:35:56	J8444-FS	10	1	2.5		N-Methyl	f 2355-31-9		4.14	NG_G	J		TRG					20171116		1.15	1.15	5.1	70	2.56	5.13	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SS03-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	000	REG	SS	4	09/26/2018 10:15	09/28/2018			20181008	13:30:00	20181018	22:35:56	J8444-FS	10	1	2.5		N-Ethyl Pe	2991-50-6		0.97	NG_G	J		TRG					20171116		0.58	0.58	5.1	70	2.05	5.13	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SS03-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	DL1	REG	SS	4	09/26/2018 10:15	09/28/2018			20181008	13:30:00	20181018	16:26:39	J8444-FS	50	1	2.5		Perfluorob	375-73-5		251.19	NG_G	D		TRG					20171116		1.85	1.85	5.1	70	5.13	25.64	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SS03-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	DL1	REG	SS	4	09/26/2018 10:15	09/28/2018			20181008	13:30:00	20181018	17:10:08	J8444-FS	11111.11	1	2.5		Perfluoroh	355-46-4		12981.91	NG_G	D		TRG					20171116		250.71	250.71	5.1	70	569.8	5698.01	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SS03-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	DL1	REG	SS	4	09/26/2018 10:15	09/28/2018			20181008	13:30:00	20181019	23:42:56	J8444-FS	111111.1	1	2.5		Perfluoroo	1763-23-1		156714.6	NG_G	D		TRG					20171116		3076.92	3076.92	5.1	70	11396.01	56980.05	18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SS03-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	DL1	REG	SS	4	09/26/2018 10:15	09/28/2018			20181008	13:30:00	20181018	17:10:08	J8444-FS	11111.11	1	2.5		13C5-PFH	x BDO-2217		95	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SS03-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	DL1	REG	SS	4	09/26/2018 10:15	09/28/2018			20181008	13:30:00	20181018	17:10:08	J8444-FS	11111.11	1	2.5		13C4-PFH	g BDO-2218		104	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MLVC-MS09-SS03-000H		NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE, NONE		DRY	METHOD	DL1

Contract_I	DO_CTO_N	Phase	Installation	Sample_Name	CH2M_Coc	Analysis_G	Analytical_	PRC_Code	Lab_Code	Lab_Name	Leachate_I	SAMPLE_B	Extraction	Result_Typ	Lab_QC_ty	SAMPLE_N	QC_Level	DateTime_Collected	Date_Received	Leachate_I	Leachate_T	Extraction_	Extraction_	Analysis_D	Analysis_T	Lab_Sampl	Dilution	Run_Numb	PERCENT_M	PERCENT_I	Chem_Nar	Analyte_ID	Analyte_Vi	Original_A	Result_Uni	Lab_Qualif	Validator_	GC_Colum	Analysis_R	Result_Nat	QC_Contrc	QC_Accura	QC_Accura	Control_Lii	QC_Narrat	MDL	Detection_	QSM_Vers	DL	LOD	LOQ	SDG	Analysis_B	Validator_	Val_Date
N6247016	4164		POINT_MLV	C-MS09-SB03-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018	10:25	09/28/2018		20181008	13:30:00	20181018	18:37:01	J8446-FS	50	1	27.16		13C3-PFBS	BDO-2226		106	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-SB03-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018	10:25	09/28/2018		20181008	13:30:00	20181018	18:37:01	J8446-FS	50	1	27.16		13C3-PFHx	BDO-2227		94	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-SB03-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018	10:25	09/28/2018		20181008	13:30:00	20181018	18:37:01	J8446-FS	50	1	27.16		13C8-PFOS	BDO-2228		101	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		Perfluoroh	307-24-4		9.43	NG_G			TRG				20171116		0.36	0.36	5.1	70	1.1	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		Perfluoroh	375-85-9		3.87	NG_G	J		TRG				20171116		0.49	0.49	5.1	70	1.1	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		Perfluoroo	335-67-1		9.99	NG_G			TRG				20171116		0.55	0.55	5.1	70	1.1	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		Perfluoro	375-95-1		17.82	NG_G			TRG				20171116		0.48	0.48	5.1	70	1.1	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		Perfluorod	335-76-2		4.79	NG_G	J		TRG				20171116		0.3	0.3	5.1	70	1.1	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		Perfluorou	2058-94-8		10.22	NG_G			TRG				20171116		0.45	0.45	5.1	70	1.1	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		Perfluorod	307-55-1		2.41	NG_G	J		TRG				20171116		0.27	0.27	5.1	70	0.55	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		Perfluorot	72629-94-8		7.05	NG_G			TRG				20171116		0.31	0.31	5.1	70	1.1	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		Perfluorob	376-06-7		2.21	NG_G	U		TRG				20171116		0.7	0.7	5.1	70	2.21	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		N-Methyl	2355-31-9		2.76	NG_G	U		TRG				20171116		1.24	1.24	5.1	70	2.76	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		N-Ethyl Pe	2991-50-6		2.21	NG_G	U		TRG				20171116		0.63	0.63	5.1	70	2.21	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		Perfluorob	375-73-5		0.63	NG_G	J		TRG				20171116		0.4	0.4	5.1	70	1.1	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		Perfluoroh	355-46-4		32.94	NG_G			TRG				20171116		0.24	0.24	5.1	70	0.55	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SS	4	09/26/2018	23:20:04	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	2777.78	1	7.68		Perfluoro	1763-23-1		2224.28	NG_G	D		TRG				20171116		82.87	82.87	5.1	70	306.94	1534.68	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		13C3-PFHx	BDO-2217		114	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		13C4-PFHp	BDO-2218		115	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		13C8-PFOA	BDO-2219		122	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		13C9-PFNA	BDO-2221		68	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		13C6-PFDA	BDO-2222		117	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		13C7-PFUr	BDO-2223		132	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		13C2-PFDc	BDO-2112		121	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:03:55	J8450-FS	10	1	7.68		13C2-PFTe	BDO-2224		115	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:14:47	J8450-FS	166.67	1	7.68		d3-MeFOS	BDO-1838		123	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:14:47	J8450-FS	166.67	1	7.68		d5-EtFOSA	BDO-1839		127	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:14:47	J8450-FS	166.67	1	7.68		13C3-PFBS	BDO-2226		123	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:14:47	J8450-FS	166.67	1	7.68		13C3-PFHx	BDO-2227		125	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S505-000H	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SS	4	09/26/2018	10:44	09/28/2018		20181008	13:30:00	20181018	20:14:47	J8450-FS	166.67	1	7.68		13C8-PFOS	BDO-2228		123	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		Perfluoroh	307-24-4		8.09	NG_G			TRG				20171116		0.36	0.36	5.1	70	1.1	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		Perfluoroh	375-85-9		4.57	NG_G	J		TRG				20171116		0.49	0.49	5.1	70	1.1	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		Perfluoroo	335-67-1		6.23	NG_G			TRG				20171116		0.55	0.55	5.1	70	1.1	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		Perfluoro	375-95-1		17.84	NG_G			TRG				20171116		0.48	0.48	5.1	70	1.1	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		Perfluorod	335-76-2		3.31	NG_G	J		TRG				20171116		0.3	0.3	5.1	70	1.1	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		Perfluorou	2058-94-8		13.45	NG_G			TRG				20171116		0.45	0.45	5.1	70	1.1	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		Perfluorod	307-55-1		0.98	NG_G	J		TRG				20171116		0.27	0.27	5.1	70	0.55	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		Perfluorot	72629-94-8		4.98	NG_G	J		TRG				20171116		0.31	0.31	5.1	70	1.1	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		Perfluorob	376-06-7		2.21	NG_G	U		TRG				20171116		0.7	0.7	5.1	70	2.21	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		N-Methyl	2355-31-9		2.76	NG_G	U		TRG				20171116		1.24	1.24	5.1	70	2.76	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		N-Ethyl Pe	2991-50-6		2.21	NG_G	U		TRG				20171116		0.63	0.63	5.1	70	2.21	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		Perfluorob	375-73-5		0.46	NG_G	J		TRG				20171116		0.4	0.4	5.1	70	1.1	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		Perfluoroh	355-46-4		29.28	NG_G			TRG				20171116		0.24	0.24	5.1	70	0.55	5.52	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:36:29	J8451-FS	250	1	10.29		Perfluoro	1763-23-1		1552.75	NG_G	D		TRG				20171116		7.46	7.46	5.1	70	27.62	138.12	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		13C5-PFHx	BDO-2217		100	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		13C4-PFHp	BDO-2218		99	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		13C8-PFOA	BDO-2219		115	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		13C9-PFNA	BDO-2221		71	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		13C6-PFDA	BDO-2222		103	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		13C7-PFUr	BDO-2223		117	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		13C2-PFDc	BDO-2112		109	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:25:38	J8451-FS	10	1	10.29		13C2-PFTe	BDO-2224		109	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:36:29	J8451-FS	250	1	10.29		d3-MeFOS	BDO-1838		110	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:36:29	J8451-FS	250	1	10.29		d5-EtFOSA	BDO-1839		126	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:36:29	J8451-FS	250	1	10.29		13C3-PFBS	BDO-2226		110	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:36:29	J8451-FS	250	1	10.29		13C3-PFHx	BDO-2227		125	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S802-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018	10:45	09/28/2018		20181008	13:30:00	20181018	20:36:29	J8451-FS	250	1	10.29		13C8-PFOS	BDO-2228		121	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S805-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018	10:50	09/28/2018		20181008	13:30:00	20181018	20:47:20	J8452-FS	10	1	14.94		Perfluoroh	307-24-4		25.94	NG_G			TRG				20171116		0.4	0.4	5.1	70	1.21	6.06	18-0589	DP-18-0295		
N6247016	4164		POINT_MLV	C-MS09-S805-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOF	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018

Contract_I	DO_CTO_N	Phase	Installatior	Sample_Name	CH2M_Coc	Analysis_G	Analytical_PRC_Code	Lab_Code	Lab_Name	Leachate_I	SAMPLE_B	Extraction_	Result_Typ	Lab_QC_ty	SAMPLE_N	QC_Level	DateTime_Collected	Date_Received	Leachate_I	Leachate_I	Extraction_	Extraction_	Analysis_D	Analysis_T	Lab_Sampl	Dilution	Run_Numt	PERCENT_I	PERCENT_I	Chem_Nar	Analyte_ID	Analyte_Vi	Original_A	Result_Uni	Lab_Qualif	Validator_	GC_Colum	Analysis_R	Result_Nat	QC_Contrc	QC_Accura	QC_Accura	Control_Lii	QC_Narrat	MDL	Detection_	QSM_Vers	DL	LOD	LOQ	SDG	Analysis_B	Validator_	Val_Date
N6247016(4164			POINT_MU	VC-MS09-SB04-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:18	09/28/2018			20181008	13:30:00	20181018	18:58:43	J8448-FS	10	1	10.79	10.79	N-Methyl	I 2355-31-9		2.91	NG_G	U		TRG				20171116		1.3	1.3	5.1	70	2.91	5.81	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:18	09/28/2018			20181008	13:30:00	20181018	18:58:43	J8448-FS	10	1	10.79	10.79	N-Ethyl Pe	2991-50-6		2.33	NG_G	U		TRG				20171116		0.66	0.66	5.1	70	2.33	5.81	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:18	09/28/2018			20181008	13:30:00	20181018	18:58:43	J8448-FS	10	1	10.79	10.79	Perfluorob	375-73-5		20.59	NG_G			TRG				20171116		0.42	0.42	5.1	70	1.16	5.81	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:18	09/28/2018			20181008	13:30:00	20181018	18:58:43	J8448-FS	10	1	10.79	10.79	Perfluoroh	355-46-4		36.78	NG_G			TRG				20171116		0.26	0.26	5.1	70	0.58	5.81	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 11:18	09/28/2018			20181008	13:30:00	20181018	19:09:33	J8448-FS	100	1	10.79	10.79	Perfluoro	1763-23-1		494.23	NG_G	D		TRG				20171116		3.14	3.14	5.1	70	11.63	58.14	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:18	09/28/2018			20181008	13:30:00	20181018	18:58:43	J8448-FS	10	1	10.79	10.79	13C5-PFH	x BDO-2217		95	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:18	09/28/2018			20181008	13:30:00	20181018	18:58:43	J8448-FS	10	1	10.79	10.79	13C4-PFH	p BDO-2218		101	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:18	09/28/2018			20181008	13:30:00	20181018	18:58:43	J8448-FS	10	1	10.79	10.79	13C8-PFO	A BDO-2219		105	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:18	09/28/2018			20181008	13:30:00	20181018	18:58:43	J8448-FS	10	1	10.79	10.79	13C9-PFN	A BDO-2221		76	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:18	09/28/2018			20181008	13:30:00	20181018	18:58:43	J8448-FS	10	1	10.79	10.79	13C6-PFD	A BDO-2222		104	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:18	09/28/2018			20181008	13:30:00	20181018	18:58:43	J8448-FS	10	1	10.79	10.79	13C7-PFU	r BDO-2223		117	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:18	09/28/2018			20181008	13:30:00	20181018	18:58:43	J8448-FS	10	1	10.79	10.79	13C2-PFD	c BDO-2112		111	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:18	09/28/2018			20181008	13:30:00	20181018	18:58:43	J8448-FS	10	1	10.79	10.79	13C2-PFT	e BDO-2224		104	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 11:18	09/28/2018			20181008	13:30:00	20181018	19:09:33	J8448-FS	100	1	10.79	10.79	d3-MeFOS	BDO-1838		81	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 11:18	09/28/2018			20181008	13:30:00	20181018	19:09:33	J8448-FS	100	1	10.79	10.79	d5-EtFOSA	BDO-1839		103	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 11:18	09/28/2018			20181008	13:30:00	20181018	19:09:33	J8448-FS	100	1	10.79	10.79	13C3-PFB	S BDO-2226		94	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 11:18	09/28/2018			20181008	13:30:00	20181018	19:09:33	J8448-FS	100	1	10.79	10.79	13C3-PFH	x BDO-2227		101	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0102	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 11:18	09/28/2018			20181008	13:30:00	20181018	19:09:33	J8448-FS	100	1	10.79	10.79	13C8-PFO	S BDO-2228		102	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	Perfluoroh	307-24-4		30	NG_G			TRG				20171116		0.45	0.45	5.1	70	1.36	6.8	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	Perfluoro	375-85-9		6.97	NG_G			TRG				20171116		0.6	0.6	5.1	70	1.36	6.8	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	Perfluoro	335-67-1		124.66	NG_G			TRG				20171116		0.68	0.68	5.1	70	1.36	6.8	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	Perfluoro	375-95-1		1.41	NG_G	J		TRG				20171116		0.59	0.59	5.1	70	1.36	6.8	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	Perfluoro	335-76-2		1.36	NG_G	U		TRG				20171116		0.37	0.37	5.1	70	1.36	6.8	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	Perfluorou	2058-94-8		1.36	NG_G	U		TRG				20171116		0.56	0.56	5.1	70	1.36	6.8	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	Perfluoro	307-55-1		0.68	NG_G	U		TRG				20171116		0.33	0.33	5.1	70	0.68	6.8	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	Perfluoro	7262	9-94-8	1.36	NG_G	U		TRG				20171116		0.38	0.38	5.1	70	1.36	6.8	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	Perfluoro	376-06-7		2.72	NG_G	U		TRG				20171116		0.86	0.86	5.1	70	2.72	6.8	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	N-Methyl	I 2355-31-9		3.4	NG_G	U		TRG				20171116		1.52	1.52	5.1	70	3.4	6.8	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	N-Ethyl Pe	2991-50-6		2.72	NG_G	U		TRG				20171116		0.78	0.78	5.1	70	2.72	6.8	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	Perfluorob	375-73-5		8.72	NG_G			TRG				20171116		0.49	0.49	5.1	70	1.36	6.8	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	Perfluoroh	355-46-4		94.2	NG_G			TRG				20171116		0.3	0.3	5.1	70	0.68	6.8	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:53:03	J8449-FS	20	1	25.15	25.15	Perfluoro	1763-23-1		234.84	NG_G	D		TRG				20171116		0.73	0.73	5.1	70	2.72	13.61	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	13C5-PFH	x BDO-2217		104	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	13C4-PFH	p BDO-2218		105	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	13C8-PFO	A BDO-2219		98	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	13C9-PFN	A BDO-2221		90	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	13C6-PFD	A BDO-2222		104	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	13C7-PFU	r BDO-2223		109	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	13C2-PFD	c BDO-2112		97	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:42:10	J8449-FS	10	1	25.15	25.15	13C2-PFT	e BDO-2224		94	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:53:03	J8449-FS	20	1	25.15	25.15	d3-MeFOS	BDO-1838		101	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:53:03	J8449-FS	20	1	25.15	25.15	d5-EtFOSA	BDO-1839		124	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:53:03	J8449-FS	20	1	25.15	25.15	13C3-PFB	S BDO-2226		108	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:53:03	J8449-FS	20	1	25.15	25.15	13C3-PFH	x BDO-2227		111	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB04-0506	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	DL1	REG	SB	4	09/26/2018 11:25	09/28/2018			20181008	13:30:00	20181018	19:53:03	J8449-FS	20	1	25.15	25.15	13C8-PFO	S BDO-2228		99	PCT_REC			SURR	SLSP	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB08-0102-PB-FS	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	BLK	SD	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	11:43:47	CR902PB-F	10	1	0		Perfluoroh	307-24-4		0.99	NG_G	U		TRG				20171116		0.33	0.33	5.1	70	0.99	4.95	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB08-0102-PB-FS	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	BLK	SD	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	11:43:47	CR902PB-F	10	1	0		Perfluoro	375-85-9		0.99	NG_G	U		TRG				20171116		0.44	0.44	5.1	70	0.99	4.95	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB08-0102-PB-FS	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	BLK	SD	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	11:43:47	CR902PB-F	10	1	0		Perfluoro	335-67-1		0.99	NG_G	U		TRG				20171116		0.49	0.49	5.1	70	0.99	4.95	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB08-0102-PB-FS	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	BLK	SD	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	11:43:47	CR902PB-F	10	1	0		Perfluoro	375-95-1		0.99	NG_G	U		TRG				20171116		0.43	0.43	5.1	70	0.99	4.95	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB08-0102-PB-FS	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	BLK	SD	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	11:43:47	CR902PB-F	10	1	0		Perfluoro	335-76-2		0.99	NG_G	U		TRG				20171116		0.27	0.27	5.1	70	0.99	4.95	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB08-0102-PB-FS	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	BLK	SD	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	11:43:47	CR902PB-F	10	1	0		Perfluorou	2058-94-8		0.99	NG_G	U		TRG				20171116		0.41	0.41	5.1	70	0.99	4.95	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB08-0102-PB-FS	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	BLK	SD	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	11:43:47	CR902PB-F	10	1	0		Perfluoro	307-55-1		0.5	NG_G	U		TRG				20171116		0.24	0.24	5.1	70	0.5	4.95	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB08-0102-PB-FS	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	BLK	SD	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	11:43:47	CR902PB-F	10	1	0		Perfluoro	7262	9-94-8	0.99	NG_G	U		TRG				20171116		0.28	0.28	5.1	70	0.99	4.95	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB08-0102-PB-FS	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	BLK	SD	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	11:43:47	CR902PB-F	10	1	0		Perfluoro	376-06-7		1.98	NG_G	U		TRG				20171116		0.62	0.62	5.1	70	1.98	4.95	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB08-0102-PB-FS	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	BLK	SD	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	11:43:47	CR902PB-F	10	1	0		N-Methyl	I 2355-31-9		2.48	NG_G	U		TRG				20171116		1.11	1.11	5.1	70	2.48	4.95	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB08-0102-PB-FS	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	BLK	SD	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	11:43:47	CR902PB-F	10	1	0		N-Ethyl Pe	2991-50-6		1.98	NG_G	U		TRG				20171116		0.56	0.56	5.1	70	1.98	4.95	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB08-0102-PB-FS	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	BLK	SD	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	11:43:47	CR902PB-F	10	1	0		Perfluorob	375-73-5		0.99	NG_G	U		TRG				20171116		0.36	0.36	5.1	70	0.99	4.95	18-0589	DP-18-0295		
N6247016(4164			POINT_MU	VC-MS09-SB08-0102-PB-FS	NONS	SVOA	537_MOD	ORG	BMSL_NOI	BATTELLE,	NONE	DRY	METHOD	000	BLK	SD

Contract_I	DO_CTO_N	Phase	Installatior	Sample_Name	CH2M_Coc	Analysis_G	Analytical_	PRC_Code	Lab_Code	Lab_Name	Leachate_I	SAMPLE_B	Extraction	Result_Typ	Lab_QC_ty	SAMPLE_N	QC_Level	DateTime_Collected	Date_Received	Leachate_I	Leachate_'	Extraction_	Extraction_	Analysis_D	Analysis_T	Lab_Sampl	Dilution	Run_Numt	PERCENT_I	PERCENT_I	Chem_Nar	Analyte_ID	Analyte_Vi	Original_A	Result_Uni	Lab_Qualif	Validator_	GC_Colum	Analysis_R	Result_Nat	QC_Contrc	QC_Accura	QC_Accura	Control_Lii	QC_Narrat	MDL	Detection_	QSM_Vers	DL	LOD	LOQ	SDG	Analysis_B	Validator_	Val_Date
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MS	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MS	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:30:47	J8453MS-F	10	1	11.53		13C2-PFTe	BDO-2224		99	PCT_REC			SURR	SLSP	150	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MS	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	DL1	MS	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:41:39	J8453MS-F	100	1	11.53		d3-MeFOS	BDO-1838		94	PCT_REC			SURR	SLSP	150	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MS	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	DL1	MS	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:41:39	J8453MS-F	100	1	11.53		d5-EtFOSA	BDO-1839		106	PCT_REC			SURR	SLSP	150	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MS	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	DL1	MS	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:41:39	J8453MS-F	100	1	11.53		13C3-PFBS	BDO-2226		112	PCT_REC			SURR	SLSP	150	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MS	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	DL1	MS	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:41:39	J8453MS-F	100	1	11.53		13C3-PFHx	BDO-2227		113	PCT_REC			SURR	SLSP	150	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MS	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	DL1	MS	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:41:39	J8453MS-F	100	1	11.53		13C8-PFOS	BDO-2228		112	PCT_REC			SURR	SLSP	150	150	50	20171116				5.1				18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	22:03:21	J8454MSD	100	1	10.19		Perfluoroh	307-24-4		0	PCT_REC	N		TRG	LSA	135	45	20171116	3.84	3.84	5.1	11.63	58.14	18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:52:29	J8454MSD	10	1	10.19		Perfluoroh	375-85-9		40	PCT_REC	N		TRG	LSA	128	60	20171116	0.51	0.51	5.1	1.16	5.81	18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:52:29	J8454MSD	10	1	10.19		Perfluoroo	335-67-1		0	PCT_REC	N		TRG	LSA	136	56	20171116	0.58	0.58	5.1	1.16	5.81	18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:52:29	J8454MSD	10	1	10.19		Perfluoron	375-95-1		114	PCT_REC			TRG	LSA	130	54	20171116	0.5	0.5	5.1	1.16	5.81	18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:52:29	J8454MSD	10	1	10.19		Perfluorod	335-76-2		100	PCT_REC			TRG	LSA	141	55	20171116	0.31	0.31	5.1	1.16	5.81	18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:52:29	J8454MSD	10	1	10.19		Perfluorou	2058-94-8		107	PCT_REC			TRG	LSA	137	57	20171116	0.48	0.48	5.1	1.16	5.81	18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:52:29	J8454MSD	10	1	10.19		Perfluorod	307-55-1		98	PCT_REC			TRG	LSA	134	62	20171116	0.28	0.28	5.1	0.58	5.81	18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:52:29	J8454MSD	10	1	10.19		Perfluorot	72629-94-8		103	PCT_REC			TRG	LSA	127	51	20171116	0.33	0.33	5.1	1.16	5.81	18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:52:29	J8454MSD	10	1	10.19		Perfluorot	376-06-7		98	PCT_REC			TRG	LSA	162	34	20171116	0.73	0.73	5.1	2.33	5.81	18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:52:29	J8454MSD	10	1	10.19		N-Methyl	2355-31-9		99	PCT_REC			TRG	LSA	146	52	20171116	1.3	1.3	5.1	2.91	5.81	18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:52:29	J8454MSD	10	1	10.19		N-Ethyl Pe	2991-50-6		111	PCT_REC			TRG	LSA	124	54	20171116	0.66	0.66	5.1	2.33	5.81	18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	DL1	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	22:03:21	J8454MSD	100	1	10.19		Perfluorob	375-73-5			PCT_REC			TRG	LSA	145	57	20171116	4.19	4.19	5.1	11.63	58.14	18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	DL1	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	22:03:21	J8454MSD	100	1	10.19		Perfluoroh	355-46-4			PCT_REC			TRG	LSA	132	52	20171116	2.56	2.56	5.1	5.81	58.14	18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	DL1	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	22:03:21	J8454MSD	100	1	10.19		Perfluoroo	1763-23-1			PCT_REC			TRG	LSA	130	50	20171116	3.14	3.14	5.1	11.63	58.14	18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:52:29	J8454MSD	10	1	10.19		13C5-PFHx	BDO-2217		86	PCT_REC			SURR	SLSP	150	50	20171116			5.1			18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:52:29	J8454MSD	10	1	10.19		13C4-PFHp	BDO-2218		85	PCT_REC			SURR	SLSP	150	50	20171116			5.1			18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:52:29	J8454MSD	10	1	10.19		13C8-PFO	BDO-2219		80	PCT_REC			SURR	SLSP	150	50	20171116			5.1			18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:52:29	J8454MSD	10	1	10.19		13C9-PFN	BDO-2221		71	PCT_REC			SURR	SLSP	150	50	20171116			5.1			18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:52:29	J8454MSD	10	1	10.19		13C6-PFD	BDO-2222		87	PCT_REC			SURR	SLSP	150	50	20171116			5.1			18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:52:29	J8454MSD	10	1	10.19		13C7-PFU	BDO-2223		98	PCT_REC			SURR	SLSP	150	50	20171116			5.1			18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:52:29	J8454MSD	10	1	10.19		13C2-PFDc	BDO-2112		103	PCT_REC			SURR	SLSP	150	50	20171116			5.1			18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	000	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	21:52:29	J8454MSD	10	1	10.19		13C2-PFTe	BDO-2224		105	PCT_REC			SURR	SLSP	150	50	20171116			5.1			18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	DL1	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	22:03:21	J8454MSD	100	1	10.19		d3-MeFOS	BDO-1838		100	PCT_REC			SURR	SLSP	150	50	20171116			5.1			18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	DL1	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	22:03:21	J8454MSD	100	1	10.19		d5-EtFOSA	BDO-1839		112	PCT_REC			SURR	SLSP	150	50	20171116			5.1			18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	DL1	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	22:03:21	J8454MSD	100	1	10.19		13C3-PFBS	BDO-2226		109	PCT_REC			SURR	SLSP	150	50	20171116			5.1			18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	DL1	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	22:03:21	J8454MSD	100	1	10.19		13C3-PFHx	BDO-2227		96	PCT_REC			SURR	SLSP	150	50	20171116			5.1			18-0589	DP-18-0295		
N6247016(	4164		POINT_MI	LVC-MS09-SB04-0102-MSD	NONS	SVOA	537_MOD	ORG	BMSL_NO	BATTELLE,	NONE	DRY	METHOD	DL1	MSD	SB	4	10/08/2018 13:30	10/08/2018			20181008	13:30:00	20181018	22:03:21	J8454MSD	100	1	10.19		13C8-PFO	BDO-2228		113	PCT_REC			SURR	SLSP	150	50	20171116			5.1			18-0589	DP-18-0295		

ENVIRONMENTAL
Data Services, Inc.

DATA VALIDATION SUMMARY REPORT
NAVAL BASE VENTURA COUNTY, CALIFORNIA

Client: CH2M HILL, Inc., Corvallis, Oregon
SDG: 18-0589
Laboratory: Battelle Norwell Operations, Norwell, Massachusetts
Site: Naval Base Ventura County, CTO-4164, California
Date: January 11, 2019

PFCs			
EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	VC-MS09-SS01-000H	J8438-FS	Soil
2	VC-MS09-SB01-0102	J8439-FS	Soil
3	VC-MS09-SB01-0506	J8440-FS	Soil
4	VC-MS09-SS02-000H	J8441-FS	Soil
5	VC-MS09-SB02-0102	J8442-FS	Soil
6	VC-MS09-SB02-0506	J8443-FS	Soil
7	VC-MS09-SS03-000H	J8444-FS	Soil
8	VC-MS09-SB03-0102	J8445-FS	Soil
9	VC-MS09-SB03-0506	J8446-FS	Soil
10	VC-MS09-SS04-000H	J8447-FS	Soil
11	VC-MS09-SB04-0102	J8448-FS	Soil
11MS	VC-MS09-SB04-0102MS	J8448-FSMS	Soil
11MSD	VC-MS09-SB04-0102MSD	J8448-FSMSD	Soil
12	VC-MS09-SB04-0506	J8449-FS	Soil
13	VC-MS09-SS05-000H	J8450-FS	Soil
14	VC-MS09-SB05-0102	J8451-FS	Soil
15	VC-MS09-SB05-0506	J8452-FS	Soil

A full data validation was performed on the analytical data for fifteen soil samples collected on September 26, 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. There were no qualifications.

Perfluorinated Compounds (PFCs)

Data Completeness, Case Narrative & Custody Documentation

- The case narrative and chain-of-custody documentation were included in the data package as required. All criteria were met.

Holding Times

- All samples were extracted within 28 days for soil samples and analyzed within 30 days.

LC/MS Tuning

- All criteria were met.

Initial Calibration

- All relative standard deviation (%RSD) and/or correlation coefficients criteria were met.

Continuing Calibration

- All percent recovery (%R) criteria were met.

Method Blank

- The method blanks were free of contamination.

Field QC Blank

- Field QC samples are summarized below.

Blank ID	Compound	Conc. ng/L	Qualifier	Affected Samples
VC-SO-FB07-09262018	None - ND	-	-	-
VC-SO-EB07-09262018	PFOS	10.60	U	10

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The MS/MSD samples exhibited acceptable percent recoveries (%R) and RPD values except for the following.

EDS Sample ID	Compound	MS %R/MSD %R/RPD	Qualifier
8	Several Compounds	Low/Low/High	None - Compounds diluted out

Laboratory Control Samples

- The LCS samples exhibited acceptable percent recoveries (%R).

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Target Compound Identification

- All mass spectra and quantitation criteria were met.

Compound Quantitation

- Several samples were analyzed at various dilutions due to high concentrations of target compounds. The reporting limits were adjusted accordingly. No action was required.

Field Duplicate Sample Precision

- Field duplicate samples were not collected.

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed: Nancy Weaver Dated: 1/11/19

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-MS09-SS01-000H			
Battelle ID		J8438-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		11.93			
Matrix		SS			
Sample Size		1.82			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	8.44	0.36	1.10	5.49
PFHpA	375-85-9	1.77 J	0.48	1.10	5.49
PFOA	335-67-1	8.05	0.55	1.10	5.49
PFNA	375-95-1	16.73	0.47	1.10	5.49
PFDA	335-76-2	0.70 J	0.30	1.10	5.49
PFUnA	2058-94-8	1.15 J	0.45	1.10	5.49
PFDoA	307-55-1	0.55 U	0.26	0.55	5.49
PFTrDA	72629-94-8	1.10 U	0.31	1.10	5.49
PFTeDA	376-06-7	2.20 U	0.69	2.20	5.49
NMeFOSAA	2355-31-9	2.75 U	1.23	2.75	5.49
NEtFOSAA	2991-50-6	2.20 U	0.63	2.20	5.49
PFBS	375-73-5	3.43 J	0.40	1.10	5.49
PFHxS	355-46-4	25.77	0.24	0.55	5.49
PFOS	1763-23-1	474.84	1.48	5.49	27.47
Surrogate Recoveries (%)					
13C5-PFHxA		105			
13C4-PFHpA		107			
13C8-PFOA		106			
13C9-PFNA		89			
13C6-PFDA		101			
13C7-PFUnA		109			
13C2-PFDoA		97			
13C2-PFTeDA		101			
d3-MeFOSAA		117			
d5-EtFOSAA		135			
13C3-PFBS		145			
13C3-PFHxS		128			
13C8-PFOS		108			

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2

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

Client ID		VC-MS09-SB01-0102			
Battelle ID		J8439-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		14.53			
Matrix		SB			
Sample Size		1.68			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	107.59	0.39	1.19	5.95
PFHpA	375-85-9	10.70	0.52	1.19	5.95
PFOA	335-67-1	9.51	0.60	1.19	5.95
PFNA	375-95-1	18.53	0.51	1.19	5.95
PFDA	335-76-2	0.36 J	0.32	1.19	5.95
PFUnA	2058-94-8	1.19 U	0.49	1.19	5.95
PFDoA	307-55-1	0.60 U	0.29	0.60	5.95
PFTrDA	72629-94-8	1.19 U	0.33	1.19	5.95
PFTeDA	376-06-7	2.38 U	0.75	2.38	5.95
NMeFOSAA	2355-31-9	2.98 U	1.33	2.98	5.95
NEtFOSAA	2991-50-6	2.38 U	0.68	2.38	5.95
PFBS	375-73-5	21.58	0.43	1.19	5.95
PFHxS	355-46-4	61.38	0.26	0.60	5.95
PFOS	1763-23-1	461.30 Ø	1.61	5.95	29.76
Surrogate Recoveries (%)					
13C5-PFHxA		102			
13C4-PFHpA		97			
13C8-PFOA		116			
13C9-PFNA		85			
13C6-PFDA		107			
13C7-PFUnA		112			
13C2-PFDoA		105			
13C2-PFTeDA		96			
d3-MeFOSAA		114			
d5-EtFOSAA		127			
13C3-PFBS		130			
13C3-PFHxS		120			
13C8-PFOS		114			

MW 12/28/18

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3

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

Client ID		VC-MS09-SB01-0506			
Battelle ID		J8440-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		20.73			
Matrix		SB			
Sample Size		1.55			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	21.58	0.43	1.29	6.45
PFHpA	375-85-9	6.09 J	0.57	1.29	6.45
PFOA	335-67-1	12.90	0.65	1.29	6.45
PFNA	375-95-1	4.88 J	0.55	1.29	6.45
PFDA	335-76-2	1.29 U	0.35	1.29	6.45
PFUnA	2058-94-8	1.29 U	0.53	1.29	6.45
PFDoA	307-55-1	0.65 U	0.31	0.65	6.45
PFTrDA	72629-94-8	1.29 U	0.36	1.29	6.45
PFTeDA	376-06-7	2.58 U	0.81	2.58	6.45
NMeFOSAA	2355-31-9	3.23 U	1.45	3.23	6.45
NEtFOSAA	2991-50-6	2.58 U	0.74	2.58	6.45
PFBS	375-73-5	3.10 J	0.46	1.29	6.45
PFHxS	355-46-4	62.49	0.28	0.65	6.45
PFOS	1763-23-1	658.47 D	8.71	32.26	161.29
Surrogate Recoveries (%)					
13C5-PFHxA		124			
13C4-PFHpA		123			
13C8-PFOA		123			
13C9-PFNA		104			
13C6-PFDA		125			
13C7-PFUnA		134			
13C2-PFDoA		117			
13C2-PFTeDA		116			
d3-MeFOSAA		109 D			
d5-EtFOSAA		113 D			
13C3-PFBS		123 D			
13C3-PFHxS		102 D			
13C8-PFOS		108 D			

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4

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

Client ID		VC-MS09-SS02-000H			
Battelle ID		J8441-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		19.10			
Matrix		SS			
Sample Size		1.63			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	944.17 D	4.05	12.27	61.35
PFHpA	375-85-9	368.32 D	5.40	12.27	61.35
PFOA	335-67-1	459.54 D	6.13	12.27	61.35
PFNA	375-95-1	39.50	0.53	1.23	6.13
PFDA	335-76-2	14.94	0.33	1.23	6.13
PFUnA	2058-94-8	3.04 J	0.50	1.23	6.13
PFDoA	307-55-1	3.15 J	0.29	0.61	6.13
PFTrDA	72629-94-8	0.58 J	0.34	1.23	6.13
PFTeDA	376-06-7	2.45 U	0.77	2.45	6.13
NMeFOSAA	2355-31-9	3.27 J	1.37	3.07	6.13
NEtFOSAA	2991-50-6	2.45 U	0.70	2.45	6.13
PFBS	375-73-5	350.25 D	4.42	12.27	61.35
PFHxS	355-46-4	4137.38 D	13.50	30.67	306.75
PFOS	1763-23-1	21060.99 D	82.82	306.75	1533.74
Surrogate Recoveries (%)					
13C5-PFHxA		102 D			
13C4-PFHpA		103 D			
13C8-PFOA		111 D			
13C9-PFNA		96 D			
13C6-PFDA		105			
13C7-PFUnA		147			
13C2-PFDoA		134			
13C2-PFTeDA		146			
d3-MeFOSAA		91 D			
d5-EtFOSAA		105 D			
13C3-PFBS		102 D			
13C3-PFHxS		104 D			
13C8-PFOS		90 D			

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

Client ID		VC-MS09-SB02-0102			
Battelle ID		J8442-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		26.91			
Matrix		SB			
Sample Size		1.43			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	1843.14 D	23.08	69.93	349.65
PFHpA	375-85-9	641.48 D	6.15	13.99	69.93
PFOA	335-67-1	1125.70 D	34.97	69.93	349.65
PFNA	375-95-1	35.49	0.60	1.40	6.99
PFDA	335-76-2	2.18 J	0.38	1.40	6.99
PFUnA	2058-94-8	1.40 U	0.57	1.40	6.99
PFDoA	307-55-1	0.70 U	0.34	0.70	6.99
PFTrDA	72629-94-8	1.40 U	0.39	1.40	6.99
PFTeDA	376-06-7	2.80 U	0.88	2.80	6.99
NMeFOSAA	2355-31-9	3.50 U	1.57	3.50	6.99
NEtFOSAA	2991-50-6	2.80 U	0.80	2.80	6.99
PFBS	375-73-5	722.52 D	5.03	13.99	69.93
PFHxS	355-46-4	8517.97 D	76.92	174.83	1748.25
PFOS	1763-23-1	25041.58 D	94.41	349.65	1748.25
Surrogate Recoveries (%)					
13C5-PFHxA		99 D			
13C4-PFHpA		88 D			
13C8-PFOA		100 D			
13C9-PFNA		88 D			
13C6-PFDA		103			
13C7-PFUnA		117			
13C2-PFDoA		111			
13C2-PFTeDA		110			
d3-MeFOSAA		109 D			
d5-EtFOSAA		127 D			
13C3-PFBS		119 D			
13C3-PFHxS		106 D			
13C8-PFOS		118 D			

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

Client ID		VC-MS09-SB02-0506			
Battelle ID		J8443-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		24.42			
Matrix		SB			
Sample Size		1.56			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	301.34 D	2.12	6.41	32.05
PFHpA	375-85-9	66.29	0.56	1.28	6.41
PFOA	335-67-1	99.69	0.64	1.28	6.41
PFNA	375-95-1	1.10 J	0.55	1.28	6.41
PFDA	335-76-2	0.42 J	0.35	1.28	6.41
PFUnA	2058-94-8	1.28 U	0.53	1.28	6.41
PFDoA	307-55-1	0.64 U	0.31	0.64	6.41
PFTrDA	72629-94-8	1.28 U	0.36	1.28	6.41
PFTeDA	376-06-7	2.56 U	0.81	2.56	6.41
NMeFOSAA	2355-31-9	3.21 U	1.44	3.21	6.41
NEtFOSAA	2991-50-6	1.18 J	0.73	2.56	6.41
PFBS	375-73-5	103.23	0.46	1.28	6.41
PFHxS	355-46-4	587.52 D	7.05	16.03	160.26
PFOS	1763-23-1	7228.44 D	144.23	534.19	2670.94

Surrogate Recoveries (%)

13C5-PFHxA	110
13C4-PFHpA	108
13C8-PFOA	93
13C9-PFNA	52
13C6-PFDA	93
13C7-PFUnA	108
13C2-PFDoA	98
13C2-PFTeDA	106
d3-MeFOSAA	121 D
d5-EtFOSAA	123 D
13C3-PFBS	126 D
13C3-PFHxS	122 D
13C8-PFOS	109 D

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

Client ID		VC-MS09-SS03-000H			
Battelle ID		J8444-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		2.50			
Matrix		SS			
Sample Size		1.95			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	1253.05 D	11.28	34.19	170.94
PFHpA	375-85-9	257.25 D	2.26	5.13	25.64
PFOA	335-67-1	4992.08 D	56.98	113.96	569.80
PFNA	375-95-1	178.06	0.44	1.03	5.13
PFDA	335-76-2	14.53	0.28	1.03	5.13
PFUnA	2058-94-8	1.73 J	0.42	1.03	5.13
PFDoA	307-55-1	1.08 J	0.25	0.51	5.13
PFTrDA	72629-94-8	0.31 J	0.29	1.03	5.13
PFTeDA	376-06-7	2.05 U	0.65	2.05	5.13
NMeFOSAA	2355-31-9	4.14 J	1.15	2.56	5.13
NEtFOSAA	2991-50-6	0.97 J	0.58	2.05	5.13
PFBS	375-73-5	251.19 D	1.85	5.13	25.64
PFHxS	355-46-4	12981.91 D	250.71	569.80	5698.01
PFOS	1763-23-1	156714.58 D	3076.92	11396.01	56980.05
Surrogate Recoveries (%)					
13C5-PFHxA		95 D			
13C4-PFHpA		104 D			
13C8-PFOA		104 D			
13C9-PFNA		94 D			
13C6-PFDA		108			
13C7-PFUnA		137			
13C2-PFDoA		137			
13C2-PFTeDA		138			
d3-MeFOSAA		99 D			
d5-EtFOSAA		100 D			
13C3-PFBS		102 D			
13C3-PFHxS		112 D			
13C8-PFOS		105 D			

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

Client ID		VC-MS09-SB03-0102				
Battelle ID		J8445-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		12.83				
Matrix		SB				
Sample Size		1.73				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	6920.12	D	47.69	144.51	722.54
PFHpA	375-85-9	1433.05	D	12.72	28.90	144.51
PFOA	335-67-1	7780.30	D	72.25	144.51	722.54
PFNA	375-95-1	33.59		0.50	1.16	5.78
PFDA	335-76-2	9.17		0.31	1.16	5.78
PFUnA	2058-94-8	1.01	J	0.47	1.16	5.78
PFDoA	307-55-1	0.97	J	0.28	0.58	5.78
PFTrDA	72629-94-8	1.16	U	0.32	1.16	5.78
PFTeDA	376-06-7	2.31	U	0.73	2.31	5.78
NMeFOSAA	2355-31-9	49.22		1.29	2.89	5.78
NEtFOSAA	2991-50-6	2.31	U	0.66	2.31	5.78
PFBS	375-73-5	2243.69	D	10.40	28.90	144.51
PFHxS	355-46-4	27553.49	D	63.58	144.51	1445.09
PFOS	1763-23-1	30191.96	D	780.35	2890.17	14450.87
Surrogate Recoveries (%)						
13C5-PFHxA		100	D			
13C4-PFHpA		92	D			
13C8-PFOA		96	D			
13C9-PFNA		85	D			
13C6-PFDA		82				
13C7-PFUnA		103				
13C2-PFDoA		100				
13C2-PFTeDA		110				
d3-MeFOSAA		105	D			
d5-EtFOSAA		112	D			
13C3-PFBS		118	D			
13C3-PFHxS		102	D			
13C8-PFOS		98	D			

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

Client ID		VC-MS09-SB03-0506			
Battelle ID		J8446-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		27.16			
Matrix		SB			
Sample Size		1.48			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	426.56 D	2.23	6.76	33.78
PFHpA	375-85-9	69.91	0.59	1.35	6.76
PFOA	335-67-1	262.24 D	3.38	6.76	33.78
PFNA	375-95-1	0.67 J	0.58	1.35	6.76
PFDA	335-76-2	1.35 U	0.36	1.35	6.76
PFUnA	2058-94-8	1.35 U	0.55	1.35	6.76
PFDoA	307-55-1	0.68 U	0.32	0.68	6.76
PFTrDA	72629-94-8	1.35 U	0.38	1.35	6.76
PFTeDA	376-06-7	2.70 U	0.85	2.70	6.76
NMeFOSAA	2355-31-9	3.38 U	1.51	3.38	6.76
NEtFOSAA	2991-50-6	2.70 U	0.77	2.70	6.76
PFBS	375-73-5	106.34	0.49	1.35	6.76
PFHxS	355-46-4	274.57 D	1.49	3.38	33.78
PFOS	1763-23-1	750.56 D	18.24	67.57	337.84
Surrogate Recoveries (%)					
13C5-PFHxA		73			
13C4-PFHpA		77			
13C8-PFOA		77			
13C9-PFNA		65			
13C6-PFDA		95			
13C7-PFUnA		97			
13C2-PFDoA		92			
13C2-PFTeDA		94			
d3-MeFOSAA		87 D			
d5-EtFOSAA		97 D			
13C3-PFBS		106 D			
13C3-PFHxS		94 D			
13C8-PFOS		101 D			

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

Client ID		VC-MS09-SS04-000H			
Battelle ID		J8447-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		1.41			
Matrix		SS			
Sample Size		2.01			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	3.39 J	0.33	1.00	4.98
PFHpA	375-85-9	0.52 J	0.44	1.00	4.98
PFOA	335-67-1	7.57	0.50	1.00	4.98
PFNA	375-95-1	1.03 J	0.43	1.00	4.98
PFDA	335-76-2	0.78 J	0.27	1.00	4.98
PFUnA	2058-94-8	1.26 J	0.41	1.00	4.98
PFDoA	307-55-1	0.98 J	0.24	0.50	4.98
PFTrDA	72629-94-8	1.00 U	0.28	1.00	4.98
PFTeDA	376-06-7	1.99 U	0.63	1.99	4.98
NMeFOSAA	2355-31-9	2.49 U	1.11	2.49	4.98
NEtFOSAA	2991-50-6	1.99 U	0.57	1.99	4.98
PFBS	375-73-5	1.88 J	0.36	1.00	4.98
PFHxS	355-46-4	8.18	0.22	0.50	4.98
PFOS	1763-23-1	89.60 U	0.27	1.00	4.98

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Surrogate Recoveries (%)	
13C5-PFHxA	105
13C4-PFHpA	99
13C8-PFOA	107
13C9-PFNA	90
13C6-PFDA	100
13C7-PFUnA	107
13C2-PFDoA	100
13C2-PFTeDA	105
d3-MeFOSAA	81
d5-EtFOSAA	100
13C3-PFBS	108
13C3-PFHxS	107
13C8-PFOS	101

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

Client ID		VC-MS09-SB04-0102			
Battelle ID		J8448-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		10.79			
Matrix		SB			
Sample Size		1.72			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	50.93	0.38	1.16	5.81
PFHpA	375-85-9	5.89	0.51	1.16	5.81
PFOA	335-67-1	14.70	0.58	1.16	5.81
PFNA	375-95-1	9.53	0.50	1.16	5.81
PFDA	335-76-2	1.36 J	0.31	1.16	5.81
PFUnA	2058-94-8	1.16 U	0.48	1.16	5.81
PFDoA	307-55-1	0.58 U	0.28	0.58	5.81
PFTrDA	72629-94-8	1.16 U	0.33	1.16	5.81
PFTeDA	376-06-7	2.33 U	0.73	2.33	5.81
NMeFOSAA	2355-31-9	2.91 U	1.30	2.91	5.81
NEtFOSAA	2991-50-6	2.33 U	0.66	2.33	5.81
PFBS	375-73-5	20.59	0.42	1.16	5.81
PFHxS	355-46-4	36.78	0.26	0.58	5.81
PFOS	1763-23-1	494.23 D	3.14	11.63	58.14
Surrogate Recoveries (%)					
13C5-PFHxA		95			
13C4-PFHpA		101			
13C8-PFOA		105			
13C9-PFNA		76			
13C6-PFDA		104			
13C7-PFUnA		117			
13C2-PFDoA		111			
13C2-PFTeDA		104			
d3-MeFOSAA		81 D			
d5-EtFOSAA		103 D			
13C3-PFBS		94 D			
13C3-PFHxS		101 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-MS09-SB04-0506				
Battelle ID		J8449-FS				
Sample Type		SA				
Collection Date		09/26/2018				
Extraction Date		10/08/2018				
Analysis Date		10/18/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS				
% Moisture		25.15				
Matrix		SB				
Sample Size		1.47				
Size Unit-Basis		g				
Units		ng/g_Dry		MDL	LOD	LOQ
PFHxA	307-24-4	30.00		0.45	1.36	6.80
PFHpA	375-85-9	6.97		0.60	1.36	6.80
PFOA	335-67-1	124.66		0.68	1.36	6.80
PFNA	375-95-1	1.41	J	0.59	1.36	6.80
PFDA	335-76-2	1.36	U	0.37	1.36	6.80
PFUnA	2058-94-8	1.36	U	0.56	1.36	6.80
PFDoA	307-55-1	0.68	U	0.33	0.68	6.80
PFTrDA	72629-94-8	1.36	U	0.38	1.36	6.80
PFTeDA	376-06-7	2.72	U	0.86	2.72	6.80
NMeFOSAA	2355-31-9	3.40	U	1.52	3.40	6.80
NEtFOSAA	2991-50-6	2.72	U	0.78	2.72	6.80
PFBS	375-73-5	8.72		0.49	1.36	6.80
PFHxS	355-46-4	94.20		0.30	0.68	6.80
PFOS	1763-23-1	234.84	D	0.73	2.72	13.61
Surrogate Recoveries (%)						
13C5-PFHxA		104				
13C4-PFHpA		105				
13C8-PFOA		98				
13C9-PFNA		90				
13C6-PFDA		104				
13C7-PFUnA		109				
13C2-PFDoA		97				
13C2-PFTeDA		94				
d3-MeFOSAA		101	D			
d5-EtFOSAA		124	D			
13C3-PFBS		108	D			
13C3-PFHxS		111	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-MS09-SS05-000H			
Battelle ID		J8450-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		7.68			
Matrix		SS			
Sample Size		1.81			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	9.43	0.36	1.10	5.52
PFHpA	375-85-9	3.87 J	0.49	1.10	5.52
PFOA	335-67-1	9.99	0.55	1.10	5.52
PFNA	375-95-1	17.82	0.48	1.10	5.52
PFDA	335-76-2	4.79 J	0.30	1.10	5.52
PFUnA	2058-94-8	10.22	0.45	1.10	5.52
PFDoA	307-55-1	2.41 J	0.27	0.55	5.52
PFTrDA	72629-94-8	7.05	0.31	1.10	5.52
PFTeDA	376-06-7	2.21 U	0.70	2.21	5.52
NMeFOSAA	2355-31-9	2.76 U	1.24	2.76	5.52
NEtFOSAA	2991-50-6	2.21 U	0.63	2.21	5.52
PFBS	375-73-5	0.63 J	0.40	1.10	5.52
PFHxS	355-46-4	32.94	0.24	0.55	5.52
PFOS	1763-23-1	2224.28	82.87	306.94	1534.68
Surrogate Recoveries (%)					
13C5-PFHxA		114			
13C4-PFHpA		115			
13C8-PFOA		122			
13C9-PFNA		68			
13C6-PFDA		117			
13C7-PFUnA		132			
13C2-PFDoA		121			
13C2-PFTeDA		115			
d3-MeFOSAA		123 D			
d5-EtFOSAA		127 D			
13C3-PFBS		123 D			
13C3-PFHxS		125 D			
13C8-PFOS		123 D			

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

Client ID		VC-MS09-SB05-0102			
Battelle ID		J8451-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		10.29			
Matrix		SB			
Sample Size		1.81			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	8.09	0.36	1.10	5.52
PFHpA	375-85-9	4.57 J	0.49	1.10	5.52
PFOA	335-67-1	6.23	0.55	1.10	5.52
PFNA	375-95-1	17.84	0.48	1.10	5.52
PFDA	335-76-2	3.31 J	0.30	1.10	5.52
PFUnA	2058-94-8	13.45	0.45	1.10	5.52
PFDoA	307-55-1	0.98 J	0.27	0.55	5.52
PFTrDA	72629-94-8	4.98 J	0.31	1.10	5.52
PFTeDA	376-06-7	2.21 U	0.70	2.21	5.52
NMeFOSAA	2355-31-9	2.76 U	1.24	2.76	5.52
NEtFOSAA	2991-50-6	2.21 U	0.63	2.21	5.52
PFBS	375-73-5	0.46 J	0.40	1.10	5.52
PFHxS	355-46-4	29.28	0.24	0.55	5.52
PFOS	1763-23-1	1552.75 D	7.46	27.62	138.12
Surrogate Recoveries (%)					
13C5-PFHxA		100			
13C4-PFHpA		99			
13C8-PFOA		115			
13C9-PFNA		71			
13C6-PFDA		103			
13C7-PFUnA		117			
13C2-PFDoA		109			
13C2-PFTeDA		109			
d3-MeFOSAA		110 D			
d5-EtFOSAA		126 D			
13C3-PFBS		110 D			
13C3-PFHxS		125 D			
13C8-PFOS		121 D			

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

Client ID		VC-MS09-SB05-0506			
Battelle ID		J8452-FS			
Sample Type		SA			
Collection Date		09/26/2018			
Extraction Date		10/08/2018			
Analysis Date		10/18/2018			
Analytical Instrument		Sciex 5500 LC/MS/MS			
% Moisture		14.94			
Matrix		SB			
Sample Size		1.65			
Size Unit-Basis		g			
Units		ng/g_Dry	MDL	LOD	LOQ
PFHxA	307-24-4	25.94	0.40	1.21	6.06
PFHpA	375-85-9	10.32	0.53	1.21	6.06
PFOA	335-67-1	19.76	0.61	1.21	6.06
PFNA	375-95-1	11.57	0.52	1.21	6.06
PFDA	335-76-2	1.21 U	0.33	1.21	6.06
PFUnA	2058-94-8	1.21 U	0.50	1.21	6.06
PFDoA	307-55-1	0.61 U	0.29	0.61	6.06
PFTrDA	72629-94-8	1.21 U	0.34	1.21	6.06
PFTeDA	376-06-7	2.42 U	0.76	2.42	6.06
NMeFOSAA	2355-31-9	3.03 U	1.36	3.03	6.06
NEtFOSAA	2991-50-6	2.42 U	0.69	2.42	6.06
PFBS	375-73-5	2.75 J	0.44	1.21	6.06
PFHxS	355-46-4	102.47	0.27	0.61	6.06
PFOS	1763-23-1	417.41	1.64	6.06	30.30

Surrogate Recoveries (%)

13C5-PFHxA	100
13C4-PFHpA	102
13C8-PFOA	100
13C9-PFNA	89
13C6-PFDA	106
13C7-PFUnA	106
13C2-PFDoA	96
13C2-PFTeDA	96
d3-MeFOSAA	110
d5-EtFOSAA	119
13C3-PFBS	128
13C3-PFHxS	121
13C8-PFOS	107

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-MS09-SO01	SITE 00009	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0589	6222486.1	1869599.4	Perfluoroalkyl Compounds	VC-MS09-SB01-0102	SBS	Sub-surface soil (> 6)	26-Sep-18
VC-MS09-SO01	SITE 00009	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0589	6222486.1	1869599.4	Perfluoroalkyl Compounds	VC-MS09-SB01-0506	SBS	Sub-surface soil (> 6)	26-Sep-18
VC-MS09-SO01	SITE 00009	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0589	6222486.1	1869599.4	Perfluoroalkyl Compounds	VC-MS09-SS01-000H	SU	Surface soil (less than 6 inches)	26-Sep-18
VC-MS09-SO02	SITE 00009	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0589	6223040.5	1869590.5	Perfluoroalkyl Compounds	VC-MS09-SB02-0102	SBS	Sub-surface soil (> 6)	26-Sep-18
VC-MS09-SO02	SITE 00009	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0589	6223040.5	1869590.5	Perfluoroalkyl Compounds	VC-MS09-SB02-0506	SBS	Sub-surface soil (> 6)	26-Sep-18
VC-MS09-SO02	SITE 00009	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0589	6223040.5	1869590.5	Perfluoroalkyl Compounds	VC-MS09-SS02-000H	SU	Surface soil (less than 6 inches)	26-Sep-18
VC-MS09-SO03	SITE 00009	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0589	6222972.6	1869497.7	Perfluoroalkyl Compounds	VC-MS09-SB03-0102	SBS	Sub-surface soil (> 6)	26-Sep-18
VC-MS09-SO03	SITE 00009	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0589	6222972.6	1869497.7	Perfluoroalkyl Compounds	VC-MS09-SB03-0506	SBS	Sub-surface soil (> 6)	26-Sep-18
VC-MS09-SO03	SITE 00009	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0589	6222972.6	1869497.7	Perfluoroalkyl Compounds	VC-MS09-SS03-000H	SU	Surface soil (less than 6 inches)	26-Sep-18
VC-MS09-SO04	SITE 00009	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0589	6223047.8	1869412	Perfluoroalkyl Compounds	VC-MS09-SB04-0102	SBS	Sub-surface soil (> 6)	26-Sep-18
VC-MS09-SO04	SITE 00009	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0589	6223047.8	1869412	Perfluoroalkyl Compounds	VC-MS09-SB04-0506	SBS	Sub-surface soil (> 6)	26-Sep-18
VC-MS09-SO04	SITE 00009	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0589	6223047.8	1869412	Perfluoroalkyl Compounds	VC-MS09-SS04-000H	SU	Surface soil (less than 6 inches)	26-Sep-18
VC-MS09-SO05	SITE 00009	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0589	6222488.3	1869422.3	Perfluoroalkyl Compounds	VC-MS09-SB05-0102	SBS	Sub-surface soil (> 6)	26-Sep-18
VC-MS09-SO05	SITE 00009	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0589	6222488.3	1869422.3	Perfluoroalkyl Compounds	VC-MS09-SB05-0506	SBS	Sub-surface soil (> 6)	26-Sep-18
VC-MS09-SO05	SITE 00009	POINT_MUGU_NAS	DP	Direct Push/Geoprobe	18-0589	6222488.3	1869422.3	Perfluoroalkyl Compounds	VC-MS09-SS05-000H	SU	Surface soil (less than 6 inches)	26-Sep-18