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BRUNSWICK_NAS
SSIC 5000-33c

LABORATORY DATA PACKAGE, 18-0500, NAS BRUNSWICK ME
08/31/2018
BATTELLE

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**CTO-WE21: Former Naval Air Station, Brunswick,
Maine**

**Project No 100122108-CTOWE21
PFAS by DoD QSM 5.1 Table B-15
GW**

Batch 18-0500

Package DP-18-0217

Submitted to:

Tetra Tech

661 Anderson Drive Foster Plaza 7

Pittsburgh, PA 15220 USA

Submitted by:

Battelle Norwell Operations
141 Longwater Drive Suite 202
Norwell, MA 02061

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**CTO-WE21: Former Naval Air Station, Brunswick,
Maine**

**Project No 100122108-CTOWE21
PFAS by DoD QSM 5.1 Table B-15
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*Batch 18-0500
Package DP-18-0217*

Submitted to:
Tetra Tech
661 Anderson Drive Foster Plaza 7
Pittsburgh, PA 15220 USA

NELAP Accreditation Number: E87856 (Florida Department of Health)

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

Analyst Approval:		schumitzd@battelle.org 2018.08.30 11:56:23 -04'00'
QC Chemist Approval:		Digitally signed by devinec@battelle.org DN: cn=devinec@battelle.org Date: 2018.08.31 09:10:30 -04'00'
Project Manager Approval:		Digitally signed by Jonathan Thorn Date: 2018.08.31 14:32:55 -04'00'

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CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No 100122108-CTOWE21 PFAS by DoD QSM 5.1 Table B-15 GW

Batch 18-0500

Package DP-18-0217

1	<i>Work Plan</i> Laboratory Work Plan, Addendums To Work Plan, Memos From Project Manager, Special Instructions, Chain-of-Custody Reports.	1
2	<i>Tables</i> Analytical Data Tables, Qualifier Definitions.	17
3	<i>Miscellaneous Documentation</i> Case Narrative, Miscellaneous Documentation Form, Quality Control Summary, Example Calculations, Internal Standard Recovery Report, Retention Time Window Report.	33
4	<i>Sample Preparation Records</i> Sample Preparation Records, Dilution Worksheets, Standard Preparation Records, Certificates Of Analysis, GPC Check Report.	180
5	<i>Analytical Calibrations</i> Analytical Sequence, Analytical Method, Tune Report, Initial Calibration, Pesticide Degradation Report, RF Summary, Calibration Verifications, Independent Calibration Verification Check.	195
6	<i>Analytical Data</i> Raw Data Quantification Reports.	398
7	<i>Chromatograms</i> Sample And Standard Chromatograms.	474
8	<i>Unused Data</i>	650

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Sample Summary

Client: Tetra Tech Inc.


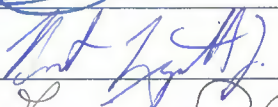
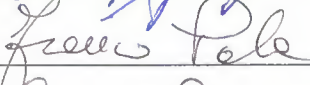





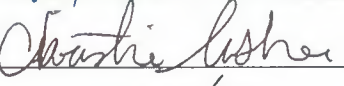

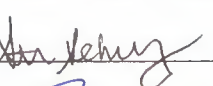

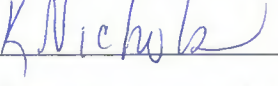



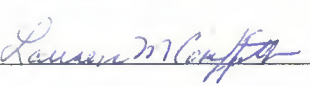
SDG: 18-0500

Project/Site: Former Naval Air Station, Brunswick, Maine

CTO: WE21

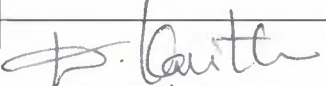
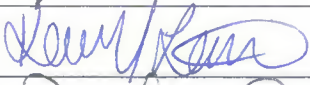


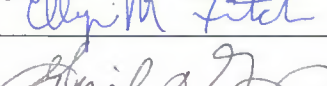
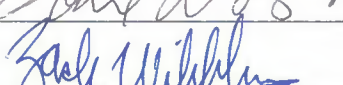
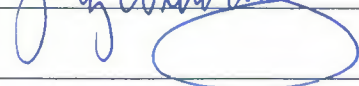
Lab Sample ID	Client Sample ID	Matrix	Collection Date	Receipt Date
CR552PB-FS	Procedural Blank	WATER	8/15/2018	8/15/2018
CR553LCS-FS	Laboratory Control Sample	WATER	8/15/2018	8/15/2018
J7394-FS	NASB-CCC-GW-01-0818	GW	8/8/2018	8/10/2018
J7395-FS	NASB-CCC-GW-02-0818	GW	8/8/2018	8/10/2018
J7396-FS	NASB-BLL15-GW-02-0818	GW	8/9/2018	8/10/2018
J7397-FS	NASB-BLL15-GW-01-0818	GW	8/9/2018	8/10/2018
J7397MS-FS	NASB-BLL15-GW-01-0818	GW	8/9/2018	8/10/2018
J7397MSD-FS	NASB-BLL15-GW-01-0818	GW	8/9/2018	8/10/2018
J7398-FS	NASB-BLL15-DUP-080918	GW	8/9/2018	8/10/2018
J7399-FS	NASB-BLL15-GW-03-0818	GW	8/9/2018	8/10/2018
J7400-FS	NASB-BLL15-GW-04-0818	GW	8/9/2018	8/10/2018
J7402-FS	NASB-BLL15-GW-RB01-080918	QC	8/9/2018	8/10/2018

Signature Page

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

Signature Page

Battelle 2018 (2 of 2)
Signature Page

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

Work Plan



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WORK/QUALITY ASSURANCE PROJECT PLAN

1.0 GENERAL PROJECT INFORMATION

Project Title: CTO-WE21: Former Naval Air Station, Brunswick, Maine
Project Number: 100122108-CTOWE21
Client: Tetra Tech
 661 Anderson Drive Foster Plaza 7
 Pittsburgh, PA 15220
 USA

Client Contact Information: Jeff Orient
 Manager
 (412) 921-8778(V)
 NA
 jeff.orient@tetrattech.com

Effective Date of QAPP: 8/10/2018
Version Number: 100122108-CTOWE21(L)-01
Project Manager: Thorn, Jonathan
Laboratory Task Manager: Thorn, Jonathan
Deliverable Due Date: 8/31/2018

2.0 SCOPE OF WORK

Overview: Analysis of groundwater samples for PFAS including PFBA.
Matrix: Water

2.1 TECHNICAL APPROACH

2.1.1 Sample Receipt, Storage, and Handling

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

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



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WORK/QUALITY ASSURANCE PROJECT PLAN

2.1.2 Sample Preparation

10 samples, including field reagent blank (FRB) samples. FRB samples will only be extracted if PFAS are detected in any field samples.

Samples Expected:	Samples Per Batch:	Batches Expected:
10	20	1

Batch quality control samples are defined in Table 1.

Target samples are presented in Attachment 1.

Table 1: Quality Control Samples

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

2.1.3 Extraction/Preparation

2.1.3.1 Extraction

SOP No.-Rev:	5-370-06
SOP Title:	<i>Extraction of Poly and Perfluoroalkyl Substances from Environmental Matrices</i>
Sample Size:	250 ml
SIS and LCS/MS Compounds:	Defined in Table 2.
Deviations:	None
Comments:	None

Table 2: SIS and LCS/MS Spiking Level

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



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Standard Type	Standard Contents	Spike Amount (ng)	Volume (uL)	Comment
PFAS - DoD Second Source LCS/MS Solution	JZ27 LCS/MS	~ 7.5 ng	150 uL	NA
PFAS - DoD Second Source LCS/MS Solution	JZ27 LCS/MS	~ 2.50 ng	50 uL	LCS only

2.1.3.2 Cleanup

None.

RIS spiking levels are presented in Table 3.

Extract PIV (uL): 500

Table 3: RIS Spiking Level

Standard Type	Standard Contents	Spike Amount (ng)	Volume (uL)	Comment
PFAS - DoD Internal Standard Spiking Solution	JY26 RIS	~ 0.125 ng	25 uL	NA

2.1.4 Instrumental Analysis

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

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

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

Deviations: None

Comments: None

2.2. DELIVERABLES

Deliverables Due:	8/31/2018
LIMS Reports:	No
Histograms:	No
Excel Tables:	Yes
EICs:	No



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Chromatograms:	<i>No</i>
EDDs:	<i>Yes</i>
Comments:	<ul style="list-style-type: none"> • Full validation package compliant with QSM 5.1 Table B-15 • Tetra Tech EDD format

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
Lauren M. Griffith	LC-MS/MS Analysis	NA
Denise M. 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	08/10/2018	08/10/2018	0	NA
Sample Preparation	08/10/2018	08/14/2018	4	NA
Instrument Analysis	08/14/2018	08/24/2018	10	NA



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Activity:	Start Date:	End Date:	TAT (days):	Comment:
Quality Control Review	08/24/2018	08/29/2018	5	NA
Final Data Reporting	08/31/2018	08/31/2018	0	NA
Quality Assurance Review	08/29/2018	08/31/2018	2	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	1	2	Hours based on batch of 20 samples.
Sample Preparation	8	1	8	NA
Instrument Analysis	8	1	8	NA
Quality Control Review	3	1	3	NA
Final Data Reporting	1	1	1	NA
Quality Assurance Review	1	1	1	NA

7.0 STAFF DEVELOPMENT

None anticipated.



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WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 1: Target Samples

Shipment: SHP-180810-03
Status: Pending
Description: Nas Brunswick
Range: J7394-J7402
Comment: NA

No:	BDO Id:	Client Sample ID:	Collection Date:	Matrix:	Storage Facility:	Location:	No:	Comments:
1	J7394	NASB-CCC-GW-01-0818	08/08/2018 3:12 pm	GW	R0119	(NA)		
2	J7395	NASB-CCC-GW-02-0818	08/08/2018 4:06 pm	GW	R0119	(NA)		
3	J7396	NASB-BLL15-GW-02-0818	08/09/2018 8:37 am	GW	R0119	(NA)		
4	J7397	NASB-BLL15-GW-01-0818	08/09/2018 9:40 am	GW	R0119	(NA)		
5	J7398	NASB-BLL15-DUP-080918	08/09/2018 9:45 am	GW	R0119	(NA)		
6	J7399	NASB-BLL15-GW-03-0818	08/09/2018 10:54 am	GW	R0119	(NA)		
7	J7400	NASB-BLL15-GW-04-0818	08/09/2018 12:16 pm	GW	R0119	(NA)		
8	J7401	NASB-BLL15-GW-FB01-080918	08/09/2018 2:00 pm	GW	R0119	(NA)		
9	J7402	NASB-BLL15-GW-RB01-080918	08/09/2018 2:15 pm	GW	R0119	(NA)		



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Attachment 2: Test Codes

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

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

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



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Attachment 2: Test Codes

Project Test Code Name: Master_369

No:	Analyte:	Report Name:	Type	RIS	SIS	Hidden:	Graph:
4	13C8-PFOA	13C8-PFOA	SIS	13C2-PFOA		No	No
5	13C9-PFNA	13C9-PFNA	SIS	13C2-PFOA		No	No
6	13C6-PFDA	13C6-PFDA	SIS	13C2-PFDA		No	No
7	13C7-PFUnA	13C7-PFUnA	SIS	13C2-PFDA		No	No
8	13C2-PFDoA	13C2-PFDoA	SIS	13C2-PFDA		No	No
9	13C2-PFTeDA	13C2-PFTeDA	SIS	13C2-PFDA		No	No
10	d3-MeFOSAA	d3-MeFOSAA	SIS	13C4-PFOS		No	No
11	d5-EtFOSAA	d5-EtFOSAA	SIS	13C4-PFOS		No	No
12	13C3-PFBS	13C3-PFBS	SIS	13C4-PFOS		No	No
13	13C3-PFHxS	13C3-PFHxS	SIS	13C4-PFOS		No	No
14	13C8-PFOS	13C8-PFOS	SIS	13C4-PFOS		No	No
Total Analytes:		29					

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

Degradation Check Criteria:

None



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Attachment 3: Method Quality Objectives

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



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WORK/QUALITY ASSURANCE PROJECT PLAN

Attachment 3: Method Quality Objectives

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

Sample Receipt Form

Approved: Authorized

Project Number: 112G08005-WE21 **Client:** Tetra Tech
Received by: Schumitz, Matt **Date/Time Received:** Friday, August 10, 2018 10:30 AM
No. of Shipping Containers: 1

SHIPMENT

Method of Delivery: Commercial Carrier **Tracking Number:** 8111 8554 2137
COC Forms: Shipped with samples No Forms

Cooler(s)/Box(es)

Cntr	Type	Tracking No.	Seal	Seal	Container	Therm.	Temp C	Smps
1 of 1	Cooler	8111 8554 2137	Custody Seal	Intact	Intact	Therm_1	0.9	9

Samples

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

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

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

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

Samples Acidified: Yes No Unknown

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

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

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

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

Storage Location: Custody: Refrigerator - R0119 (NA) **BDO IDs Assigned:** J7394 - J7402

Samples logged in by: Schumitz, Matt **Date/Time:** 08/10/2018 10:30 AM

Approved By: _____ **Approved On:** _____

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



It can be done

ShpNo SHP-180810-03

Battelle Project No: 8-CTOWE21

Sample Receipt Form Details

Approved: Authorized

Project Number: 112G08005-WE21 Client: Tetra Tech

Received by: Schumitz, Matt Date/Time Received: Friday, August 10, 2018 10:30 AM

No. of Shipping Containers: 1

BDO Id:	Client Sample ID:	Collection Date:	Login Date:	Ctrs:	Matrix:	Temp:	pH:	TRC:	VOC:	Stored In:	Loc:	No:	Comments:
J7394	NASB-CCC-GW-01-0818	08/08/18 15:12	08/10/18 11:26	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J7395	NASB-CCC-GW-02-0818	08/08/18 16:06	08/10/18 11:26	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J7396	NASB-BLL15-GW-02-0818	08/09/18 8:37	08/10/18 11:27	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J7397	NASB-BLL15-GW-01-0818	08/09/18 9:40	08/10/18 11:27	6	GW	0.9	NA	NA	NA	R0119 (NA)			
J7398	NASB-BLL15-DUP-080918	08/09/18 9:45	08/10/18 11:27	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J7399	NASB-BLL15-GW-03-0818	08/09/18 10:54	08/10/18 11:28	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J7400	NASB-BLL15-GW-04-0818	08/09/18 12:16	08/10/18 11:28	2	GW	0.9	NA	NA	NA	R0119 (NA)			
J7401	NASB-BLL15-GW-FB01-080918	08/09/18 14:00	08/10/18 11:28	2	QC	0.9	NA	NA	NA	R0119 (NA)			
J7402	NASB-BLL15-GW-RB01-080918	08/09/18 14:15	08/10/18 11:29	2	QC	0.9	NA	NA	NA	R0119 (NA)			

Total Samples: 9



PROJECT NO: 112G08005WEZ1	FACILITY: NAS BRUNSWICK	PROJECT MANAGER JEFF ORIENT	PHONE NUMBER 412-921-7080	LABORATORY NAME AND CONTACT: 781-691-5588 BATTELLE JON THORN
SAMPLERS (SIGNATURE) <i>Sredlauer</i>		FIELD OPERATIONS LEADER FRED W. RAMSER	PHONE NUMBER 412-921-8838	ADDRESS 141 LONGWATER DR, SUITE 202
CARRIER/WAYBILL NUMBER FED EX 8111 8554 2137			CITY, STATE NORWELL, MA 02061	

STANDARD TAT <input checked="" type="checkbox"/>	CONTAINER TYPE PLASTIC (P) or GLASS (G)
RUSH TAT <input type="checkbox"/>	PRESERVATIVE USED
<input type="checkbox"/> 24 hr. <input type="checkbox"/> 48 hr. <input type="checkbox"/> 72 hr. <input type="checkbox"/> 7 day <input type="checkbox"/> 14 day	NONE P

DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	TYPE OF ANALYSIS	COMMENTS
8/8	1512	NASB-CCC-GW-01-0818	CC MW01	-	-	GW	G	2	PFAS	J7394
8/8	1606	NASB-CCC-GW-02-0818	CC MW02	-	-	GW	G	2		J7395
8/9	0837	NASB-BLL15-GW-02-0818	BLL15 MW02	-	-	GW	G	2		J7396
8/9	0940	NASB-BLL15-GW-01-0818	BLL15 MW01	-	-	GW	G	6+		J7397
8/9	0945	NASB-BLL15-DUP080918	-	-	-	GW	G	2		J7398
8/9	1054	NASB-BLL15-GW-03-0818	BLL15 MW03	-	-	GW	G	2		J7399
8/9	1216	NASB-BLL15-GW-04-0818	BLL15 MW04	-	-	GW	G	2		J7400
8/9	1400	NASB-BLL15-GW-RB01-080918	QC	-	-	QC	G	2		J7401
8/9	1415	NASB-BLL15-GW-RB01-080918	QC	-	-	QC	G	2		J7402

1. RELINQUISHED BY <i>Sredlauer</i>	DATE 8-9-18	TIME 1630	1. RECEIVED BY FED EX	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY <i>M Battelle</i>	DATE 8-10-18	TIME 1030
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

TRK# 8111 8554 2137 FRI - 10 AUG 10:30
0215 PRIORITY OVERNIGHT

XE XPUA

02061
MA - US
BOS



5224795 09AUG 23:58 MEMH 547C1/07F5/A17C

Therm-1

0.9

Data Tables



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	NASB-CCC-GW-01-0818			
Battelle ID	J7394-FS			
Sample Type	SA			
Collection Date	08/08/2018			
Extraction Date	08/15/2018			
Analysis Date	08/25/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.285			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	3.86 J	0.12	0.44	4.39
PFHxA	1.19 J	0.17	0.44	4.39
PFHpA	0.96 J	0.14	0.44	4.39
PFOA	6.28 B	0.16	0.44	4.39
PFNA	0.78 J	0.23	0.88	4.39
PFDA	0.50 J	0.14	0.44	4.39
PFUnA	0.88 U	0.25	0.88	4.39
PFDoA	0.44 U	0.16	0.44	4.39
PFTTrDA	0.44 U	0.13	0.44	4.39
PFTeDA	0.88 U	0.22	0.88	4.39
NMeFOSAA	1.75 U	0.49	1.75	4.39
NEtFOSAA	0.88 U	0.43	0.88	4.39
PFBS	1.27 J	0.11	0.44	4.39
PFHxS	4.00 J	0.10	0.35	4.39
PFOS	3.36 J	0.17	0.44	4.39
Surrogate Recoveries (%)				
13C4-PFBA	66			
13C5-PFHxA	95			
13C4-PFHpA	99			
13C8-PFOA	86			
13C9-PFNA	85			
13C6-PFDA	86			
13C7-PFUnA	86			
13C2-PFDoA	77			
13C2-PFTeDA	80			
d3-MeFOSAA	80			
d5-EtFOSAA	61			
13C3-PFBS	94			
13C3-PFHxS	104			
13C8-PFOS	88			



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	NASB-CCC-GW-02-0818			
Battelle ID	J7395-FS			
Sample Type	SA			
Collection Date	08/08/2018			
Extraction Date	08/15/2018			
Analysis Date	08/25/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.275			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	2.05 J	0.13	0.45	4.55
PFHxA	7.71 B	0.17	0.45	4.55
PFHpA	3.85 J	0.15	0.45	4.55
PFOA	7.62 B	0.16	0.45	4.55
PFNA	0.29 J	0.24	0.91	4.55
PFDA	0.45 U	0.15	0.45	4.55
PFUnA	0.91 U	0.26	0.91	4.55
PFDoA	0.45 U	0.16	0.45	4.55
PFTTrDA	0.45 U	0.14	0.45	4.55
PFTeDA	0.91 U	0.23	0.91	4.55
NMeFOSAA	1.82 U	0.51	1.82	4.55
NEtFOSAA	0.91 U	0.45	0.91	4.55
PFBS	0.72 J	0.12	0.45	4.55
PFHxS	5.20	0.10	0.36	4.55
PFOS	6.22	0.17	0.45	4.55
Surrogate Recoveries (%)				
13C4-PFBA	58			
13C5-PFHxA	88			
13C4-PFHpA	94			
13C8-PFOA	76			
13C9-PFNA	85			
13C6-PFDA	83			
13C7-PFUnA	75			
13C2-PFDoA	77			
13C2-PFTeDA	67			
d3-MeFOSAA	72			
d5-EtFOSAA	66			
13C3-PFBS	102			
13C3-PFHxS	86			
13C8-PFOS	83			



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	NASB-BLL15-GW-02-0818			
Battelle ID	J7396-FS			
Sample Type	SA			
Collection Date	08/09/2018			
Extraction Date	08/15/2018			
Analysis Date	08/25/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.270			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	0.46 U	0.13	0.46	4.63
PFHxA	3.84 J	0.18	0.46	4.63
PFHpA	1.99 J	0.15	0.46	4.63
PFOA	7.86 B	0.17	0.46	4.63
PFNA	0.45 J	0.24	0.93	4.63
PFDA	0.46 U	0.15	0.46	4.63
PFUnA	0.93 U	0.27	0.93	4.63
PFDoA	0.46 U	0.17	0.46	4.63
PFTTrDA	0.46 U	0.14	0.46	4.63
PFTeDA	0.93 U	0.23	0.93	4.63
NMeFOSAA	1.85 U	0.52	1.85	4.63
NEtFOSAA	0.93 U	0.45	0.93	4.63
PFBS	2.26 J	0.12	0.46	4.63
PFHxS	11.26	0.10	0.37	4.63
PFOS	5.86 B	0.18	0.46	4.63
Surrogate Recoveries (%)				
13C4-PFBA	50			
13C5-PFHxA	97			
13C4-PFHpA	111			
13C8-PFOA	82			
13C9-PFNA	90			
13C6-PFDA	87			
13C7-PFUnA	75			
13C2-PFDoA	68			
13C2-PFTeDA	55			
d3-MeFOSAA	96			
d5-EtFOSAA	92			
13C3-PFBS	111			
13C3-PFHxS	122			
13C8-PFOS	99			



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	NASB-BLL15-GW-01-0818			
Battelle ID	J7397-FS			
Sample Type	SA			
Collection Date	08/09/2018			
Extraction Date	08/15/2018			
Analysis Date	08/25/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.260			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	57.74	0.13	0.48	4.81
PFHxA	3.47 J	0.18	0.48	4.81
PFHpA	1.90 J	0.15	0.48	4.81
PFOA	6.81 B	0.17	0.48	4.81
PFNA	0.41 J	0.25	0.96	4.81
PFDA	0.48 U	0.15	0.48	4.81
PFUnA	0.96 U	0.28	0.96	4.81
PFDoA	0.48 U	0.17	0.48	4.81
PFTTrDA	0.48 U	0.14	0.48	4.81
PFTeDA	0.96 U	0.24	0.96	4.81
NMeFOSAA	1.92 U	0.54	1.92	4.81
NEtFOSAA	0.96 U	0.47	0.96	4.81
PFBS	3.10 J	0.13	0.48	4.81
PFHxS	12.63	0.11	0.38	4.81
PFOS	3.30 J	0.18	0.48	4.81

Surrogate Recoveries (%)

13C4-PFBA	8 N
13C5-PFHxA	112
13C4-PFHpA	126
13C8-PFOA	102
13C9-PFNA	104
13C6-PFDA	99
13C7-PFUnA	91
13C2-PFDoA	73
13C2-PFTeDA	43 N
d3-MeFOSAA	95
d5-EtFOSAA	78
13C3-PFBS	100
13C3-PFHxS	128
13C8-PFOS	95



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	NASB-BLL15-DUP-080918			
Battelle ID	J7398-FS			
Sample Type	SA			
Collection Date	08/09/2018			
Extraction Date	08/15/2018			
Analysis Date	08/25/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.275			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	43.74	0.13	0.45	4.55
PFHxA	4.16 J	0.17	0.45	4.55
PFHpA	2.09 J	0.15	0.45	4.55
PFOA	7.41 B	0.16	0.45	4.55
PFNA	0.38 J	0.24	0.91	4.55
PFDA	0.45 U	0.15	0.45	4.55
PFUnA	0.91 U	0.26	0.91	4.55
PFDoA	0.45 U	0.16	0.45	4.55
PFTTrDA	0.45 U	0.14	0.45	4.55
PFTeDA	0.91 U	0.23	0.91	4.55
NMeFOSAA	1.82 U	0.51	1.82	4.55
NEtFOSAA	0.91 U	0.45	0.91	4.55
PFBS	3.04 J	0.12	0.45	4.55
PFHxS	14.22	0.10	0.36	4.55
PFOS	2.67 J	0.17	0.45	4.55
Surrogate Recoveries (%)				
13C4-PFBA	7 N			
13C5-PFHxA	79			
13C4-PFHpA	97			
13C8-PFOA	78			
13C9-PFNA	84			
13C6-PFDA	79			
13C7-PFUnA	67			
13C2-PFDoA	54			
13C2-PFTeDA	36 N			
d3-MeFOSAA	69			
d5-EtFOSAA	67			
13C3-PFBS	80			
13C3-PFHxS	86			
13C8-PFOS	79			



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	NASB-BLL15-GW-03-0818			
Battelle ID	J7399-FS			
Sample Type	SA			
Collection Date	08/09/2018			
Extraction Date	08/15/2018			
Analysis Date	08/25/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.265			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	0.47 U	0.13	0.47	4.72
PFHxA	3.77 J	0.18	0.47	4.72
PFHpA	2.50 J	0.15	0.47	4.72
PFOA	8.52 B	0.17	0.47	4.72
PFNA	0.70 J	0.25	0.94	4.72
PFDA	0.47 U	0.15	0.47	4.72
PFUnA	0.94 U	0.27	0.94	4.72
PFDoA	0.47 U	0.17	0.47	4.72
PFTTrDA	0.47 U	0.14	0.47	4.72
PFTeDA	0.94 U	0.24	0.94	4.72
NMeFOSAA	1.89 U	0.53	1.89	4.72
NEtFOSAA	0.94 U	0.46	0.94	4.72
PFBS	1.80 J	0.12	0.47	4.72
PFHxS	10.73	0.10	0.38	4.72
PFOS	11.61	0.18	0.47	4.72

Surrogate Recoveries (%)

13C4-PFBA	13 N
13C5-PFHxA	93
13C4-PFHpA	101
13C8-PFOA	89
13C9-PFNA	97
13C6-PFDA	81
13C7-PFUnA	82
13C2-PFDoA	69
13C2-PFTeDA	38 N
d3-MeFOSAA	106
d5-EtFOSAA	91
13C3-PFBS	97
13C3-PFHxS	118
13C8-PFOS	107



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	NASB-BLL15-GW-04-0818			
Battelle ID	J7400-FS			
Sample Type	SA			
Collection Date	08/09/2018			
Extraction Date	08/15/2018			
Analysis Date	08/25/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.290			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	17.43	0.12	0.43	4.31
PFHxA	6.76 B	0.16	0.43	4.31
PFHpA	4.01 J	0.14	0.43	4.31
PFOA	15.39	0.16	0.43	4.31
PFNA	0.77 J	0.22	0.86	4.31
PFDA	0.43 U	0.14	0.43	4.31
PFUnA	0.86 U	0.25	0.86	4.31
PFDoA	0.43 U	0.16	0.43	4.31
PFTTrDA	0.43 U	0.13	0.43	4.31
PFTeDA	0.86 U	0.22	0.86	4.31
NMeFOSAA	1.72 U	0.48	1.72	4.31
NEtFOSAA	0.86 U	0.42	0.86	4.31
PFBS	2.84 J	0.11	0.43	4.31
PFHxS	11.03	0.09	0.34	4.31
PFOS	78.41	0.16	0.43	4.31

Surrogate Recoveries (%)

13C4-PFBA	19 N
13C5-PFHxA	72
13C4-PFHpA	91
13C8-PFOA	71
13C9-PFNA	71
13C6-PFDA	70
13C7-PFUnA	59
13C2-PFDoA	50
13C2-PFTeDA	38 N
d3-MeFOSAA	69
d5-EtFOSAA	87
13C3-PFBS	100
13C3-PFHxS	90
13C8-PFOS	76



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	NASB-BLL15-GW-RB01-080918			
Battelle ID	J7402-FS			
Sample Type	SA			
Collection Date	08/09/2018			
Extraction Date	08/15/2018			
Analysis Date	08/25/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	QC			
Sample Size	0.255			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	0.49 U	0.14	0.49	4.90
PFHxA	1.45 J	0.19	0.49	4.90
PFHpA	0.63 J	0.16	0.49	4.90
PFOA	1.38 J	0.18	0.49	4.90
PFNA	0.98 U	0.25	0.98	4.90
PFDA	0.49 U	0.16	0.49	4.90
PFUnA	0.98 U	0.28	0.98	4.90
PFDoA	0.49 U	0.18	0.49	4.90
PFTTrDA	0.49 U	0.15	0.49	4.90
PFTeDA	0.98 U	0.25	0.98	4.90
NMeFOSAA	1.96 U	0.55	1.96	4.90
NEtFOSAA	0.98 U	0.48	0.98	4.90
PFBS	0.49 U	0.13	0.49	4.90
PFHxS	0.27 J	0.11	0.39	4.90
PFOS	1.03 J	0.19	0.49	4.90

Surrogate Recoveries (%)

13C4-PFBA	81
13C5-PFHxA	98
13C4-PFHpA	102
13C8-PFOA	94
13C9-PFNA	94
13C6-PFDA	103
13C7-PFUnA	98
13C2-PFDoA	87
13C2-PFTeDA	85
d3-MeFOSAA	93
d5-EtFOSAA	82
13C3-PFBS	97
13C3-PFHxS	93
13C8-PFOS	90



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	JY46 IB			
Battelle ID	JY46 IB_08/24/2018			
Sample Type	IB			
Collection Date	NA			
Extraction Date	NA			
Analysis Date	08/24/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	Water			
Sample Size	0.250			
Size Unit-Basis	NA			
Units	ng/L	MDL	LOD	LOQ
PFBA	0.50 U	0.14	0.50	5.00
PFHxA	0.50 U	0.19	0.50	5.00
PFHpA	0.50 U	0.16	0.50	5.00
PFOA	0.50 U	0.18	0.50	5.00
PFNA	1.00 U	0.26	1.00	5.00
PFDA	0.50 U	0.16	0.50	5.00
PFUnA	1.00 U	0.29	1.00	5.00
PFDoA	0.50 U	0.18	0.50	5.00
PFTTrDA	0.50 U	0.15	0.50	5.00
PFTeDA	1.00 U	0.25	1.00	5.00
NMeFOSAA	2.00 U	0.56	2.00	5.00
NEtFOSAA	1.00 U	0.49	1.00	5.00
PFBS	0.50 U	0.13	0.50	5.00
PFHxS	0.40 U	0.11	0.40	5.00
PFOS	0.50 U	0.19	0.50	5.00

Surrogate Recoveries (%)

13C4-PFBA	103
13C5-PFHxA	101
13C4-PFHpA	100
13C8-PFOA	106
13C9-PFNA	99
13C6-PFDA	111
13C7-PFUnA	103
13C2-PFDoA	108
13C2-PFTeDA	99
d3-MeFOSAA	101
d5-EtFOSAA	123
13C3-PFBS	100
13C3-PFHxS	99
13C8-PFOS	103



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	JY46 IB			
Battelle ID	JY46 IB_08/28/2018			
Sample Type	IB			
Collection Date	NA			
Extraction Date	NA			
Analysis Date	08/28/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	Water			
Sample Size	0.250			
Size Unit-Basis	NA			
Units	ng/L	MDL	LOD	LOQ
PFBA	0.20 J	0.14	0.50	5.00
PFHxA	0.50 U	0.19	0.50	5.00
PFHpA	0.50 U	0.16	0.50	5.00
PFOA	0.50 U	0.18	0.50	5.00
PFNA	1.00 U	0.26	1.00	5.00
PFDA	0.50 U	0.16	0.50	5.00
PFUnA	1.00 U	0.29	1.00	5.00
PFDoA	0.50 U	0.18	0.50	5.00
PFTeDA	0.50 U	0.15	0.50	5.00
PFTeDA	1.00 U	0.25	1.00	5.00
NMeFOSAA	2.00 U	0.56	2.00	5.00
NEtFOSAA	1.00 U	0.49	1.00	5.00
PFBS	0.50 U	0.13	0.50	5.00
PFHxS	0.40 U	0.11	0.40	5.00
PFOS	0.50 U	0.19	0.50	5.00

Surrogate Recoveries (%)

13C4-PFBA	94
13C5-PFHxA	100
13C4-PFHpA	99
13C8-PFOA	107
13C9-PFNA	104
13C6-PFDA	107
13C7-PFUnA	106
13C2-PFDoA	97
13C2-PFTeDA	97
d3-MeFOSAA	89
d5-EtFOSAA	111
13C3-PFBS	87
13C3-PFHxS	100
13C8-PFOS	108



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	Procedural Blank			
Battelle ID	CR552PB-FS			
Sample Type	PB			
Collection Date	08/15/2018			
Extraction Date	08/15/2018			
Analysis Date	08/25/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	WATER			
Sample Size	0.250			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	0.21 J	0.14	0.50	5.00
PFHxA	1.89 J	0.19	0.50	5.00
PFHpA	0.50 U	0.16	0.50	5.00
PFOA	1.21 J	0.18	0.50	5.00
PFNA	1.00 U	0.26	1.00	5.00
PFDA	0.50 U	0.16	0.50	5.00
PFUnA	1.00 U	0.29	1.00	5.00
PFDoA	0.50 U	0.18	0.50	5.00
PFTeDA	0.50 U	0.15	0.50	5.00
PFTeDA	1.00 U	0.25	1.00	5.00
NMeFOSAA	2.00 U	0.56	2.00	5.00
NEtFOSAA	1.00 U	0.49	1.00	5.00
PFBS	0.50 U	0.13	0.50	5.00
PFHxS	0.40 U	0.11	0.40	5.00
PFOS	0.60 J	0.19	0.50	5.00

Surrogate Recoveries (%)

13C4-PFBA	132
13C5-PFHxA	131
13C4-PFHpA	133
13C8-PFOA	137
13C9-PFNA	136
13C6-PFDA	139
13C7-PFUnA	139
13C2-PFDoA	122
13C2-PFTeDA	112
d3-MeFOSAA	122
d5-EtFOSAA	146
13C3-PFBS	135
13C3-PFHxS	139
13C8-PFOS	128



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	Laboratory Control Sample					
Battelle ID	CR553LCS-FS					
Sample Type	LCS					
Collection Date	08/15/2018					
Extraction Date	08/15/2018					
Analysis Date	08/25/2018					
Analytical Instrument	Sciex 5500 LC/MS/MS					
% Moisture	NA					
Matrix	WATER					
Sample Size	0.250					
Size Unit-Basis	L					
Units	ng/L	Target	Recovery	Qual	Control Limits	
					Lower	Upper
PFBA	11.04	10.00	110		61	139
PFHxA	12.61 B	10.10	125		51	137
PFHpA	11.00	10.00	110		48	136
PFOA	12.27	10.00	123		49	141
PFNA	10.13	10.00	101		58	122
PFDA	10.01	10.00	100		59	135
PFUnA	9.37	10.00	94		64	134
PFDoA	10.26	10.00	103		75	131
PFTTrDA	10.28	10.00	103		42	148
PFTeDA	10.59	10.00	106		42	158
NMeFOSAA	11.05	10.00	111		50	146
NEtFOSAA	10.77	10.00	108		51	131
PFBS	10.26	10.10	102		56	134
PFHxS	9.81	10.10	97		52	128
PFOS	9.68	10.00	97		40	144

Surrogate Recoveries (%)

13C4-PFBA	88
13C5-PFHxA	105
13C4-PFHpA	102
13C8-PFOA	96
13C9-PFNA	106
13C6-PFDA	123
13C7-PFUnA	119
13C2-PFDoA	115
13C2-PFTeDA	105
d3-MeFOSAA	108
d5-EtFOSAA	101
13C3-PFBS	101
13C3-PFHxS	106
13C8-PFOS	116



Project Client: Tetra Tech

Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project ID No.: 100122108-CTOWE21 NASB-BLL15-GW-01-0818 NASB-BLL15-GW-01-0818

Battelle ID		J7397-FS	J7397MS-FS				
Sample Type		SA	MS				
Collection Date		08/09/2018	08/09/2018				
Extraction Date		08/15/2018	08/15/2018				
Analysis Date		08/25/2018	08/25/2018				
Analytical Instrument		Sciex 5500 LC/MS/MS	Sciex 5500 LC/MS/MS				
% Moisture		NA	NA				
Matrix		GW	GW				
Sample Size		0.260	0.260				
Size Unit-Basis		L	L	Control Limits			
Units	ng/L	ng/L	Target	Recovery	Qual	Lower	Upper
PFBA	57.74	85.96	28.85	98		61	139
PFHxA	3.47 J	30.85	29.13	94		51	137
PFHpA	1.90 J	30.50	28.85	99		48	136
PFOA	6.81 B	31.78	28.85	87		49	141
PFNA	0.41 J	28.62	28.85	98		58	122
PFDA	0.48 U	28.54	28.85	99		59	135
PFUnA	0.96 U	26.03	28.85	90		64	134
PFDoA	0.48 U	28.08	28.85	97		75	131
PFTeDA	0.48 U	34.42	28.85	119		42	148
PFTeDA	0.96 U	29.03	28.85	101		42	158
NMeFOSAA	1.92 U	31.14	28.85	108		50	146
EtFOSAA	0.96 U	31.01	28.85	108		51	131
PFBS	3.10 J	31.13	29.13	96		56	134
PFHxS	12.63	43.11	29.13	105		52	128
PFOS	3.30 J	34.71	28.85	109		40	144

Surrogate Recoveries (%)

13C4-PFBA	8 N	7 N
13C5-PFHxA	112	95
13C4-PFHpA	126	108
13C8-PFOA	102	88
13C9-PFNA	104	85
13C6-PFDA	99	80
13C7-PFUnA	91	76
13C2-PFDoA	73	67
13C2-PFTeDA	43 N	43 N
d3-MeFOSAA	95	94
d5-EtFOSAA	78	75
13C3-PFBS	100	99
13C3-PFHxS	128	119
13C8-PFOS	95	88



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21 NASB-BLL15-GW-01-0818

Battelle ID	J7397MSD-FS									
Sample Type	MSD									
Collection Date	08/09/2018									
Extraction Date	08/15/2018									
Analysis Date	08/25/2018									
Analytical Instrument	Sciex 5500 LC/MS/MS									
% Moisture	NA									
Matrix	GW									
Sample Size	0.255									
Size Unit-Basis	L									
Units	ng/L	Target	Recovery	Qual	Control Limits Lower	Upper	RPD	Qual	RPD Limit	
PFBA	91.78	29.41	116		61	139	16.8			≤ 30
PFHxA	34.07	29.71	103		51	137	9.1			≤ 30
PFHpA	30.76	29.41	98		48	136	1.0			≤ 30
PFOA	33.91	29.41	92		49	141	5.6			≤ 30
PFNA	29.73	29.41	100		58	122	2.0			≤ 30
PFDA	27.34	29.41	93		59	135	6.3			≤ 30
PFUnA	24.63	29.41	84		64	134	6.9			≤ 30
PFDoA	31.53	29.41	107		75	131	9.8			≤ 30
PFTrDA	33.65	29.41	114		42	148	4.3			≤ 30
PFTeDA	29.44	29.41	100		42	158	1.0			≤ 30
NMeFOSAA	34.17	29.41	116		50	146	7.1			≤ 30
NEtFOSAA	31.69	29.41	108		51	131	0.0			≤ 30
PFBS	33.05	29.71	101		56	134	5.1			≤ 30
PFHxS	37.36	29.71	83		52	128	23.4			≤ 30
PFOS	33.19	29.41	102		40	144	6.6			≤ 30

Surrogate Recoveries (%)

13C4-PFBA	7 N
13C5-PFHxA	81
13C4-PFHpA	96
13C8-PFOA	81
13C9-PFNA	80
13C6-PFDA	85
13C7-PFUnA	85
13C2-PFDoA	68
13C2-PFTeDA	48 N
d3-MeFOSAA	80
d5-EtFOSAA	69
13C3-PFBS	76
13C3-PFHxS	112
13C8-PFOS	81



Glossary of Data Qualifiers

Flag: Application:

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

Miscellaneous Documentation

QA/QC Summary
Batch 18-0500

Project:	CTO-WE21: Former Naval Air Station, Brunswick, Maine
Parameters:	PFAS
Laboratory:	Battelle, Norwell, MA
Matrix:	GW
Data Set:	DP-18-0217
Analytical SOP:	5-369
Method Reference:	PFAS to QSM 5.1 Table B-15

Sample Custody		
Collection Date	Receipt Date	Temp (°C)
8/8 and 9/2018	8/10/2018	0.9
Corrective Actions	None.	
Sample Storage	The water samples were stored refrigerated until extraction.	
Related samples	This FRB sample is related to these field samples in SDG 18-0520.	

METHOD SUMMARIES	
Sample Preparation	Water samples were spiked with surrogates in the original sample container from the field. The water was extracted using a weak ion exchange solid phase extraction (SPE) cartridge and eluted from the SPE with 0.4% NH ₃ in methanol. Extracts were split and 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	Samples NASB-BLL15-GW-02-0818 (J7396-FS), NASB-BLL15-GW-01-0818 (J7397-FS), NASB-BLL15-GW-01-0818 (J7397MS-FS), NASB-BLL15-GW-01-0818 (J7397MSD-FS), NASB-BLL15-DUP-080918 (J7398-FS), NASB-BLL15-GW-03-0818 (J7399-FS), and NASB-BLL15-GW-04-0818 (J7400-FS) had a yellow color in the original sample containers.
Analysis	PFAS were measured by liquid chromatography tandem mass spectrometry (LC-MS/MS) in the multiple reaction monitoring (MRM). An initial calibration consisting of representative target analytes, labelled analogs, and internal standards was analyzed prior to analysis to demonstrate the linear range of analysis. Calibration verification was performed at the beginning and end of 10 injections and at the end of each sequence. Target PFAS were quantified using the isotope dilution method. Samples are reported in ng/L concentrations.
Analysis Comments	<p>Samples analyzed on Sciex 5500 LC-MS/MS.</p> <p>The original sequence for Data File NP_08212018.wiff had an instrument error that lead to retention time shifts, all samples were re-run with the sequence for Data File 18-0501-515-520-500.wiff. The original sequence can be found in the unused data section of the full data package.</p> <p>Sample NASB-CCC-GW-01-0818 (J7394-FS) failed internal standard area criteria for all four internal standards in the sequence for Data File 18-0501-515-520-500.wiff, this sample was re-run on the sequence for Data File 18-0511_18-</p>

QA/QC Summary
Batch 18-0500

	<p>0517.wiff with passing results, this sample was reported from Data File 18-0511_18-0517.wiff with quant methods 18-0500_BASE_R and 18-0500_SIS_R.</p> <p>Sample NASB-BLL15-GW-04-0818 (J7400-FS) had ion ratio exceedances (> 50% RPD) for PFOA.</p>	
Holding Times	Extraction Date(s)	Analysis Date(s)
	8/15/2018	8/24, 25 and 28, 29/2018
Procedural Blank (PB)	A PB was prepared with this analytical batch to ensure the sample extraction and analysis methods are free of contamination.	
≤ ½ the LOQ Samples >10x PB	<p>10 exceedances noted.</p> <p>PFHxA was detected in samples NASB-CCC-GW-02-0818 (J7395-FS), NASB-BLL15-GW-04-0818 (J7400-FS), and the LCS at a concentration less than 10 times the amount found in the PB. The amount found in the PB (1.89 ng/L) was less than ½ the LOQ.</p> <p>PFOA was detected in samples NASB-CCC-GW-01-0818 (J7394-FS), NASB-CCC-GW-02-0818 (J7395-FS), NASB-BLL15-GW-02-0818 (J7396-FS), NASB-BLL15-GW-01-0818 (J7397-FS), NASB-BLL15-DUP-080918 (J7398-FS), and NASB-BLL15-GW-03-0818 (J7399-FS) at a concentration less than 10 times the amount found in the PB. The amount found in the PB (1.21 ng/L) was less than ½ the LOQ.</p> <p>PFOS was detected in sample NASB-BLL15-GW-02-0818 (J7396-FS) at a concentration less than 10 times the amount found in the PB. The amount found in the PB (0.60 ng/L) was less than ½ the LOQ.</p> <p>The PB was re-run to verify initial results, the re-analysis can be found in the unused data section of the full data package.</p>	
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	<p>No exceedances noted.</p> <p>No comments.</p>	
Matrix Spike (MS) / Duplicate (MSD)	A MS/MSD were prepared with this analytical batch. The percent recoveries of target analytes were calculated to measure accuracy. The relative percent difference was calculated to measure precision.	
Laboratory derived control limits for recovery, RPD ≤ 30%	<p>No exceedances noted.</p> <p>No comments.</p>	

QA/QC Summary Batch 18-0500

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	12 exceedances noted. The surrogates 13C4-PFBA and 13C2-PFTeDA for samples NASB-BLL15-GW-01-0818 (J7397-FS), NASB-BLL15-GW-01-0818 (J7397MS-FS), NASB-BLL15-GW-01-0818 (J7397MSD-FS), NASB-BLL15-DUP-080918 (J7398-FS), NASB-BLL15-GW-03-0818 (J7399-FS), and NASB-BLL15-GW-04-0818 (J7400-FS) failed low. All extracts were re-run to verify the low recoveries, re-analysis results can be found in the unused data section of the full data package.
Internal Standard Analytes	Labelled analog compounds were added prior to analysis.
+/- 50% of the area of the L5 calibration point.	Five exceedances noted. 13C2-PFBA in samples NASB-BLL15-GW-01-0818 (J7397-FS), NASB-BLL15-GW-01-0818 (J7397MS-FS), NASB-BLL15-GW-01-0818 (J7397MSD-FS), NASB-BLL15-DUP-080918 (J7398-FS), and NASB-BLL15-GW-03-0818 (J7399-FS) were outside criteria in the sequence for Data File 18-0501-515-520-500.wiff, these samples were re-run on the sequence for Data File 18-0511_18-0517.wiff confirming the exceedances. The original results were reported, and the re-analysis can be found in the unused data section of the final data package.
Initial Calibration (ICAL)	The LC-MS/MS was calibrated with multi-level calibration curve for all compounds using linear or quadratic curve fitting.
+/- 30% of true value, $R^2 \geq 0.99$	No exceedances noted. No comments.
Independent Calibration Check (ICC)	The independent check was run after each initial calibration to verify the calibration. This standard is from a different source than the ICAL.
+/- 30% of true value	No exceedances noted. No comments.
Continuing Calibration Verification (CCV)	Continuing calibration standards were run at the beginning and end of 10 injections and at the end of the sequence to ensure that initial calibration is still valid.
+/- 30% of true value	No exceedances noted. No comments.
Instrument Blank (IB)	Immediately following the highest standard analyzed and daily prior to sample analysis.
$\leq \frac{1}{2}$ the LOQ	No exceedances noted. No comments.



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project Number: 100122108-CTOWE21
 Preparation Batch: 18-0500
 Data Set: DP-18-0217
 Test Code: Master_369

QC Parameter:	Exceed:	Justification:
Procedural Blank	0	None
PB Measurement Quality Objective	10	In Samples CR553LCS, J7400 and J7395 PFHxA was detected ten times lower than that of the PB. In samples J7394, J7395, J7396 J7397, J7398 and J7399 PFOA was detected ten times lower than that of the PB. The blank was run previously with the similar results and that data can be found in the unused data section of this package. DMS 8/30/2018
Laboratory Control Sample	0	None
Matrix Spike / Matrix Spike Duplicate Recovery	0	None
Matrix Spike / Matrix Spike Duplicate Precision	0	None
Extracted Internal Standard Analytes (Surrogates)	12	13C4-PFBA and 13C2-PFTeDA fall below passing criteria in samples J7397, J7398, J7399, J7400, J7397MS and J7397MSD. These samples were rerun against a new instrument and the results confirmed (this data can be found in the unused data section of this data package). All of these extracts were dark yellow in color and where all other extracted SIS's pass, matrix would have caused the suppression of the 13C4-PFBA and 13C2-PFTeDA. DMS 8/30/2018
Instrument Calibration	0	None
Instrument Blank	0	None
Independent Calibration Check	0	None
Continuing Calibration Verification	0	None

BATTELLE

It can be done

BATTELLE - NORWELL OPERATIONS MISCELLANEOUS DOCUMENTATION FORM

Project Title:	CTO-WE21: Former Naval Air Station, B	Data Set Number:	DP-18-0217
Project Number:	100122108-CTOWE21	Prep Batch Number:	18-0500
Entered By:	Denise Schumitz	Entered On:	08/30/2018
Test Code (Matrix Type):	Master_369(L)		

Samples that were manually integrated are noted on the quant reports with the comment (TRUE).
DMS 8/30/2018

This batch was originally run on 8/21/2018 however due to an instrument error there was a retention time shift that warranted the samples to be rerun. The original data can be found in the unused data section of this data package.
DMS 8/30/2018

JY38 is not being used for PFHpA in method BASE_A. There is no impact on the data once this point is removed from the calibration.
DMS 8/30/2018

JY38 is not being used for PFBA and NEtFOSAA. There is no impact on the data once this point is removed from the calibration.
DMS 8/30/2018

Sample J7394 does not meet passing IS area criteria for 13C3-PFBA, 13C2-PFOA, 13C2-PFDA and 13C4-PFOS. A fresh aliquot of this sample was taken and run with passing criteria from methods 18-0500_SIS_R and 18-0500_BASE_R.
DMS 8/30/2018

Samples J7397, J7397MS, J7397MSD, J7398 and J7399 do not meet passing IS area criteria for 13C3-PFBA but do for all other IS areas. A fresh aliquot was taken of these samples and rerun with confirming results in method 18-0500_SIS_R. These sample extracts were all dark yellow in color and 13C3-PFBA is the first eluting analyte from the analytical run, it can be presumed that matrix is effecting the results. The original results are being reported from 18-0500_SIS_A.
DMS 8/30/2018

Sample J7400 has an ion ratio >50% RPD for PFOA.
DMS 8/30/2018

Task Leader Approval:

Supervisor Approval:

PM Approval:



Digitally signed by Jonathan Thorn
Date: 2018.08.30 15:36:52 -04'00'



Example Calculation for PFAS

Calculation of final concentration from area:

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

Where:

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

Sample ID: J7397-FS(3)
 Client Sample ID: NASB-BLL15-GW-01-0818
 Sample Size: 0.26
 Units: L
 Dilution Factor: 2.000
 PIV (L): 0.0005
 Target Analyte: PFOA
 MRM Transition: 413.0 / 369.0
 Data file: 18-0501-515-520-500.wiff
 Result table: 18-0500_BASE_A
 Area: 530,731.98
 IS Name: 13C8-PFOA
 IS Area: 64,922.46
 IS Amount (ng/L): 250
 y-intercept: -0.20416
 slope: 1.18259

$$\text{Concentration} = \frac{[(530731.98/64922.46) - -0.20416]}{1.18259} * 250 * 0.0005 * 2 / 0.26$$

ng/L = 6.81



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21
 Preparation Batch: 18-0500
 Data Set: DP-18-0217

	CR552PB-FS (Procedural Blank)	CR553LCS-FS (Laboratory Control Sample)	J7397MS-FS (NASB-BLL15-GW-01-0818)	J7397MSD-FS (NASB-BLL15-GW-01-0818)	J7394-FS (NASB-CCC-GW-01-0818)	J7395-FS (NASB-CCC-GW-02-0818)	J7396-FS (NASB-BLL15-GW-02-0818)	J7397-FS (NASB-BLL15-GW-01-0818)
PFBA	L	L	L	L	L	L	L	L
PFHxA	L	L	L	L	L	L	L	L
PFHpA	-	L	L	L	L	L	L	L
PFOA	L	L	L	L	L	L	L	L
PFNA	-	L	L	L	L	L	L	L
PFDA	-	L	L	L	L	-	-	-
PFUnA	-	L	L	L	-	-	-	-
PFDoA	-	L	L	L	-	-	-	-
PFTTrDA	-	L	L	L	-	-	-	-
PFTeDA	-	L	L	L	-	-	-	-
NMeFOSAA	-	L	L	L	-	-	-	-
NEtFOSAA	-	L	L	L	-	-	-	-
PFBS	-	L	L	L	L	L	L	L
PFHxS	-	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br
PFOS	L	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: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21
 Preparation Batch: 18-0500
 Data Set: DP-18-0217

	J7398-FS (NASB-BLL15-DUP-080918)	J7399-FS (NASB-BLL15-GW-03-0818)	J7400-FS (NASB-BLL15-GW-04-0818)	J7402-FS (NASB-BLL15-GW-RB01-080918)
PFBA	L	L	L	-
PFHxA	L	L	L	L
PFHpA	L	L	L	L
PFOA	L	L	L	L
PFNA	L	L	L	-
PFDA	-	-	-	-
PFUnA	-	-	-	-
PFDoA	-	-	-	-
PFTrDA	-	-	-	-
PFTeDA	-	-	-	-
NMeFOSAA	-	-	-	-
NEtFOSAA	-	-	-	-
PFBS	L	L	L	-
PFHxS	L/Br	L/Br	L/Br	L/Br
PFOS	L/Br	L/Br	L/Br	L/Br

"L": Linear

"Br": branched

"L/Br": Linear/Branched

"-": Not detected

Project Client: Tetra Tech

Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/24/18 23:20	13C3-PFBA	62,099.81	31,049.91	93,149.72

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/24/18 22:36	13C3-PFBA	55,737.70	31,049.91	93,149.72	
JY39	L2	8/24/18 22:47	13C3-PFBA	54,856.95	31,049.91	93,149.72	
JY40	L3	8/24/18 22:58	13C3-PFBA	57,614.29	31,049.91	93,149.72	
JY41	L4	8/24/18 23:09	13C3-PFBA	57,883.97	31,049.91	93,149.72	
JY42	L5	8/24/18 23:20	13C3-PFBA	62,099.81	31,049.91	93,149.72	
JY43	L6	8/24/18 23:31	13C3-PFBA	58,707.76	31,049.91	93,149.72	
JY44	L7	8/24/18 23:42	13C3-PFBA	56,480.01	31,049.91	93,149.72	
JY46 IB	Instrument Blank	8/24/18 23:53	13C3-PFBA	55,663.08	31,049.91	93,149.72	
JY45 ICC	ICC	8/25/18 0:03	13C3-PFBA	59,885.14	31,049.91	93,149.72	
CR552PB-FS(3)	Procedural Blank	8/25/18 4:46	13C3-PFBA	39,560.86	31,049.91	93,149.72	
CR553LCS-FS(3)	Laboratory Control Sample	8/25/18 4:57	13C3-PFBA	55,753.46	31,049.91	93,149.72	
J7402-FS(3)	NASB-BLL15-GW-RB01-080918	8/25/18 5:08	13C3-PFBA	55,148.70	31,049.91	93,149.72	
J7394-FS(3)	NASB-CCC-GW-01-0818	8/25/18 5:19	13C3-PFBA	10,273.60	31,049.91	93,149.72	N
J7395-FS(3)	NASB-CCC-GW-02-0818	8/25/18 5:30	13C3-PFBA	47,502.78	31,049.91	93,149.72	
J7396-FS(3)	NASB-BLL15-GW-02-0818	8/25/18 5:41	13C3-PFBA	37,713.82	31,049.91	93,149.72	
JY42 CCV	CCV	8/25/18 6:02	13C3-PFBA	54,530.51	31,049.91	93,149.72	
J7397-FS(3)	NASB-BLL15-GW-01-0818	8/25/18 6:24	13C3-PFBA	173,257.35	31,049.91	93,149.72	N
J7397MS-FS(3)	Matrix Spike Sample	8/25/18 6:35	13C3-PFBA	192,682.81	31,049.91	93,149.72	N
J7397MSD-FS(3)	Matrix Spike Duplicate Sample	8/25/18 6:46	13C3-PFBA	195,651.07	31,049.91	93,149.72	N
J7398-FS(3)	NASB-BLL15-DUP-080918	8/25/18 6:57	13C3-PFBA	168,448.12	31,049.91	93,149.72	N
J7399-FS(3)	NASB-BLL15-GW-03-0818	8/25/18 7:08	13C3-PFBA	101,986.13	31,049.91	93,149.72	N
J7400-FS(3)	NASB-BLL15-GW-04-0818	8/25/18 7:18	13C3-PFBA	68,374.98	31,049.91	93,149.72	
JY41 CCV	CCV	8/25/18 7:40	13C3-PFBA	52,177.80	31,049.91	93,149.72	

Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/24/18 23:20	13C2-PFOA	92,608.08	46,304.04	138,912.12

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/24/18 22:36	13C2-PFOA	89,686.34	46,304.04	138,912.12	
JY39	L2	8/24/18 22:47	13C2-PFOA	90,381.96	46,304.04	138,912.12	
JY40	L3	8/24/18 22:58	13C2-PFOA	87,326.72	46,304.04	138,912.12	
JY41	L4	8/24/18 23:09	13C2-PFOA	89,865.42	46,304.04	138,912.12	
JY42	L5	8/24/18 23:20	13C2-PFOA	92,608.08	46,304.04	138,912.12	
JY43	L6	8/24/18 23:31	13C2-PFOA	91,795.08	46,304.04	138,912.12	
JY44	L7	8/24/18 23:42	13C2-PFOA	91,050.54	46,304.04	138,912.12	
JY46 IB	Instrument Blank	8/24/18 23:53	13C2-PFOA	86,993.18	46,304.04	138,912.12	
JY45 ICC	ICC	8/25/18 0:03	13C2-PFOA	94,996.84	46,304.04	138,912.12	
CR552PB-FS(3)	Procedural Blank	8/25/18 4:46	13C2-PFOA	61,640.47	46,304.04	138,912.12	
CR553LCS-FS(3)	Laboratory Control Sample	8/25/18 4:57	13C2-PFOA	73,989.36	46,304.04	138,912.12	
J7402-FS(3)	NASB-BLL15-GW-RB01-080918	8/25/18 5:08	13C2-PFOA	79,568.13	46,304.04	138,912.12	
J7394-FS(3)	NASB-CCC-GW-01-0818	8/25/18 5:19	13C2-PFOA	16,178.63	46,304.04	138,912.12	N
J7395-FS(3)	NASB-CCC-GW-02-0818	8/25/18 5:30	13C2-PFOA	78,894.96	46,304.04	138,912.12	
J7396-FS(3)	NASB-BLL15-GW-02-0818	8/25/18 5:41	13C2-PFOA	62,008.69	46,304.04	138,912.12	
JY42 CCV	CCV	8/25/18 6:02	13C2-PFOA	82,508.65	46,304.04	138,912.12	
J7397-FS(3)	NASB-BLL15-GW-01-0818	8/25/18 6:24	13C2-PFOA	58,674.53	46,304.04	138,912.12	
J7397MS-FS(3)	Matrix Spike Sample	8/25/18 6:35	13C2-PFOA	74,066.12	46,304.04	138,912.12	
J7397MSD-FS(3)	Matrix Spike Duplicate Sample	8/25/18 6:46	13C2-PFOA	87,164.02	46,304.04	138,912.12	
J7398-FS(3)	NASB-BLL15-DUP-080918	8/25/18 6:57	13C2-PFOA	67,737.02	46,304.04	138,912.12	
J7399-FS(3)	NASB-BLL15-GW-03-0818	8/25/18 7:08	13C2-PFOA	65,277.04	46,304.04	138,912.12	
J7400-FS(3)	NASB-BLL15-GW-04-0818	8/25/18 7:18	13C2-PFOA	66,198.76	46,304.04	138,912.12	
JY41 CCV	CCV	8/25/18 7:40	13C2-PFOA	77,497.71	46,304.04	138,912.12	

Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/24/18 23:20	13C2-PFDA	105,936.28	52,968.14	158,904.42

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/24/18 22:36	13C2-PFDA	101,703.93	52,968.14	158,904.42	
JY39	L2	8/24/18 22:47	13C2-PFDA	104,669.39	52,968.14	158,904.42	
JY40	L3	8/24/18 22:58	13C2-PFDA	99,261.32	52,968.14	158,904.42	
JY41	L4	8/24/18 23:09	13C2-PFDA	100,506.14	52,968.14	158,904.42	
JY42	L5	8/24/18 23:20	13C2-PFDA	105,936.28	52,968.14	158,904.42	
JY43	L6	8/24/18 23:31	13C2-PFDA	113,124.25	52,968.14	158,904.42	
JY44	L7	8/24/18 23:42	13C2-PFDA	103,798.12	52,968.14	158,904.42	
JY46 IB	Instrument Blank	8/24/18 23:53	13C2-PFDA	98,444.02	52,968.14	158,904.42	
JY45 ICC	ICC	8/25/18 0:03	13C2-PFDA	113,766.69	52,968.14	158,904.42	
CR552PB-FS(3)	Procedural Blank	8/25/18 4:46	13C2-PFDA	69,525.37	52,968.14	158,904.42	
CR553LCS-FS(3)	Laboratory Control Sample	8/25/18 4:57	13C2-PFDA	78,542.82	52,968.14	158,904.42	
J7402-FS(3)	NASB-BLL15-GW-RB01-080918	8/25/18 5:08	13C2-PFDA	92,715.53	52,968.14	158,904.42	
J7394-FS(3)	NASB-CCC-GW-01-0818	8/25/18 5:19	13C2-PFDA	17,532.80	52,968.14	158,904.42	N
J7395-FS(3)	NASB-CCC-GW-02-0818	8/25/18 5:30	13C2-PFDA	85,960.93	52,968.14	158,904.42	
J7396-FS(3)	NASB-BLL15-GW-02-0818	8/25/18 5:41	13C2-PFDA	77,585.56	52,968.14	158,904.42	
JY42 CCV	CCV	8/25/18 6:02	13C2-PFDA	90,676.97	52,968.14	158,904.42	
J7397-FS(3)	NASB-BLL15-GW-01-0818	8/25/18 6:24	13C2-PFDA	68,663.42	52,968.14	158,904.42	
J7397MS-FS(3)	Matrix Spike Sample	8/25/18 6:35	13C2-PFDA	86,049.09	52,968.14	158,904.42	
J7397MSD-FS(3)	Matrix Spike Duplicate Sample	8/25/18 6:46	13C2-PFDA	99,733.95	52,968.14	158,904.42	
J7398-FS(3)	NASB-BLL15-DUP-080918	8/25/18 6:57	13C2-PFDA	81,245.71	52,968.14	158,904.42	
J7399-FS(3)	NASB-BLL15-GW-03-0818	8/25/18 7:08	13C2-PFDA	81,268.83	52,968.14	158,904.42	
J7400-FS(3)	NASB-BLL15-GW-04-0818	8/25/18 7:18	13C2-PFDA	81,919.89	52,968.14	158,904.42	
JY41 CCV	CCV	8/25/18 7:40	13C2-PFDA	87,962.69	52,968.14	158,904.42	

Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/24/18 23:20	13C4-PFOS	32,248.02	16,124.01	48,372.03

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/24/18 22:36	13C4-PFOS	33,175.18	16,124.01	48,372.03	
JY39	L2	8/24/18 22:47	13C4-PFOS	31,211.04	16,124.01	48,372.03	
JY40	L3	8/24/18 22:58	13C4-PFOS	31,393.82	16,124.01	48,372.03	
JY41	L4	8/24/18 23:09	13C4-PFOS	31,692.96	16,124.01	48,372.03	
JY42	L5	8/24/18 23:20	13C4-PFOS	32,248.02	16,124.01	48,372.03	
JY43	L6	8/24/18 23:31	13C4-PFOS	32,619.41	16,124.01	48,372.03	
JY44	L7	8/24/18 23:42	13C4-PFOS	28,605.63	16,124.01	48,372.03	
JY46 IB	Instrument Blank	8/24/18 23:53	13C4-PFOS	30,847.94	16,124.01	48,372.03	
JY45 ICC	ICC	8/25/18 0:03	13C4-PFOS	37,275.00	16,124.01	48,372.03	
CR552PB-FS(3)	Procedural Blank	8/25/18 4:46	13C4-PFOS	19,734.44	16,124.01	48,372.03	
CR553LCS-FS(3)	Laboratory Control Sample	8/25/18 4:57	13C4-PFOS	25,543.65	16,124.01	48,372.03	
J7402-FS(3)	NASB-BLL15-GW-RB01-080918	8/25/18 5:08	13C4-PFOS	28,797.12	16,124.01	48,372.03	
J7394-FS(3)	NASB-CCC-GW-01-0818	8/25/18 5:19	13C4-PFOS	5,918.75	16,124.01	48,372.03	N
J7395-FS(3)	NASB-CCC-GW-02-0818	8/25/18 5:30	13C4-PFOS	26,519.64	16,124.01	48,372.03	
J7396-FS(3)	NASB-BLL15-GW-02-0818	8/25/18 5:41	13C4-PFOS	19,254.63	16,124.01	48,372.03	
JY42 CCV	CCV	8/25/18 6:02	13C4-PFOS	29,425.91	16,124.01	48,372.03	
J7397-FS(3)	NASB-BLL15-GW-01-0818	8/25/18 6:24	13C4-PFOS	18,517.23	16,124.01	48,372.03	
J7397MS-FS(3)	Matrix Spike Sample	8/25/18 6:35	13C4-PFOS	20,046.86	16,124.01	48,372.03	
J7397MSD-FS(3)	Matrix Spike Duplicate Sample	8/25/18 6:46	13C4-PFOS	26,463.71	16,124.01	48,372.03	
J7398-FS(3)	NASB-BLL15-DUP-080918	8/25/18 6:57	13C4-PFOS	22,238.46	16,124.01	48,372.03	
J7399-FS(3)	NASB-BLL15-GW-03-0818	8/25/18 7:08	13C4-PFOS	19,123.67	16,124.01	48,372.03	
J7400-FS(3)	NASB-BLL15-GW-04-0818	8/25/18 7:18	13C4-PFOS	19,104.92	16,124.01	48,372.03	
JY41 CCV	CCV	8/25/18 7:40	13C4-PFOS	27,471.32	16,124.01	48,372.03	

Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/28/18 20:48	13C3-PFBA	51,124.18	25,562.09	76,686.27

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/28/18 20:04	13C3-PFBA	61,083.71	25,562.09	76,686.27	
JY39	L2	8/28/18 20:15	13C3-PFBA	53,621.70	25,562.09	76,686.27	
JY40	L3	8/28/18 20:26	13C3-PFBA	56,475.25	25,562.09	76,686.27	
JY41	L4	8/28/18 20:37	13C3-PFBA	49,987.19	25,562.09	76,686.27	
JY42	L5	8/28/18 20:48	13C3-PFBA	51,124.18	25,562.09	76,686.27	
JY43	L6	8/28/18 20:59	13C3-PFBA	53,288.49	25,562.09	76,686.27	
JY44	L7	8/28/18 21:09	13C3-PFBA	50,812.75	25,562.09	76,686.27	
JY46 IB	Instrument Blank	8/28/18 21:20	13C3-PFBA	56,562.61	25,562.09	76,686.27	
JY45 ICC	ICC	8/28/18 21:31	13C3-PFBA	50,669.86	25,562.09	76,686.27	
JY41 CCV	CCV	8/29/18 0:58	13C3-PFBA	51,658.25	25,562.09	76,686.27	
J7394-FS(3)	NASB-CCC-GW-01-0818	8/29/18 1:19	13C3-PFBA	41,020.69	25,562.09	76,686.27	
J7397-FS(3)	NASB-BLL15-GW-01-0818	8/29/18 1:30	13C3-PFBA	160,906.49	25,562.09	76,686.27	N
J7397MS-FS(3)	Matrix Spike Sample	8/29/18 1:41	13C3-PFBA	177,826.43	25,562.09	76,686.27	N
J7397MSD-FS(3)	Matrix Spike Duplicate Sample	8/29/18 1:52	13C3-PFBA	185,117.74	25,562.09	76,686.27	N
J7398-FS(3)	NASB-BLL15-DUP-080918	8/29/18 2:03	13C3-PFBA	181,458.60	25,562.09	76,686.27	N
J7399-FS(3)	NASB-BLL15-GW-03-0818	8/29/18 2:14	13C3-PFBA	92,715.93	25,562.09	76,686.27	N
J7400-FS(3)	NASB-BLL15-GW-04-0818	8/29/18 2:24	13C3-PFBA	142,232.90	25,562.09	76,686.27	N
JY42 CCV	CCV	8/29/18 2:46	13C3-PFBA	50,774.45	25,562.09	76,686.27	

Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/28/18 20:48	13C2-PFOA	70,686.29	35,343.15	106,029.44

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/28/18 20:04	13C2-PFOA	84,330.39	35,343.15	106,029.44	
JY39	L2	8/28/18 20:15	13C2-PFOA	70,363.64	35,343.15	106,029.44	
JY40	L3	8/28/18 20:26	13C2-PFOA	82,022.48	35,343.15	106,029.44	
JY41	L4	8/28/18 20:37	13C2-PFOA	71,523.55	35,343.15	106,029.44	
JY42	L5	8/28/18 20:48	13C2-PFOA	70,686.29	35,343.15	106,029.44	
JY43	L6	8/28/18 20:59	13C2-PFOA	83,677.30	35,343.15	106,029.44	
JY44	L7	8/28/18 21:09	13C2-PFOA	78,516.75	35,343.15	106,029.44	
JY46 IB	Instrument Blank	8/28/18 21:20	13C2-PFOA	74,344.26	35,343.15	106,029.44	
JY45 ICC	ICC	8/28/18 21:31	13C2-PFOA	75,529.88	35,343.15	106,029.44	
JY41 CCV	CCV	8/29/18 0:58	13C2-PFOA	74,719.91	35,343.15	106,029.44	
J7394-FS(3)	NASB-CCC-GW-01-0818	8/29/18 1:19	13C2-PFOA	48,584.46	35,343.15	106,029.44	
JY42 CCV	CCV	8/29/18 2:46	13C2-PFOA	83,329.18	35,343.15	106,029.44	

Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/28/18 20:48	13C2-PFDA	82,579.96	41,289.98	123,869.94

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/28/18 20:04	13C2-PFDA	97,894.02	41,289.98	123,869.94	
JY39	L2	8/28/18 20:15	13C2-PFDA	79,143.80	41,289.98	123,869.94	
JY40	L3	8/28/18 20:26	13C2-PFDA	94,637.43	41,289.98	123,869.94	
JY41	L4	8/28/18 20:37	13C2-PFDA	79,399.67	41,289.98	123,869.94	
JY42	L5	8/28/18 20:48	13C2-PFDA	82,579.96	41,289.98	123,869.94	
JY43	L6	8/28/18 20:59	13C2-PFDA	86,460.00	41,289.98	123,869.94	
JY44	L7	8/28/18 21:09	13C2-PFDA	94,107.95	41,289.98	123,869.94	
JY46 IB	Instrument Blank	8/28/18 21:20	13C2-PFDA	83,546.56	41,289.98	123,869.94	
JY45 ICC	ICC	8/28/18 21:31	13C2-PFDA	85,834.11	41,289.98	123,869.94	
JY41 CCV	CCV	8/29/18 0:58	13C2-PFDA	87,991.97	41,289.98	123,869.94	
J7394-FS(3)	NASB-CCC-GW-01-0818	8/29/18 1:19	13C2-PFDA	56,339.76	41,289.98	123,869.94	
JY42 CCV	CCV	8/29/18 2:46	13C2-PFDA	89,429.45	41,289.98	123,869.94	

Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/28/18 20:48	13C4-PFOS	30,907.19	15,453.60	46,360.79

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/28/18 20:04	13C4-PFOS	29,953.96	15,453.60	46,360.79	
JY39	L2	8/28/18 20:15	13C4-PFOS	28,891.71	15,453.60	46,360.79	
JY40	L3	8/28/18 20:26	13C4-PFOS	29,758.83	15,453.60	46,360.79	
JY41	L4	8/28/18 20:37	13C4-PFOS	23,457.09	15,453.60	46,360.79	
JY42	L5	8/28/18 20:48	13C4-PFOS	30,907.19	15,453.60	46,360.79	
JY43	L6	8/28/18 20:59	13C4-PFOS	27,142.68	15,453.60	46,360.79	
JY44	L7	8/28/18 21:09	13C4-PFOS	24,977.32	15,453.60	46,360.79	
JY46 IB	Instrument Blank	8/28/18 21:20	13C4-PFOS	27,744.14	15,453.60	46,360.79	
JY45 ICC	ICC	8/28/18 21:31	13C4-PFOS	27,304.48	15,453.60	46,360.79	
JY41 CCV	CCV	8/29/18 0:58	13C4-PFOS	23,956.70	15,453.60	46,360.79	
J7394-FS(3)	NASB-CCC-GW-01-0818	8/29/18 1:19	13C4-PFOS	18,899.28	15,453.60	46,360.79	
JY42 CCV	CCV	8/29/18 2:46	13C4-PFOS	27,975.91	15,453.60	46,360.79	

Sample Name	JY44	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 11:42:11 PM	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
PFBS_1	298.9 / 80.0	1.55	55	>10
PFBS_2	298.9 / 99.0	1.55	51	>10
PFHxA_1	313.0 / 269.0	1.86	25	>10
PFHxA_2	313.0 / 119.0	1.86	26	>10
PFHpA_1	363.0 / 319.0	2.26	29	>10
PFHpA_2	363.0 / 169.0	2.26	30	>10
PFHxS_1	399.0 / 80.0	2.28	48	>10
PFHxS_2	399.0 / 99.0	2.28	46	>10
PFOA_1	413.0 / 369.0	2.66	34	>10
PFOA_2	413.0 / 169.0	2.66	36	>10
PFNA_1	463.0 / 419.0	3.05	33	>10
PFNA_2	463.0 / 219.0	3.05	31	>10
PFOS_1	499.0 / 80.0	3.04	49	>10
PFOS_2	499.0 / 99.0	3.04	52	>10
PFDA_1	513.0 / 469.0	3.40	46	>10
PFDA_2	513.0 / 219.0	3.40	39	>10
PFUnA_1	563.0 / 519.0	3.72	30	>10
PFUnA_2	563.0 / 269.0	3.72	57	>10
PFDoA_1	613.0 / 569.0	4.01	32	>10
PFDoA_2	613.0 / 319.0	4.00	38	>10
PFTTrDA_1	663.0 / 619.0	4.25	64	>10
PFTTrDA_2	663.0 / 169.0	4.25	37	>10
PFTeDA_1	713.0 / 669.0	4.47	86	>10
PFTeDA_2	713.0 / 169.0	4.47	49	>10
NMeFOSAA_1	570.0 / 419.0	3.55	48	>10
NMeFOSAA_2	570.0 / 512.0	3.55	34	>10
NEtFOSAA_1	584.0 / 419.0	3.72	36	>10
NEtFOSAA_2	584.0 / 483.0	3.72	25	>10
PFBA	213.0 / 169.0	1.16	40	>10

Sample Name	JY44	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 11:42:11 PM	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
13C4-PFBA	217.0 / 172.0	1.16	44	>10
13C2-PFDoA	615.0 / 570.0	3.99	41	>10
d3-MeFOSAA	573.0 / 419.0	3.55	35	>10
d5-EtFOSAA	589.0 / 419.0	3.71	23	>10
13C5-PFHxA	318.0 / 273.0	1.85	37	>10
13C4-PFHpA	367.0 / 322.0	2.25	37	>10
13C8-PFOA	421.0 / 376.0	2.65	34	>10
13C9-PFNA	472.0 / 427.0	3.03	35	>10
13C6-PFDA	519.0 / 474.0	3.38	33	>10
13C7-PFUnA	570.0 / 525.0	3.71	37	>10
13C2-PFTeDA	715.0 / 670.0	4.46	42	>10
13C3-PFBS	302.0 / 99.0	1.53	33	>10
13C3-PFHxS	402.0 / 99.0	2.27	33	>10
13C8-PFOS	507.0 / 99.0	3.03	25	>10

Sample Name	JY44	Injection Vial	22
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 9:09:59 PM	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
PFBS_1	298.9 / 80.0	1.54	50	>10
PFBS_2	298.9 / 99.0	1.54	55	>10
PFHxA_1	313.0 / 269.0	1.85	25	>10
PFHxA_2	313.0 / 119.0	1.85	23	>10
PFHpA_1	363.0 / 319.0	2.25	30	>10
PFHpA_2	363.0 / 169.0	2.25	27	>10
PFHxS_1	399.0 / 80.0	2.27	52	>10
PFHxS_2	399.0 / 99.0	2.27	59	>10
PFOA_1	413.0 / 369.0	2.66	33	>10
PFOA_2	413.0 / 169.0	2.65	35	>10
PFNA_1	463.0 / 419.0	3.05	29	>10
PFNA_2	463.0 / 219.0	3.05	33	>10
PFOS_1	499.0 / 80.0	3.05	44	>10
PFOS_2	499.0 / 99.0	3.04	49	>10
PFDA_1	513.0 / 469.0	3.40	31	>10
PFDA_2	513.0 / 219.0	3.40	40	>10
PFUnA_1	563.0 / 519.0	3.71	30	>10
PFUnA_2	563.0 / 269.0	3.71	37	>10
PFDaA_1	613.0 / 569.0	4.00	63	>10
PFDaA_2	613.0 / 319.0	3.99	38	>10
PFTrDA_1	663.0 / 619.0	4.24	83	>10
PFTrDA_2	663.0 / 169.0	4.23	44	>10
PFTeDA_1	713.0 / 669.0	4.45	84	>10
PFTeDA_2	713.0 / 169.0	4.45	72	>10
NMeFOSAA_1	570.0 / 419.0	3.55	46	>10
NMeFOSAA_2	570.0 / 512.0	3.55	52	>10
NEtFOSAA_1	584.0 / 419.0	3.71	58	>10
NEtFOSAA_2	584.0 / 483.0	3.71	39	>10
PFBA	213.0 / 169.0	1.14	45	>10

Sample Name	JY44	Injection Vial	22
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 9:09:59 PM	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
13C4-PFBA	217.0 / 172.0	1.15	38	>10
13C2-PFDoA	615.0 / 570.0	3.98	33	>10
d3-MeFOSAA	573.0 / 419.0	3.54	19	>10
d5-EtFOSAA	589.0 / 419.0	3.70	21	>10
13C5-PFHxA	318.0 / 273.0	1.83	36	>10
13C4-PFHpA	367.0 / 322.0	2.24	41	>10
13C8-PFOA	421.0 / 376.0	2.64	40	>10
13C9-PFNA	472.0 / 427.0	3.03	28	>10
13C6-PFDA	519.0 / 474.0	3.38	34	>10
13C7-PFUnA	570.0 / 525.0	3.70	52	>10
13C2-PFTeDA	715.0 / 670.0	4.45	43	>10
13C3-PFBS	302.0 / 99.0	1.52	45	>10
13C3-PFHxS	402.0 / 99.0	2.26	25	>10
13C8-PFOS	507.0 / 99.0	3.03	40	>10



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

Analyte	CAS No.	Average (ng/L)	ST DEV	3 Sigma	n
PFBA	375-22-4	12.40	2.18	6.54	11
PFPeA	2706-90-3	10.73	1.51	4.53	9
PFHxA	307-24-4	10.07	1.25	3.75	30
PFHpA	375-85-9	9.51	1.71	5.13	30
PFOA	335-67-1	10.06	1.60	4.80	31
PFNA	375-95-1	9.70	1.23	3.69	30
PFDA	335-76-2	10.04	1.43	4.29	30
PFUnA	2058-94-8	9.95	1.45	4.35	30
PFDoA	307-55-1	11.03	1.28	3.84	30
PFTTrDA	72629-94-8	11.52	1.50	4.50	30
PFTeDA	376-06-7	10.92	2.07	6.21	30
NMeFOSAA	2355-31-9	10.21	2.04	6.12	30
NEtFOSAA	2991-50-6	9.60	1.70	5.10	30
PFOSA	754-91-6	9.74	1.14	3.42	3
PFBS	375-73-5	10.25	1.55	4.65	31
PFPeS	BDO-2114	9.80	0.96	2.88	4
PFHxS	355-46-4	9.90	1.52	4.56	30
PFHpS	375-99-6	10.96	0.96	2.88	9
PFOS	1763-23-1	10.16	1.47	4.41	30
PFNS	98789-57-2	9.34	1.10	3.30	4
PFDS	2806-15-7	10.13	1.88	5.64	9
4:2FTS	BDO-2205	11.03	1.26	3.78	9
6:2FTS	27619-97-2	12.52	2.91	8.73	9
8:2FTS	39108-34-4	12.11	2.54	7.62	9

BATTELLE DETECTION LIMITS FOR PFAS IN NON-POTABLE WATER

Analytical SOP 5-369
Extraction SOP 5-370

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

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

Analytes on NELAP and ELAP QSM 5.1 Scope of accreditation

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
PFDaA	307-55-1	Target	613.0 / 569.0	613.0 / 319.0
PFTTrDA	72629-94-8	Target	663.0 / 619.0	663.0 / 169.0
PFTeDA	376-06-7	Target	713.0 / 669.0	713.0 / 169.0
NMeFOSAA	2355-31-9	Target	570.0 / 419.0	570.0 / 512.0
NEtFOSAA	2991-50-6	Target	584.0 / 419.0	584.0 / 483.0
PFOSA	754-91-6	Target	498.0 / 78.0	498.0 / 83.0
PFBS	375-73-5	Target	299.0 / 80.0	299.0 / 99.0
PFPeS	BDO-2114	Target	349.0 / 99.0	249.0 / 80.0
PFHxS	355-46-4	Target	399.0 / 80.0	399.0 / 99.0
PFHpS	375-99-6	Target	449.0 / 80.0	449.0 / 99.0
PFOS	1763-23-1	Target	499.0 / 80.0	499.0 / 99.0
PFNS	98789-57-2	Target	549.0 / 99.0	549.0 / 80.0
PFDS	2806-15-7	Target	599.0 / 80.0	599.0 / 99.0
4:2FTS	BDO-2205	Target	327.0 / 307.0	327.0 / 80.0
6:2FTS	27619-97-2	Target	427.0 / 407.0	427.0 / 81.0
8:2FTS	39108-34-4	Target	527.0 / 507.0	527.0 / 487.0
13C4-PFBA	BDO-2105	SIS ¹	217.0 / 172.0	NA
13C5-PFPeA	BDO-2216	SIS ¹	268.0 / 223.0	NA
13C5-PFHxA	BDO-2217	SIS ¹	318.0 / 273.0	NA

Analyte	CAS No.	Type	Primary Transition	Secondary Transition
13C4-PFH _p A	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-PFH _x S	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



Non-Potable Water Calibration to Sample Equivalents

ICAL (ng/L)	PIV (mL)	DF ¹	Sample Size (L)	Sample Equivalent (ng/L) ²
25	0.5	2	0.250	0.1
50	0.5	2	0.250	0.2
100	0.5	2	0.250	0.4
250	0.5	2	0.250	1.0
500	0.5	2	0.250	2.0
1,000	0.5	2	0.250	4.0
2,500	0.5	2	0.250	10.0
10,000	0.5	2	0.250	40.0
20,000	0.5	2	0.250	80.0

¹ - base level dilution as part of the extraction procedure

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

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

QTRAP 5500 Preventive Maintenance Checklist

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

PASS FAIL

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

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

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

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

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

Approved By : _____ **Date:** _____

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

PRE PM PPG PERFORMANCE EVALUATION:

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

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

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

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

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

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

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

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

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

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

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

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

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

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

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

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

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

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

Appendix ZEFPM003-2L

PREVENTIVE MAINTENANCE CHECKLIST:

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

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

Appendix ZEFPM003-2L

POST PM PPG PERFORMANCE TESTS:

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

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

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

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

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

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

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

Transmission Efficiency: 21.10% (≥ 10.0%)

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

**Zef Scientific Inc.**

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Phone: 1.866.854.7988

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

Appendix ZEFPM003-2L

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

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

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

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

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

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

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

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

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

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

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

Appendix ZEFPM003-2L

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

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

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

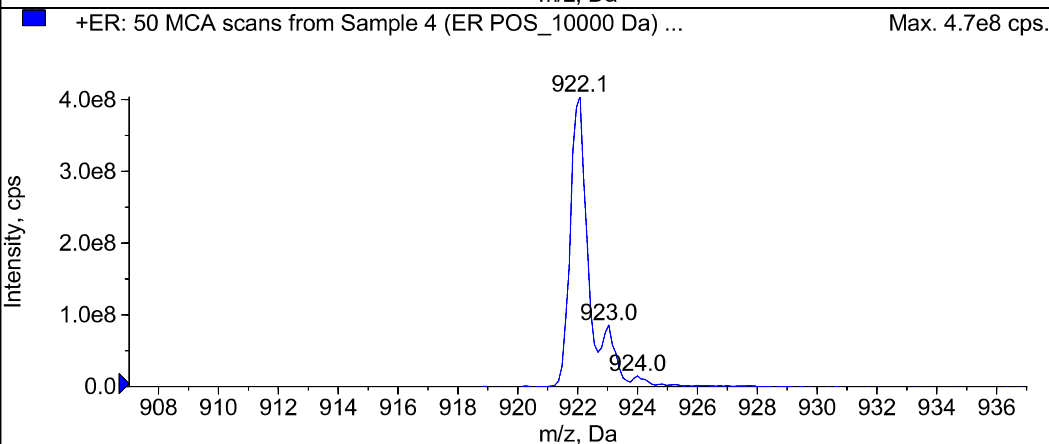
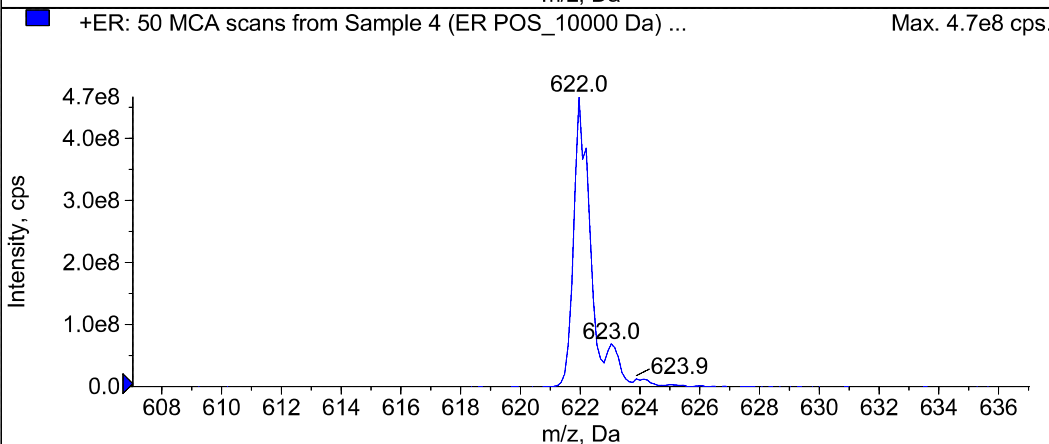
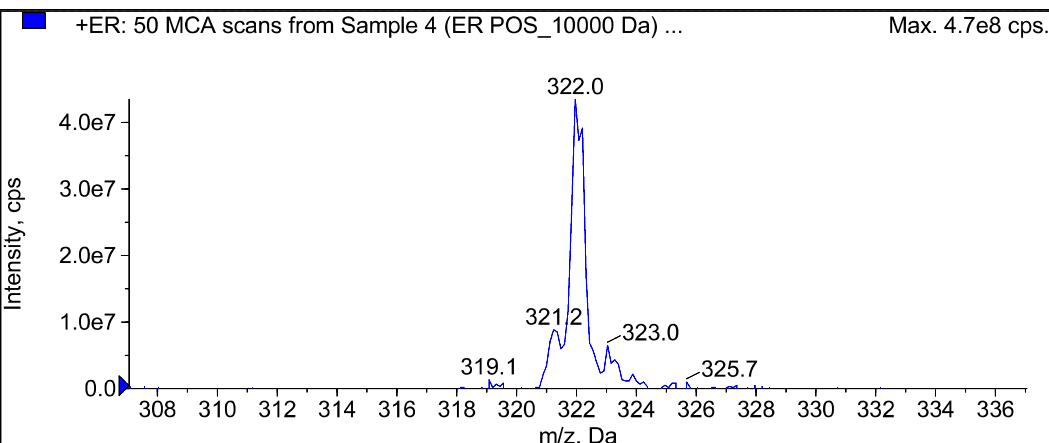
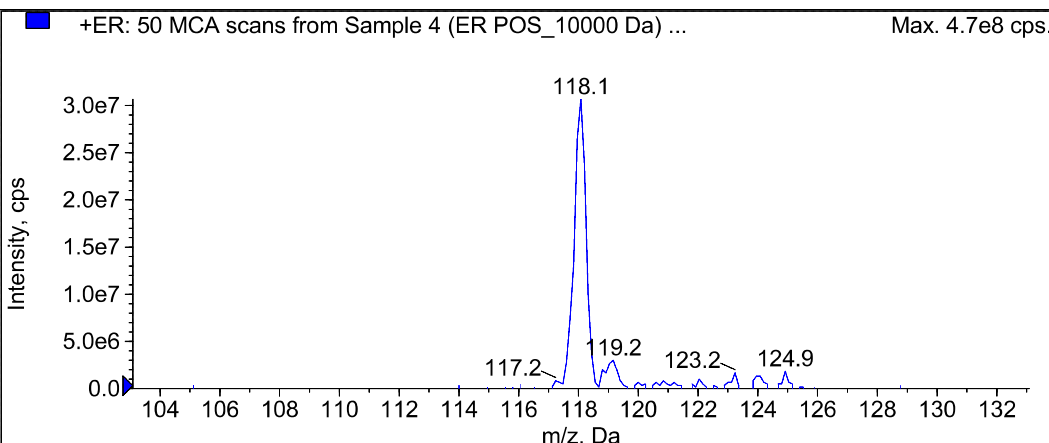
Mass	Scan Rate (Da/s)	Fragamentation OFF		Fragmentation ON	
		Intensity	Spec	Intensity	Spec
MS3 397.2	1000	Yes	Contains only 397.2	N/A	N/A
<input type="checkbox"/> 236 OR <input checked="" type="checkbox"/> 365	1000	Yes	Fragment Intensity	> 2.0 e6	≥1.6x 10 ^{e6}

REVIEW:

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

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

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



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

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

Battelle Standard ID	Description	Intermediate Solutions	Battelle Reagent ID (purchased solutions)
JX29	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-02
JX29	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-03
JX29	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-04
JX29	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-06
JX29	PFAS Branched Solution (~5,000 ng/L)	JX28	180618-07
JY26	PFAS - DoD Internal Standard Spiking Solution	JY25	180726-04
JY28	PFAS - DoD Low Level Labelled Extracted Internal Standards (SIS)	JY27	180726-05
JY38	PFAS - DoD Calibration L1	JY27	180726-05
JY38	PFAS - DoD Calibration L1	JY25	180726-04
JY38	PFAS - DoD Calibration L1	JY23	180705-02
JY39	PFAS - DoD Calibration L2	JY23	180705-02
JY39	PFAS - DoD Calibration L2	JY25	180726-04
JY39	PFAS - DoD Calibration L2	JY27	180726-05
JY40	PFAS - DoD Calibration L3	JY27	180726-05
JY40	PFAS - DoD Calibration L3	JY25	180726-04
JY40	PFAS - DoD Calibration L3	JY24	180705-02
JY41	PFAS - DoD Calibration L4	JY24	180705-02
JY41	PFAS - DoD Calibration L4	JY25	180726-04
JY41	PFAS - DoD Calibration L4	JY27	180726-05
JY42	PFAS - DoD Calibration L5	JY27	180726-05
JY42	PFAS - DoD Calibration L5	JY25	180726-04
JY42	PFAS - DoD Calibration L5	JY24	180705-02
JY43	PFAS - DoD Calibration L6	JY24	180705-02
JY43	PFAS - DoD Calibration L6	JY25	180726-04
JY43	PFAS - DoD Calibration L6	JY27	180726-05
JY44	PFAS - DoD Calibration L7	JY27	180726-05
JY44	PFAS - DoD Calibration L7	JY25	180726-04
JY44	PFAS - DoD Calibration L7	JY24	180705-02
JY45	PFAS - DoD ICC	JZ27	171025-01
JY45	PFAS - DoD ICC	JY25	180726-04
JY45	PFAS - DoD ICC	JY27	180726-05
JY46	PFAS - DoD Instrument Blank	JY27	180726-05
JY46	PFAS - DoD Instrument Blank	JY25	180726-04
JZ27	PFAS - DoD Second Source LCS/MS Solution	-	171025-01

It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: JX28

Description: PFAS Branched Standard Stock

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

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

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

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

It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JX28

Description: PFAS Branched Standard Stock

Stock Id: 180618-02

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

Stock Id: 180618-03

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

Stock Id: 180618-04

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

Stock Id: 180618-06

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

Stock Id: 180618-07

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

Final Concentrations:

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

Syringes/Pipettes:

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

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

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

Comment:

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

It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: **JX29**

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: 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: 80:20 Methanol/Millipore Water

Approved By: Lizotte Jr, Robert Date: 7/2/2018 5:07:00 PM

It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: **JX29**

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	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: 80:20 Methanol/Millipore Water

Approved By: Lizotte Jr, Robert Date: 7/2/2018 5:07:00 PM

It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: JY23

Description: PFAS - DoD Low ICAL Stock

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

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

Balance ID: _____

Comment: 96/4 Methanol/milli-q water

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



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY23

Description: PFAS - DoD Low ICAL Stock

Stock Id: 180705-02

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

Final Concentrations:

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

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

Comment: 96/4 Methanol/milli-q water

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



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY23

Description: PFAS - DoD Low ICAL Stock

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

Syringes/Pipettes:

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

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

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

It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: JY24

Description: PFAS - DoD High ICAL Stock

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

Solution Prepared By: Schultz, Stephanie

Date Prepared: 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

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



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY24

Description: PFAS - DoD High ICAL Stock

Stock Id: 180705-02

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

Final Concentrations:

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

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

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



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY24

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: 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

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

It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: **JY25**

Description: PFAS - DoD Internal Standard Stock Solution

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

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

Balance ID: _____

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

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



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY25

Description: PFAS - DoD Internal Standard Stock Solution

Stock Id: 180726-04

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

Final Concentrations:

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

Syringes/Pipettes:

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

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

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

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

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



It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: JY26

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: 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 9:16:00 AM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY26

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: 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 9:16:00 AM

It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: JY27

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

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

Solution Prepared By: Schultz, Stephanie

Date Prepared: 7/16/2018

Expiration Date: 7/16/2019

Solution Volume 40 mL X 1 Vials

Refrigerator/Freezer No: LC Laboratory: Refrigerator - R0107

Balance ID: _____

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

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



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



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY27

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

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

Syringes/Pipettes:

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

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

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

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

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

It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: **JY28**

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: 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



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY28

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: 7/16/2018 Expiration Date: 7/16/2019

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

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

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



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY28

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: 7/16/2018 Expiration Date: 7/16/2019

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

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

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



It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: JY38

Description: PFAS - DoD Calibration L1

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

Solution Prepared By: Schultz, Stephanie	Date Prepared: 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: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 8/14/2018 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY38

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-butanefluoride	200	0.01	---	---	1	10	0.00010
Perfluoro-1-hexanesulfonate	200	0.01	---	---	1	10	0.00010
Perfluoro-1-octanesulfonamide	200	0.01	---	---	1	10	0.00010
Perfluoro-1-octanesulfonate	200	0.01	---	---	1	10	0.00010
Perfluoro-n-butanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-decanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-dodecanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-heptanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-hexanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-octanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluorononanoic Acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-pentanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-tetradecanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-tridecanoic acid	200	0.01	---	---	1	10	0.00010
Perfluoro-n-undecanoic acid	200	0.01	---	---	1	10	0.00010
Sodium perfluoro-1-pentanesulfonate	200	0.01	---	---	1	10	0.00010

Stock Id: JY25

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

Stock Id: JY27

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 7/16/2018 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: 8/14/2018 4:47:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: **JY38**

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: 7/16/2018	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:** 8/14/2018 4:47:00 PM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: JY38

Description: PFAS - DoD Calibration L1

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY23	Pipette	B814657482
JY25	Pipette	I0793912B
JY27	Pipette	I0793912B

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: 80/20 Methanol/Milli-q water		

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:47:00 PM



It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: JY39

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
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000

Solution Prepared By: Schultz, Stephanie	Date Prepared: 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: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY39

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-butanefulfonate	500	0.01	---	---	1	10	0.00025
Perfluoro-1-hexanesulfonate	500	0.01	---	---	1	10	0.00025
Perfluoro-1-octanesulfonamide	500	0.01	---	---	1	10	0.00025
Perfluoro-1-octanesulfonate	500	0.01	---	---	1	10	0.00025
Perfluoro-n-butanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-decanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-dodecanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-heptanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-hexanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-octanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluorononanoic Acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-pentanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-tetradecanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-tridecanoic acid	500	0.01	---	---	1	10	0.00025
Perfluoro-n-undecanoic acid	500	0.01	---	---	1	10	0.00025
Sodium perfluoro-1-pentanesulfonate	500	0.01	---	---	1	10	0.00025

Stock Id: JY25

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

Stock Id: JY27

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 7/16/2018 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: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY39

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: 7/16/2018	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: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: JY39

Description: PFAS - DoD Calibration L2

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY23	Pipette	B820865811
JY25	Pipette	I0793912B
JY27	Pipette	I0793912B

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: 80/20 Methanol/Milli-q water		

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM



It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: JY40

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)
JY24	PFAS - DoD High ICAL Stock	Solution	~1	07/16/19	---	---	100 uL	1	10	~0.0100
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000

Solution Prepared By: Schultz, Stephanie	Date Prepared: 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: 80/20 Methanol/milli-q water

Approved By: Schumitz, Denise Date: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY40

Description: PFAS - DoD Calibration L3

Stock Id: JY24

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-butanefulfonate	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: JY25

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

Stock Id: JY27

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 7/16/2018 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: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY40

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: 7/16/2018	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: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations Approved:

Standard Laboratory ID Number: JY40

Description: PFAS - DoD Calibration L3

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY24	Pipette	I0793912B
JY25	Pipette	I0793912B
JY27	Pipette	I0793912B

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: 80/20 Methanol/milli-q water					

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM



It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: JY41

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)
JY24	PFAS - DoD High ICAL Stock	Solution	~1	07/16/19	---	---	200 uL	1	10	~0.0200
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000

Solution Prepared By: Schultz, Stephanie	Date Prepared: 7/16/2018	Expiration Date: 7/16/2019
Solution Volume 40 mL X 1 Vials	Refrigerator/Freezer No: Storage Room: Refrigerator - R0105	

Balance ID: _____

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY41

Description: PFAS - DoD Calibration L4

Stock Id: JY24

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	200	0.05	---	---	1	10	0.00101
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	200	0.05	---	---	1	10	0.00101
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	200	0.05	---	---	1	10	0.00100
(Na) Perfluoro-1-decanesulfonate	200	0.05	---	---	1	10	0.00101
(Na) Perfluoro-1-heptanesulfonate	200	0.05	---	---	1	10	0.00100
(Na) Perfluoro-1-nonanesulfonate	200	0.05	---	---	1	10	0.00101
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-butanefulfonate	200	0.05	---	---	1	10	0.00101
Perfluoro-1-hexanesulfonate	200	0.05	---	---	1	10	0.00101
Perfluoro-1-octanesulfonamide	200	0.05	---	---	1	10	0.00100
Perfluoro-1-octanesulfonate	200	0.05	---	---	1	10	0.00100
Perfluoro-n-butanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-decanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-dodecanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-heptanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-hexanoic acid	200	0.05	---	---	1	10	0.00101
Perfluoro-n-octanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluorononanoic Acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-pentanoic acid	200	0.05	---	---	1	10	0.00101
Perfluoro-n-tetradecanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-tridecanoic acid	200	0.05	---	---	1	10	0.00100
Perfluoro-n-undecanoic acid	200	0.05	---	---	1	10	0.00100
Sodium perfluoro-1-pentanesulfonate	200	0.05	---	---	1	10	0.00100

Stock Id: JY25

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

Stock Id: JY27

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

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

Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: Storage Room: Refrigerator - R0105

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY41

Description: PFAS - DoD Calibration L4

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	.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: 7/16/2018	Expiration Date: 7/16/2019
Solution Volume 40 mL X 1 Vials Refrigerator/Freezer No: Storage Room: Refrigerator - R0105		

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY41

Description: PFAS - DoD Calibration L4

13C4-PFOS	.00024
13C5-PFHxA	.00025
13C5-PFPeA	.00025
13C6-PFDA	.00025
13C7-PFUnA	.00025
13C8-FOSA	.00025
13C8-PFOA	.00025
13C8-PFOS	.00024
13C9-PFNA	.00025
d3-MeFOSAA	.00025
d5-EtFOSAA	.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00100
Perfluoro-1-butanefulfonate	.00101
Perfluoro-1-hexanesulfonate	.00101
Perfluoro-1-octanesulfonamide	.00100
Perfluoro-1-octanesulfonate	.00100
Perfluoro-n-butyric 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:
JY24	Pipette	B814657482
JY25	Pipette	I0793912B
JY27	Pipette	I0793912B

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: Storage Room: Refrigerator - R0105

Comment: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: JY42

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)
JY24	PFAS - DoD High ICAL Stock	Solution	~1	07/16/19	---	---	500 uL	1	10	~0.0500
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000

Solution Prepared By: Schultz, Stephanie	Date Prepared: 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: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY42

Description: PFAS - DoD Calibration L5

Stock Id: JY24

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	500	0.05	---	---	1	10	0.00253
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	500	0.05	---	---	1	10	0.00253
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	500	0.05	---	---	1	10	0.00250
(Na) Perfluoro-1-decanesulfonate	500	0.05	---	---	1	10	0.00253
(Na) Perfluoro-1-heptanesulfonate	500	0.05	---	---	1	10	0.00250
(Na) Perfluoro-1-nonanesulfonate	500	0.05	---	---	1	10	0.00253
N-ethylperfluoro-octanesulfonamidoacetic acid	500	0.05	---	---	1	10	0.00250
N-methylperfluoro-1-octanesulfonamidoacetic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-1-butanedisulfonate	500	0.05	---	---	1	10	0.00253
Perfluoro-1-hexanesulfonate	500	0.05	---	---	1	10	0.00253
Perfluoro-1-octanesulfonamide	500	0.05	---	---	1	10	0.00250
Perfluoro-1-octanesulfonate	500	0.05	---	---	1	10	0.00250
Perfluoro-n-butanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-decanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-dodecanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-heptanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-hexanoic acid	500	0.05	---	---	1	10	0.00253
Perfluoro-n-octanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluorononanoic Acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-pentanoic acid	500	0.05	---	---	1	10	0.00253
Perfluoro-n-tetradecanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-tridecanoic acid	500	0.05	---	---	1	10	0.00250
Perfluoro-n-undecanoic acid	500	0.05	---	---	1	10	0.00250
Sodium perfluoro-1-pentanesulfonate	500	0.05	---	---	1	10	0.00250

Stock Id: JY25

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

Stock Id: JY27

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 7/16/2018 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: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY42

Description: PFAS - DoD Calibration L5

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	.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: 7/16/2018 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: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY42

Description: PFAS - DoD Calibration L5

13C4-PFOS	.00024
13C5-PFHxA	.00025
13C5-PFPeA	.00025
13C6-PFDA	.00025
13C7-PFUnA	.00025
13C8-FOSA	.00025
13C8-PFOA	.00025
13C8-PFOS	.00024
13C9-PFNA	.00025
d3-MeFOSAA	.00025
d5-EtFOSAA	.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	.00250
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00250
Perfluoro-1-butanefulfonate	.00253
Perfluoro-1-hexanesulfonate	.00253
Perfluoro-1-octanesulfonamide	.00250
Perfluoro-1-octanesulfonate	.00250
Perfluoro-n-butanefulfonic Acid	.00250
Perfluoro-n-decanefulfonic Acid	.00250
Perfluoro-n-dodecanefulfonic acid	.00250
Perfluoro-n-heptanefulfonic Acid	.00250
Perfluoro-n-hexanefulfonic acid	.00253
Perfluoro-n-octanefulfonic Acid	.00250
Perfluorononanefulfonic Acid	.00250
Perfluoro-n-pentanefulfonic acid	.00253
Perfluoro-n-tetradecanefulfonic acid	.00250
Perfluoro-n-tridecanefulfonic acid	.00250
Perfluoro-n-undecanefulfonic acid	.00250
Sodium perfluoro-1-pentanesulfonate	.00250

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY24	Pipette	B820865811
JY25	Pipette	I0793912B
JY27	Pipette	I0793912B

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: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: JY43

Description: PFAS - DoD Calibration L6

Assigned Lab ID (from receipt log)	Chemical Name:	Source	Stock (ug/mL)	Expir. Date	Purity (%)	Density (g/mL)	Amount Taken	Conv. Fact.	Final Vol. (mL)	Std. Conc. (ug/mL)
JY24	PFAS - DoD High ICAL Stock	Solution	~1	07/16/19	---	---	1000 uL	1	5	~0.2000
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	25 uL	1	5	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	25 uL	1	5	~0.0000

Solution Prepared By: 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: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY43

Description: PFAS - DoD Calibration L6

Stock Id: JY24

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	1000	0.05	---	---	1	5	0.01010
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	1000	0.05	---	---	1	5	0.01010
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	1000	0.05	---	---	1	5	0.01000
(Na) Perfluoro-1-decanesulfonate	1000	0.05	---	---	1	5	0.01010
(NA) Perfluoro-1-heptanesulfonate	1000	0.05	---	---	1	5	0.01000
(Na) Perfluoro-1-nonanesulfonate	1000	0.05	---	---	1	5	0.01010
N-ethylperfluoro-octanesulfonamidoacetic acid	1000	0.05	---	---	1	5	0.01000
N-methylperfluoro-1-octanesulfonamidoacetic acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-1-butanedisulfonate	1000	0.05	---	---	1	5	0.01010
Perfluoro-1-hexanesulfonate	1000	0.05	---	---	1	5	0.01010
Perfluoro-1-octanesulfonamide	1000	0.05	---	---	1	5	0.01000
Perfluoro-1-octanesulfonate	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-butanoic Acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-decanoic Acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-dodecanoic acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-heptanoic Acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-hexanoic acid	1000	0.05	---	---	1	5	0.01010
Perfluoro-n-octanoic Acid	1000	0.05	---	---	1	5	0.01000
Perfluorononanoic Acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-pentanoic acid	1000	0.05	---	---	1	5	0.01010
Perfluoro-n-tetradecanoic acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-tridecanoic acid	1000	0.05	---	---	1	5	0.01000
Perfluoro-n-undecanoic acid	1000	0.05	---	---	1	5	0.01000
Sodium perfluoro-1-pentanesulfonate	1000	0.05	---	---	1	5	0.01000

Stock Id: JY25

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

Stock Id: JY27

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-4:2FTS	25	0.05	---	---	1	5	0.00023

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: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY43

Description: PFAS - DoD Calibration L6

13C2-6:2FTS	25	0.05	---	---	1	5	0.00024
13C2-8:2FTS	25	0.05	---	---	1	5	0.00024
13C2-PFDoA	25	0.05	---	---	1	5	0.00025
13C2-PFTeDA	25	0.05	---	---	1	5	0.00025
13C3-PFBS	25	0.05	---	---	1	5	0.00023
13C3-PFHxS	25	0.05	---	---	1	5	0.00024
13C4-PFBA	25	0.05	---	---	1	5	0.00025
13C4-PFHpA	25	0.05	---	---	1	5	0.00025
13C5-PFHxA	25	0.05	---	---	1	5	0.00025
13C5-PFPeA	25	0.05	---	---	1	5	0.00025
13C6-PFDA	25	0.05	---	---	1	5	0.00025
13C7-PFUnA	25	0.05	---	---	1	5	0.00025
13C8-FOSA	25	0.05	---	---	1	5	0.00025
13C8-PFOA	25	0.05	---	---	1	5	0.00025
13C8-PFOS	25	0.05	---	---	1	5	0.00024
13C9-PFNA	25	0.05	---	---	1	5	0.00025
d3-MeFOSAA	25	0.05	---	---	1	5	0.00025
d5-EtFOSAA	25	0.05	---	---	1	5	0.00025

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: 7/16/2018 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: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY43

Description: PFAS - DoD Calibration L6

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY24	Pipette	B820865811
JY25	Pipette	I0793912B
JY27	Pipette	I0793912B

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: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: JY44

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)
JY24	PFAS - DoD High ICAL Stock	Solution	~1	07/16/19	---	---	2000 uL	1	5	~0.4000
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	25 uL	1	5	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	25 uL	1	5	~0.0000

Solution Prepared By: 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: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY44

Description: PFAS - DoD Calibration L7

Stock Id: JY24

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate	2000	0.05	---	---	1	5	0.02020
(Na) 1H,1H,2H,2H-Perfluorohexane sulfonate	2000	0.05	---	---	1	5	0.02020
(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate	2000	0.05	---	---	1	5	0.02000
(Na) Perfluoro-1-decanesulfonate	2000	0.05	---	---	1	5	0.02020
(Na) Perfluoro-1-heptanesulfonate	2000	0.05	---	---	1	5	0.02000
(Na) Perfluoro-1-nonanesulfonate	2000	0.05	---	---	1	5	0.02020
N-ethylperfluoro-octanesulfonamidoacetic acid	2000	0.05	---	---	1	5	0.02000
N-methylperfluoro-1-octanesulfonamidoacetic acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-1-butanedisulfonate	2000	0.05	---	---	1	5	0.02020
Perfluoro-1-hexanesulfonate	2000	0.05	---	---	1	5	0.02020
Perfluoro-1-octanesulfonamide	2000	0.05	---	---	1	5	0.02000
Perfluoro-1-octanesulfonate	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-butanoic Acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-decanoic Acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-dodecanoic acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-heptanoic Acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-hexanoic acid	2000	0.05	---	---	1	5	0.02020
Perfluoro-n-octanoic Acid	2000	0.05	---	---	1	5	0.02000
Perfluorononanoic Acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-pentanoic acid	2000	0.05	---	---	1	5	0.02020
Perfluoro-n-tetradecanoic acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-tridecanoic acid	2000	0.05	---	---	1	5	0.02000
Perfluoro-n-undecanoic acid	2000	0.05	---	---	1	5	0.02000
Sodium perfluoro-1-pentanesulfonate	2000	0.05	---	---	1	5	0.02000

Stock Id: JY25

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

Stock Id: JY27

Chemical Name	Stock Amount uL	Initial Conc. (ug/mL)	Density (g/mL)	Purity	Conv. Factor	Final Vol mL	Concentration (ug/mL)
13C2-4:2FTS	25	0.05	---	---	1	5	0.00023

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: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY44

Description: PFAS - DoD Calibration L7

13C2-6:2FTS	25	0.05	---	---	1	5	0.00024
13C2-8:2FTS	25	0.05	---	---	1	5	0.00024
13C2-PFDoA	25	0.05	---	---	1	5	0.00025
13C2-PFTeDA	25	0.05	---	---	1	5	0.00025
13C3-PFBS	25	0.05	---	---	1	5	0.00023
13C3-PFHxS	25	0.05	---	---	1	5	0.00024
13C4-PFBA	25	0.05	---	---	1	5	0.00025
13C4-PFHpA	25	0.05	---	---	1	5	0.00025
13C5-PFHxA	25	0.05	---	---	1	5	0.00025
13C5-PFPeA	25	0.05	---	---	1	5	0.00025
13C6-PFDA	25	0.05	---	---	1	5	0.00025
13C7-PFUnA	25	0.05	---	---	1	5	0.00025
13C8-FOSA	25	0.05	---	---	1	5	0.00025
13C8-PFOA	25	0.05	---	---	1	5	0.00025
13C8-PFOS	25	0.05	---	---	1	5	0.00024
13C9-PFNA	25	0.05	---	---	1	5	0.00025
d3-MeFOSAA	25	0.05	---	---	1	5	0.00025
d5-EtFOSAA	25	0.05	---	---	1	5	0.00025

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: 7/16/2018 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: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY44

Description: PFAS - DoD Calibration L7

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

Syringes/Pipettes:

Stock ID:	Type:	Battelle ID:
JY24	Pipette	I0400533B
JY25	Pipette	I0793912B
JY27	Pipette	I0793912B

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: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: JY45

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)
JZ27	PFAS - DoD Second Source LCS/MS Solution	Solution	~0	07/25/19	---	---	200 uL	1	10	~0.0000
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000
JY25	PFAS - DoD Internal Standard Stock Solution	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000

Solution Prepared By: Schultz, Stephanie	Date Prepared: 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: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY45

Description: PFAS - DoD ICC

Stock Id: JY25

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

Stock Id: JY27

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

Stock Id: JZ27

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: 7/16/2018 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: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY45

Description: PFAS - DoD ICC

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

Final Concentrations:

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 7/16/2018 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: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY45

Description: PFAS - DoD ICC

13C4-PFOS	.00024
13C5-PFHxA	.00025
13C5-PFPeA	.00025
13C6-PFDA	.00025
13C7-PFUnA	.00025
13C8-FOSA	.00025
13C8-PFOA	.00025
13C8-PFOS	.00024
13C9-PFNA	.00025
d3-MeFOSAA	.00025
d5-EtFOSAA	.00025
N-ethylperfluoro-octanesulfonamidoacetic acid	.00100
N-methylperfluoro-1-octanesulfonamidoacetic acid	.00100
Perfluoro-1-butanefulfonate	.00101
Perfluoro-1-hexanesulfonate	.00101
Perfluoro-1-octanesulfonamide	.00100
Perfluoro-1-octanesulfonate	.00100
Perfluoro-n-butyric 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	I0793912B
JY27	Pipette	I0793912B
JZ27	Pipette	B814657482

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: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: JY46

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
JY27	PFAS - DoD High Level Labelled Extracted Internal Standards (SIS)	Solution	~0	07/16/19	---	---	50 uL	1	10	~0.0000

Solution Prepared By: Schultz, Stephanie	Date Prepared: 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: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise Date: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY46

Description: PFAS - DoD Instrument Blank

Stock Id: JY25

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

Stock Id: JY27

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

Final Concentrations:

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

Solution Prepared By: Schultz, Stephanie Date Prepared: 7/16/2018 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: 8/14/2018 4:48:00 PM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JY46

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	I0793912B
JY27	Pipette	I0793912B

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: 80/20 Methanol/Milli-q water

Approved By: Schumitz, Denise **Date:** 8/14/2018 4:48:00 PM



It can be done

Standard Solution Prep Form II

Approved:

Standard Laboratory ID Number: JZ27

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)
171025-01	PFOA - 2nd Source	Neat	~1.00000 0	03/22/22	---	---	1000 uL	1	20	~0.0500

Solution Prepared By: Schultz, Stephanie	Date Prepared: 7/25/2018	Expiration Date: 7/25/2019
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: 7/26/2018 8:18:00 AM



It can be done

Standard Solution Concentrations

Approved: Standard Laboratory ID Number: **JZ27**

Description: PFAS - DoD Second Source LCS/MS Solution

Stock Id: **171025-01**

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-butanefulfonate	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-butanefulfonate	.05050

Solution Prepared By: Schultz, Stephanie Date Prepared: 7/25/2018 Expiration Date: 7/25/2019

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: 7/26/2018 8:18:00 AM



It can be done

Standard Solution Concentrations

Approved:

Standard Laboratory ID Number: JZ27

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:
171025-01	Pipette	B820865811

Solution Prepared By: Schultz, Stephanie **Date Prepared:** 7/25/2018 **Expiration Date:** 7/25/2019

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:** 7/26/2018 8:18:00 AM



It can be done

BDO Id: 171025-01

Reagent Receipt Report

Approved:

Name: PFOA - 2nd Source **Received:** 10/25/2017
Vendor: ABSOLUTE STANDARDS **Custodian:** Schumitz, Matt
Catalogue No: 99207 **Expires:** 3/22/2022
Type: Solution **Consumed:** _____
Lot No: 032217 **Stored In:** LC Laboratory - F0111
Quantity: 5 ea ml **% Moisture:** _____
Description: PFOA-DOD

Analyte:	CAS No:	Concentration (ug/mL):	Purity:	Density:	Density Units:	Cert	Cert Val:	Lower Limit:	Upper Limit:
(Na) 1H,1H,2H,2H-Perfluorodecane	39108-34-4	1.0100	100.00	--	--	<input type="checkbox"/>			
(Na) 1H,1H,2H,2H-Perfluorohexane	BDO-2205	1.0000	100.00	--	--	<input type="checkbox"/>			
(Na) 1H,1H,2H,2H-Perfluorooctane s	27619-97-2	1.0000	100.00	--	--	<input type="checkbox"/>			
(Na) Perfluoro-1-decanesulfonate	2806-15-7	1.0100	100.00	--	--	<input type="checkbox"/>			
(NA) Perfluoro-1-heptanesulfonate	375-92-8	1.0000	100.00	--	--	<input type="checkbox"/>			
(Na) Perfluoro-1-nonanesulfonate	98789-57-2	1.0100	100.00	--	--	<input type="checkbox"/>			
N-ethylperfluoro-octanesulfonamidoa	2991-50-6	1.0000	100.00	--	--	<input type="checkbox"/>			
N-methylperfluoro-1-octanesulfonami	2355-31-9	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-butanefulfonic Acid	375-73-5	1.0100	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-hexanesulfonic Acid	355-46-4	1.0100	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-octanesulfonamide	754-91-6	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-1-octanesulphonic Acid	1763-23-1	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-butanoic Acid	375-22-4	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-decanoic Acid	335-76-2	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-dodecanoic acid	307-55-1	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-heptanoic Acid	375-85-9	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-hexanoic acid	307-24-4	1.0100	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-octanoic Acid	335-67-1	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluorononanoic Acid	375-95-1	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-pentanoic acid	2706-90-3	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-tetradecanoic acid	376-06-7	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-tridecanoic acid	72629-94-8	1.0000	100.00	--	--	<input type="checkbox"/>			
Perfluoro-n-undecanoic acid	2058-94-8	1.0000	100.00	--	--	<input type="checkbox"/>			
Sodium perfluoro-1-pentanesulfonat	BDO-2114	1.0000	100.00	--	--	<input type="checkbox"/>			

Total Analytes: 24

Notes:

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



CERTIFIED WEIGHT REPORT

Part Number: 99207
Lot Number: 101717
Description: PFOA - DOD
24 components
Expiration Date: 101722
Recommended Storage: Freezer (-20°C)
Nominal Concentration (µg/mL): 1.0
NIST Test ID#: 2506734D

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

Volume(s) shown below were combined and diluted to (mL):
Note: All assigned values are anion concentrations.

Formulated By: <i>Marlo Lux</i> Marlo Lux	DATE 101717
Reviewed By: <i>Pedro L. Rentas</i> Pedro L. Rentas	DATE 101717

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	PFBAC516	0.02	1.00	0.004	50.0	1.00	0.01	375-22-4	N/A
2. Perfluoro-n-pentanoic acid	3669	PFPeA617	0.02	1.00	0.004	50.0	1.00	0.01	2706-90-3	N/A
3. Perfluorohexanoic acid	99199	03067	0.02	1.00	0.004	50.3	1.01	0.01	307-24-4	N/A
4. Perfluoroheptanoic acid	99197	03057	0.02	1.00	0.004	50.1	1.00	0.01	375-85-9	N/A
5. Perfluorooctanoic acid	99202	03067	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	03067	0.02	1.00	0.004	50.1	1.00	0.01	375-95-1	N/A
7. Perfluorodecanoic acid	99195	03067	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	03067	0.02	1.00	0.004	50.1	1.00	0.01	2058-94-8	N/A
9. Tricosafluorododecanoic acid	99196	03067	0.02	1.00	0.004	50.1	1.00	0.01	307-55-1	N/A
10. Perfluorotridecanoic acid	99204	03067	0.02	1.00	0.004	50.1	1.00	0.01	72629-94-8	N/A
11. Perfluorotetradecanoic acid	99203	03067	0.02	1.00	0.004	50.1	1.00	0.01	376-06-7	N/A
12. Perfluoro-1-octanesulfonamide	3677	FOSA09161	0.02	1.00	0.004	50.0	1.00	0.01	754-91-6	N/A
13. N-Methylperfluoro-1-octanesulfonamidoacetic acid	3667	NMeFOSA0117	0.02	1.00	0.004	50.0	1.00	0.01	2355-31-9	N/A
14. N-Ethylperfluoro-1-octanesulfonamidoacetic acid	3664	NEFOSA0117	0.02	1.00	0.004	50.0	1.00	0.01	2991-50-6	N/A
15. Perfluorobutanesulfonic acid	99194	031017	0.02	1.00	0.004	50.7	1.01	0.01	375-73-5	N/A
16. Perfluoro-1-pentanesulfonic acid	3956	LFPeS0117	0.0214	1.07	0.004	46.9	1.00	0.01	630402-22-1	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
18. Perfluoro-1-heptanesulfonic acid	3672	LPHpS0817	0.021	1.05	0.004	47.6	1.00	0.01	375-92-8	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
20. Perfluoro-1-nonanesulfonic acid	3957	LPFNS0516	0.021	1.05	0.004	48.0	1.01	0.01	98789-57-2	N/A
21. Perfluoro-1-decane sulfonic acid	3671	LPFDS0217	0.021	1.05	0.004	48.2	1.01	0.01	2806-15-7	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
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
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

* 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).

20-50121

BATTELLE

It can be done

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

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

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

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

180618-02



WELLINGTON
LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

br-NEtFOSAA

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

<u>PRODUCT CODE:</u>	br-NEtFOSAA
<u>LOT NUMBER:</u>	brNETFOSAA0118
<u>CONCENTRATION:</u>	50.0 ± 2.5 µg/ml
<u>SOLVENT(S):</u>	Methanol/Water (<1%)
<u>DATE PREPARED:</u> (mm/dd/yyyy)	01/10/2018
<u>LAST TESTED:</u> (mm/dd/yyyy)	01/17/2018
<u>EXPIRY DATE:</u> (mm/dd/yyyy)	01/17/2023
<u>RECOMMENDED STORAGE:</u>	Refrigerate ampoule

DESCRIPTION:

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

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HANDLING:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

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

UNCERTAINTY:

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

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

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

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

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

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

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



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

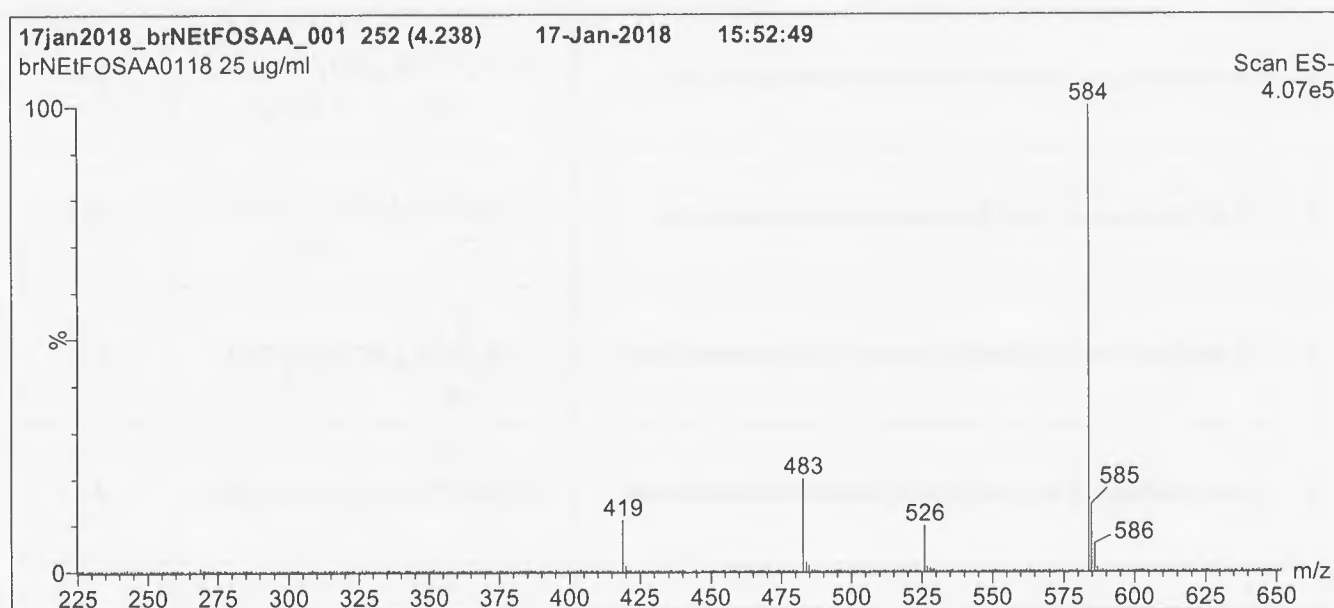
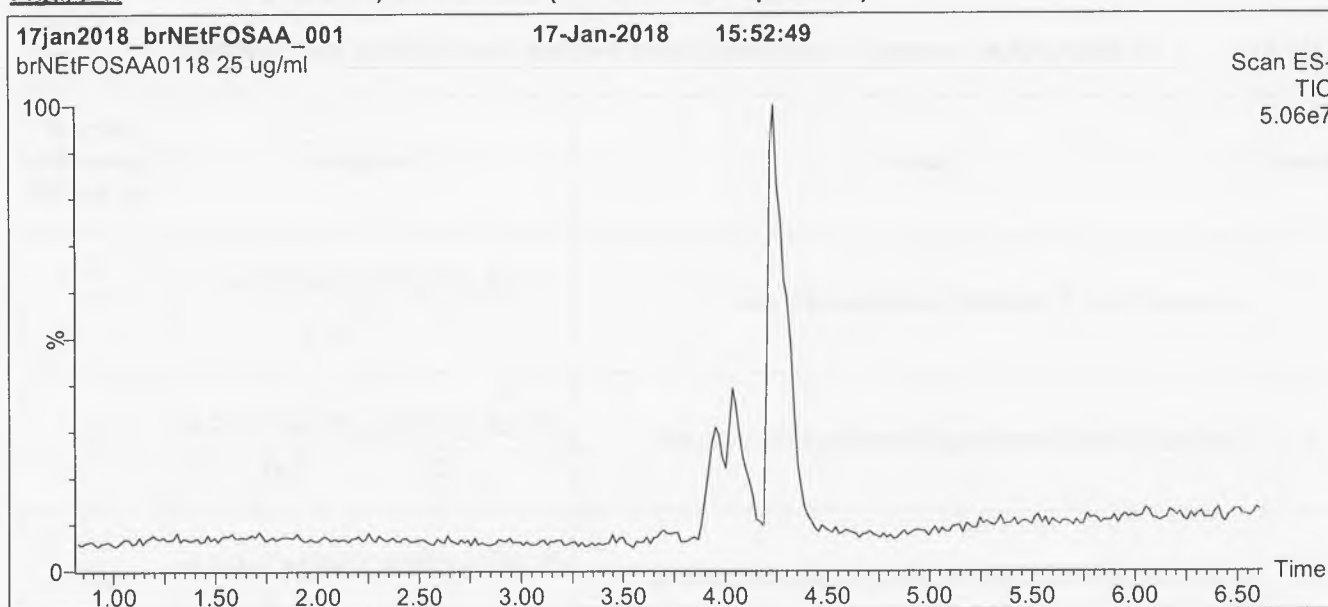
Table A: br-NEtFOSAA; Isomeric Components and Percent Composition (by ¹⁹F-NMR)*

Isomer	Name	Structure	Percent Composition by ¹⁹ F-NMR
1	N-ethylperfluoro-1-octanesulfonamidoacetic acid	$\text{CF}_3(\text{CF}_2)_7\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ C_2H_5	77.5
2	N-ethylperfluoro-3-methylheptanesulfonamidoacetic acid	$\text{CF}_3(\text{CF}_2)_3\underset{\text{CF}_3}{\text{CF}}(\text{CF}_2)_2\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ C_2H_5	2.3
3	N-ethylperfluoro-4-methylheptanesulfonamidoacetic acid	$\text{CF}_3(\text{CF}_2)_2\underset{\text{CF}_3}{\text{CF}}(\text{CF}_2)_3\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ C_2H_5	2.2
4	N-ethylperfluoro-5-methylheptanesulfonamidoacetic acid	$\text{CF}_3\text{CF}_2\underset{\text{CF}_3}{\text{CF}}(\text{CF}_2)_4\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ C_2H_5	5.4
5	N-ethylperfluoro-6-methylheptanesulfonamidoacetic acid	$\text{CF}_3\underset{\text{CF}_3}{\text{CF}}(\text{CF}_2)_5\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ C_2H_5	10.4
6	N-ethylperfluoro-5,5-dimethylhexanesulfonamidoacetic acid	$\underset{\text{CF}_3}{\text{CF}_3}\text{C}(\text{CF}_2)_4\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ C_2H_5	0.3
7	N-ethylperfluoro-4,5-dimethylhexanesulfonamidoacetic acid	$\underset{\text{CF}_3}{\text{CF}_3}\text{CF}(\text{CF}_2)_3\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ C_2H_5	0.3
8	N-ethylperfluoro-3,5-dimethylhexanesulfonamidoacetic acid	$\text{CF}_3\underset{\text{CF}_3}{\text{CF}}\text{CF}_2\underset{\text{CF}_3}{\text{CF}}(\text{CF}_2)_2\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ C_2H_5	0.3
9	Other Unidentified Isomers		1.3

* Percent of total N-ethylperfluorooctanesulfonamidoacetic acid isomers only.

Certified By: 
B.G. Chittim, General Manager

Date: 03/22/2018
(mm/dd/yyyy)

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

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

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈,
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.

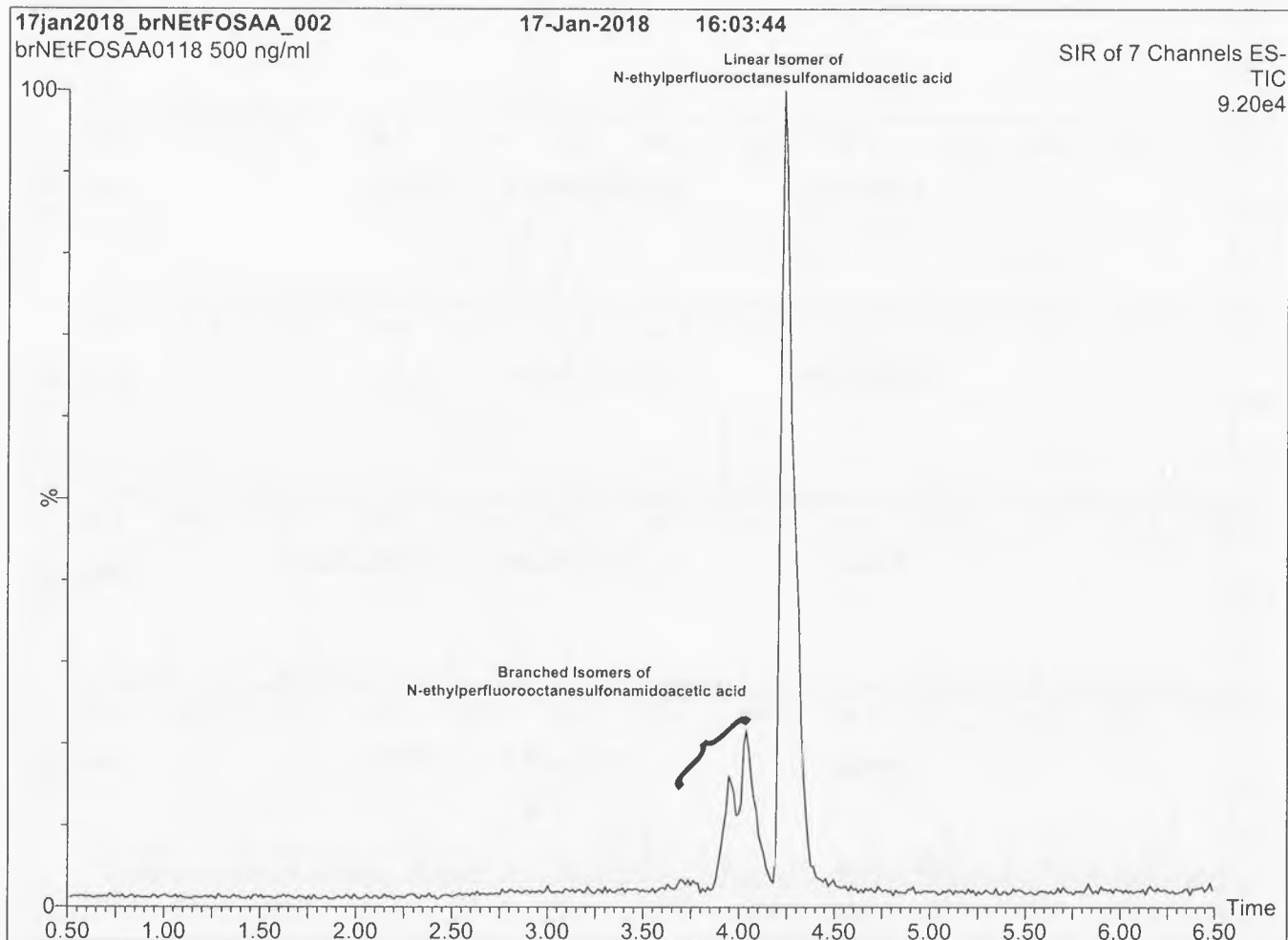
Time: 10 min

Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

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

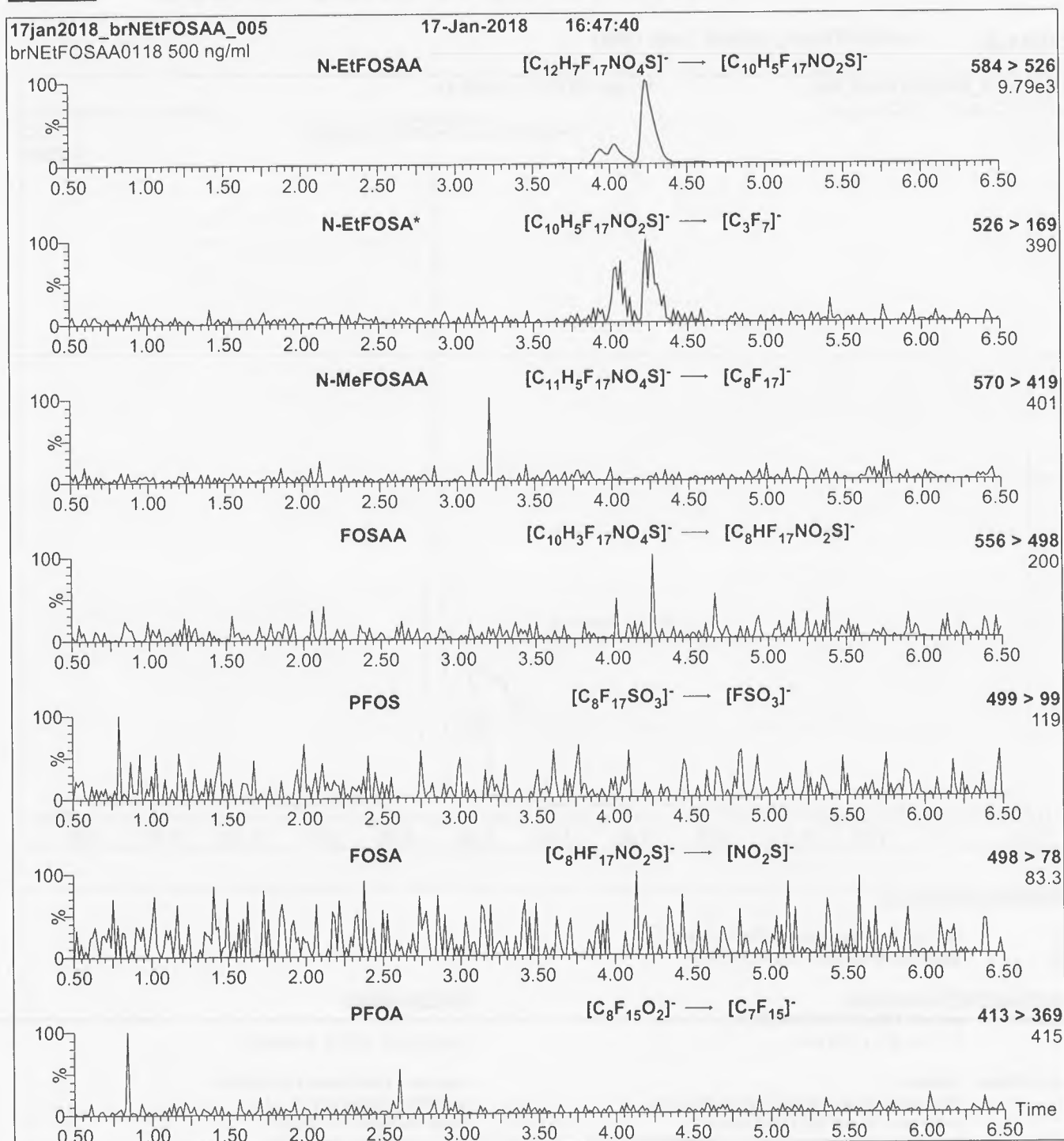
Figure 2: br-NEtFOSAA; LC/MS Data (SIR)**Conditions for Figure 2:****LC:** Waters Acquity Ultra Performance LC**MS:** Micromass Quattro *micro* API MS**Chromatographic Conditions**Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mmMobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.

Time: 10 min

Flow: 300 μ l/min**MS Parameters**

Experiment: SIR (7 channels)

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

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

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

Conditions for Figure 3:

Injection: On-column

MS Parameters

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

Mobile phase: Same as Figure 2

Flow: 300 μ l/min



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 Val:	Cert Val:	Lower Limit:	Upper Limit:
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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 ¹⁹F-NMR
 Figure 1: LC/MS Data (TIC and Mass Spectrum)
 Figure 2: LC/MS Data (SIR)
 Figure 3: LC/MS/MS Data (Selected MRM Transitions)

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HANDLING:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

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

UNCERTAINTY:

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

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

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

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

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

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

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

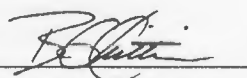


For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

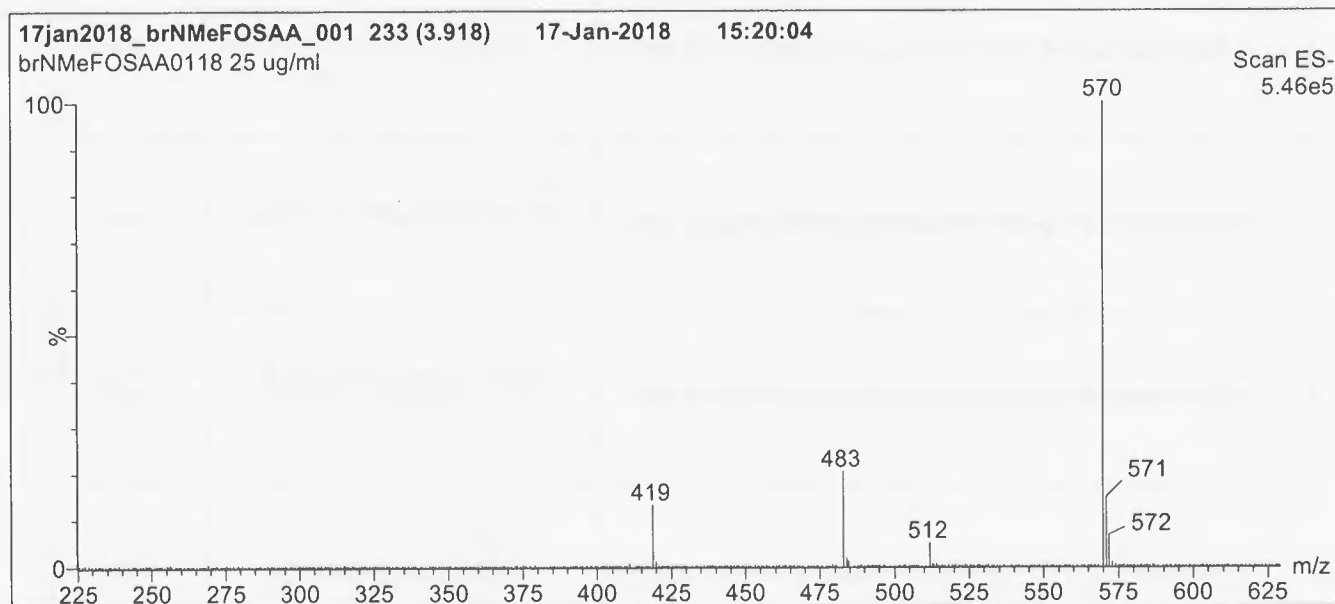
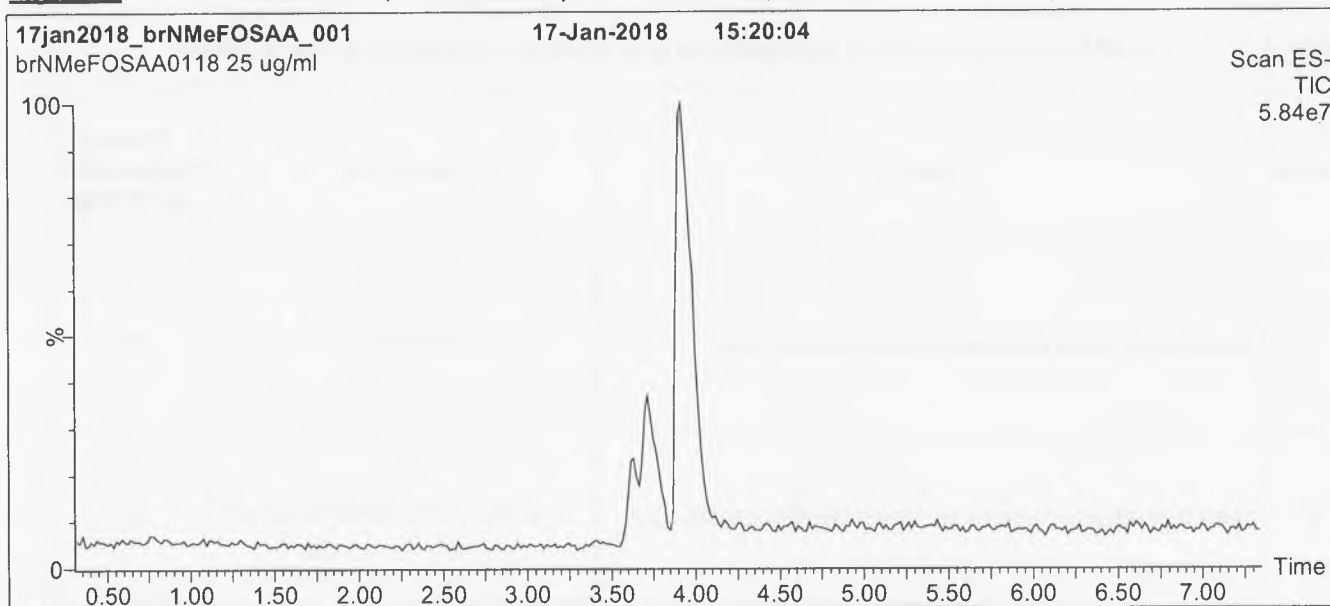
Table A: br-NMeFOSAA; Isomeric Components and Percent Composition (by ¹⁹F-NMR)*

Isomer	Name	Structure	Percent Composition by ¹⁹ F-NMR
1	N-methylperfluoro-1-octanesulfonamidoacetic acid	$\text{CF}_3(\text{CF}_2)_7\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ $\quad \quad \quad $ $\quad \quad \quad \text{CH}_3$	76.0
2	N-methylperfluoro-3-methylheptanesulfonamidoacetic acid	$\text{CF}_3(\text{CF}_2)_3\text{CF}(\text{CF}_2)_2\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ $\quad \quad \quad \quad \quad \quad $ $\quad \quad \quad \text{CF}_3 \quad \quad \quad \text{CH}_3$	0.7
3	N-methylperfluoro-4-methylheptanesulfonamidoacetic acid	$\text{CF}_3(\text{CF}_2)_2\text{CF}(\text{CF}_2)_3\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ $\quad \quad \quad \quad \quad \quad $ $\quad \quad \quad \text{CF}_3 \quad \quad \quad \text{CH}_3$	2.0
4	N-methylperfluoro-5-methylheptanesulfonamidoacetic acid	$\text{CF}_3\text{CF}_2\text{CF}(\text{CF}_2)_4\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ $\quad \quad \quad \quad \quad \quad $ $\quad \quad \quad \text{CF}_3 \quad \quad \quad \text{CH}_3$	6.0
5	N-methylperfluoro-6-methylheptanesulfonamidoacetic acid	$\text{CF}_3\text{CF}(\text{CF}_2)_5\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ $\quad \quad \quad \quad \quad \quad $ $\quad \quad \quad \text{CF}_3 \quad \quad \quad \text{CH}_3$	14.0
6	N-methylperfluoro-5,5-dimethylhexanesulfonamidoacetic acid	$\quad \quad \quad \text{CF}_3$ $\quad \quad \quad $ $\text{CF}_3\text{C}(\text{CF}_2)_4\text{SO}_2\text{NCH}_2\text{CO}_2\text{H}$ $\quad \quad \quad \quad \quad \quad $ $\quad \quad \quad \text{CF}_3 \quad \quad \quad \text{CH}_3$	0.2
7	Other Unidentified Isomers		1.1

* Percent of total N-methylperfluorooctanesulfonamidoacetic acid isomers only.

Certified By: 
B.G. Chittim, General Manager

Date: 03/22/2018
(mm/dd/yyyy)

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

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

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.

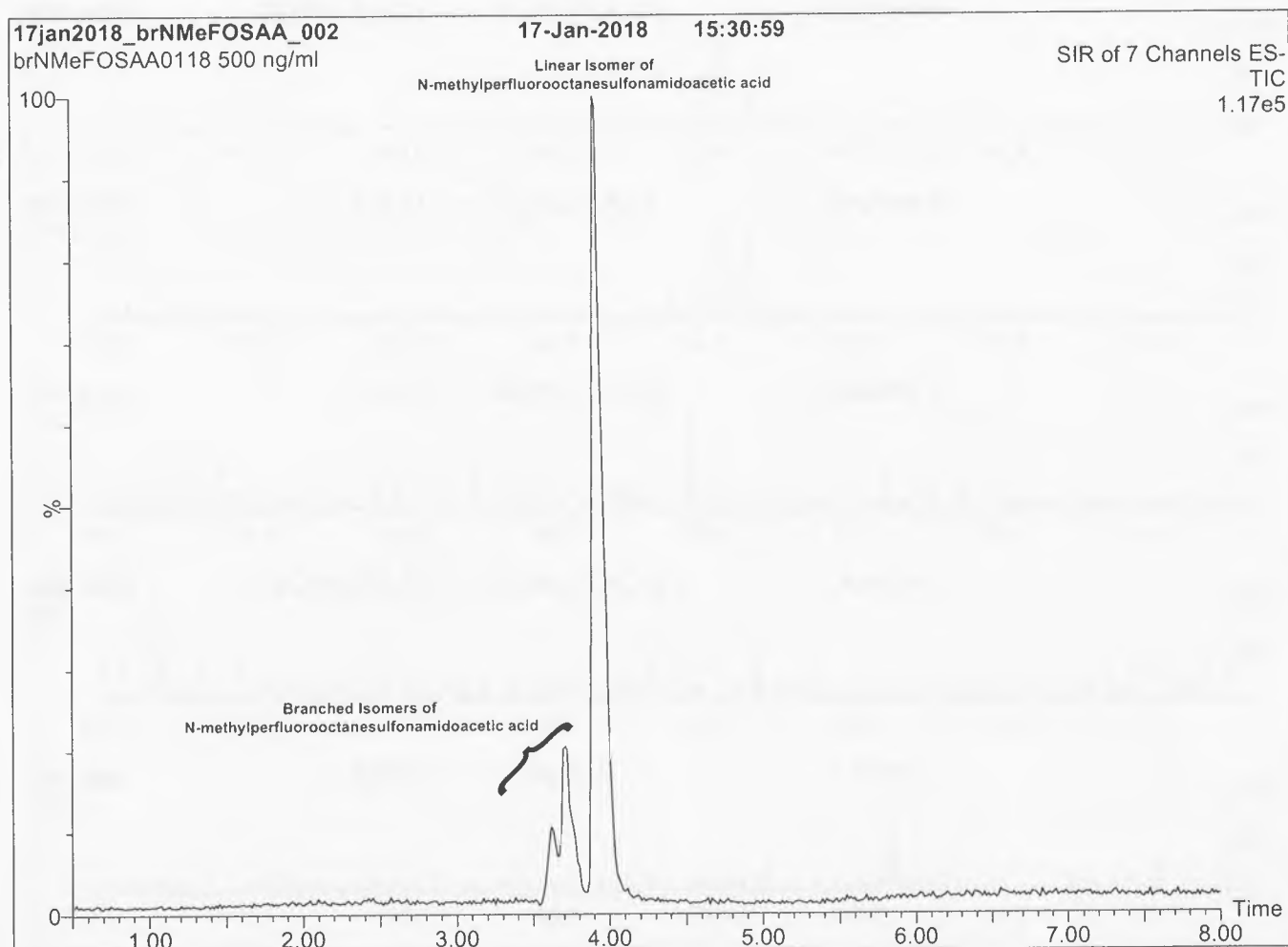
Time: 10 min

Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

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

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

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

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
Start: 55% (80:20 MeOH:ACN) / 45% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 7 min and hold for
2 min before returning to initial conditions in 0.5 min.

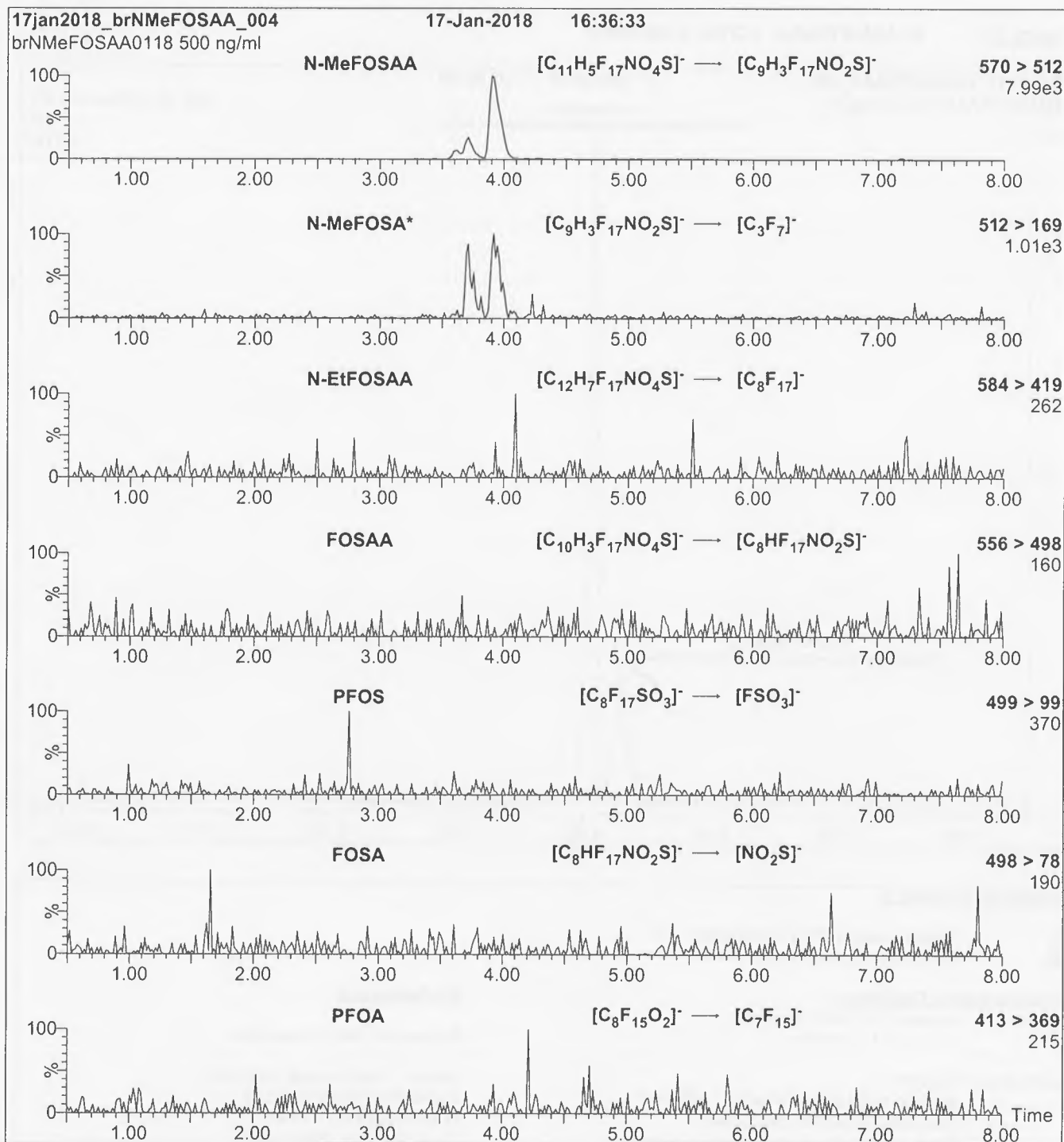
MS Parameters

Experiment: SIR (7 channels)

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

Time: 10 min

Flow: 300 μ l/min

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

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

Conditions for Figure 3:

Injection: On-column

MS Parameters

Mobile phase: Same as Figure 2

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

Flow: 300 μ l/min



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 Val:	Cert Val:	Lower Limit:	Upper Limit:
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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: $50 \pm 2.5 \mu\text{g/ml}$ (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. ChittimDate: 02/22/2017
(mm/dd/yyyy)

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

INTENDED USE:

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

HAZARDS:

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

CHARACTERIZATION / HOMOGENEITY:

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

UNCERTAINTY:

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

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

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

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

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

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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



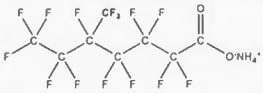
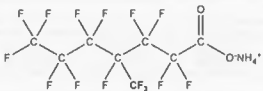
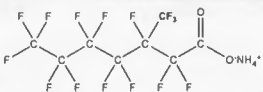
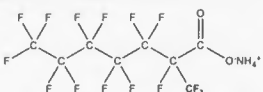
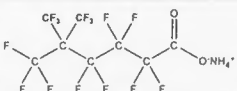
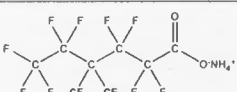
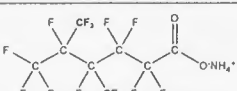
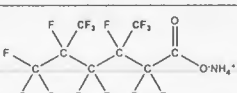
QUALITY MANAGEMENT:

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



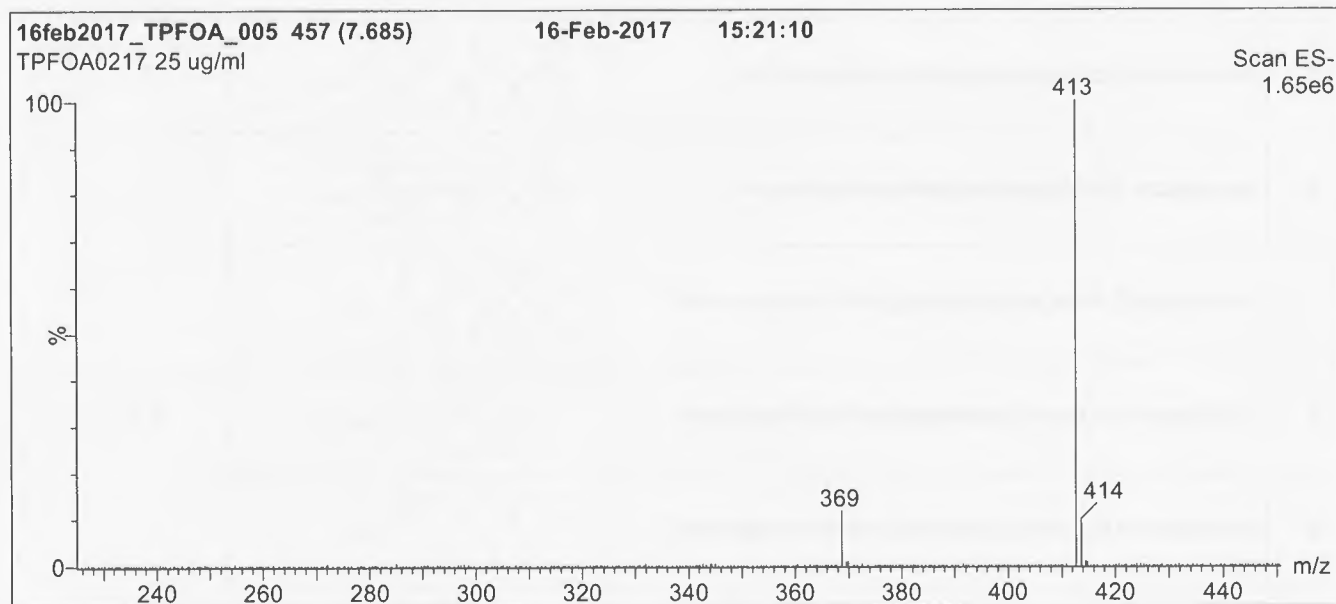
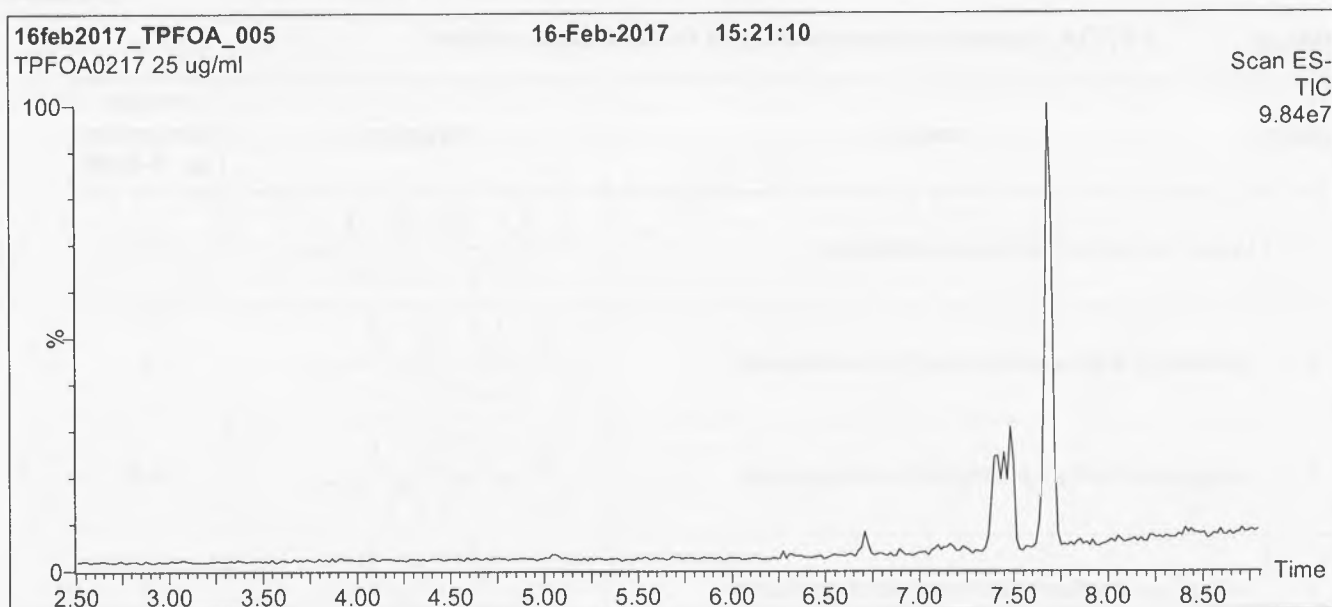
For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

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

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

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

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

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

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

Chromatographic Conditions:

Column: Kinetex PFP
2.6 μ m, 4.6 x 100 mm

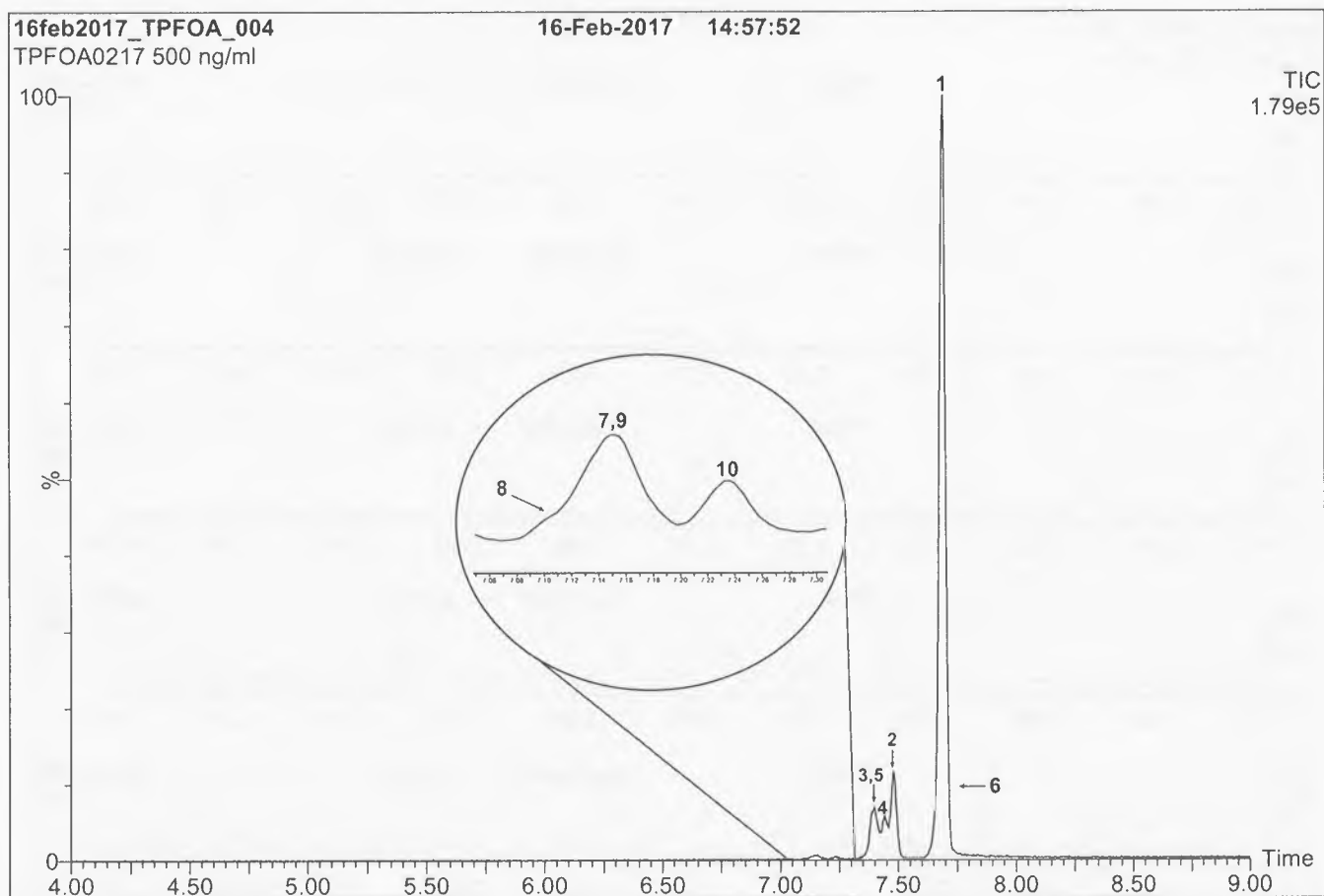
Mobile phase: Gradient
Start: 30% (80:20 MeOH:ACN) / 70% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 50% organic over 5 min. Ramp to
90% organic over 5 min and hold for 1.5 min.
Return to initial conditions over 0.5 min.
Time: 13 min

Flow: 1.0 ml/min

MS Parameters:

Experiment: Full Scan (225 - 850 amu)

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

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

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

Chromatographic Conditions:

Column: Kinetex PFP
2.6 μ m, 4.6 x 100 mm

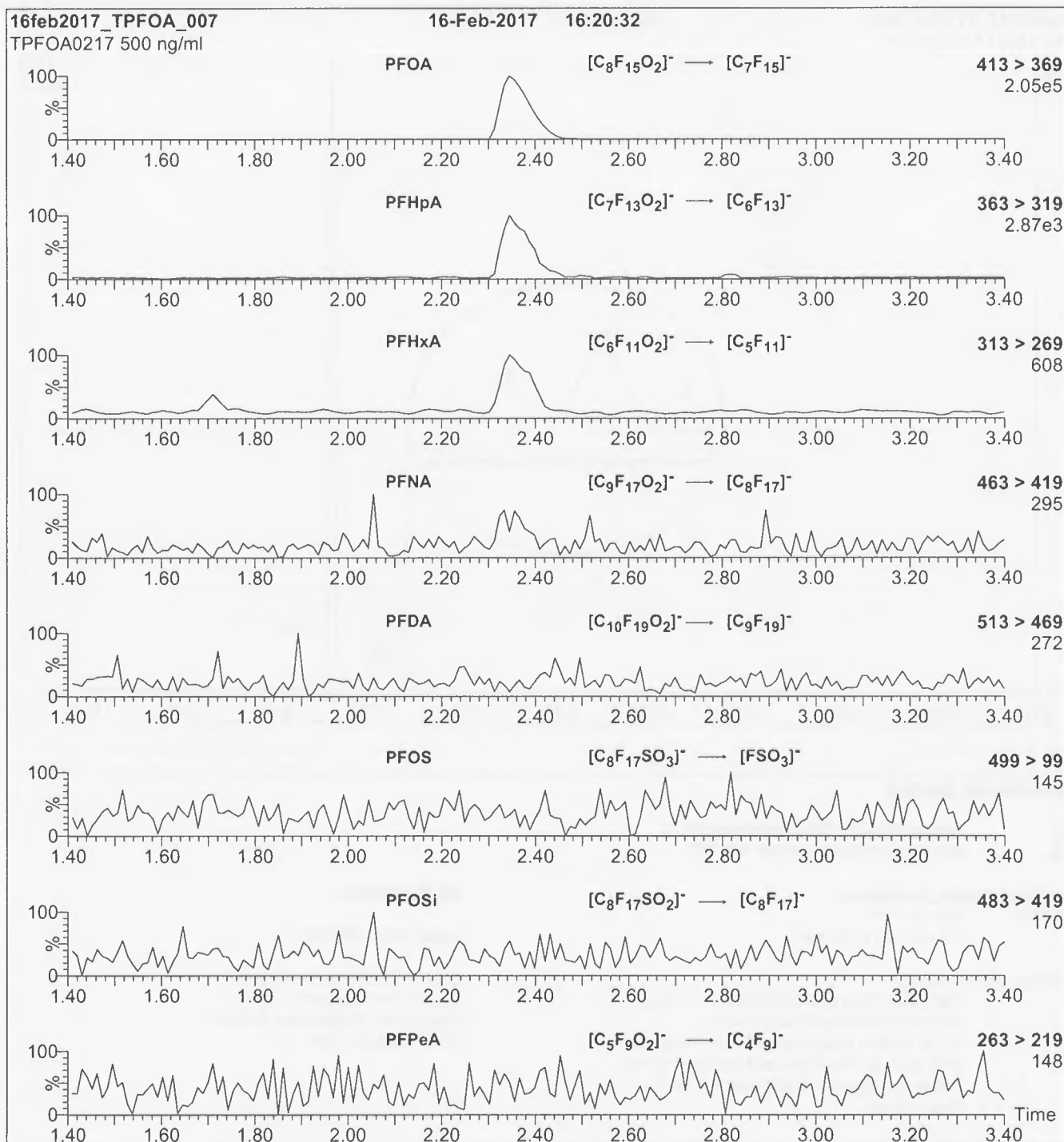
Mobile phase: Gradient
Start: 30% (80:20 MeOH:ACN) / 70% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 50% organic over 5 min. Ramp to
90% organic over 5 min and hold for 1.5 min.
Return to initial conditions over 0.5 min.
Time: 13 min

Flow: 1.0 ml/min

MS Parameters:

Experiment: SIR (ES)

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

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

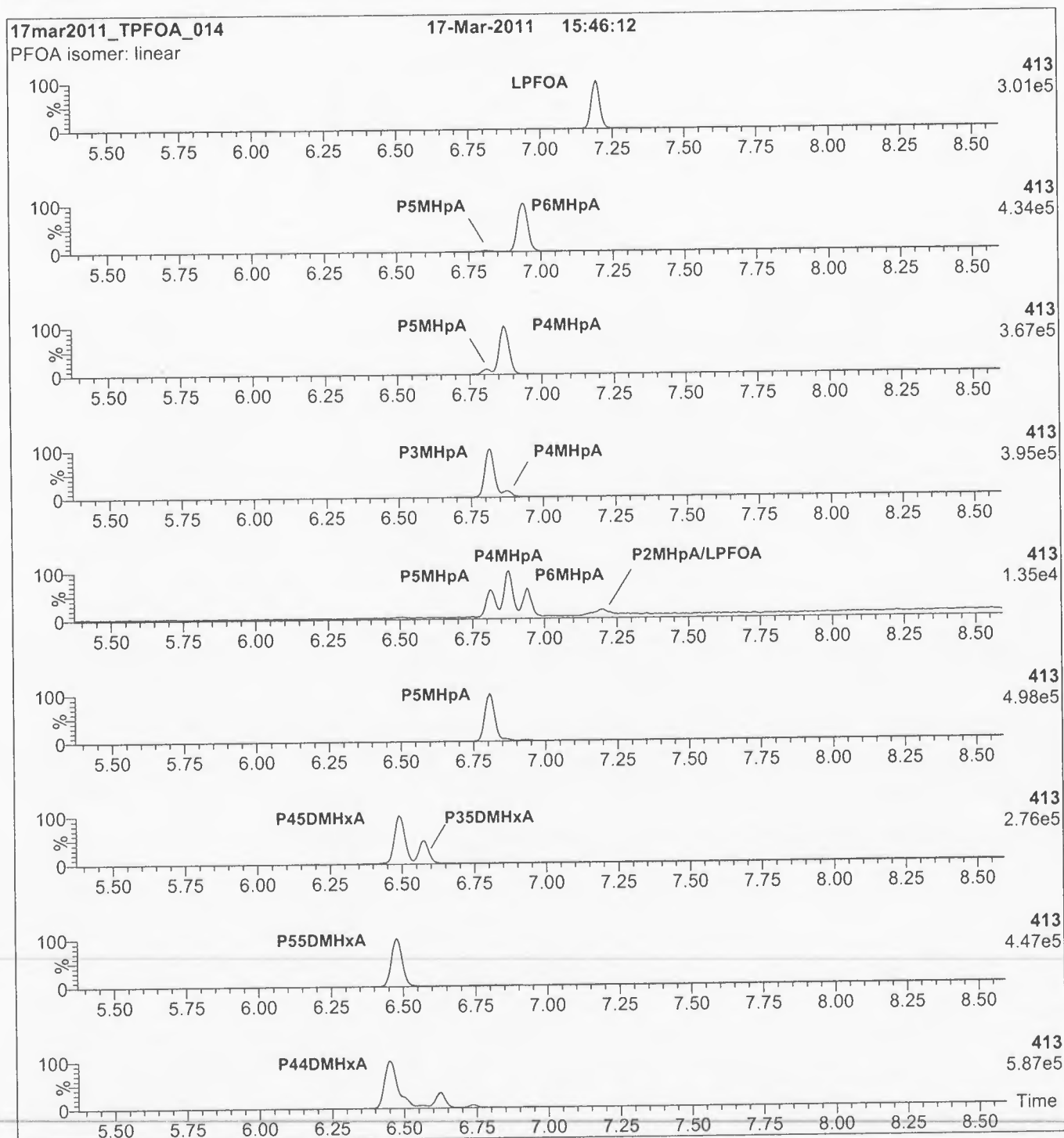
Injection: Direct loop injection
10 μ l (500 ng/ml T-PFOA)

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

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

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

Same as Figure 2.



It can be done

BDO Id: 180618-06

Reagent Receipt Report

Approved: Authorized:

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

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

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

180618-06



WELLINGTON
LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

br-PFHxSK

**Potassium Perfluorohexanesulfonate
Solution/Mixture of Linear and
Branched Isomers**

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

DESCRIPTION:

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

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HAZARDS:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

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

UNCERTAINTY:

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

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

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

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

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

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

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



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

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

Isomer	Name	Structure	Percent Composition by ¹⁹ F-NMR
1	Potassium perfluoro-1-hexanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺	81.1
2	Potassium 1-trifluoromethylperfluoropentanesulfonate**	CF ₃ CF ₂ CF ₂ CF ₂ CF(SO ₃ ⁻)K ⁺ CF ₃	2.9
3	Potassium 2-trifluoromethylperfluoropentanesulfonate	CF ₃ CF ₂ CF ₂ CF(CF ₃)CF ₂ SO ₃ ⁻ K ⁺ CF ₃	1.4
4	Potassium 3-trifluoromethylperfluoropentanesulfonate	CF ₃ CF ₂ CF(CF ₃)CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	5.0
5	Potassium 4-trifluoromethylperfluoropentanesulfonate	CF ₃ CF(CF ₃)CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	8.9
6	Potassium 3,3-di(trifluoromethyl)perfluorobutanesulfonate	CF ₃ CF ₃ CCF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	0.2
7	Other Unidentified Isomers		0.5

* Percent of total perfluorohexanesulfonate isomers only.

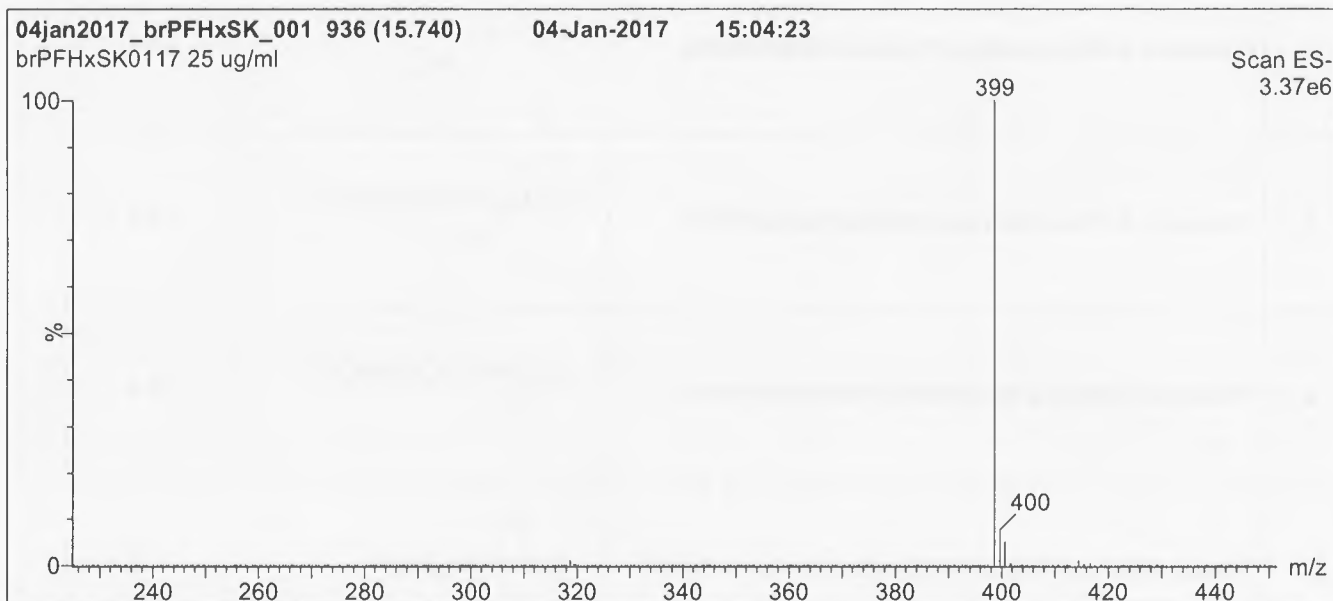
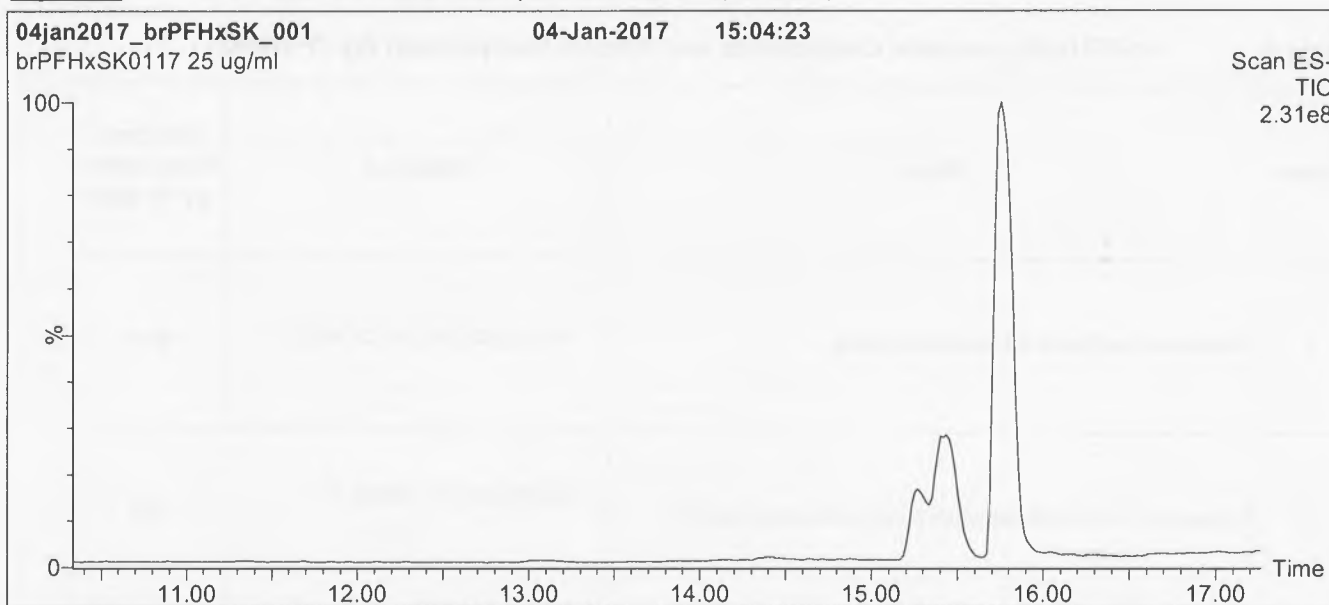
** Systematic Name: Potassium perfluorohexane-2-sulfonate.

Certified By:


 B.G. Chittim

Date: 01/20/2017

(mm/dd/yyyy)

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

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

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

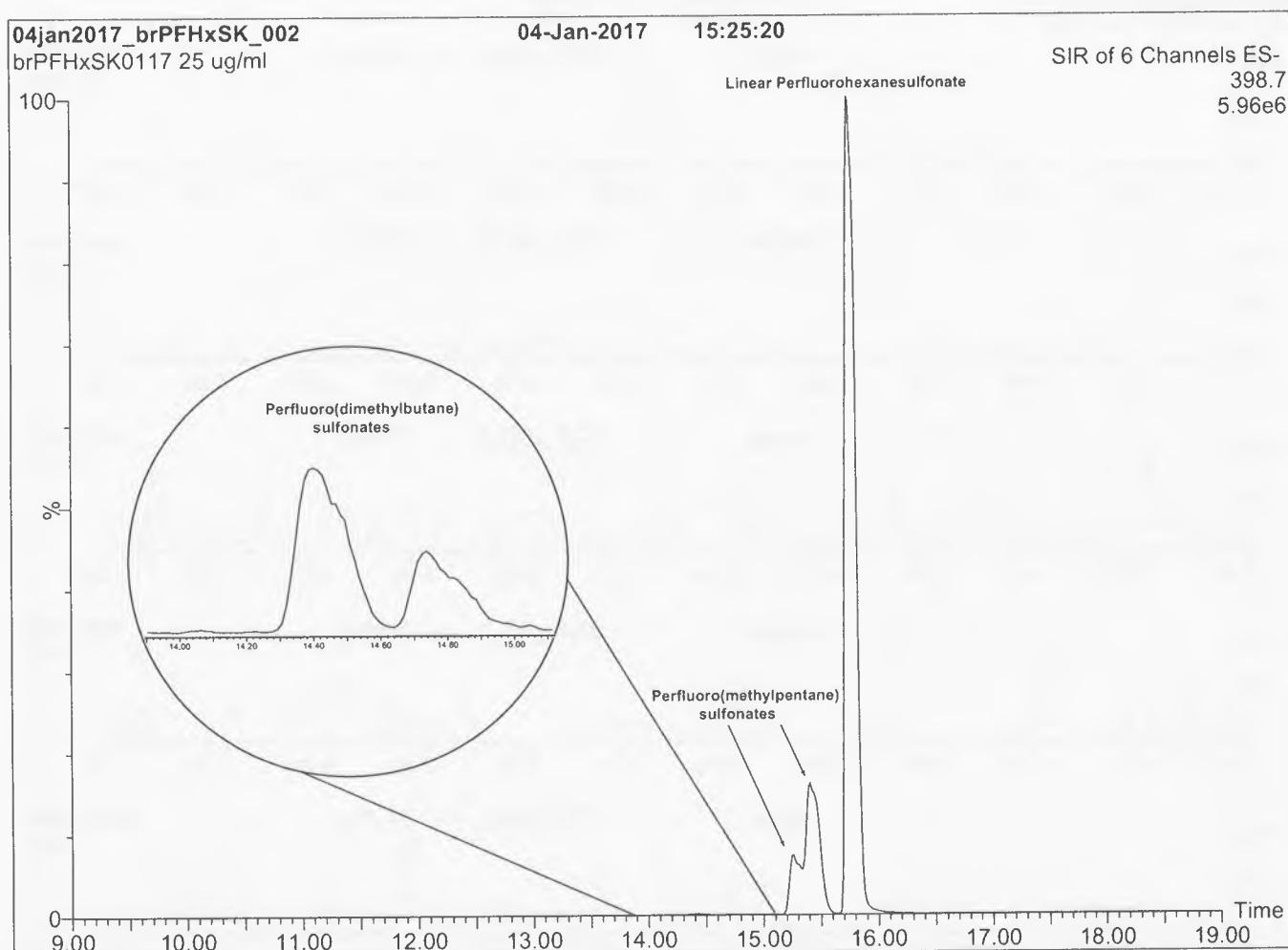
Mobile phase: Gradient
Start: 20% (80:20 MeOH:ACN) / 80% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 50% organic over 14 min. Ramp to
90% organic over 3 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 20 min

Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

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

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

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

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

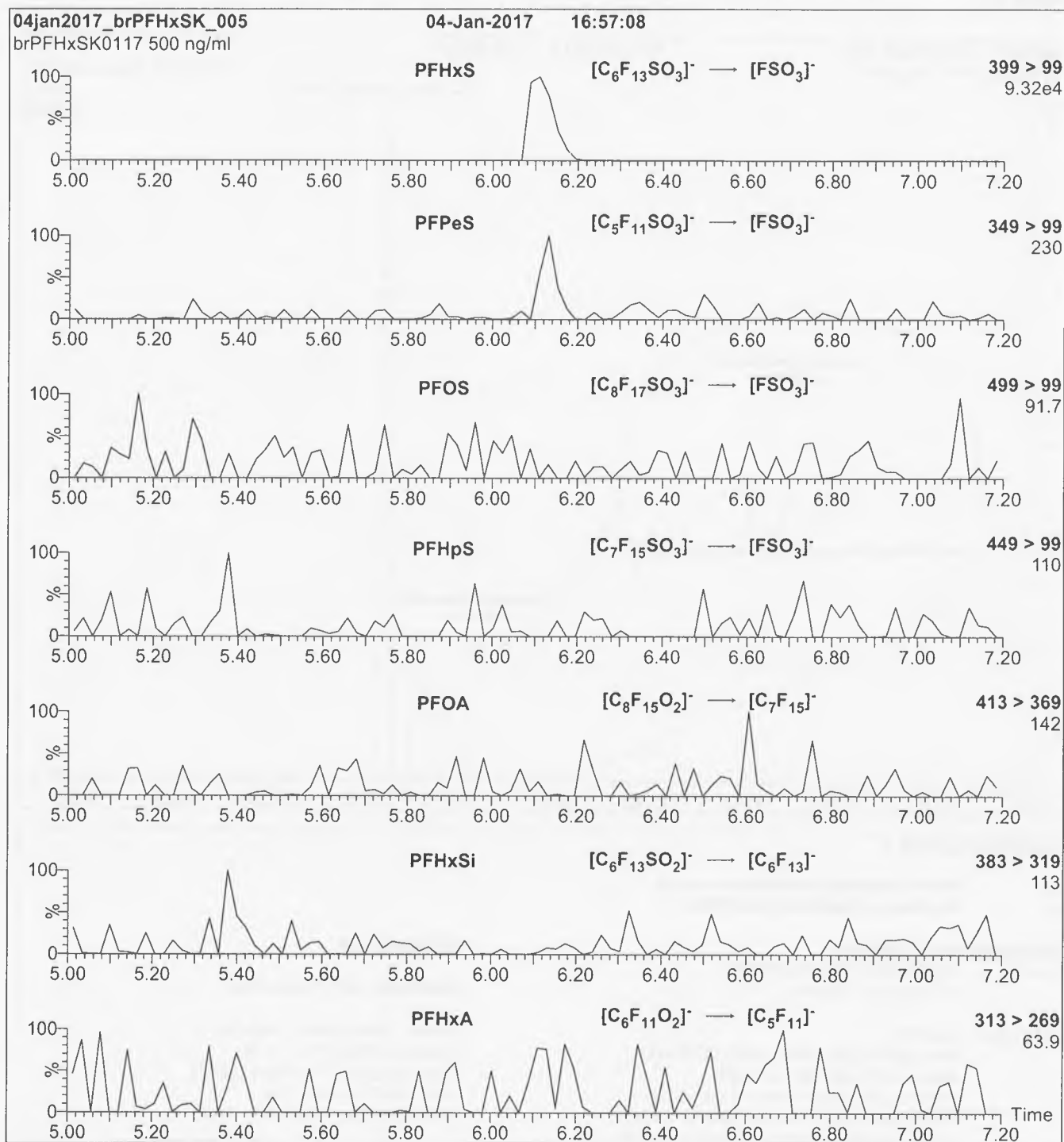
Mobile phase: Gradient
Start: 20% (80:20 MeOH:ACN) / 80% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 50% organic over 14 min. Ramp to
90% organic over 3 min and hold for 1.5 min
before returning to initial conditions in 0.5 min.
Time: 20 min

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

Flow: 300 μ l/min

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

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

Mobile phase: Isocratic 80% (80:20 MeOH:ACN) / 20% H₂O
(both with 10 mM NH₄OAc buffer)

Flow: 300 μ l/min

MS Parameters

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



It can be done

BDO Id: 180618-07

Reagent Receipt Report

Approved: Authorized

Name: Branched PFOS Standard (50 µg/mL) Received: 6/18/2018

Vendor: Wellington Laboratories Custodian: Thorn, Jonathan

Catalogue No: br-PFOSK Expires: 1/12/2022

Type: Solution Consumed: _____

Lot No: brPFOSK0117 Stored In: Sample Preparation - C0103

Quantity: 1 ea mL % Moisture: 0

Description: Branched PFOS Standard (50 µg/mL)

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

Approved by: _____ Approved on: _____

Authorized by: _____ Authorized on: _____

180618-07



WELLINGTON
LABORATORIES

CERTIFICATE OF ANALYSIS
DOCUMENTATION

br-PFOSK

**Potassium Perfluorooctanesulfonate
Solution/Mixture of Linear and
Branched Isomers**

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

DESCRIPTION:

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

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HAZARDS:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

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

UNCERTAINTY:

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

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

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

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

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

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

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



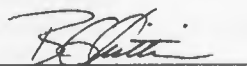
For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

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

Isomer	Name	Structure	Percent Composition by ¹⁹ F-NMR
1	Potassium perfluoro-1-octanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺	78.8
2	Potassium 1-trifluoromethylperfluoroheptanesulfonate**	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	1.2
3	Potassium 2-trifluoromethylperfluoroheptanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	0.6
4	Potassium 3-trifluoromethylperfluoroheptanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	1.9
5	Potassium 4-trifluoromethylperfluoroheptanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	2.2
6	Potassium 5-trifluoromethylperfluoroheptanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	4.5
7	Potassium 6-trifluoromethylperfluoroheptanesulfonate	CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	10.0
8	Potassium 5,5-di(trifluoromethyl)perfluorohexanesulfonate	CF ₃ CF ₃ CCF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	0.2
9	Potassium 4,4-di(trifluoromethyl)perfluorohexanesulfonate	CF ₃ CF ₃ CF ₂ CCF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	0.03
10	Potassium 4,5-di(trifluoromethyl)perfluorohexanesulfonate	CF ₃ CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	0.4
11	Potassium 3,5-di(trifluoromethyl)perfluorohexanesulfonate	CF ₃ CF ₃ CF ₂ CF ₂ CF ₂ CF ₂ SO ₃ ⁻ K ⁺ CF ₃	0.07

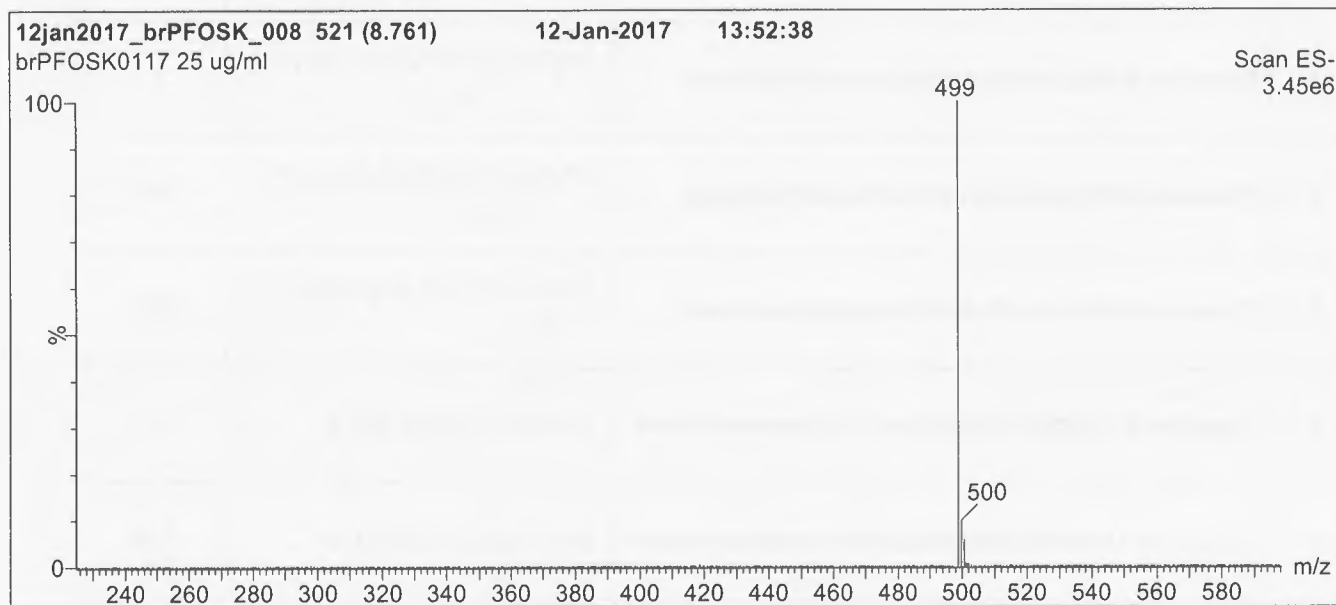
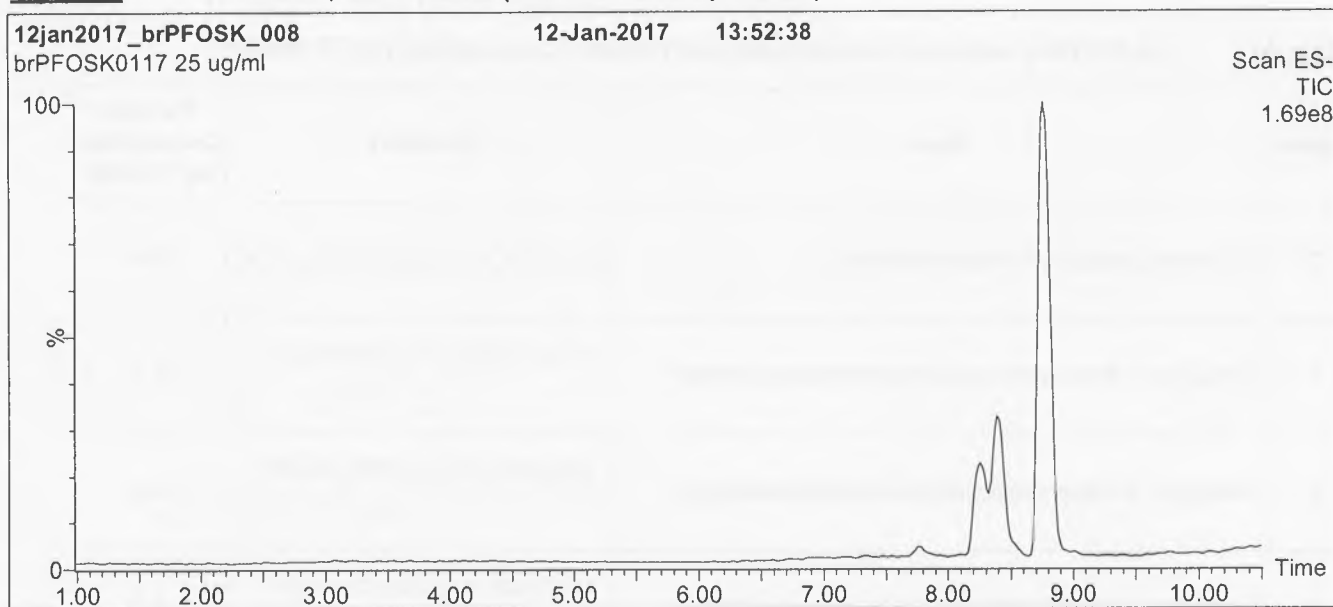
* Percent of total perfluorooctanesulfonate isomers only. Isomers are labelled in Figure 2.
 ** Systematic Name: Potassium perfluorooctane-2-sulfonate.

Certified By:


 B.G. Chittim

Date: 01/20/2017

(mm/dd/yyyy)

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

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

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
1.7 μ m, 2.1 x 100 mm

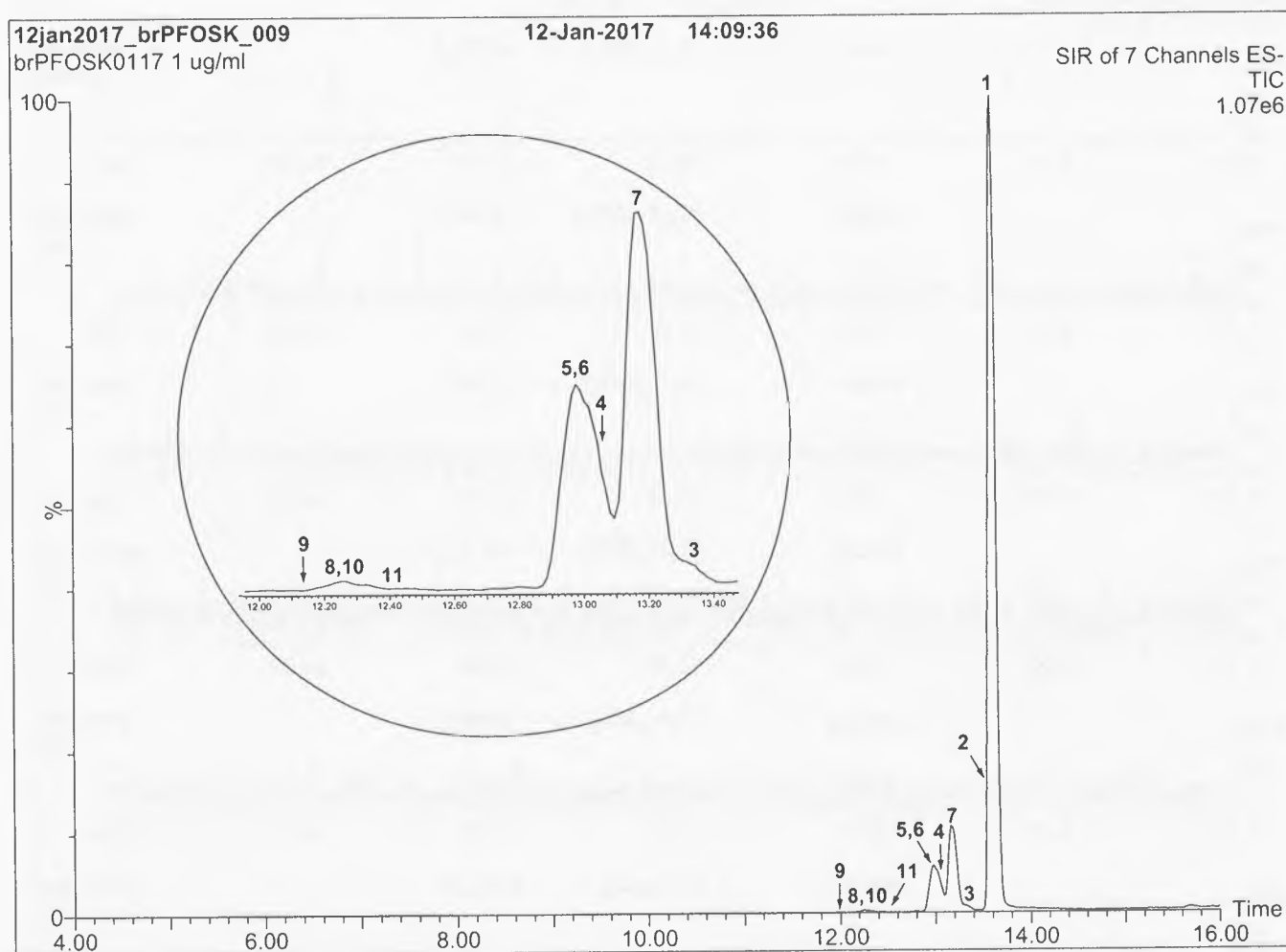
Mobile phase: Gradient
Start: 45% (80:20 MeOH:ACN) / 55% H₂O
(both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 12 min and hold for 2 min.
Return to initial conditions over 0.5 min.
Time: 16 min

Flow: 300 μ l/min

MS Parameters

Experiment: Full Scan (225 - 850 amu)

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

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

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

Chromatographic Conditions:

Column: Acquity UPLC BEH Shield RP₁₈ (1.7 μ m, 2.1 x 100 mm)

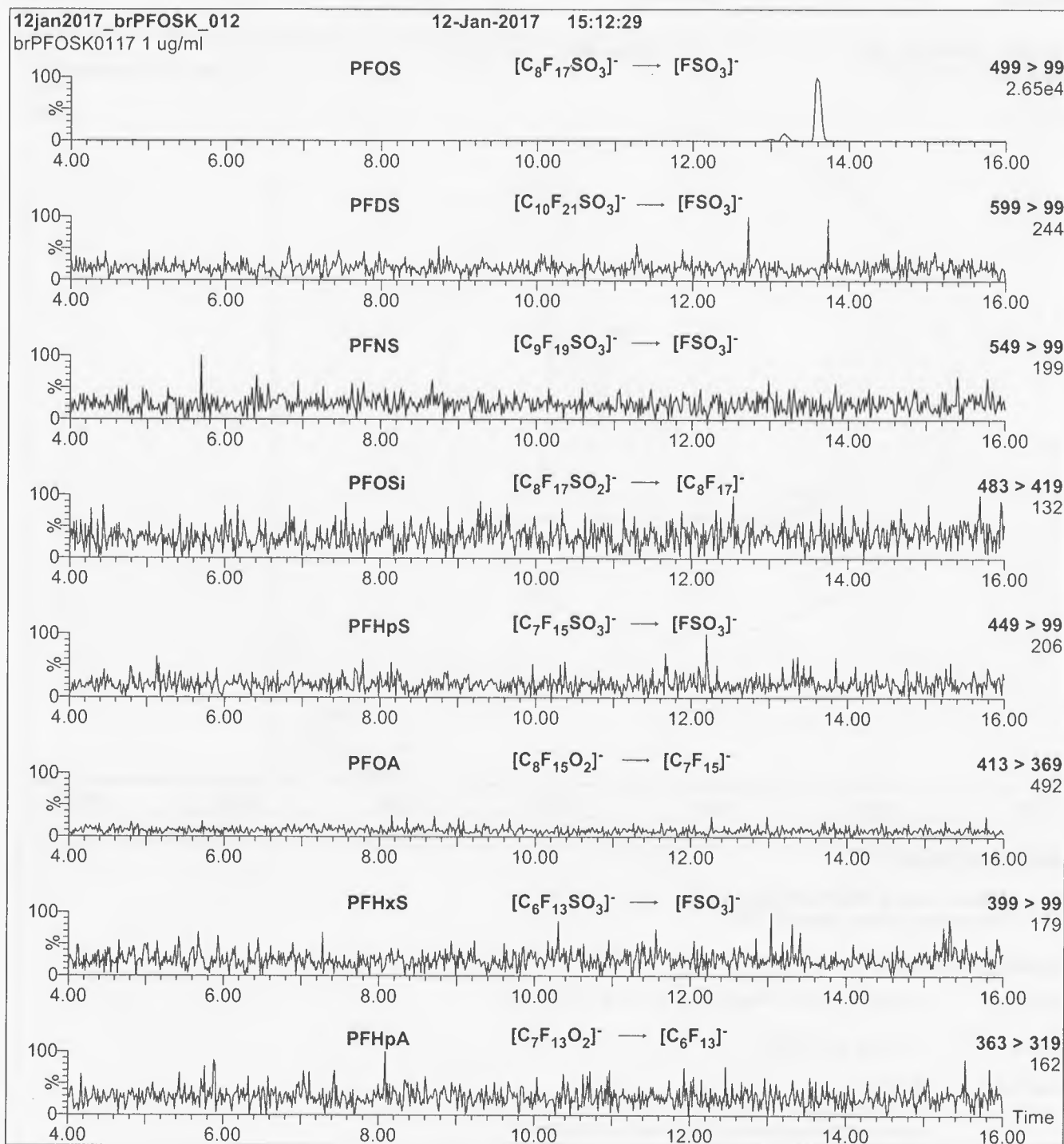
Injection: 1.0 μ g/ml of br-PFOSK

Mobile Phase: Gradient
45% (80:20 MeOH:ACN) / 55% H₂O (both with 10 mM NH₄OAc buffer)
Ramp to 90% organic over 15 min and hold for 3 min.
Return to initial conditions over 1 min.
Time: 20 min

Flow: 300 μ l/min

MS Conditions:

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

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

Injection: On-column

Mobile phase: Same as Figure 2

Flow: 300 μ l/min**MS Parameters**

Collision Gas (mbar) = 3.31e-3

Collision Energy (eV) = 11-50 (variable)



CERTIFIED WEIGHT REPORT

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

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

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

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

Note: All assigned values are anion concentrations.

50.0 5E-05 Balance Uncertainty
0.007 Flask Uncertainty

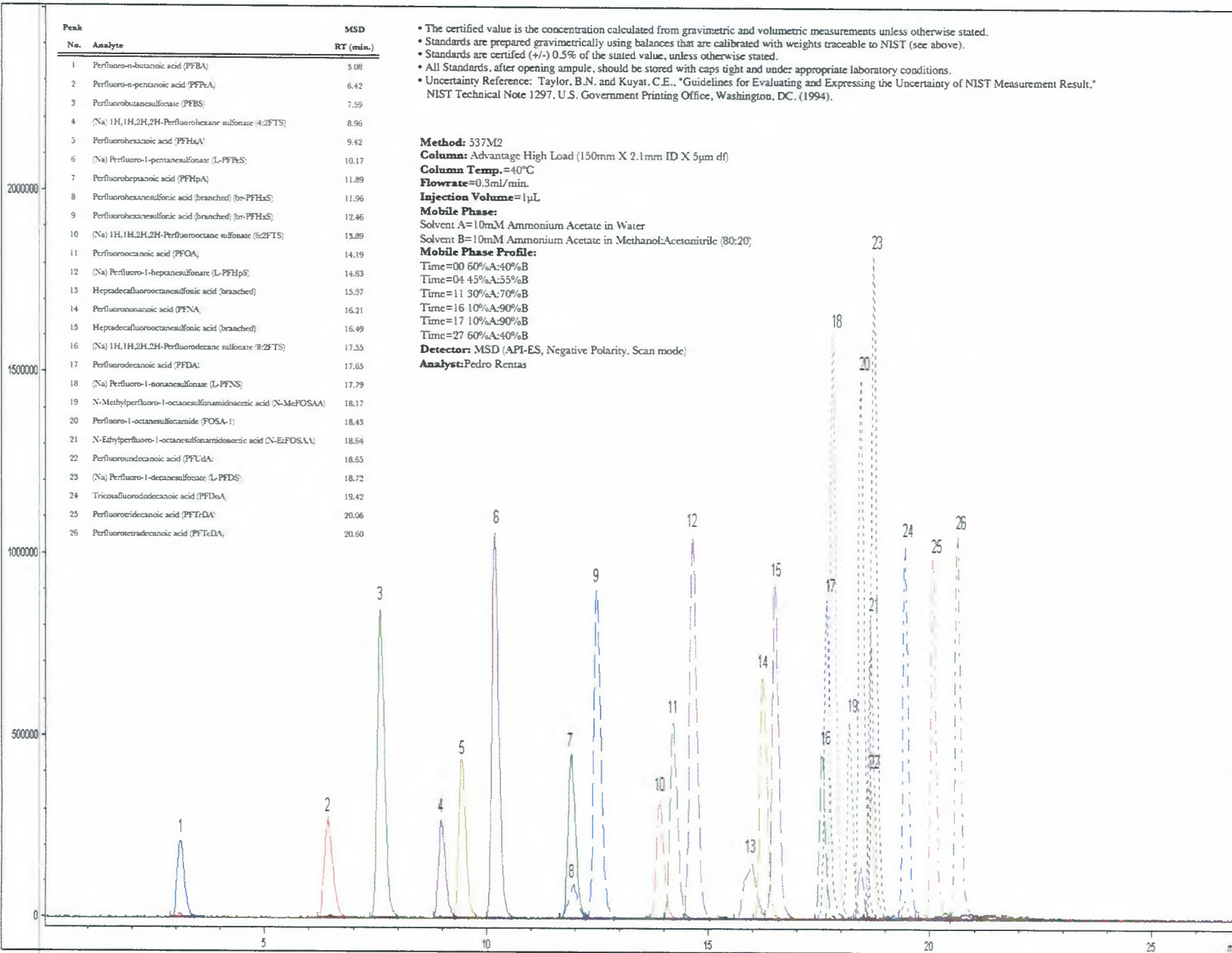
Compound	Part Number	Lot Number	Dilution Factor	Initial Vol. (mL)	Uncertainty Pipette (mL)	Initial Conc. (µg/mL)	Final Conc. (µg/mL)	Expanded Uncertainty (+/-) (µg/mL)	SDS Information (Solvent Safety Info. On Attached pg.)		
									CAS#	OSHA PEL (TWA)	LD50
1. Perfluoro-n-butanoic acid (linear)	99542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



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

Method: 537M2
Column: Advantage High Load (150mm X 2.1mm ID X 5µm df)
Column Temp. = 40°C
Flowrate = 0.3ml/min.
Injection Volume = 1µL
Mobile Phase:
 Solvent A = 10mM Ammonium Acetate in Water
 Solvent B = 10mM Ammonium Acetate in Methanol:Acetonitrile (80:20)
Mobile Phase Profile:
 Time = 00 60%A:40%B
 Time = 04 45%A:55%B
 Time = 11 30%A:70%B
 Time = 16 10%A:90%B
 Time = 17 10%A:90%B
 Time = 27 60%A:40%B
Detector: MSD (API-ES, Negative Polarity, Scan mode)
Analyst: Pedro Rentas

Peak No.	Analyte	MSD RT (min.)
1	Perfluoro-n-butanoic acid (PFBA)	3.08
2	Perfluoro-n-pentanoic acid (PFPA)	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-PFPtS)	10.17
7	Perfluorooheptanoic acid (PFHpA)	11.89
8	Perfluorohexanesulfonic acid (branched) (br-PFHsS)	11.96
9	Perfluorohexanesulfonic acid (branched) (br-PFHsS)	12.46
10	(Na) 1H,1H,2H,2H-Perfluorooctane sulfonate (8:2FTS)	13.89
11	Perfluorooctanoic acid (PFOA)	14.19
12	(Na) Perfluoro-1-heptanesulfonate (L-PFPtS)	14.63
13	Heptafluorooctanesulfonic acid (branched)	15.57
14	Perfluorononanoic acid (PFNA)	16.21
15	Heptafluorooctanesulfonic acid (branched)	16.49
16	(Na) 1H,1H,2H,2H-Perfluorodecane sulfonate (8:2FTS)	17.55
17	Perfluorodecanoic acid (PFDA)	17.65
18	(Na) Perfluoro-1-nonanesulfonate (L-PFPtS)	17.79
19	N-Methylperfluoro-1-octanesulfonamidoacetic acid (N-MeFOSAA)	18.17
20	Perfluoro-1-octanesulfonamide (FOSA-1)	18.43
21	N-Ethylperfluoro-1-octanesulfonamidoacetic acid (N-EtFOSAA)	18.64
22	Perfluoroundecanoic acid (PFUDA)	18.65
23	(Na) Perfluoro-1-decenesulfonate (L-PFPtS)	18.72
24	Tricosafluorododecanoic acid (PFDoA)	19.42
25	Perfluorotridecanoic acid (PFTrDA)	20.06
26	Perfluorotetradecanoic acid (PFTeDA)	20.60



It can be done

BDO Id: 180726-04

Reagent Receipt Report

Approved: Authorized

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

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

Total Analytes: 4

Notes:

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

**WELLINGTON**
LABORATORIES**CERTIFICATE OF ANALYSIS**
DOCUMENTATION**MPFAC-C-IS****Mass-Labelled Perfluorinated
Compound Injection Standards Solution**

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

DESCRIPTION:

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

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

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

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HAZARDS:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

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

UNCERTAINTY:

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

The combined relative standard uncertainty, $u_c(y)$, of a value y and the uncertainty of the independent parameters

x_1, x_2, \dots, x_n on which it depends is:

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

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

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

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

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

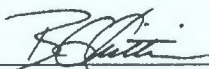


For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

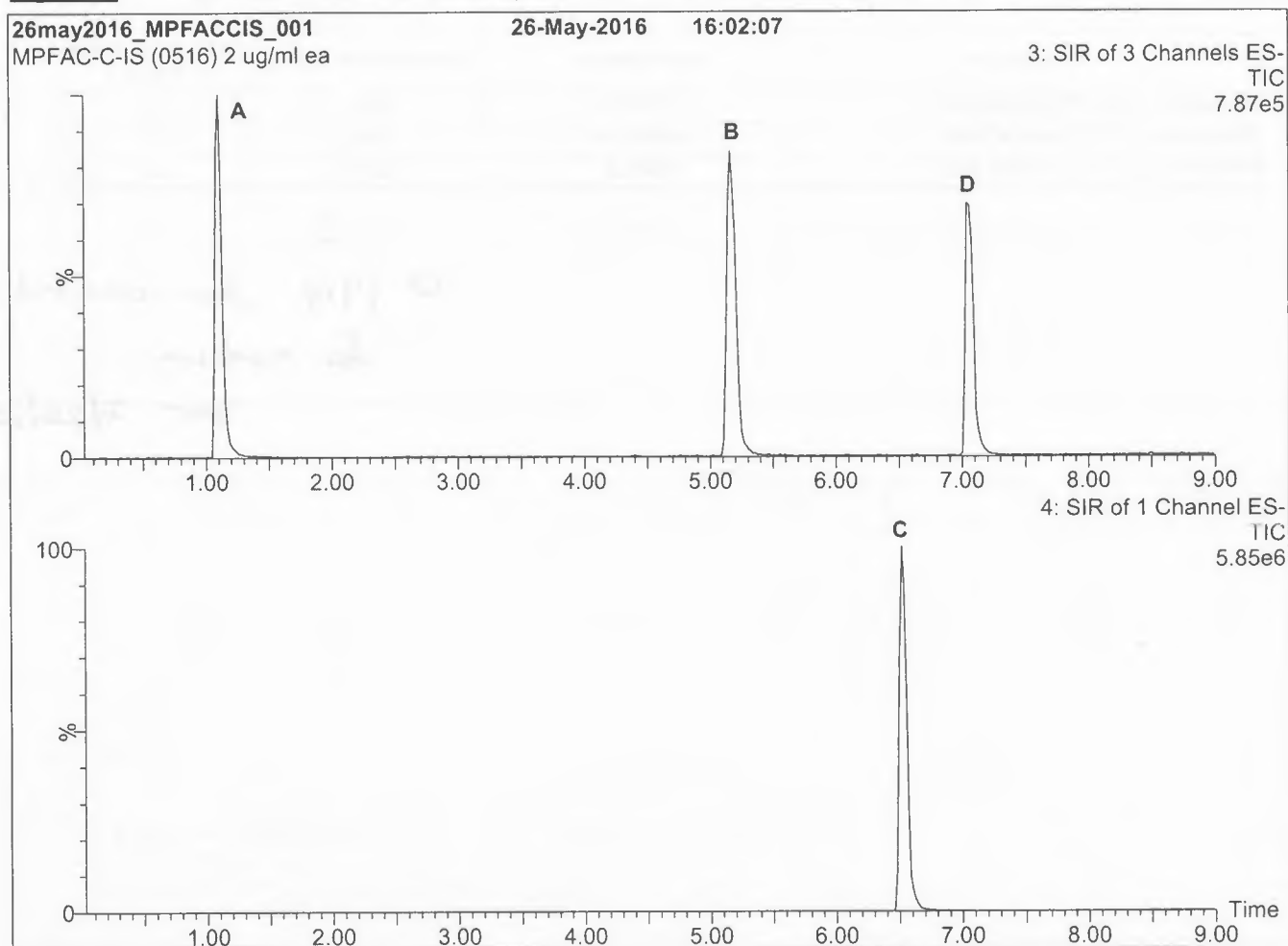
Table A: MPFAC-C-IS; Components and Concentrations (ng/ml; ± 5% in Methanol / Water (<1%))

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 [Ⓢ]	C

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

Certified By: 
B.G. Chittim, General Manager

Date: 05/04/2017
(mm/dd/yyyy)

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

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

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

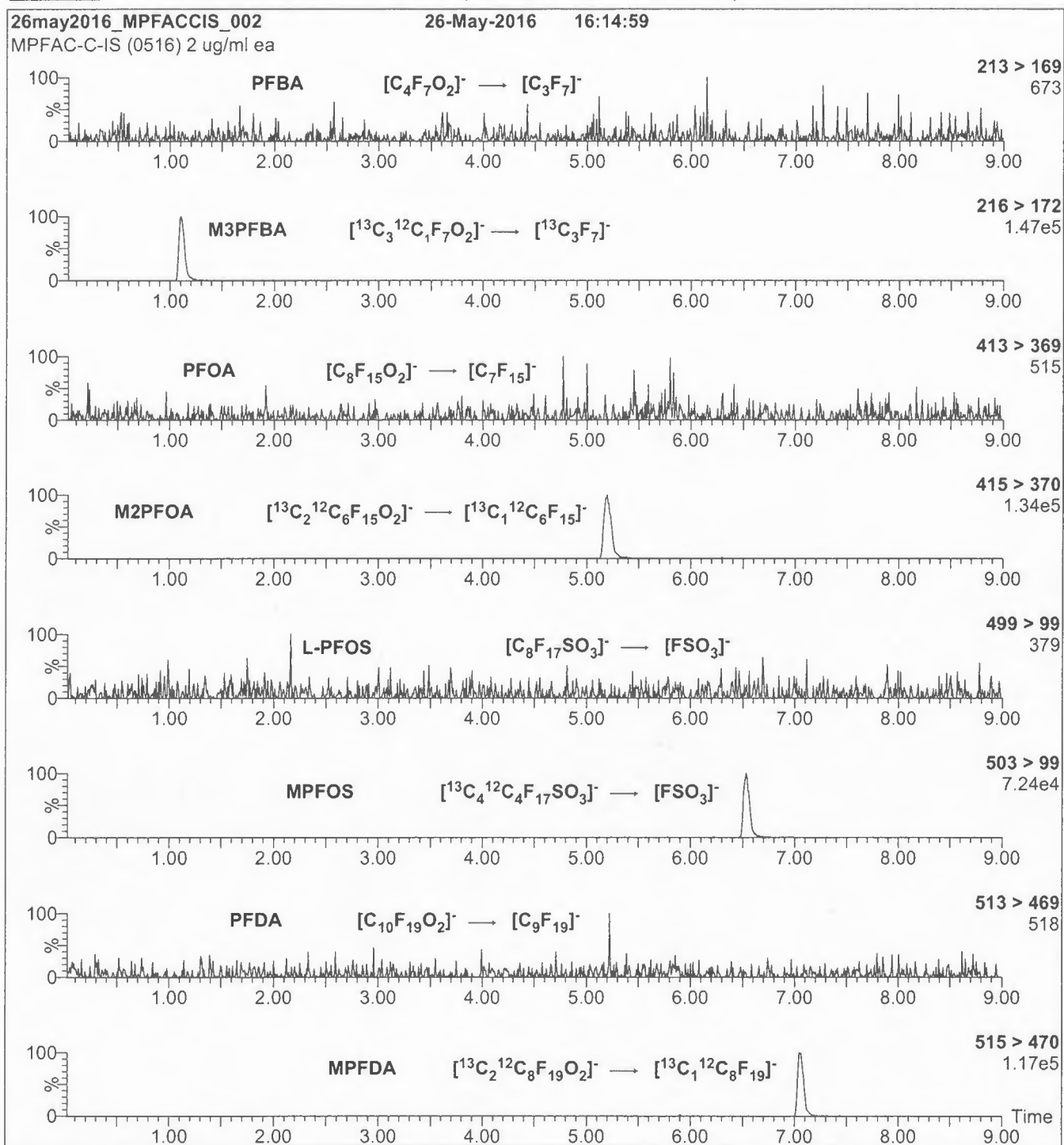
Mobile phase: Gradient
 Start: 50% (80:20 MeOH:ACN) / 50% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 90% organic over 8 min
 and hold for 2 min before returning
 to initial conditions in 1 min.
 Time: 12 min

Flow: 300 μ l/min

MS Parameters

Experiment: SIR

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

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

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

Mobile phase: Same as Figure 1

Flow: 300 μ l/min**MS Parameters**

Collision Gas (mbar) = 3.50e-3

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

It can be done

BDO Id: 180726-05

Reagent Receipt Report

Approved: Authorized

Name: Mass-labelled PFAS Extraction Stand Received: 7/26/2018
Vendor: Wellington Laboratories Custodian: Thorn, Jonathan
Catalogue No: MPFAC-24ES Expires: 2/7/2023
Type: Solution Consumed: _____
Lot No: MPFAC24ES0218 Stored In: LC Laboratory - R0107
Quantity: 2 ea 1.2 mL % Moisture: 0
Description: Mass-labelled PFAS Extraction Standard Solution

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

Total Analytes: 19

Notes:

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

**WELLINGTON**
LABORATORIES**CERTIFICATE OF ANALYSIS**
DOCUMENTATION**MPFAC-24ES****Mass-Labelled Per- and Poly-fluoroalkyl Substance
Extraction Standard Solution**

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

DESCRIPTION:

MPFAC-24ES is a solution/mixture of ten mass-labelled (¹³C) perfluoroalkylcarboxylic acids (C₄-C₁₂ and C₁₄), three mass-labelled (¹³C) perfluoroalkylsulfonates (C₄, C₆, and C₈), three mass-labelled (¹³C) telomer sulfonates (4:2, 6:2, and 8:2), two mass-labelled (²H) perfluorooctanesulfonamidoacetic acids, and perfluoro-1-[¹³C₈]octanesulfonamide. The components and their concentrations are given in Table A.

The individual mass-labelled perfluoroalkylcarboxylic acids, mass-labelled perfluoroalkylsulfonates, mass-labelled telomer sulfonates, and perfluoro-1-[¹³C₈]octanesulfonamide all have chemical purities of >98% and isotopic purities of ≥99%. The individual mass-labelled perfluorooctanesulfonamidoacetic acids all have chemical purities of >98% and isotopic purities of ≥98%.

DOCUMENTATION/ DATA ATTACHED:

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

ADDITIONAL INFORMATION:

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

FOR LABORATORY USE ONLY: NOT FOR HUMAN OR DRUG USE

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

INTENDED USE:

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

HANDLING:

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

SYNTHESIS / CHARACTERIZATION:

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

HOMOGENEITY:

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

UNCERTAINTY:

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

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

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

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

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

TRACEABILITY:

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

EXPIRY DATE / PERIOD OF VALIDITY:

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

LIMITED WARRANTY:

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

QUALITY MANAGEMENT:

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



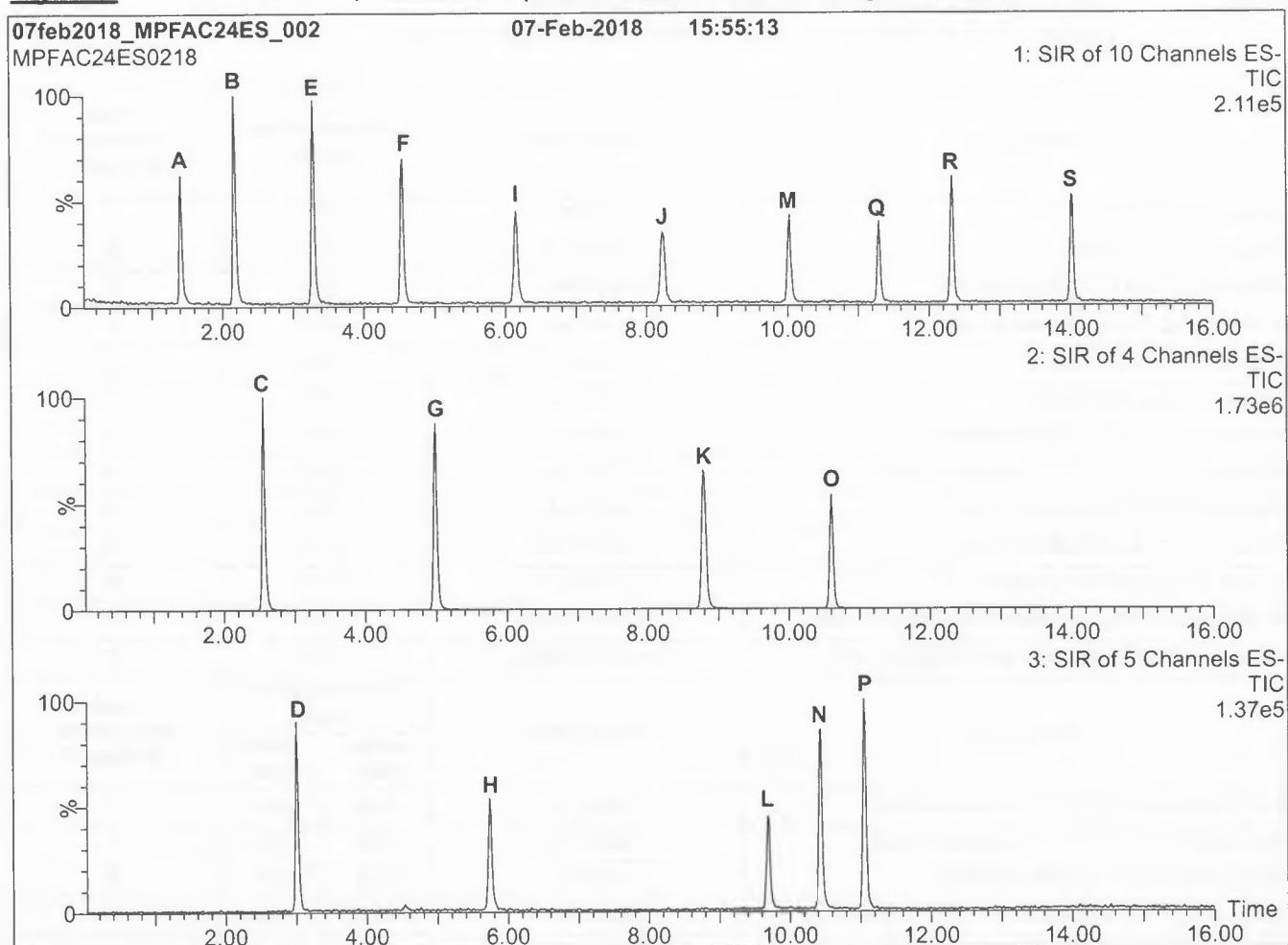
For additional information or assistance concerning this or any other products from Wellington Laboratories Inc., please visit our website at www.well-labs.com or contact us directly at info@well-labs.com

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

Compound	Abbreviation	Concentration (ng/ml)		Peak Assignment in Figure 1
		as the salt	as the anion	
Perfluoro-n-[$^{13}\text{C}_4$]butanoic acid	MPFBA	1000		A
Perfluoro-n-[$^{13}\text{C}_5$]pentanoic acid	M5PFPeA	1000		B
Perfluoro-n-[1,2,3,4,6- $^{13}\text{C}_5$]hexanoic acid	M5PFHxA	1000		E
Perfluoro-n-[1,2,3,4- $^{13}\text{C}_4$]heptanoic acid	M4PFHpA	1000		F
Perfluoro-n-[$^{13}\text{C}_6$]octanoic acid	M8PFOA	1000		I
Perfluoro-n-[$^{13}\text{C}_7$]nonanoic acid	M9PFNA	1000		J
Perfluoro-n-[1,2,3,4,5,6- $^{13}\text{C}_6$]decanoic acid	M6PFDA	1000		M
Perfluoro-n-[1,2,3,4,5,6,7- $^{13}\text{C}_7$]undecanoic acid	M7PFUdA	1000		Q
Perfluoro-n-[1,2- $^{13}\text{C}_2$]dodecanoic acid	MPFDoA	1000		R
Perfluoro-n-[1,2- $^{13}\text{C}_2$]tetradecanoic acid	M2PFTeDA	1000		S
Perfluoro-1-[$^{13}\text{C}_8$]octanesulfonamide	M8FOSA	1000		O
N-methyl- d_3 -perfluoro-1-octanesulfonamidoacetic acid	d3-N-MeFOSAA	1000		N
N-ethyl- d_5 -perfluoro-1-octanesulfonamidoacetic acid	d5-N-EtFOSAA	1000		P
Compound	Abbreviation	Concentration (ng/ml)		Peak Assignment in Figure 1
		as the salt	as the anion	
Sodium perfluoro-1-[2,3,4- $^{13}\text{C}_3$]butanesulfonate	M3PFBS	1000	929	C
Sodium perfluoro-1-[1,2,3- $^{13}\text{C}_3$]hexanesulfonate	M3PFHxS	1000	946	G
Sodium perfluoro-1-[$^{13}\text{C}_8$]octanesulfonate	M8PFOS	1000	957	K
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2- $^{13}\text{C}_2$]hexanesulfonate	M2-4:2FTS	1000	935	D
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2- $^{13}\text{C}_2$]octanesulfonate	M2-6:2FTS	1000	949	H
Sodium 1H,1H,2H,2H-perfluoro-1-[1,2- $^{13}\text{C}_2$]decanesulfonate	M2-8:2FTS	1000	958	L

Certified By: 
B.G. Chittim, General Manager

Date: 02/09/2018
(mm/dd/yyyy)

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

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

Chromatographic Conditions

Column: Acquity UPLC BEH Shield RP₁₈
 1.7 μ m, 2.1 x 100 mm

Mobile phase: Gradient
 Start: 40% (80:20 MeOH:ACN) / 60% H₂O
 (both with 10 mM NH₄OAc buffer)
 Ramp to 55% organic over 3.5 min.
 Ramp to 70% organic over 6.5 min.
 Ramp to 85% organic over 5 min and hold for
 1 min before returning to initial conditions in 0.5 min.
 Time: 17 min

Flow: 300 μ l/min

MS Parameters

Experiment: SIR

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

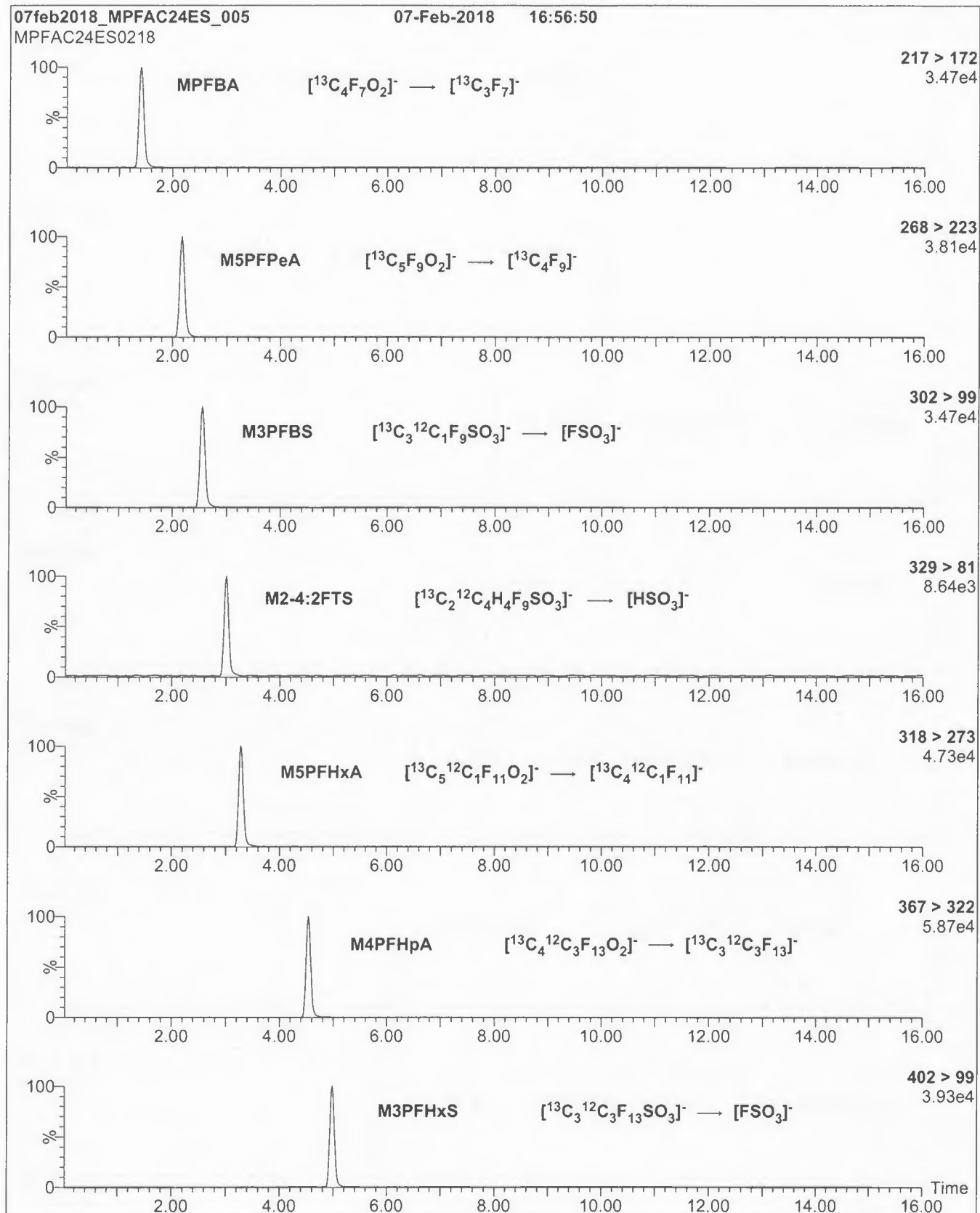
Figure 2: MPFAC-24ES; LC/MS/MS Data (Selected MRM Transitions)

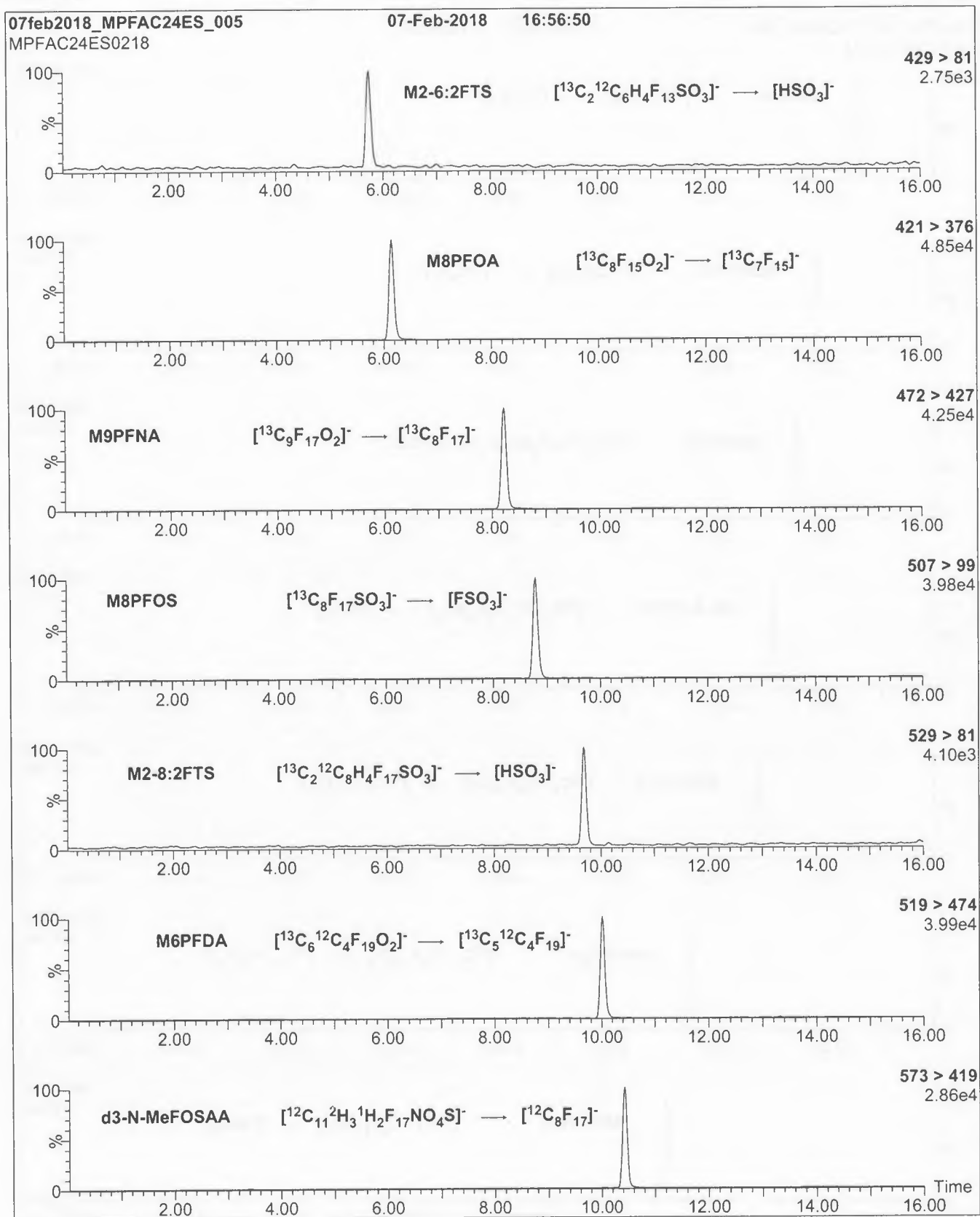
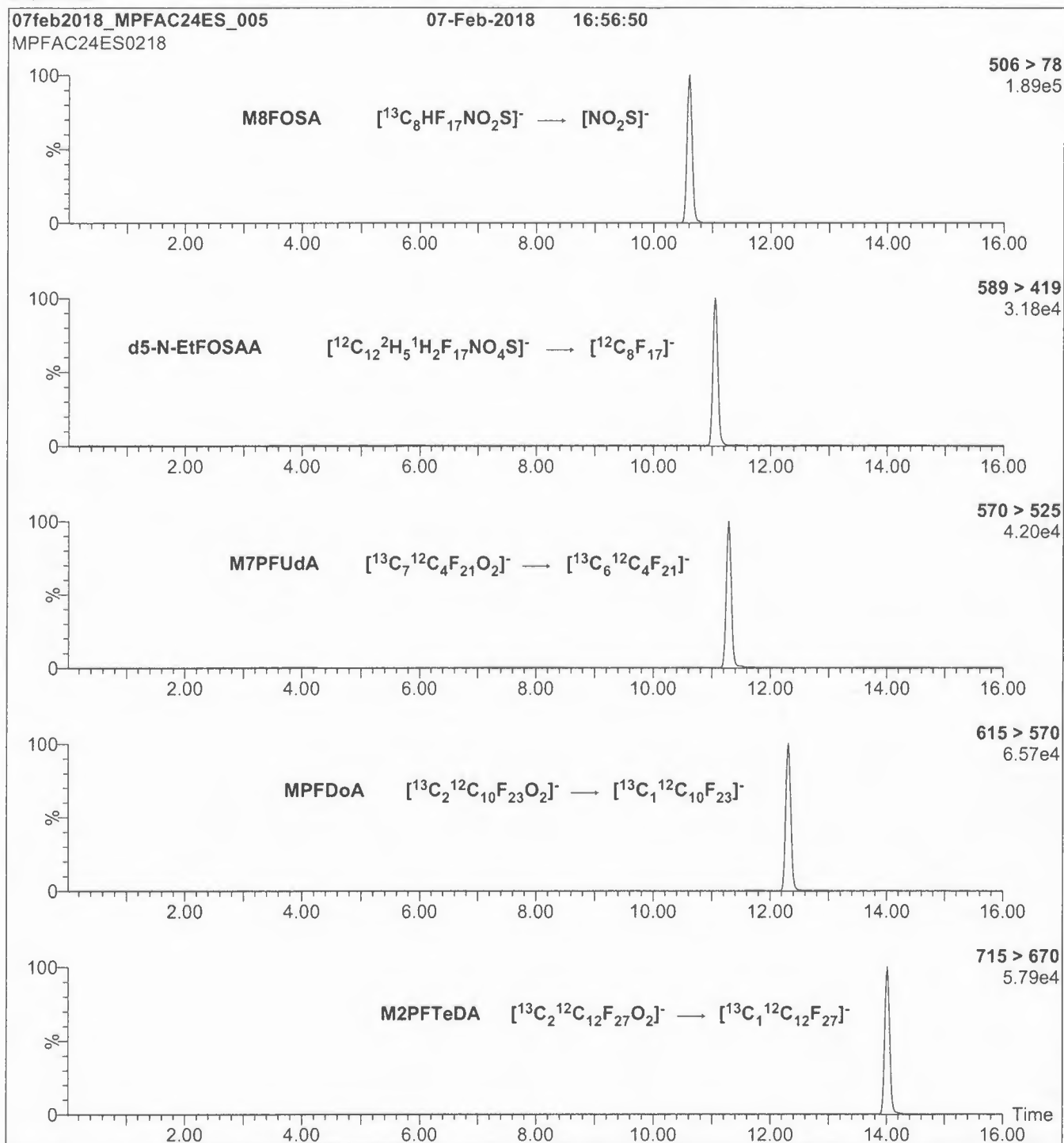
Figure 2: MPFAC-24ES; LC/MS/MS Data (Selected MRM Transitions)

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

Injection: On-column (MPFAC-24ES)

Mobile phase: Same as Figure 1

Flow: 300 $\mu\text{l}/\text{min}$ **MS Parameters**

Collision Gas (mbar) = 3.28e-3

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

Sample Preparation



It can be done

**BATTELLE - NORWELL OPERATIONS
SAMPLE PREPARATION RECORDS**

<u>Project Title(s)</u>	<u>Project No.(s)</u>
CTO-WE21: Former Naval Air Station, Brunswick, Maine	100122108- CTOWE21
18-0500	
CTO-WE21: Former Naval Air Station, Brunswick, Maine	
GW	
SOP Numbers (see workplan for modifications)	
ExtractionSOP No.	5-370

This Batch Contains The Following Samples:	
CR552PB-FS	J7397MS-FS
CR553LCS-FS	J7397MSD-FS
J7394-FS	J7398-FS
J7395-FS	J7399-FS
J7396-FS	J7400-FS
J7397-FS	J7402-FS

Laboratory Preparation Records
COMPLETE AND VALIDATED

Prep Task Leader: Stephanie Schultz

Approved By:	Date	Initials
Denise Schumitz	08/24/2018	DMS



It can be done

BATTELLE - NORWELL OPERATIONS SAMPLE IDENTIFICATION PAGE

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.(s)100122108-
CTOWE21**18-0500****CTO-WE21: Former Naval Air Station, Brunswick, Maine****GW**

Sample ID	Description
CR552PB-FS	Procedural Blank
CR553LCS-FS	Laboratory Control Sample
J7394-FS	NASB-CCC-GW-01-0818
J7395-FS	NASB-CCC-GW-02-0818
J7396-FS	NASB-BLL15-GW-02-0818
J7397-FS	NASB-BLL15-GW-01-0818
J7397MS-FS	Matrix Spike of NASB-BLL15-GW-01-0818
J7397MSD-FS	Matrix Spike Duplicate of NASB-BLL15-GW-01-0818
J7398-FS	NASB-BLL15-DUP-080918
J7399-FS	NASB-BLL15-GW-03-0818
J7400-FS	NASB-BLL15-GW-04-0818
J7402-FS	NASB-BLL15-GW-RB01-080918

Samples Assigned By:

Jonathan Thorn

Date : August 10, 2018

Comments:



It can be done

BATTELLE - NORWELL OPERATIONS SAMPLE CUSTODY LOG

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.(s)100122108-
CTOWE21**18-0500****CTO-WE21: Former Naval Air Station, Brunswick, Maine****GW**

Requested On/By: 08/15/2018 SAS	Purpose: Sample Preparation
Relinquished On/By: 08/15/2018 MDS	Last Activity: Transfer
Accepted On/By: 08/15/2018 SAS Stored In Facility: Sample Preparation Stored Until: 08/15/2018 Stored Comment: NA	Returned On/To: Returned To Facility: Returned Comment: NA

No.	BDO-ID:	Ctrs	*	Condition:	Custody Comment:
1	J7394	1	C	Consumed	NA
2	J7395	1	C	Consumed	NA
3	J7396	1	C	Consumed	NA
4	J7397	1	C	Consumed	NA
5	J7398	1	C	Consumed	NA
6	J7399	1	C	Consumed	NA
7	J7400	1	C	Consumed	NA
8	J7402	1	C	Consumed	NA

Total Samples 8 * "C" = Consumed Container



It can be done

BATTELLE - NORWELL OPERATIONS LIQUID SAMPLE ID FORM

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.(s)100122108-
CTOWE21**18-0500****CTO-WE21: Former Naval Air Station, Brunswick, Maine****GW**

Sample ID	Description	Volume (mL)	Bottles	*	Date Initials
CR552PB-FS	Procedural Blank	250.0	NA	--	08/15/18 SAS
CR553LCS-FS	Laboratory Control Sample	250.0	NA	--	08/15/18 SAS
J7394-FS	NASB-CCC-GW-01-0818	285.0	1	C	08/15/18 SAS
J7395-FS	NASB-CCC-GW-02-0818	275.0	1	C	08/15/18 SAS
J7396-FS	NASB-BLL15-GW-02-0818	270.0	1	C	08/15/18 SAS
J7397-FS	NASB-BLL15-GW-01-0818	260.0	1	C	08/15/18 SAS
J7397MS-FS	Matrix Spike	260.0	3	C	08/15/18 SAS
J7397MSD-FS	Matrix Spike Duplicate	255.0	5	C	08/15/18 SAS
J7398-FS	NASB-BLL15-DUP-080918	275.0	1	C	08/15/18 SAS
J7399-FS	NASB-BLL15-GW-03-0818	265.0	1	C	08/15/18 SAS
J7400-FS	NASB-BLL15-GW-04-0818	290.0	1	C	08/15/18 SAS
J7402-FS	NASB-BLL15-GW-RB01-080918	255.0	1	C	08/15/18 SAS

Comments:

Samples Assigned By

Jonathan Thorn

Date : August 10, 2018

* - "C" = Sample is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS SURROGATE SPIKE FORM

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.(s)100122108-
CTOWE21**18-0500****CTO-WE21: Former Naval Air Station, Brunswick, Maine****GW**

Sample ID	Standard ID	Type	Vial No.	Vol Added (uL)	Date Spiked/ Spiked By	Witn'd By	Comment
CR552PB-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
CR553LCS-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
CR553LCS-FS	JZ27	LCS/MS	1	50	08/15/18 SAS	SG	NA
J7394-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
J7395-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
J7396-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
J7397-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
J7397MS-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
J7397MS-FS	JZ27	LCS/MS	1	150	08/15/18 SAS	SG	NA
J7397MSD-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
J7397MSD-FS	JZ27	LCS/MS	1	150	08/15/18 SAS	SG	NA
J7398-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
J7399-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
J7400-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
J7402-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
JY28	Pipette	I0793912B
JZ27	Pipette	B814657482
JZ27	Pipette	I0793912B



It can be done

BATTELLE - NORWELL OPERATIONS SAMPLE EXTRACTION FORM

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine 100122108-

Project No.(s)

CTOWE21

18-0500**CTO-WE21: Former Naval Air Station, Brunswick, Maine****GW**

Sample ID	1st Extraction	2nd Extraction	3rd Extraction	Conc. ID	Turbo °C	Turbo PSI	KD °C	Comment
CR552PB-FS	08/15/18 SAS	NA	NA	NA	NA	NA	NA	NA
CR553LCS-FS	08/15/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7394-FS	08/15/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7395-FS	08/15/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7396-FS	08/15/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7397-FS	08/15/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7397MS-FS	08/15/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7397MSD-FS	08/15/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7398-FS	08/15/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7399-FS	08/15/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7400-FS	08/15/18 SAS	NA	NA	NA	NA	NA	NA	NA
J7402-FS	08/15/18 SAS	NA	NA	NA	NA	NA	NA	NA

Solvents/Reagent Preparations:

Name	ID	Expires	Lot No	Procedure	Comments
0.4% NH ₃ in Methanol	RP-180815-1	08/15/18	SHBJ0412	Per 100 mL, 3.5 mL ammonia solution brought to 100 mL with methanol	
0.4% NH ₃ in Methanol	RP-180815-1	08/15/18	181704	Per 100 mL, 3.5 mL ammonia solution brought to 100 mL with methanol	
Pre-packed SPE Column	RP-180815-3	08/15/18	003537220A	Pre-packed SPE Column	

Solvents/Reagents:



It can be done

BATTELLE - NORWELL OPERATIONS INTERNAL STANDARD SPIKING FORM

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine 100122108-

Project No.(s)

CTOWE21

18-0500**CTO-WE21: Former Naval Air Station, Brunswick, Maine****GW****(N/A Fraction)**

Extract Id	Extr. Vol. (uL)	Added (uL)	Std. Id	Accm . (uL)	Vial No.	Pre Inj. Vol. (uL)^	Final Dilution*	Date Spiked/ Spiked By	Witn'd By
CR552PB-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
CR553LCS-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7394-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7395-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7396-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7397-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7397MS-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7397MSD-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7398-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7399-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7400-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7402-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
JY26	Pipette	B814659662

Extract Id:	Comments:
CR552PB-FS	Samples reconstituted in 80/20 Methanol/milli-q water (RP-180820-3)

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

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



It can be done

BATTELLE - NORWELL OPERATIONS PREPARATION EXTRACT SPLIT FORM

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.(s)100122108-
CTOWE21**18-0500****CTO-WE21: Former Naval Air Station, Brunswick, Maine****GW**

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
CR552PB-FS	0	C	8/15/2018 10:11:00 AM	NA		NA	NA	1.000	1.000	08/15/18 SAS
CR552PB-FS	2	--	8/17/2018 3:53:00 PM	CR552PB-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
CR552PB-FS	3	--	8/17/2018 3:53:00 PM	CR552PB-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
CR553LCS-FS	0	C	8/15/2018 10:11:00 AM	NA		NA	NA	1.000	1.000	08/15/18 SAS
CR553LCS-FS	2	--	8/17/2018 3:53:00 PM	CR553LCS-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
CR553LCS-FS	3	--	8/17/2018 3:53:00 PM	CR553LCS-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7394-FS	0	C	8/15/2018 10:11:00 AM	NA		NA	NA	1.000	1.000	08/15/18 SAS
J7394-FS	2	--	8/17/2018 3:53:00 PM	J7394-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7394-FS	3	--	8/17/2018 3:53:00 PM	J7394-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7395-FS	0	C	8/15/2018 10:11:00 AM	NA		NA	NA	1.000	1.000	08/15/18 SAS
J7395-FS	2	--	8/17/2018 3:53:00 PM	J7395-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7395-FS	3	--	8/17/2018 3:53:00 PM	J7395-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7396-FS	0	C	8/15/2018 10:11:00 AM	NA		NA	NA	1.000	1.000	08/15/18 SAS
J7396-FS	2	--	8/17/2018 3:53:00 PM	J7396-FS	0	10000	5000	2.000	2.000	08/17/18 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]

Dilution Factor = [Sample Volume (uL) / Aliquot Volume (uL)] * Prior Dilution Factor

* - "C" = Extract is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS PREPARATION EXTRACT SPLIT FORM

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.(s)100122108-
CTOWE21**18-0500****CTO-WE21: Former Naval Air Station, Brunswick, Maine****GW**

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J7396-FS	3	--	8/17/2018 3:53:00 PM	J7396-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7397-FS	0	C	8/15/2018 1:28:00 PM	NA		NA	NA	1.000	1.000	08/15/18 SAS
J7397-FS	2	--	8/17/2018 3:53:00 PM	J7397-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7397-FS	3	--	8/17/2018 3:53:00 PM	J7397-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7397MS-FS	0	C	8/15/2018 1:28:00 PM	NA		NA	NA	1.000	1.000	08/15/18 SAS
J7397MS-FS	2	--	8/17/2018 3:53:00 PM	J7397MS-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7397MS-FS	3	--	8/17/2018 3:53:00 PM	J7397MS-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7397MSD-FS	0	C	8/15/2018 1:28:00 PM	NA		NA	NA	1.000	1.000	08/15/18 SAS
J7397MSD-FS	2	--	8/17/2018 3:53:00 PM	J7397MSD-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7397MSD-FS	3	--	8/17/2018 3:53:00 PM	J7397MSD-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7398-FS	0	C	8/15/2018 1:28:00 PM	NA		NA	NA	1.000	1.000	08/15/18 SAS
J7398-FS	2	--	8/17/2018 3:53:00 PM	J7398-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7398-FS	3	--	8/17/2018 3:53:00 PM	J7398-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7399-FS	0	C	8/15/2018 1:28:00 PM	NA		NA	NA	1.000	1.000	08/15/18 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]

Dilution Factor = [Sample Volume (uL) / Aliquot Volume (uL)] * Prior Dilution Factor

* - "C" = Extract is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS PREPARATION EXTRACT SPLIT FORM

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.(s)100122108-
CTOWE21**18-0500****CTO-WE21: Former Naval Air Station, Brunswick, Maine****GW**

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J7399-FS	2	--	8/17/2018 3:53:00 PM	J7399-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7399-FS	3	--	8/17/2018 3:53:00 PM	J7399-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7400-FS	0	C	8/15/2018 1:28:00 PM	NA		NA	NA	1.000	1.000	08/15/18 SAS
J7400-FS	2	--	8/17/2018 3:53:00 PM	J7400-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7400-FS	3	--	8/17/2018 3:53:00 PM	J7400-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7402-FS	0	C	8/15/2018 10:11:00 AM	NA		NA	NA	1.000	1.000	08/15/18 SAS
J7402-FS	2	--	8/17/2018 3:53:00 PM	J7402-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7402-FS	3	--	8/17/2018 3:53:00 PM	J7402-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
Extract Id: CR552PB-FS	Comments: Samples reconstituted in 80/20 Methanol/milli-q water (RP-180820-3)									

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]

Dilution Factor = [Sample Volume (uL) / Aliquot Volume (uL)] * Prior Dilution Factor

* - "C" = Extract is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS EXTRACT - INSTRUMENT FACILITY CUSTODY PAGE

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine 100122108-

Project No.(s)

CTOWE21

18-0500**CTO-WE21: Former Naval Air Station, Brunswick, Maine****GW**

Purpose:	LC-MS/MS TRANSFER	Last Activity:	Prep->Inst
Relinquished On/By:	Aug 21 2018 1:22PM SAS	Received On/By:	Aug 21 2018 1:22PM LMG
Relinquished From:	Sample Preparation: NA	Received Location:	LC Laboratory: NA
Relinquish Comment:	NA	Received Comment:	NA

No.	BDO-ID:	PIV:	DF:	Condition:	Custody Comment:
1	CR552PB-FS(3)	500	2	Intact	NA
2	CR553LCS-FS(3)	500	2	Intact	NA
3	J7394-FS(3)	500	2	Intact	NA
4	J7395-FS(3)	500	2	Intact	NA
5	J7396-FS(3)	500	2	Intact	NA
6	J7397-FS(3)	500	2	Intact	NA
7	J7397MS-FS(3)	500	2	Intact	NA
8	J7397MSD-FS(3)	500	2	Intact	NA
9	J7398-FS(3)	500	2	Intact	NA
10	J7399-FS(3)	500	2	Intact	NA
11	J7400-FS(3)	500	2	Intact	NA
12	J7402-FS(3)	500	2	Intact	NA

Total Extracts:	12
------------------------	----



It can be done

BATTELLE - NORWELL OPERATIONS EXTRACT - INSTRUMENT FACILITY CUSTODY PAGE

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine 100122108-

Project No.(s)

CTOWE21

18-0500**CTO-WE21: Former Naval Air Station, Brunswick, Maine****GW**

Purpose:	LC-MS/MS TRANSFER	Last Activity:	Prep->Inst
Relinquished On/By:	Aug 24 2018 1:58PM LMG	Received On/By:	Aug 24 2018 1:58PM LMG
Relinquished From:	Sample Preparation: NA	Received Location:	LC Laboratory: NA
Relinquish Comment:	NA	Received Comment:	NA

No.	BDO-ID:	PIV:	DF:	Condition:	Custody Comment:
1	CR552PB-FS(3)	500	2	Intact	NA
2	CR553LCS-FS(3)	500	2	Intact	NA
3	J7394-FS(3)	500	2	Intact	NA
4	J7395-FS(3)	500	2	Intact	NA
5	J7396-FS(3)	500	2	Intact	NA
6	J7397-FS(3)	500	2	Intact	NA
7	J7397MS-FS(3)	500	2	Intact	NA
8	J7397MSD-FS(3)	500	2	Intact	NA
9	J7398-FS(3)	500	2	Intact	NA
10	J7399-FS(3)	500	2	Intact	NA
11	J7400-FS(3)	500	2	Intact	NA
12	J7402-FS(3)	500	2	Intact	NA

Total Extracts:	12
------------------------	----



BATTELLE - NORWELL OPERATIONS SAMPLE SPECIFIC COMMENTS

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.(s)100122108-
CTOWE21**18-0500****CTO-WE21: Former Naval Air Station, Brunswick, Maine****GW**

Sample ID:	Comment:	Date/Initials:
CR552PB-FS	Extraction for samples CR552PB-FS through J7396-FS and J7402-FS began at 10:11am	08/15/18 SAS
CR552PB-FS	Sample extraction ended at 11:09am	08/15/18 SAS
CR553LCS-FS	Sample extraction ended at 11:04am	08/15/18 SAS
J7394-FS	Sample extraction ended at 11:11am	08/15/18 SAS
J7395-FS	Sample extraction ended at 11:10am	08/15/18 SAS
J7396-FS	Sample was yellow in color.	08/15/18 SAS
J7396-FS	Sample extraction ended at 11:16am	08/15/18 SAS
J7397-FS	Sample was yellow in color.	08/15/18 SAS
J7397-FS	Extraction for samples J7397-FS through J7400-FS began at 1:28pm	08/15/18 SAS
J7397-FS	Sample extraction ended at 2:28pm	08/15/18 SAS
J7397MS-FS	Sample was yellow in color.	08/15/18 SAS
J7397MS-FS	Sample extraction ended at 2:28pm	08/15/18 SAS
J7397MSD-FS	Sample was yellow in color.	08/15/18 SAS
J7397MSD-FS	Sample extraction ended at 2:31pm	08/15/18 SAS
J7398-FS	Sample was yellow in color.	08/15/18 SAS
J7398-FS	Sample extraction ended at 2:30pm	08/15/18 SAS
J7399-FS	Sample was yellow in color.	08/15/18 SAS
J7399-FS	Sample extraction ended at 2:33pm	08/15/18 SAS
J7400-FS	Sample was yellow in color.	08/15/18 SAS
J7400-FS	Sample extraction ended at 2:37pm	08/15/18 SAS
J7402-FS	Sample extraction ended at 11:07am	08/15/18 SAS



It can be done

**BATTELLE - NORWELL OPERATIONS
MISCELLANEOUS DOCUMENTATION FORM**

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.(s)

100122108-
CTOWE21

18-0500

CTO-WE21: Former Naval Air Station, Brunswick, Maine

GW

Entered By:

On:

Task Leader Approval:

On:

SupervisorApproval:

On:

PM Approval:

On:

Analytical Calibrations

Sequence Report

Created with Analyst Reporter
 Printed: 30/08/2018 1:38:43 PM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
1	MEOH		8/24/2018 10:26:02 PM	5-0369.dam	18-0501-515-520-500.wiff
2	JY38	L1	8/24/2018 10:36:54 PM	5-0369.dam	18-0501-515-520-500.wiff
3	JY39	L2	8/24/2018 10:47:47 PM	5-0369.dam	18-0501-515-520-500.wiff
4	JY40	L3	8/24/2018 10:58:41 PM	5-0369.dam	18-0501-515-520-500.wiff
5	JY41	L4	8/24/2018 11:09:34 PM	5-0369.dam	18-0501-515-520-500.wiff
6	JY42	L5	8/24/2018 11:20:26 PM	5-0369.dam	18-0501-515-520-500.wiff
7	JY43	L6	8/24/2018 11:31:18 PM	5-0369.dam	18-0501-515-520-500.wiff
8	JY44	L7	8/24/2018 11:42:11 PM	5-0369.dam	18-0501-515-520-500.wiff
9	JY46 IB	Instrument Blank	8/24/2018 11:53:03 PM	5-0369.dam	18-0501-515-520-500.wiff
10	JY45 ICC	ICC	8/25/2018 12:03:55 AM	5-0369.dam	18-0501-515-520-500.wiff
11	JX29 BRANCH	Branch Standard	8/25/2018 12:14:48 AM	5-0369.dam	18-0501-515-520-500.wiff
1	MEOH		8/25/2018 4:35:48 AM	5-0369.dam	18-0501-515-520-500.wiff
32	CR552PB-FS(3)	Procedural Blank	8/25/2018 4:46:41 AM	5-0369.dam	18-0501-515-520-500.wiff
33	CR553LCS-FS(3)	Laboratory Control Sample	8/25/2018 4:57:34 AM	5-0369.dam	18-0501-515-520-500.wiff
34	J7402-FS(3)	NASB-BLL15-GW-RB01-080918	8/25/2018 5:08:27 AM	5-0369.dam	18-0501-515-520-500.wiff
35	J7394-FS(3)	NASB-CCC-GW-01-0818	8/25/2018 5:19:19 AM	5-0369.dam	18-0501-515-520-500.wiff
36	J7395-FS(3)	NASB-CCC-GW-02-0818	8/25/2018 5:30:11 AM	5-0369.dam	18-0501-515-520-500.wiff
37	J7396-FS(3)	NASB-BLL15-GW-02-0818	8/25/2018 5:41:02 AM	5-0369.dam	18-0501-515-520-500.wiff
51	MEOH		8/25/2018 5:51:55 AM	5-0369.dam	18-0501-515-520-500.wiff
38	JY42 CCV	CCV	8/25/2018 6:02:47 AM	5-0369.dam	18-0501-515-520-500.wiff
51	MEOH		8/25/2018 6:13:40 AM	5-0369.dam	18-0501-515-520-500.wiff
39	J7397-FS(3)	NASB-BLL15-GW-01-0818	8/25/2018 6:24:32 AM	5-0369.dam	18-0501-515-520-500.wiff
40	J7397MS-FS(3)	Matrix Spike Sample	8/25/2018 6:35:25 AM	5-0369.dam	18-0501-515-520-500.wiff
41	J7397MSD-FS(3)	Matrix Spike Duplicate Sample	8/25/2018 6:46:18 AM	5-0369.dam	18-0501-515-520-500.wiff
42	J7398-FS(3)	NASB-BLL15-DUP-080918	8/25/2018 6:57:11 AM	5-0369.dam	18-0501-515-520-500.wiff
43	J7399-FS(3)	NASB-BLL15-GW-03-0818	8/25/2018 7:08:02 AM	5-0369.dam	18-0501-515-520-500.wiff
44	J7400-FS(3)	NASB-BLL15-GW-04-	8/25/2018 7:18:54	5-0369.dam	18-0501-515-520-

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
		0818	AM		500.wiff
45	MEOH		8/25/2018 7:29:46 AM	5-0369.dam	18-0501-515-520- 500.wiff
46	JY41 CCV	CCV	8/25/2018 7:40:38 AM	5-0369.dam	18-0501-515-520- 500.wiff

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
1	MeOH		8/28/2018 7:53:59 PM	5-0369.dam	18-0511_18-0517.wiff
16	JY38	L1	8/28/2018 8:04:50 PM	5-0369.dam	18-0511_18-0517.wiff
17	JY39	L2	8/28/2018 8:15:41 PM	5-0369.dam	18-0511_18-0517.wiff
18	JY40	L3	8/28/2018 8:26:32 PM	5-0369.dam	18-0511_18-0517.wiff
19	JY41	L4	8/28/2018 8:37:24 PM	5-0369.dam	18-0511_18-0517.wiff
20	JY42	L5	8/28/2018 8:48:15 PM	5-0369.dam	18-0511_18-0517.wiff
21	JY43	L6	8/28/2018 8:59:08 PM	5-0369.dam	18-0511_18-0517.wiff
22	JY44	L7	8/28/2018 9:09:59 PM	5-0369.dam	18-0511_18-0517.wiff
23	JY46 IB	Instrument Blank	8/28/2018 9:20:49 PM	5-0369.dam	18-0511_18-0517.wiff
24	JY45 ICC	ICC	8/28/2018 9:31:41 PM	5-0369.dam	18-0511_18-0517.wiff
25	JX29 Branch		8/28/2018 9:42:33 PM	5-0369.dam	18-0511_18-0517.wiff
1	MeOH		8/28/2018 9:53:25 PM	5-0369.dam	18-0511_18-0517.wiff
19	JY41 CCV	CCV	8/29/2018 12:58:01 AM	5-0369.dam	18-0511_18-0517.wiff
1	MeOH		8/29/2018 1:08:54 AM	5-0369.dam	18-0511_18-0517.wiff
38	J7394-FS(3)	NASB-CCC-GW-01-0818	8/29/2018 1:19:47 AM	5-0369.dam	18-0511_18-0517.wiff
39	J7397-FS(3)	NASB-BLL15-GW-01-0818	8/29/2018 1:30:39 AM	5-0369.dam	18-0511_18-0517.wiff
40	J7397MS-FS(3)	Matrix Spike Sample	8/29/2018 1:41:30 AM	5-0369.dam	18-0511_18-0517.wiff
41	J7397MSD-FS(3)	Matrix Spike Duplicate Sample	8/29/2018 1:52:22 AM	5-0369.dam	18-0511_18-0517.wiff
42	J7398-FS(3)	NASB-BLL15-DUP-080918	8/29/2018 2:03:14 AM	5-0369.dam	18-0511_18-0517.wiff
43	J7399-FS(3)	NASB-BLL15-GW-03-0818	8/29/2018 2:14:05 AM	5-0369.dam	18-0511_18-0517.wiff
44	J7400-FS(3)	NASB-BLL15-GW-04-0818	8/29/2018 2:24:57 AM	5-0369.dam	18-0511_18-0517.wiff
45	MeOH		8/29/2018 2:35:48 AM	5-0369.dam	18-0511_18-0517.wiff
20	JY42 CCV	CCV	8/29/2018 2:46:39 AM	5-0369.dam	18-0511_18-0517.wiff

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1 These samples were rerun for confirmation and the results can be found in the unused data section of this data package. DMS 8/30/2018



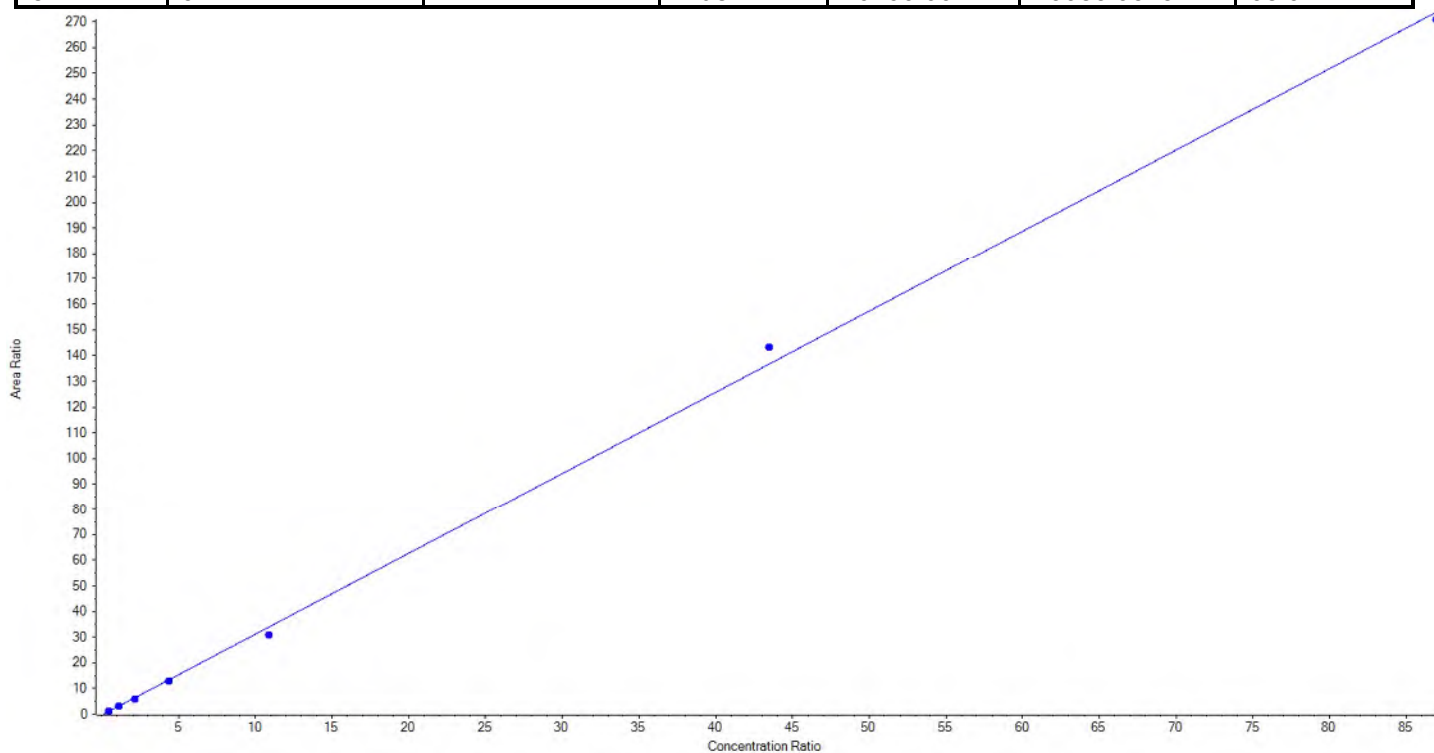
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/08/2018 2:45:08 PM

Analyte Name	PFBS_1	Data File	18-0501-515-520-500.wiff
MRM Transition	298.9 / 80.0	Result Table	18-0500_BASE_A
Internal Standard	13C3-PFBS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 3.15281 x + -0.41358$ ($r = 0.99916$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	118.174563	117.0
3	JY39	L2	True	252.50	254.441490	100.8
4	JY40	L3	True	505.00	456.707111	90.4
5	JY41	L4	True	1010.00	973.620829	96.4
6	JY42	L5	True	2525.00	2311.981236	91.6
7	JY43	L6	True	10100.00	10594.642449	104.9
8	JY44	L7	True	20200.00	19983.932322	98.9





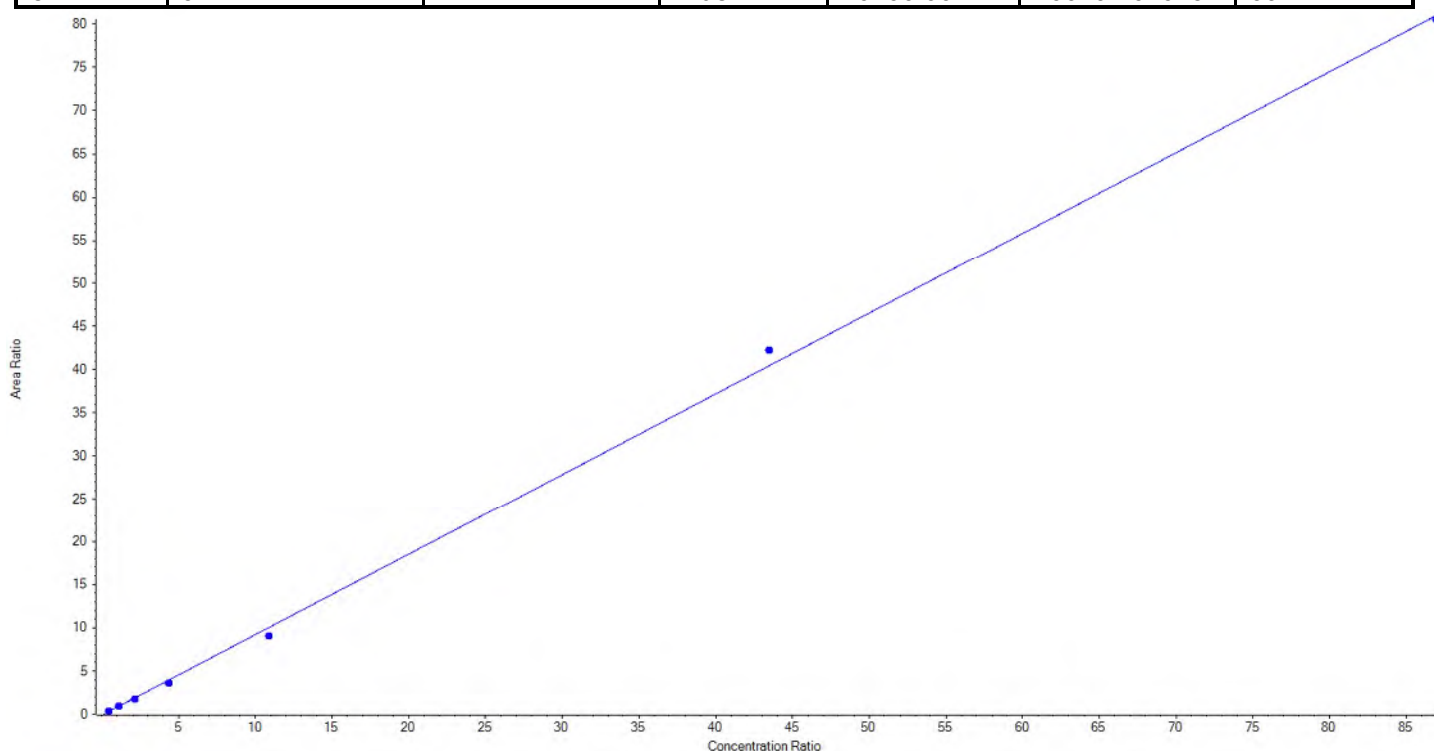
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Analyte Name	PFBS_2	Data File	18-0501-515-520-500.wiff
MRM Transition	298.9 / 99.0	Result Table	18-0500_BASE_A
Internal Standard	13C3-PFBS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.93255x + -0.12994$ ($r = 0.99907$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	124.006251	122.8
3	JY39	L2	True	252.50	251.390877	99.6
4	JY40	L3	True	505.00	457.925956	90.7
5	JY41	L4	True	1010.00	933.624261	92.4
6	JY42	L5	True	2525.00	2287.352093	90.6
7	JY43	L6	True	10100.00	10559.938920	104.6
8	JY44	L7	True	20200.00	20079.261643	99.4





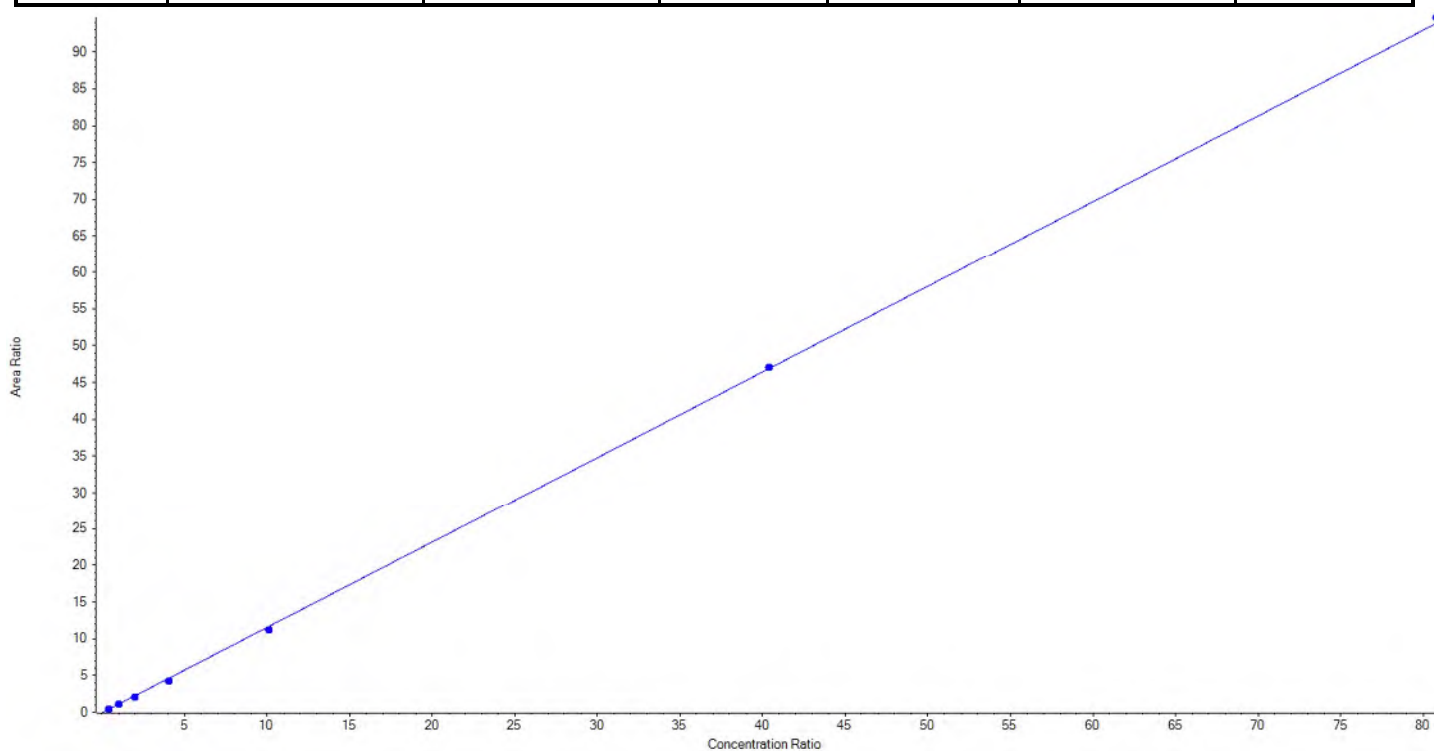
Calibration Summary Report

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Analyte Name	PFHxA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	313.0 / 269.0	Result Table	18-0500_BASE_A
Internal Standard	13C5-PFHxA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.16342x + -0.10965$ ($r = 0.99970$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	117.846366	116.7
3	JY39	L2	True	252.50	259.195130	102.7
4	JY40	L3	True	505.00	465.851790	92.3
5	JY41	L4	True	1010.00	919.737382	91.1
6	JY42	L5	True	2525.00	2428.348557	96.2
7	JY43	L6	True	10100.00	10136.988023	100.4
8	JY44	L7	True	20200.00	20365.532752	100.8





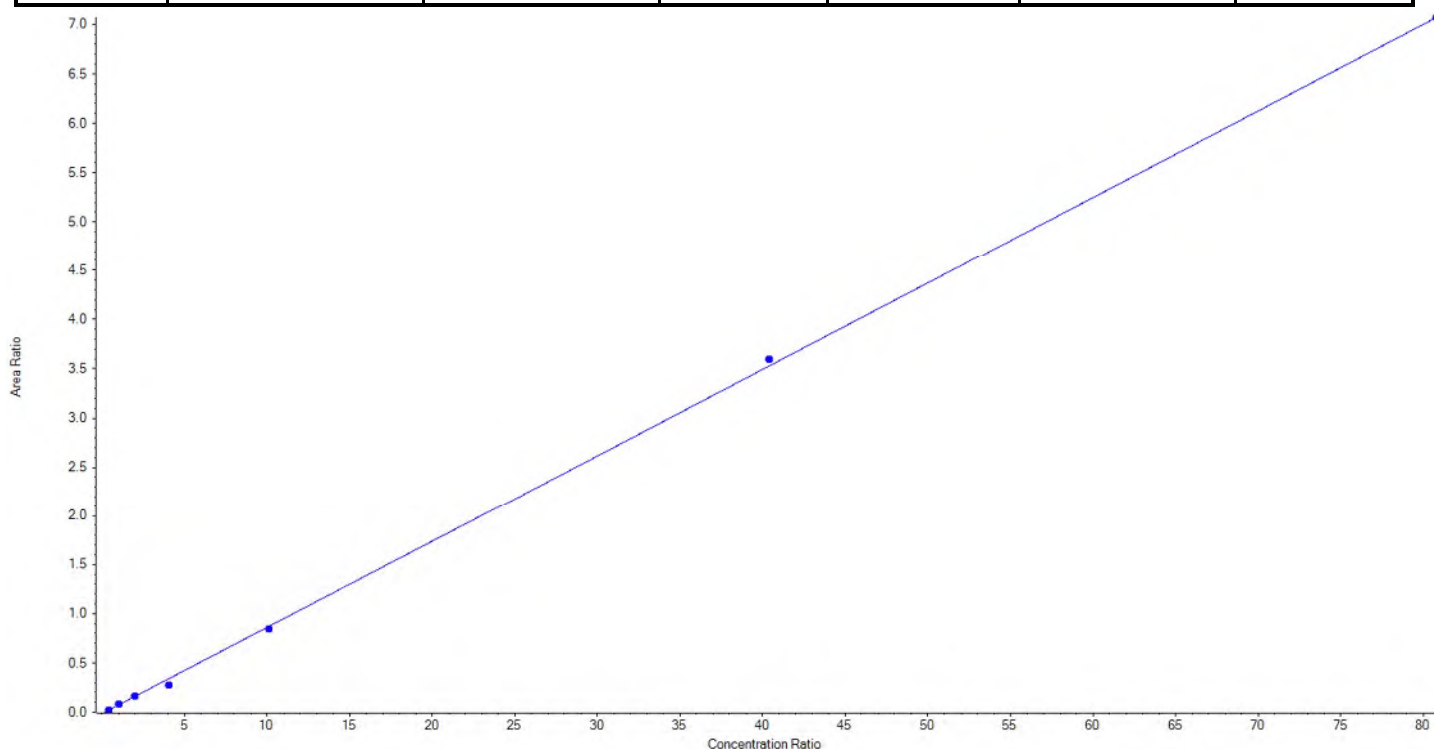
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Analyte Name	PFHxA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	313.0 / 119.0	Result Table	18-0500_BASE_A
Internal Standard	13C5-PFHxA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.08772 x + -0.01589$ ($r = 0.99944$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	108.429840	107.4
3	JY39	L2	True	252.50	269.130230	106.6
4	JY40	L3	True	505.00	521.629051	103.3
5	JY41	L4	True	1010.00	839.959766	83.2
6	JY42	L5	True	2525.00	2467.526138	97.7
7	JY43	L6	True	10100.00	10292.222124	101.9
8	JY44	L7	True	20200.00	20194.602851	100.0





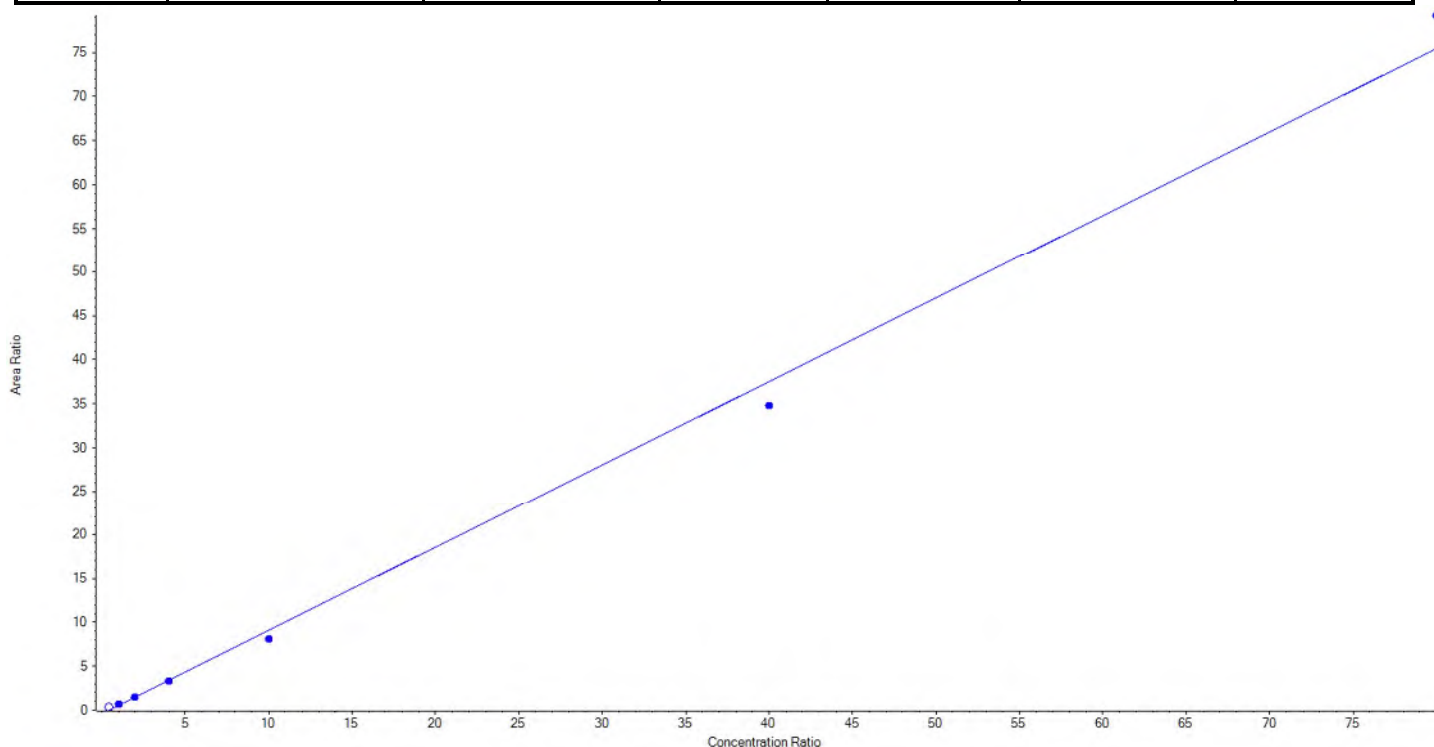
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Analyte Name	PFHpA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	363.0 / 319.0	Result Table	18-0500_BASE_A
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.94822x + -0.40079$ ($r = 0.99770$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	183.037265	183.0
3	JY39	L2	True	250.00	289.678245	115.9
4	JY40	L3	True	500.00	493.381350	98.7
5	JY41	L4	True	1000.00	984.594709	98.5
6	JY42	L5	True	2500.00	2235.657765	89.4
7	JY43	L6	True	10000.00	9266.642157	92.7
8	JY44	L7	True	20000.00	20980.045774	104.9





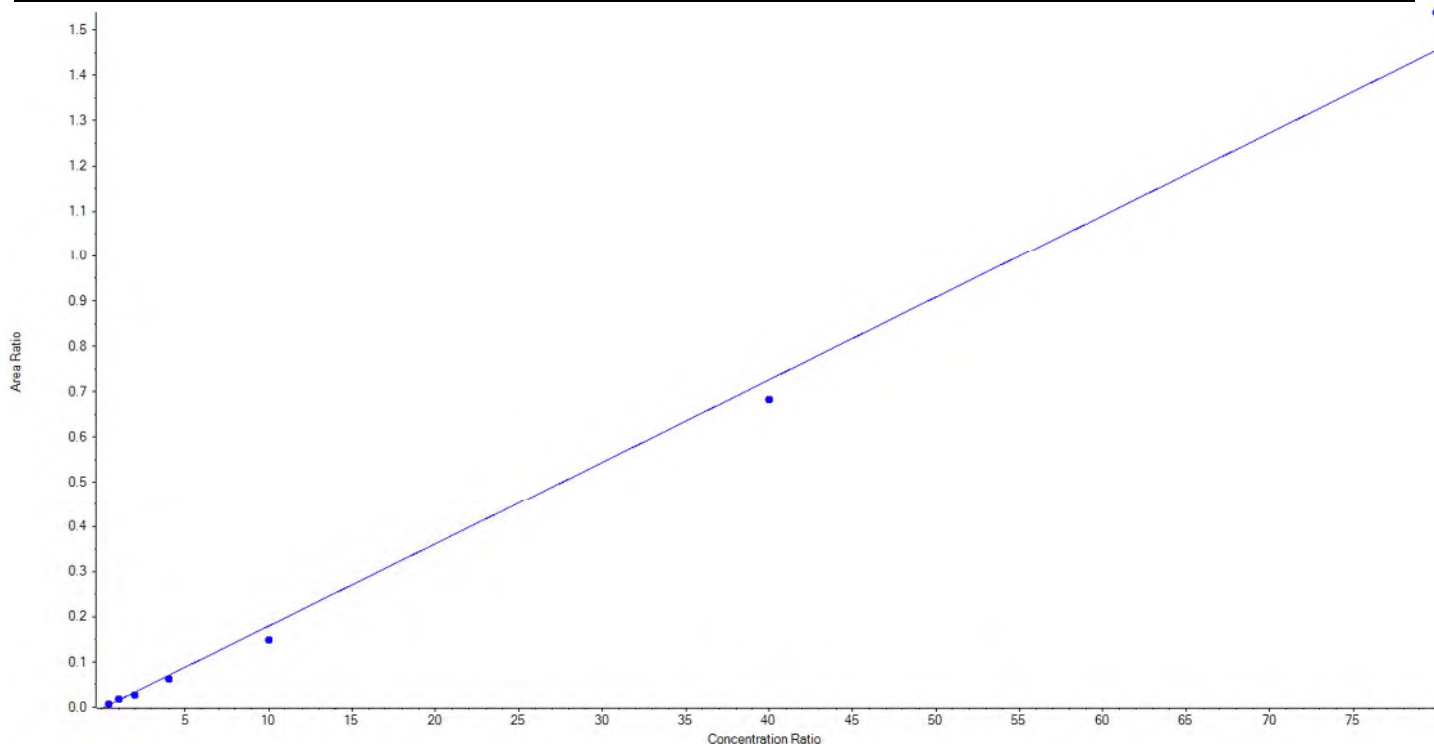
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Analyte Name	PFHpA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	363.0 / 169.0	Result Table	18-0500_BASE_A
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.01823 x + -0.00296$ ($r = 0.99671$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	126.881979	126.9
3	JY39	L2	True	250.00	291.012163	116.4
4	JY40	L3	True	500.00	419.166669	83.8
5	JY41	L4	True	1000.00	899.978240	90.0
6	JY42	L5	True	2500.00	2081.185199	83.3
7	JY43	L6	True	10000.00	9395.142275	94.0
8	JY44	L7	True	20000.00	21136.633475	105.7





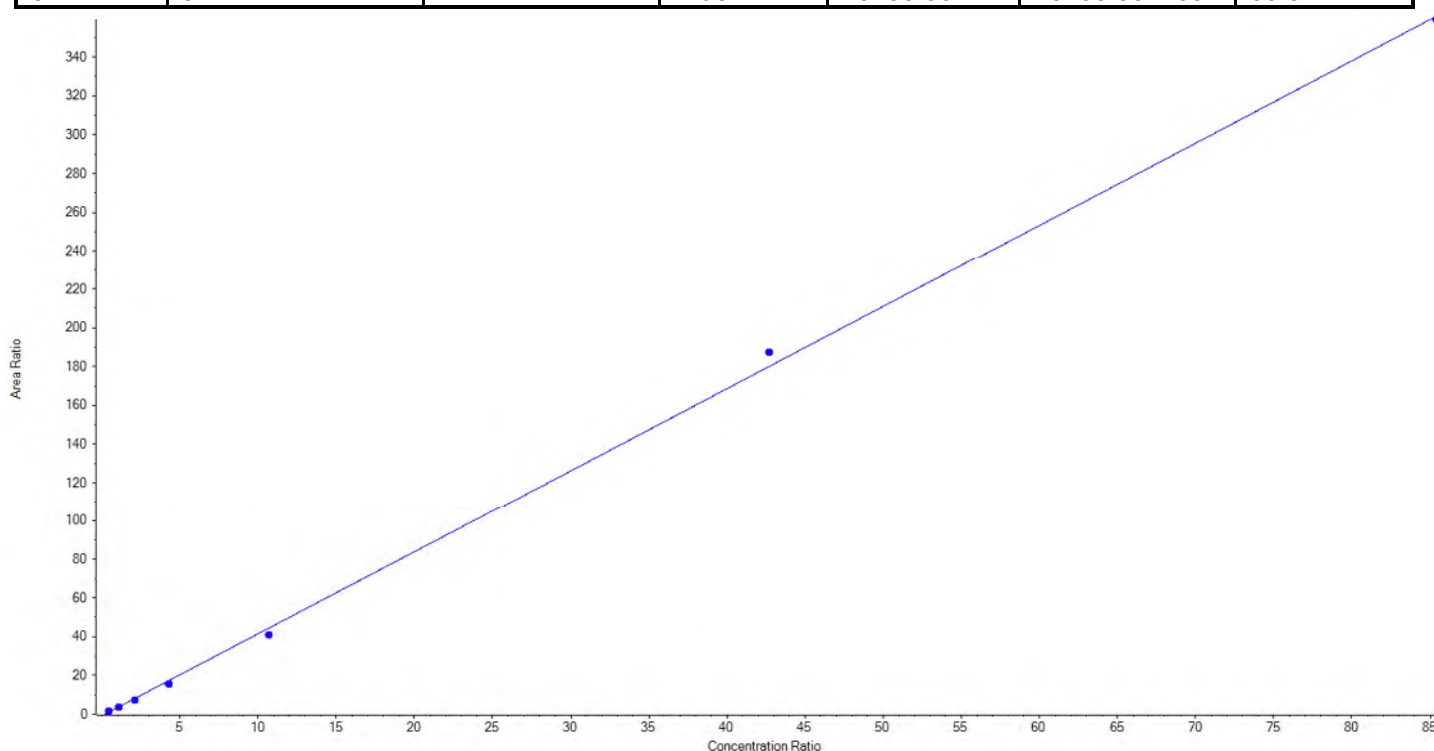
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Analyte Name	PFHxS_1	Data File	18-0501-515-520-500.wiff
MRM Transition	399.0 / 80.0	Result Table	18-0500_BASE_A
Internal Standard	13C3-PFHxS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 4.23537 x + -0.84536$ ($r = 0.99917$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	126.099371	124.9
3	JY39	L2	True	252.50	246.750083	97.7
4	JY40	L3	True	505.00	455.053362	90.1
5	JY41	L4	True	1010.00	928.278420	91.9
6	JY42	L5	True	2525.00	2316.855490	91.8
7	JY43	L6	True	10100.00	10517.109004	104.1
8	JY44	L7	True	20200.00	20103.354269	99.5





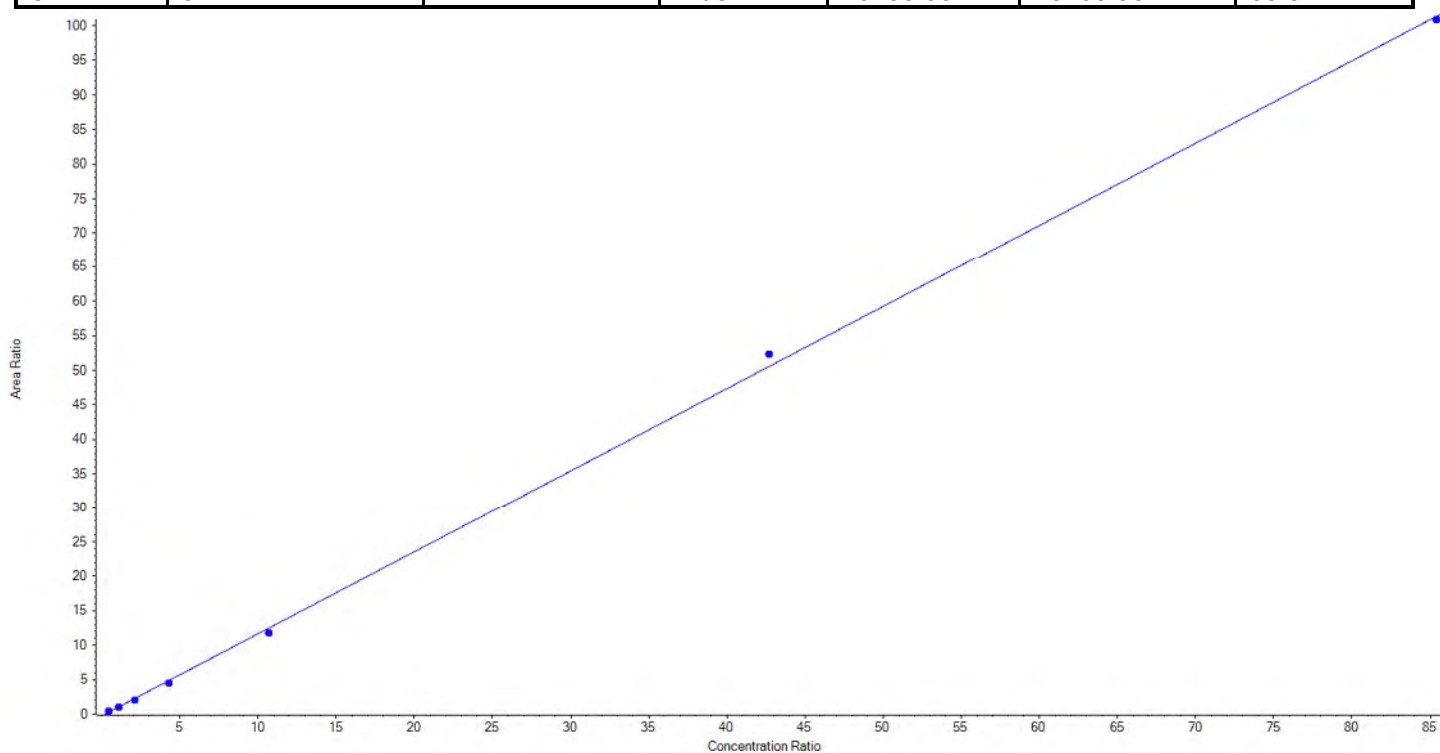
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Analyte Name	PFHxS_2	Data File	18-0501-515-520-500.wiff
MRM Transition	399.0 / 99.0	Result Table	18-0500_BASE_A
Internal Standard	13C3-PFHxS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.18953x + -0.23223$ ($r = 0.99941$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	125.405816	124.2
3	JY39	L2	True	252.50	238.832101	94.6
4	JY40	L3	True	505.00	462.800440	91.6
5	JY41	L4	True	1010.00	934.199524	92.5
6	JY42	L5	True	2525.00	2375.949764	94.1
7	JY43	L6	True	10100.00	10452.350229	103.5
8	JY44	L7	True	20200.00	20103.962127	99.5





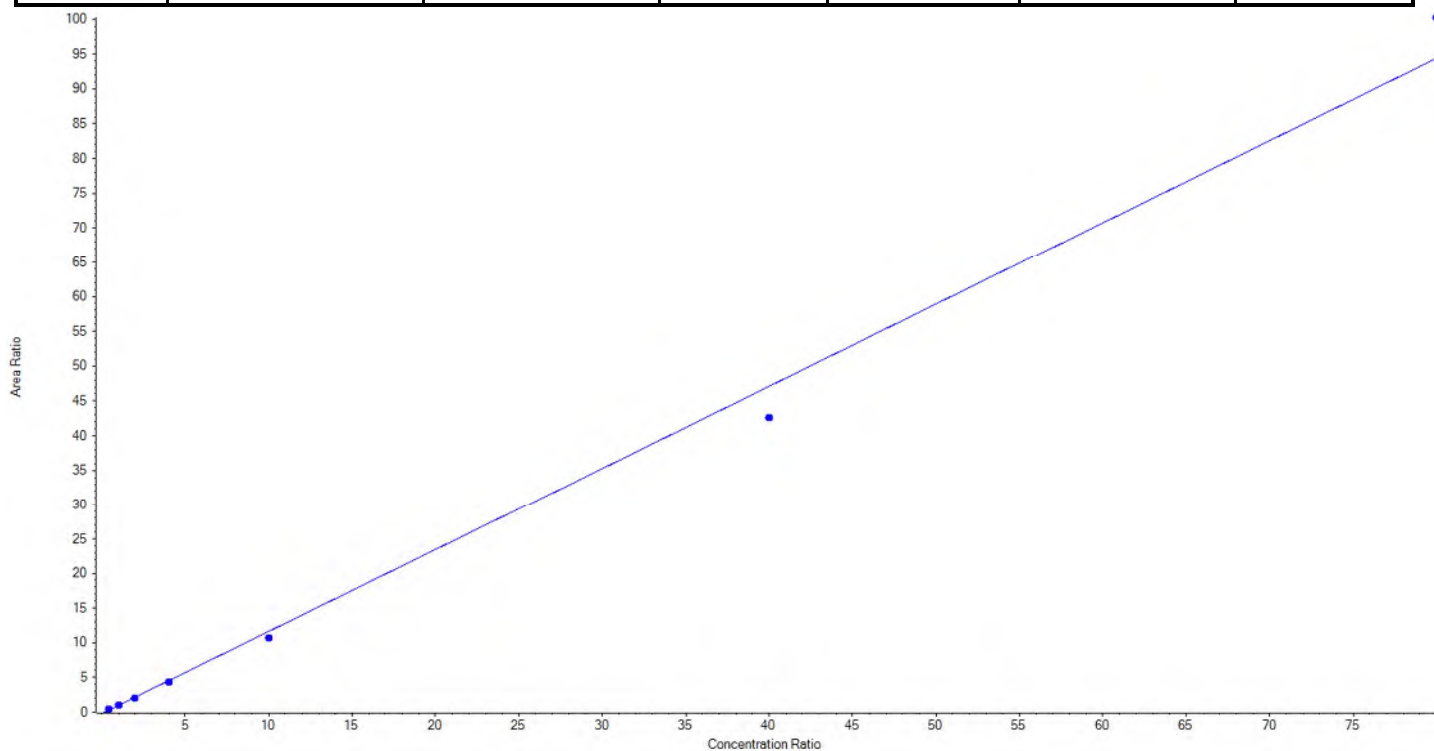
Calibration Summary Report

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Analyte Name	PFOA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	413.0 / 369.0	Result Table	18-0500_BASE_A
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.18259x + -0.20416$ ($r = 0.99688$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	124.723500	124.7
3	JY39	L2	True	250.00	250.507586	100.2
4	JY40	L3	True	500.00	455.668756	91.1
5	JY41	L4	True	1000.00	957.408716	95.7
6	JY42	L5	True	2500.00	2291.377116	91.7
7	JY43	L6	True	10000.00	9038.437378	90.4
8	JY44	L7	True	20000.00	21231.876948	106.2





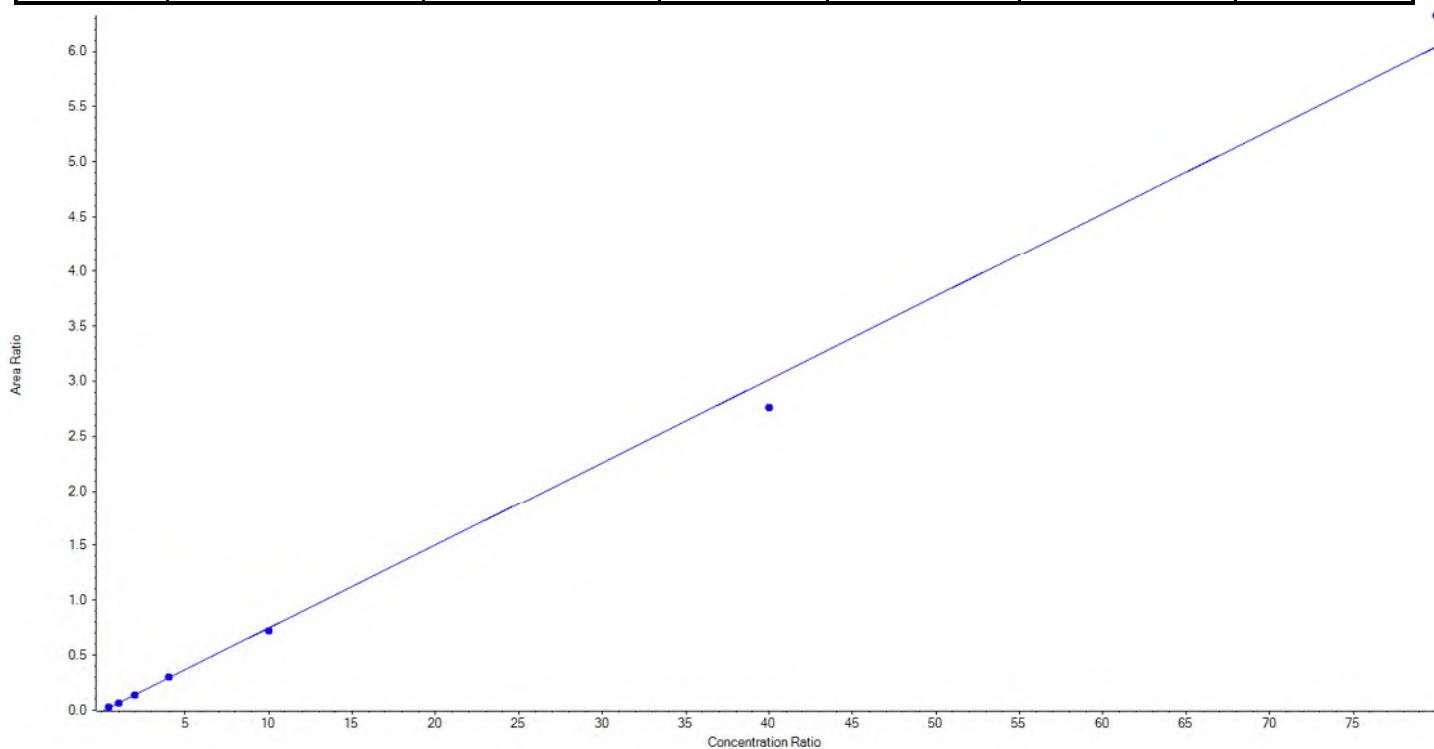
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Analyte Name	PFOA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	413.0 / 169.0	Result Table	18-0500_BASE_A
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.07565x + -0.01028$ ($r = 0.99809$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	115.729454	115.7
3	JY39	L2	True	250.00	235.595736	94.2
4	JY40	L3	True	500.00	480.697290	96.1
5	JY41	L4	True	1000.00	1013.337499	101.3
6	JY42	L5	True	2500.00	2405.851339	96.2
7	JY43	L6	True	10000.00	9166.209412	91.7
8	JY44	L7	True	20000.00	20932.579270	104.7





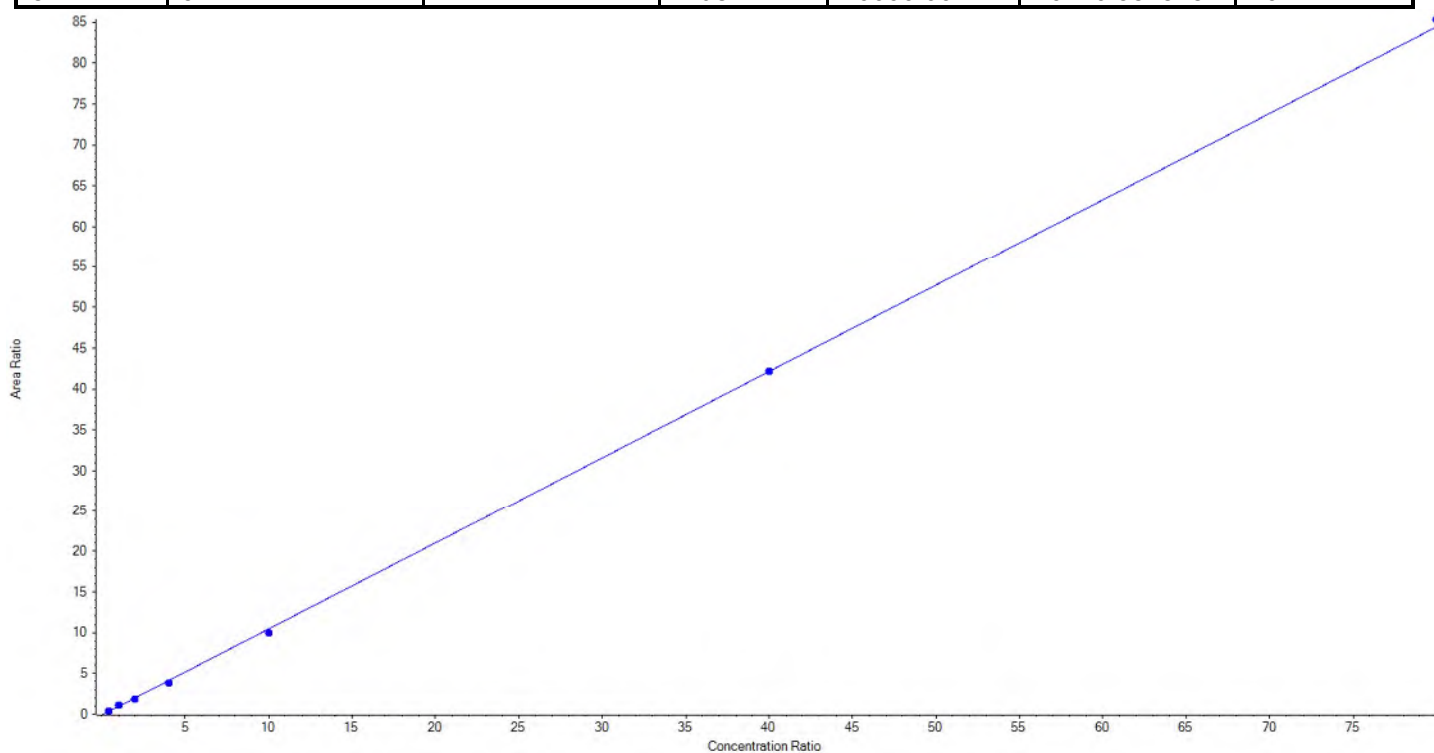
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Analyte Name	PFNA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	463.0 / 419.0	Result Table	18-0500_BASE_A
Internal Standard	13C9-PFNA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.05685x + -0.11971$ ($r = 0.99968$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	107.015449	107.0
3	JY39	L2	True	250.00	278.560077	111.4
4	JY40	L3	True	500.00	464.832649	93.0
5	JY41	L4	True	1000.00	927.907689	92.8
6	JY42	L5	True	2500.00	2371.276802	94.9
7	JY43	L6	True	10000.00	9990.022487	99.9
8	JY44	L7	True	20000.00	20210.384848	101.1





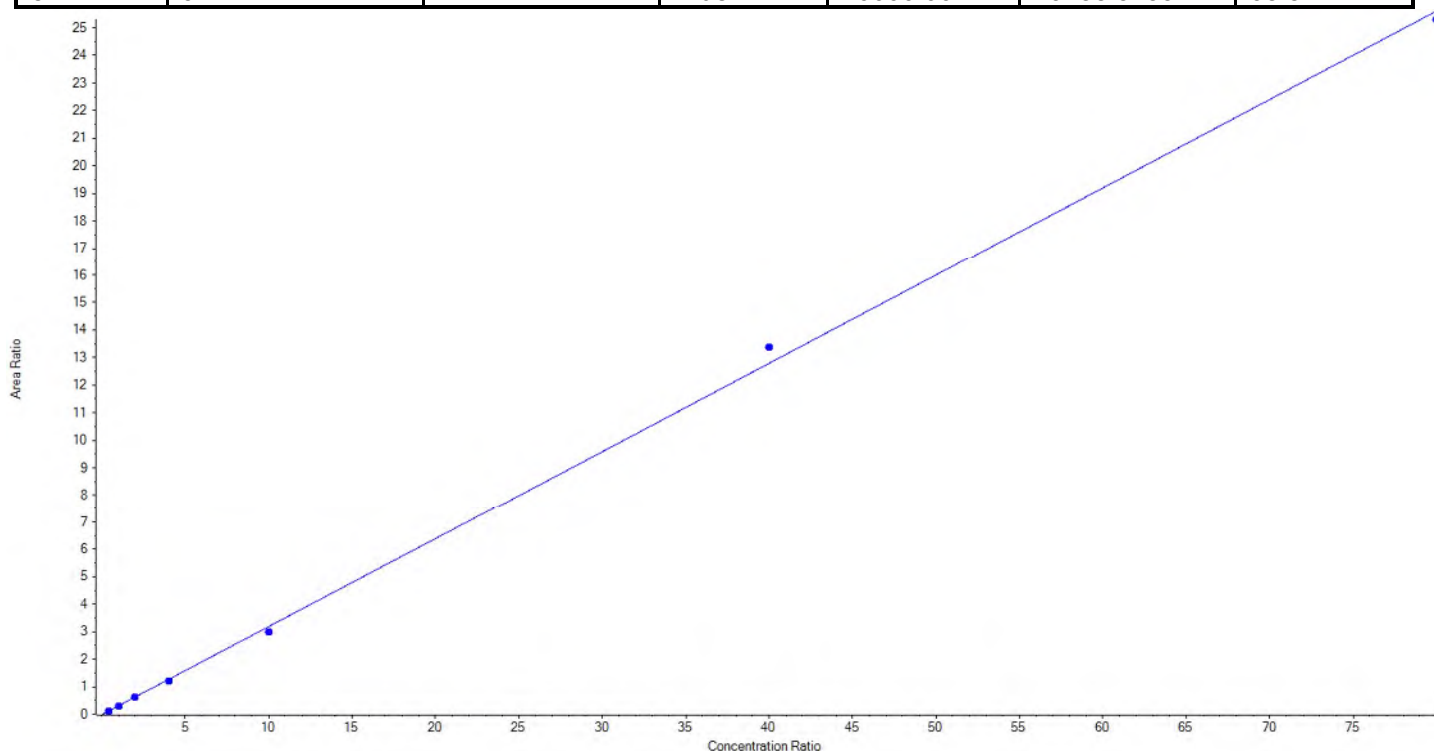
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Analyte Name	PFNA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	463.0 / 219.0	Result Table	18-0500_BASE_A
Internal Standard	13C9-PFNA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.32026x + -0.01897$ ($r = 0.99944$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	107.867314	107.9
3	JY39	L2	True	250.00	253.733268	101.5
4	JY40	L3	True	500.00	495.088887	99.0
5	JY41	L4	True	1000.00	944.716102	94.5
6	JY42	L5	True	2500.00	2348.525773	93.9
7	JY43	L6	True	10000.00	10441.723314	104.4
8	JY44	L7	True	20000.00	19758.345342	98.8





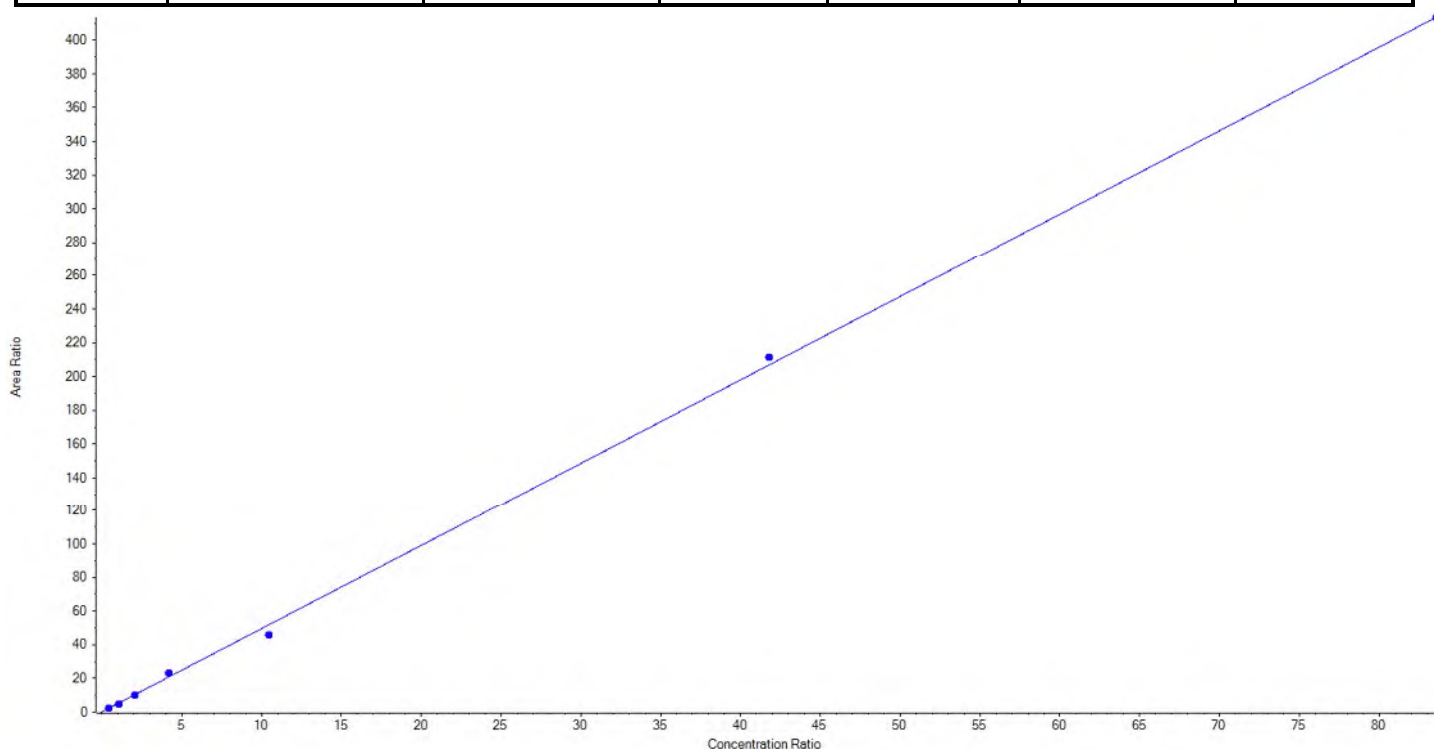
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Analyte Name	PFOS_1	Data File	18-0501-515-520-500.wiff
MRM Transition	499.0 / 80.0	Result Table	18-0500_BASE_A
Internal Standard	13C8-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 4.94550x + 0.15650$ ($r = 0.99918$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	108.675584	108.7
3	JY39	L2	True	250.00	234.616933	93.9
4	JY40	L3	True	500.00	479.887763	96.0
5	JY41	L4	True	1000.00	1108.586887	110.9
6	JY42	L5	True	2500.00	2213.074605	88.5
7	JY43	L6	True	10000.00	10218.525269	102.2
8	JY44	L7	True	20000.00	19986.632959	99.9





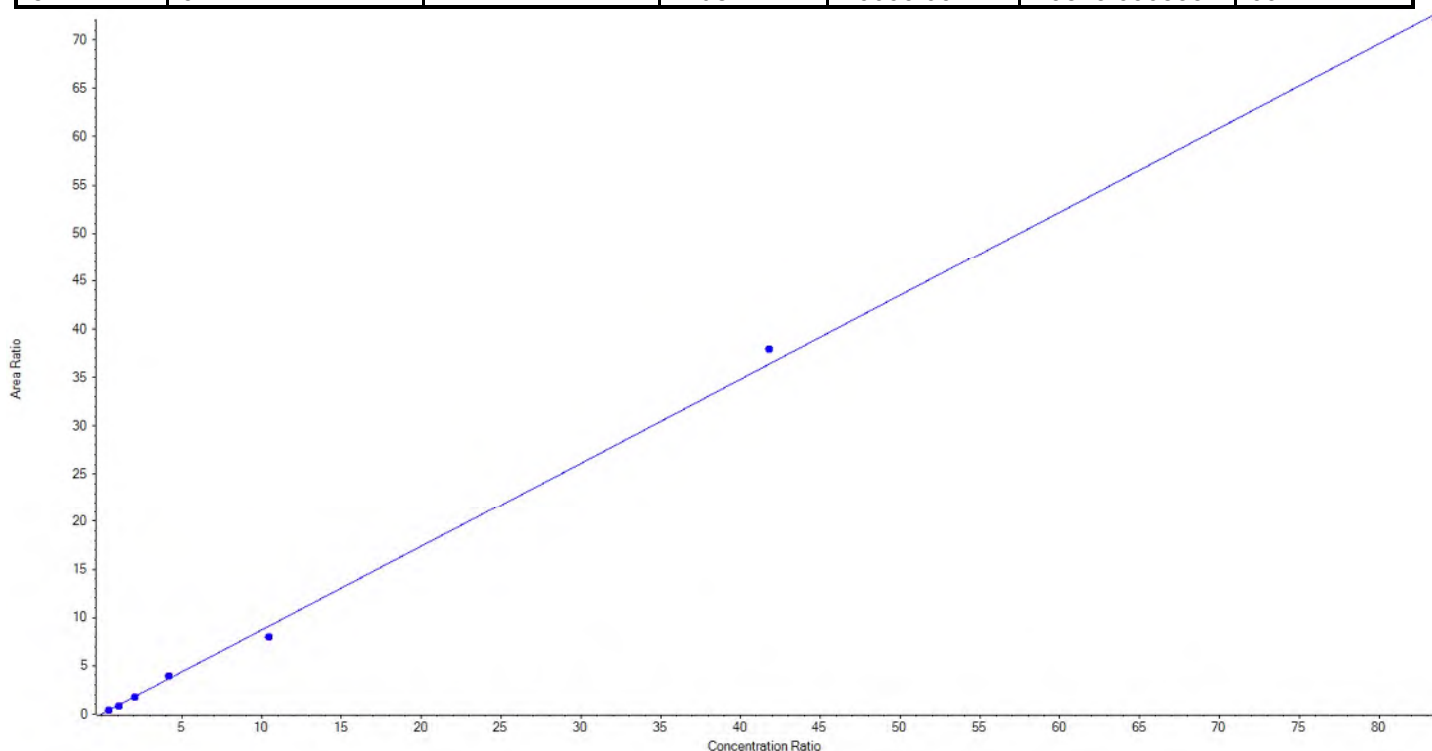
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Analyte Name	PFOS_2	Data File	18-0501-515-520-500.wiff
MRM Transition	499.0 / 99.0	Result Table	18-0500_BASE_A
Internal Standard	13C8-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.86986x + 0.01336$ ($r = 0.99881$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	117.347383	117.4
3	JY39	L2	True	250.00	217.248927	86.9
4	JY40	L3	True	500.00	477.582506	95.5
5	JY41	L4	True	1000.00	1091.956540	109.2
6	JY42	L5	True	2500.00	2190.256613	87.6
7	JY43	L6	True	10000.00	10430.517196	104.3
8	JY44	L7	True	20000.00	19825.090835	99.1





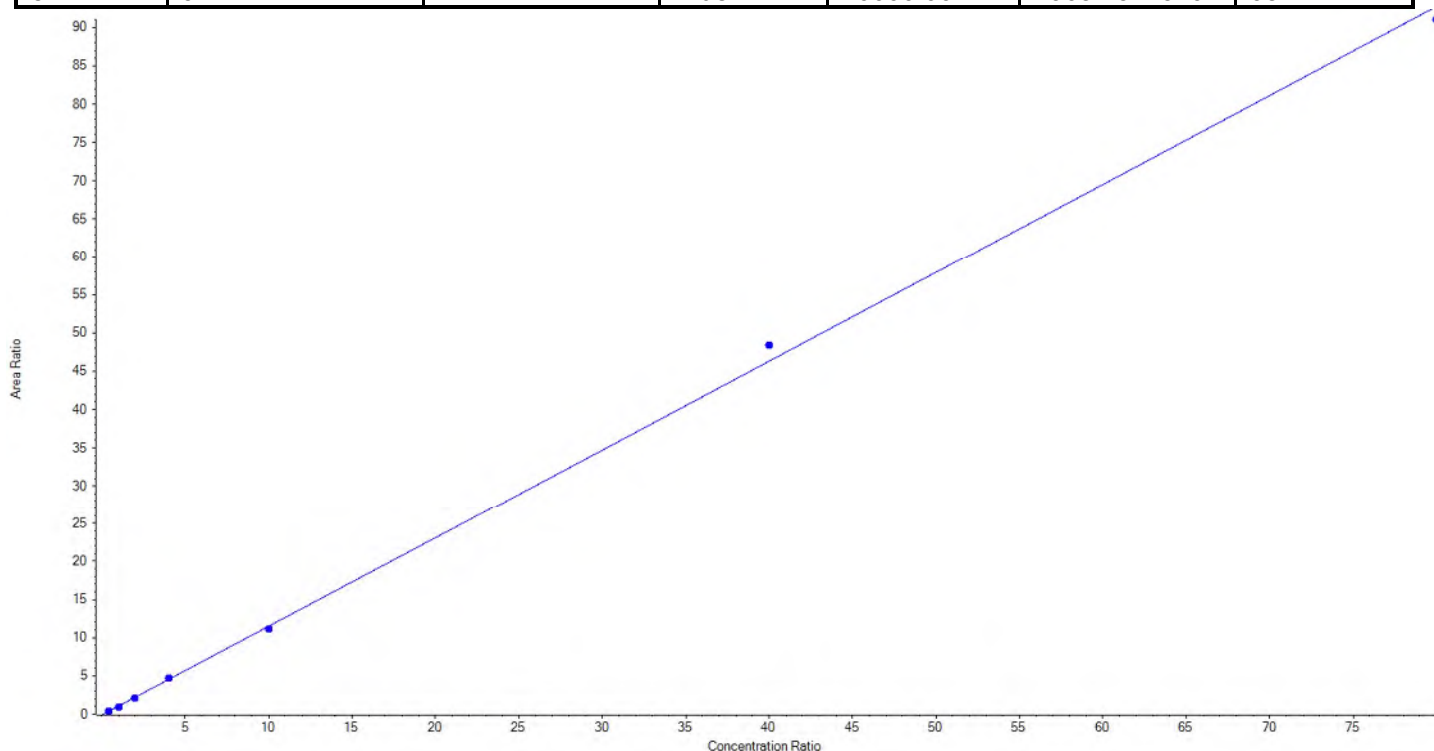
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Analyte Name	PFDA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	513.0 / 469.0	Result Table	18-0500_BASE_A
Internal Standard	13C6-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.16034 x + -0.10710$ ($r = 0.99947$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	110.198423	110.2
3	JY39	L2	True	250.00	231.107869	92.4
4	JY40	L3	True	500.00	470.043896	94.0
5	JY41	L4	True	1000.00	1035.018294	103.5
6	JY42	L5	True	2500.00	2432.445932	97.3
7	JY43	L6	True	10000.00	10438.811237	104.4
8	JY44	L7	True	20000.00	19632.374349	98.2





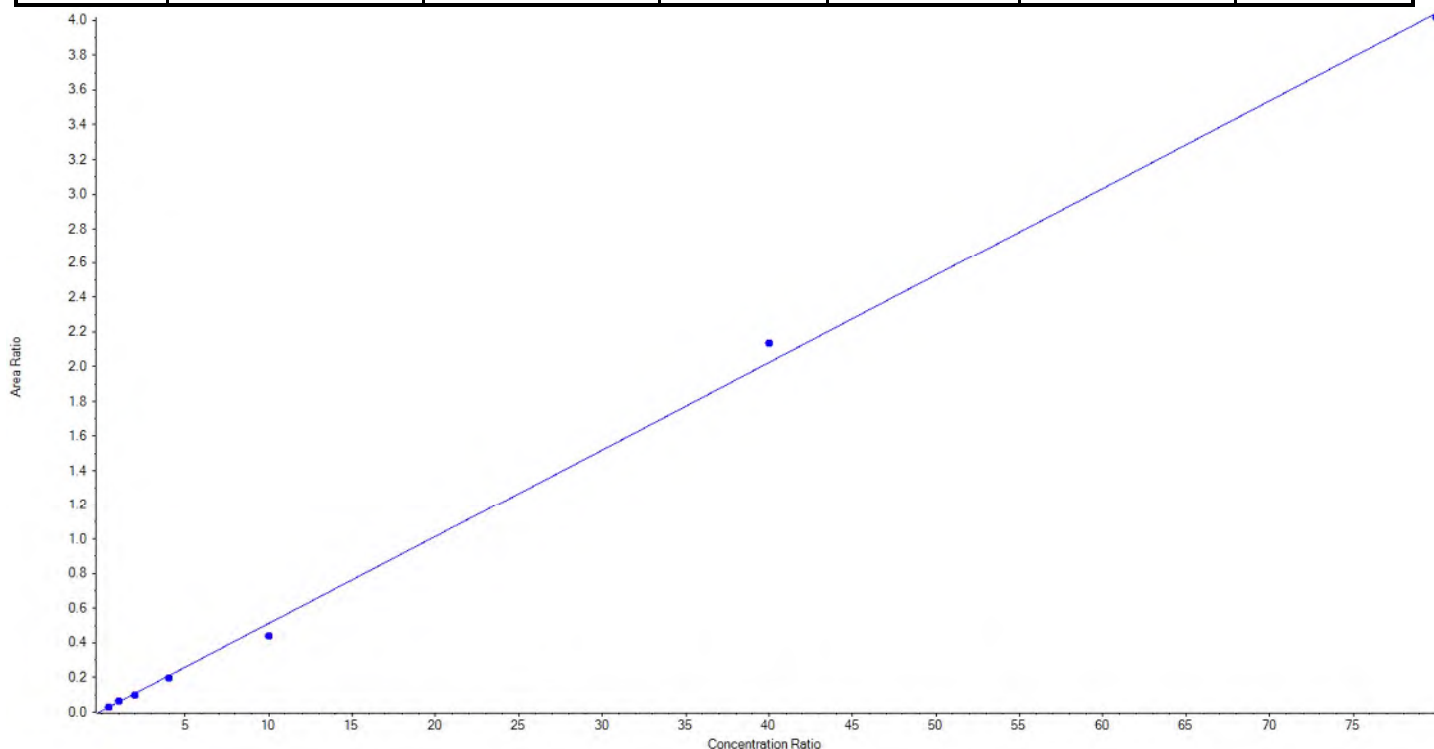
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Analyte Name	PFDA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	513.0 / 219.0	Result Table	18-0500_BASE_A
Internal Standard	13C6-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.05043x + 0.00732$ ($r = 0.99845$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	114.079000	114.1
3	JY39	L2	True	250.00	275.419951	110.2
4	JY40	L3	True	500.00	457.576231	91.5
5	JY41	L4	True	1000.00	940.050222	94.0
6	JY42	L5	True	2500.00	2132.114826	85.3
7	JY43	L6	True	10000.00	10558.871916	105.6
8	JY44	L7	True	20000.00	19871.887855	99.4





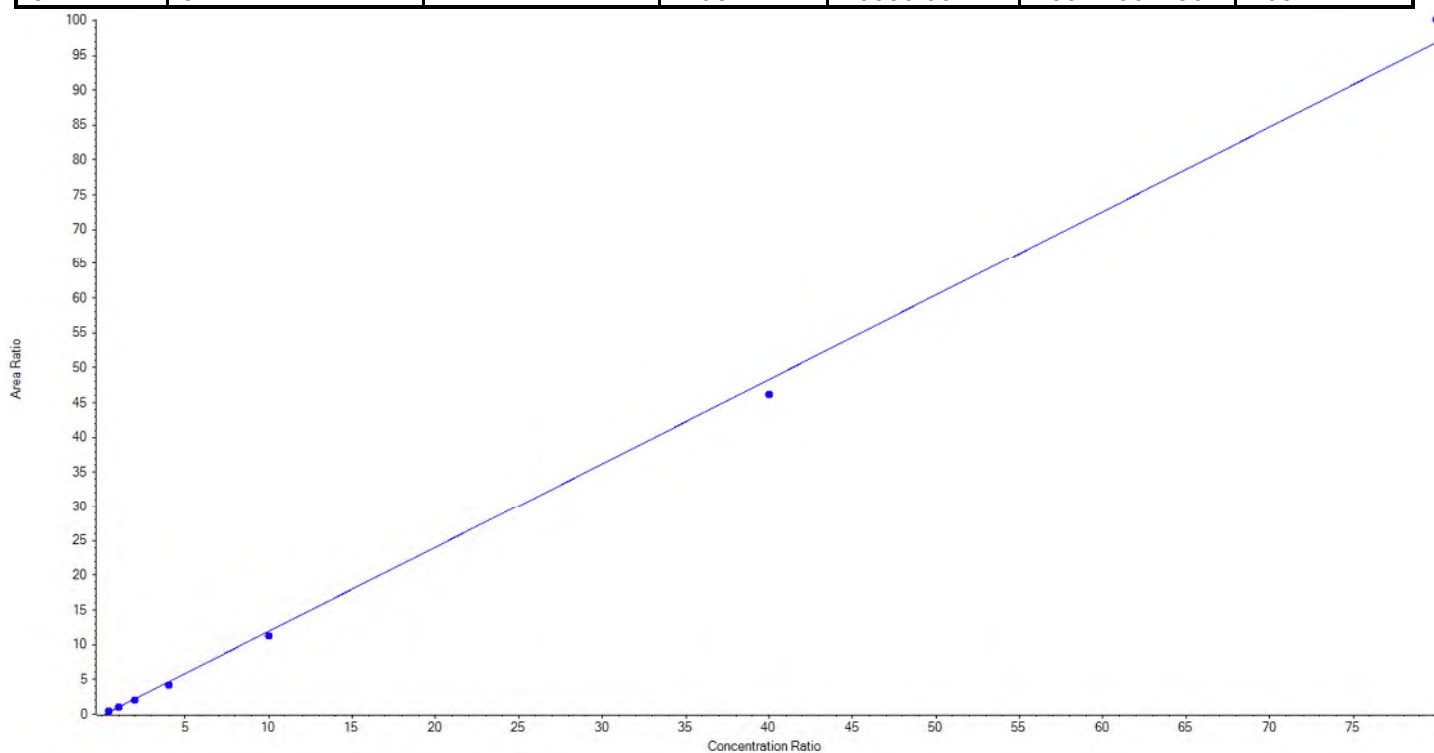
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Analyte Name	PFUnA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	563.0 / 519.0	Result Table	18-0500_BASE_A
Internal Standard	13C7-PFUnA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.21353 x + -0.22259$ ($r = 0.99899$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	122.943043	122.9
3	JY39	L2	True	250.00	246.726851	98.7
4	JY40	L3	True	500.00	463.660604	92.7
5	JY41	L4	True	1000.00	919.395673	91.9
6	JY42	L5	True	2500.00	2369.453411	94.8
7	JY43	L6	True	10000.00	9555.457961	95.6
8	JY44	L7	True	20000.00	20672.362456	103.4





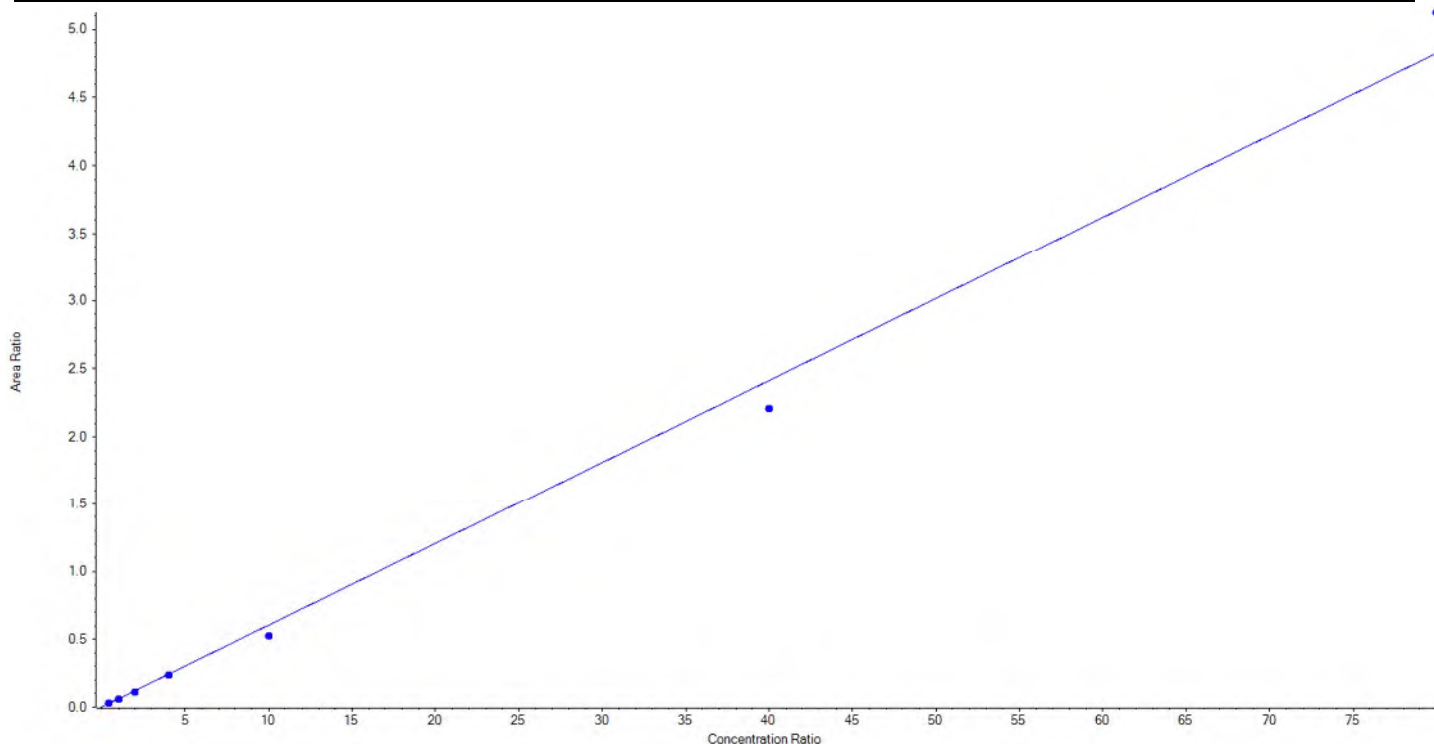
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Analyte Name	PFUnA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	563.0 / 269.0	Result Table	18-0500_BASE_A
Internal Standard	13C7-PFUnA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.06032 x + 9.82959e-4$ ($r = 0.99675$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	129.206562	129.2
3	JY39	L2	True	250.00	241.347698	96.5
4	JY40	L3	True	500.00	467.242328	93.5
5	JY41	L4	True	1000.00	968.076678	96.8
6	JY42	L5	True	2500.00	2157.204163	86.3
7	JY43	L6	True	10000.00	9155.089249	91.6
8	JY44	L7	True	20000.00	21231.833322	106.2





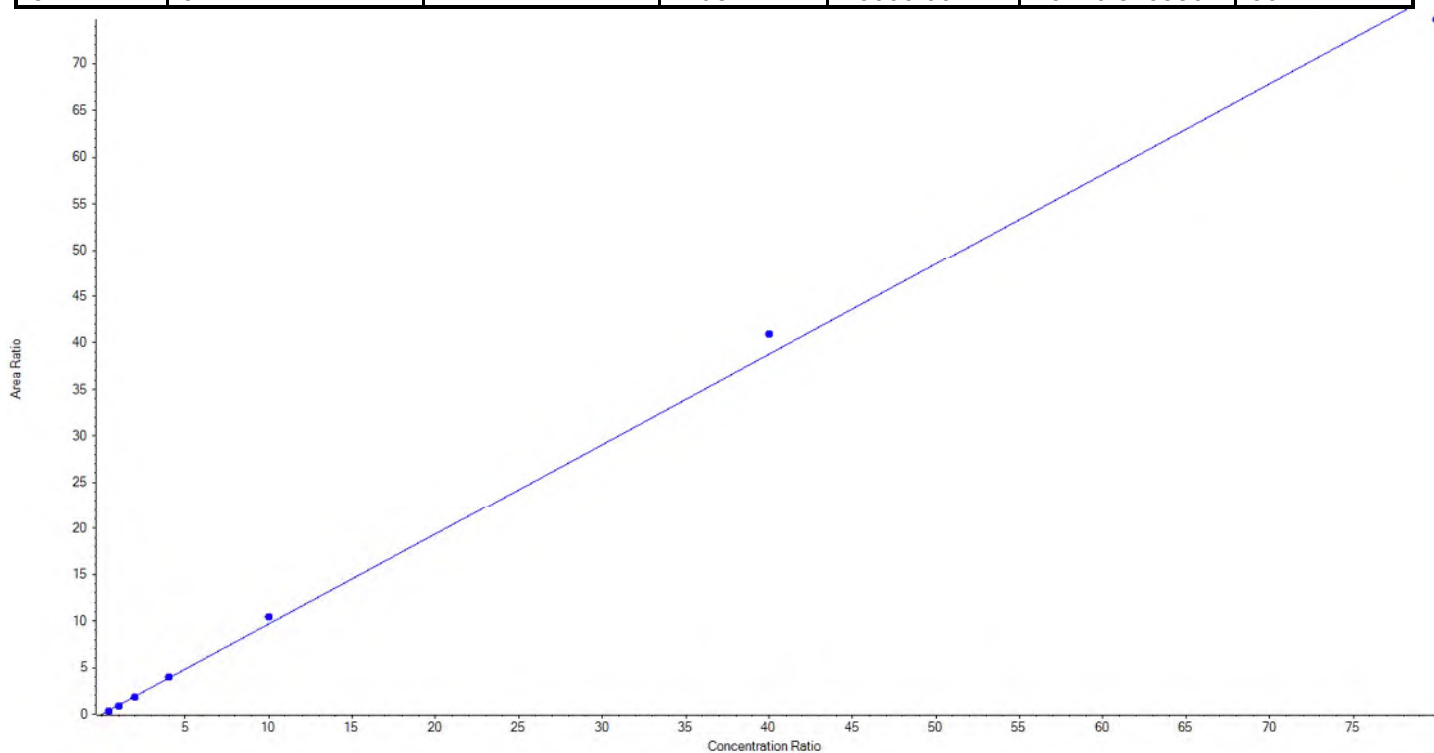
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Analyte Name	PFDoA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	613.0 / 569.0	Result Table	18-0500_BASE_A
Internal Standard	13C2-PFDoA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.96946 x + -0.01373$ ($r = 0.99883$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	98.610714	98.6
3	JY39	L2	True	250.00	233.920658	93.6
4	JY40	L3	True	500.00	475.852120	95.2
5	JY41	L4	True	1000.00	1032.761138	103.3
6	JY42	L5	True	2500.00	2688.000463	107.5
7	JY43	L6	True	10000.00	10550.038320	105.5
8	JY44	L7	True	20000.00	19270.816586	96.4





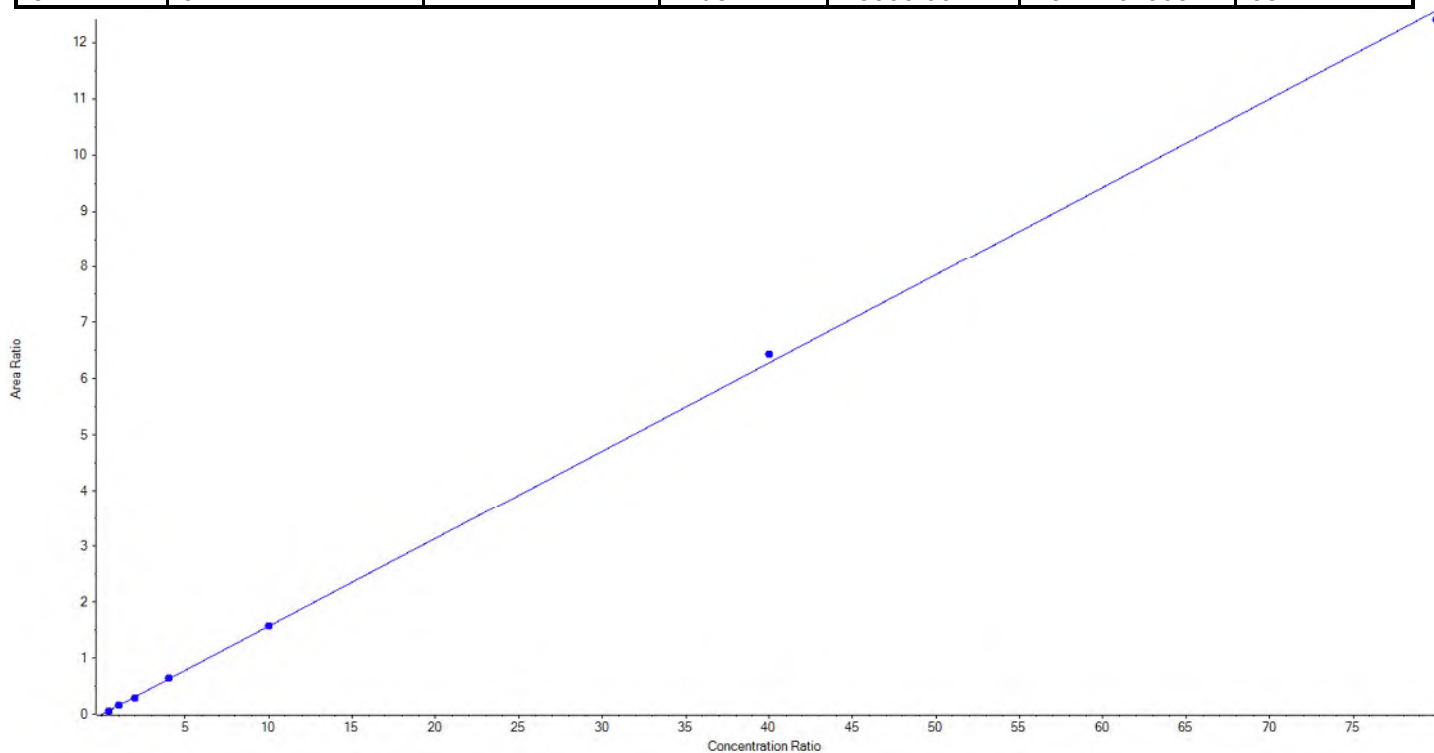
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Analyte Name	PFDaA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	613.0 / 319.0	Result Table	18-0500_BASE_A
Internal Standard	13C2-PFDaA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.15718x + -0.00485$ ($r = 0.99982$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	100.020562	100.0
3	JY39	L2	True	250.00	250.671630	100.3
4	JY40	L3	True	500.00	475.157931	95.0
5	JY41	L4	True	1000.00	1031.153986	103.1
6	JY42	L5	True	2500.00	2511.466237	100.5
7	JY43	L6	True	10000.00	10239.500617	102.4
8	JY44	L7	True	20000.00	19742.029037	98.7





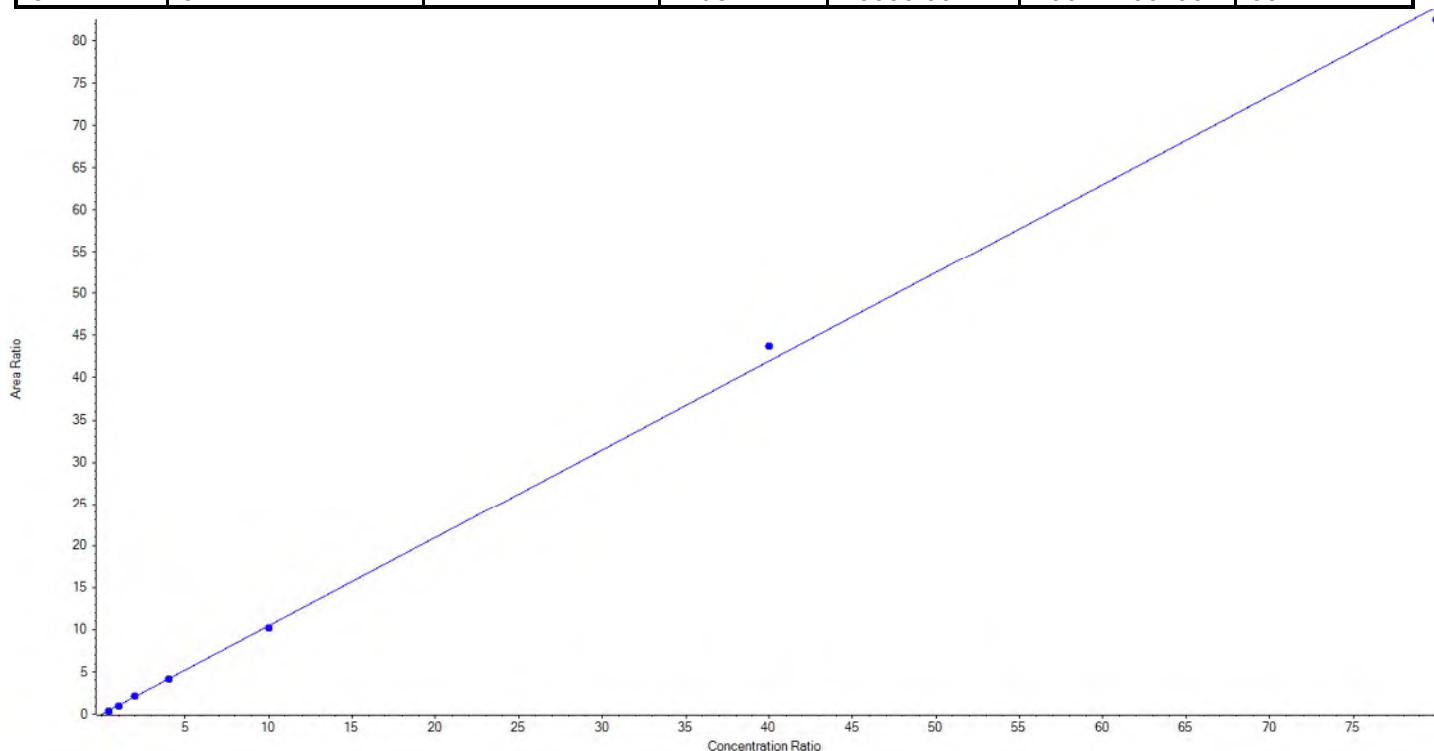
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Analyte Name	PFTTrDA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	663.0 / 619.0	Result Table	18-0500_BASE_A
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.05021 x + -0.02316$ ($r = 0.99959$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	103.989990	104.0
3	JY39	L2	True	250.00	237.901063	95.2
4	JY40	L3	True	500.00	506.941023	101.4
5	JY41	L4	True	1000.00	989.873487	99.0
6	JY42	L5	True	2500.00	2452.401261	98.1
7	JY43	L6	True	10000.00	10416.702985	104.2
8	JY44	L7	True	20000.00	19642.190190	98.2





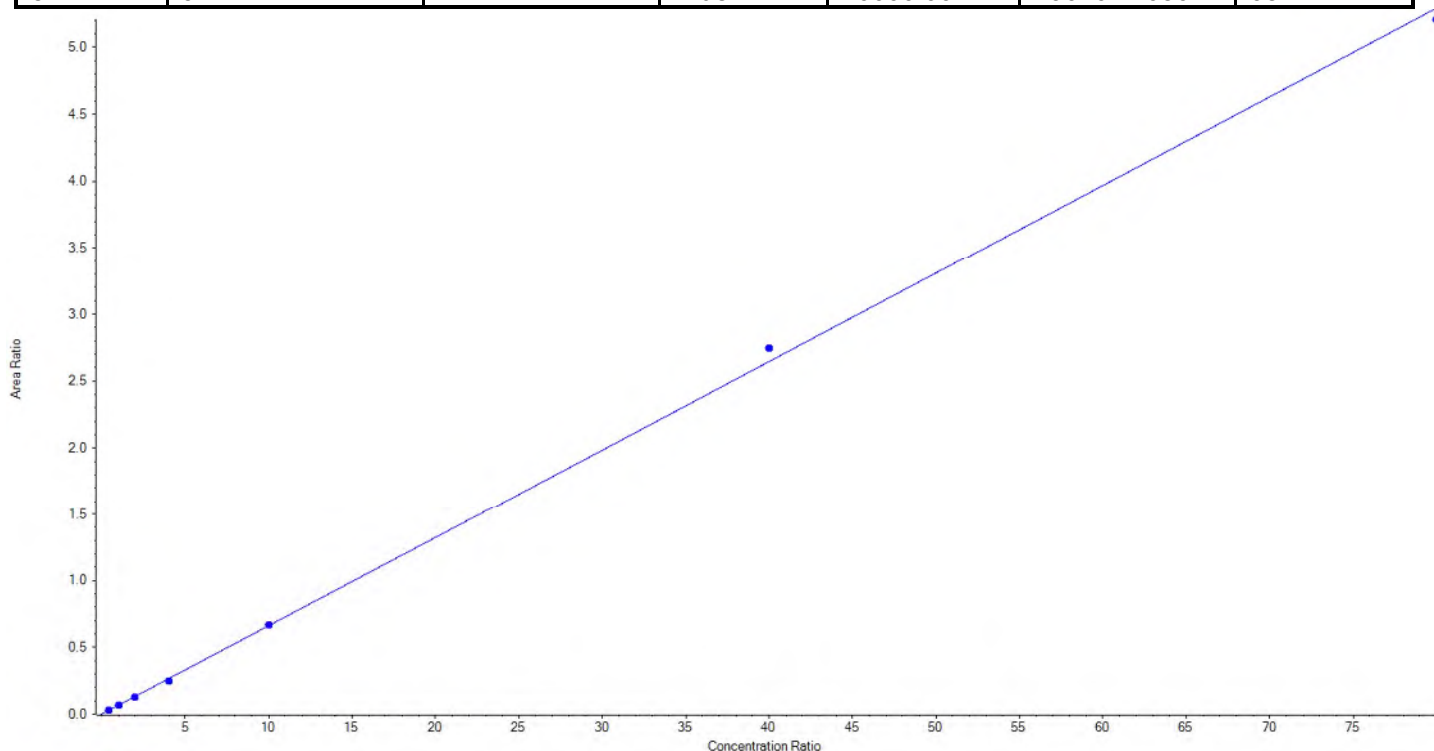
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Analyte Name	PFTTrDA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	663.0 / 169.0	Result Table	18-0500_BASE_A
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.06614 x + 4.21658e-4$ ($r = 0.99959$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	108.287462	108.3
3	JY39	L2	True	250.00	250.336593	100.1
4	JY40	L3	True	500.00	472.911739	94.6
5	JY41	L4	True	1000.00	938.882600	93.9
6	JY42	L5	True	2500.00	2523.167722	100.9
7	JY43	L6	True	10000.00	10379.703023	103.8
8	JY44	L7	True	20000.00	19676.710861	98.4





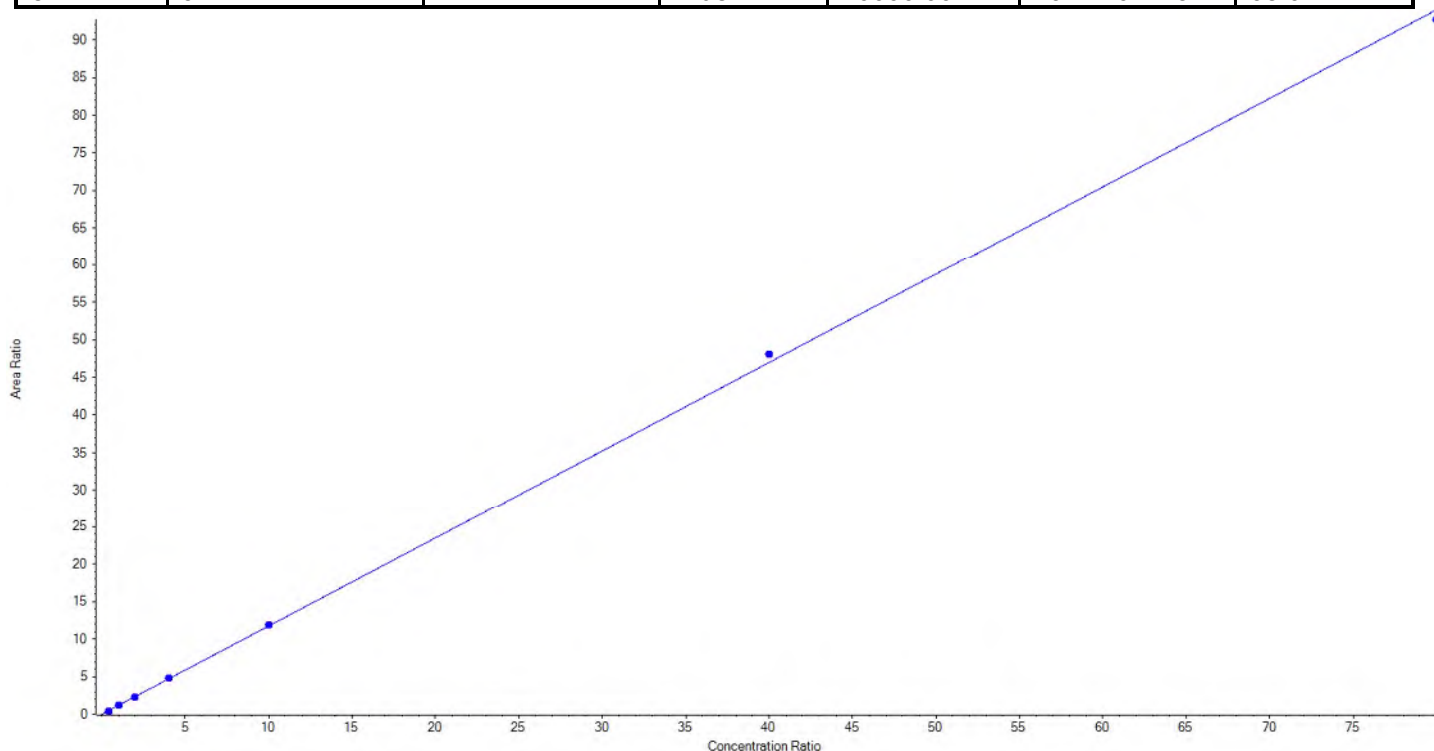
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Analyte Name	PFTeDA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	713.0 / 669.0	Result Table	18-0500_BASE_A
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.17488x + -0.00776$ ($r = 0.99984$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	98.523721	98.5
3	JY39	L2	True	250.00	248.858327	99.5
4	JY40	L3	True	500.00	490.541916	98.1
5	JY41	L4	True	1000.00	1012.450240	101.3
6	JY42	L5	True	2500.00	2540.117327	101.6
7	JY43	L6	True	10000.00	10235.461016	102.4
8	JY44	L7	True	20000.00	19724.047452	98.6





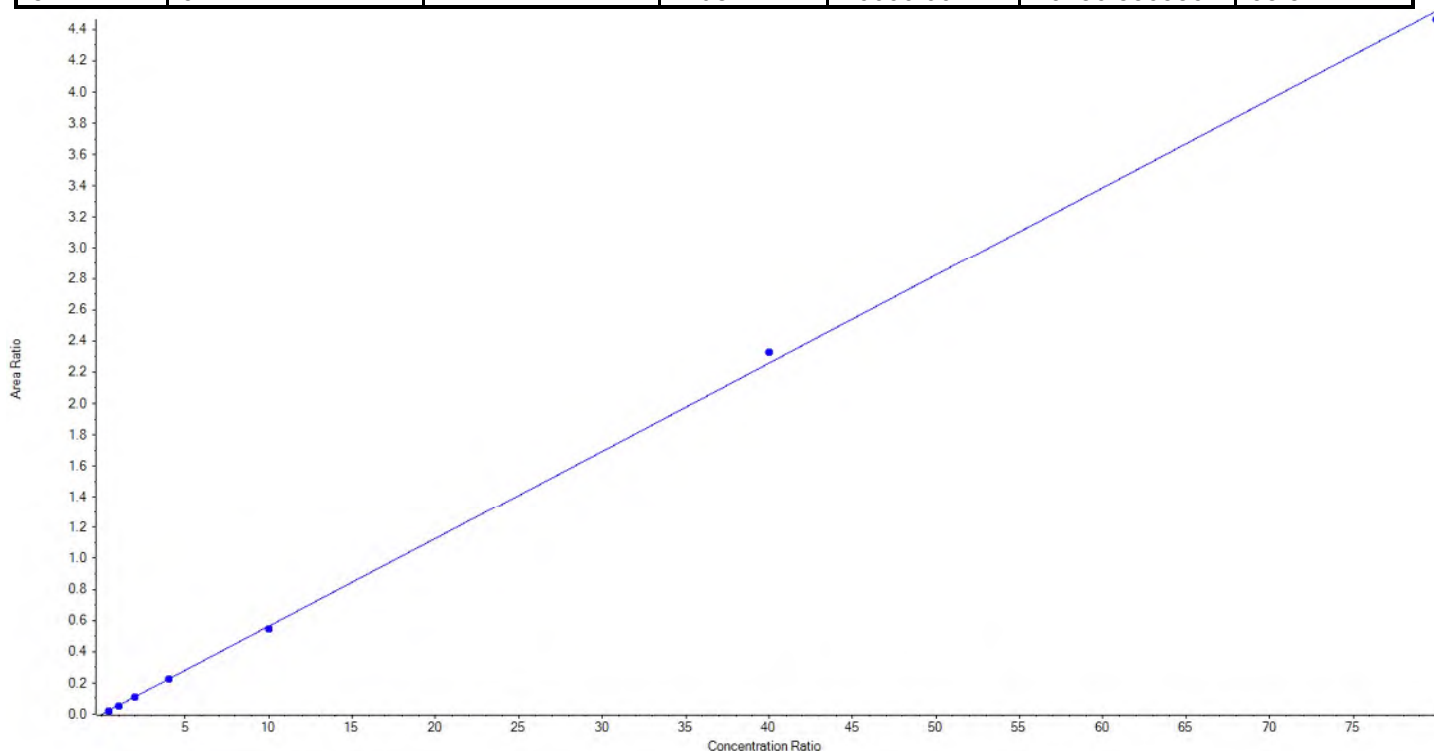
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Analyte Name	PFTeDA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	713.0 / 169.0	Result Table	18-0500_BASE_A
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.05649x + -0.00122$ ($r = 0.99976$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	103.942641	103.9
3	JY39	L2	True	250.00	243.654642	97.5
4	JY40	L3	True	500.00	499.075940	99.8
5	JY41	L4	True	1000.00	993.942996	99.4
6	JY42	L5	True	2500.00	2435.881968	97.4
7	JY43	L6	True	10000.00	10316.645427	103.2
8	JY44	L7	True	20000.00	19756.856386	98.8





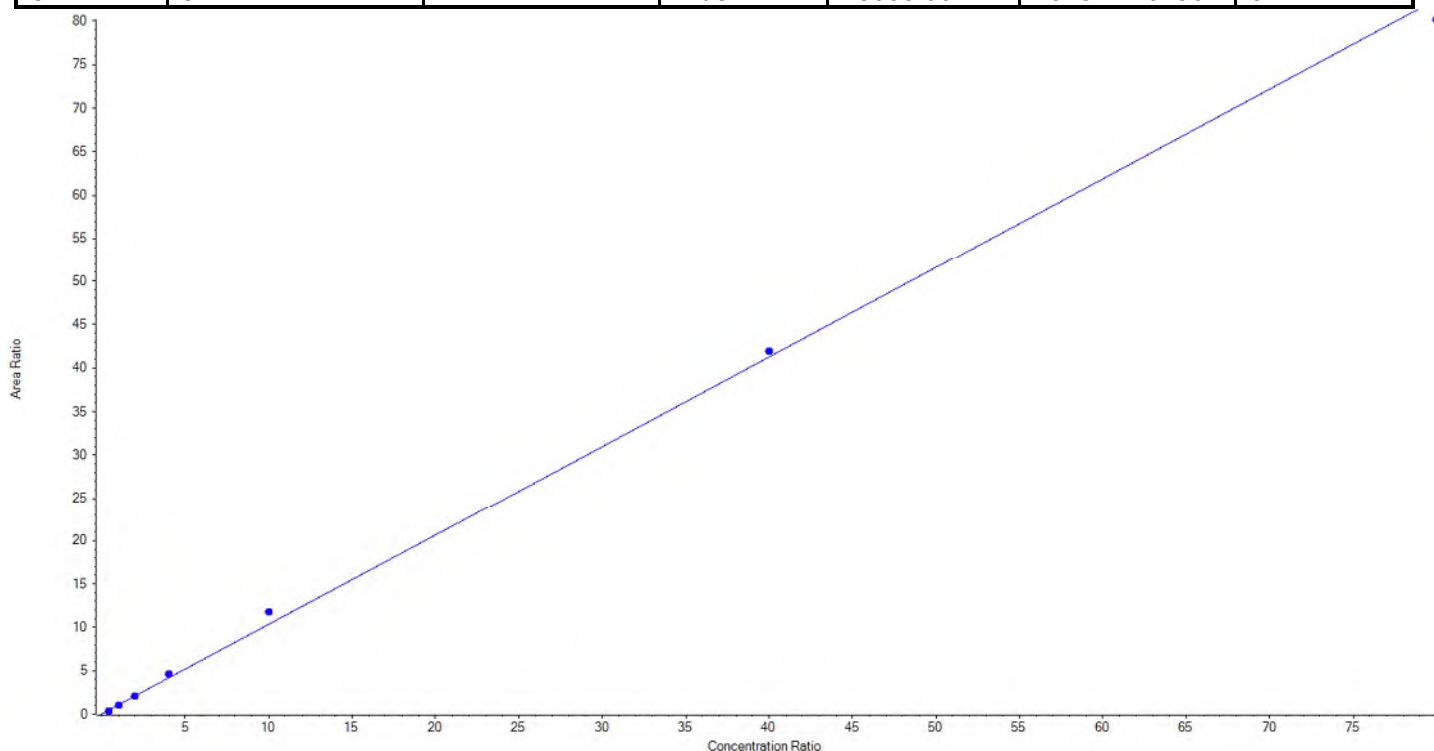
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Analyte Name	NMeFOSAA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	570.0 / 419.0	Result Table	18-0500_BASE_A
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.03070 x + 0.04450$ ($r = 0.99877$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	83.446543	83.5
3	JY39	L2	True	250.00	244.399054	97.8
4	JY40	L3	True	500.00	483.064727	96.6
5	JY41	L4	True	1000.00	1097.700385	109.8
6	JY42	L5	True	2500.00	2838.922966	113.6
7	JY43	L6	True	10000.00	10168.320127	101.7
8	JY44	L7	True	20000.00	19434.146196	97.2





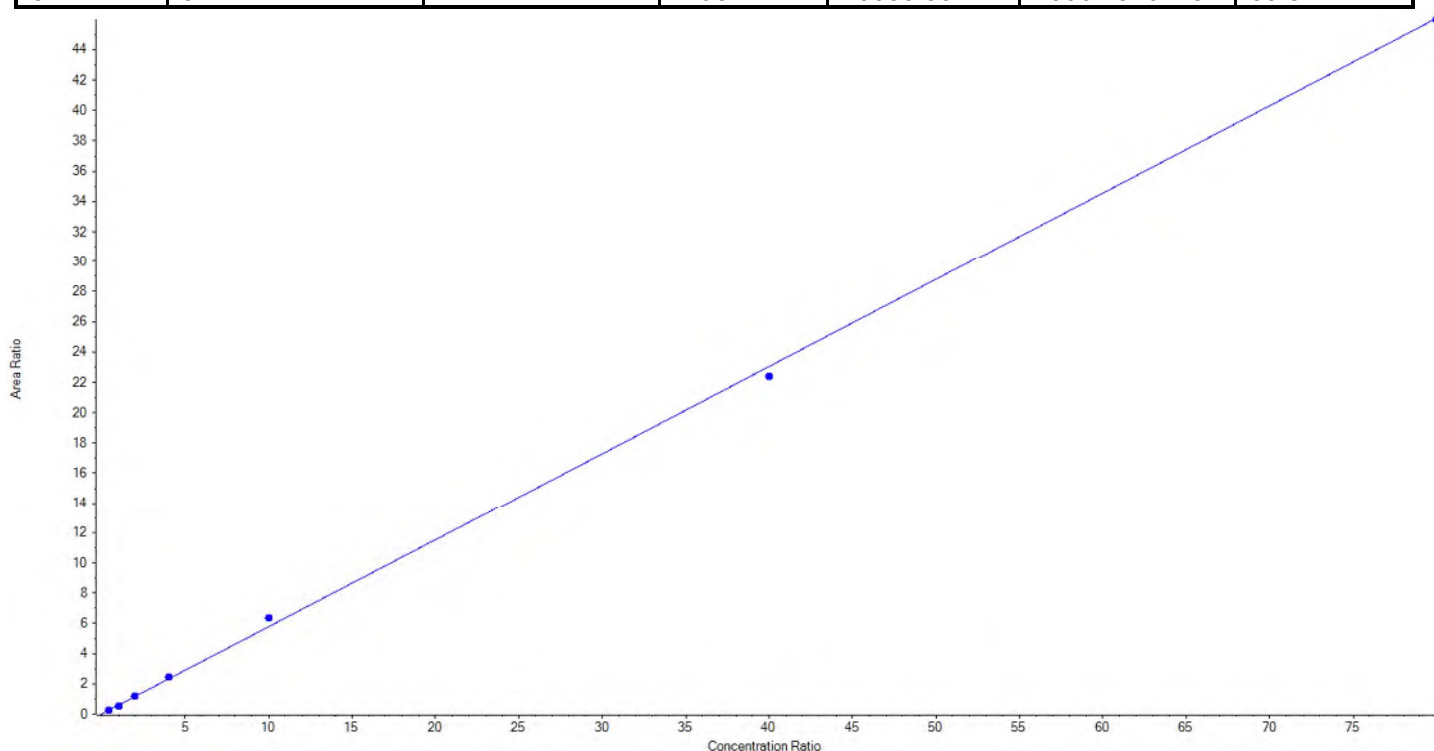
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Analyte Name	NMeFOSAA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	570.0 / 512.0	Result Table	18-0500_BASE_A
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.57549x + 0.02501$ ($r = 0.99932$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	94.256719	94.3
3	JY39	L2	True	250.00	226.726746	90.7
4	JY40	L3	True	500.00	502.520187	100.5
5	JY41	L4	True	1000.00	1068.138462	106.8
6	JY42	L5	True	2500.00	2765.525131	110.6
7	JY43	L6	True	10000.00	9729.906041	97.3
8	JY44	L7	True	20000.00	19962.926715	99.8





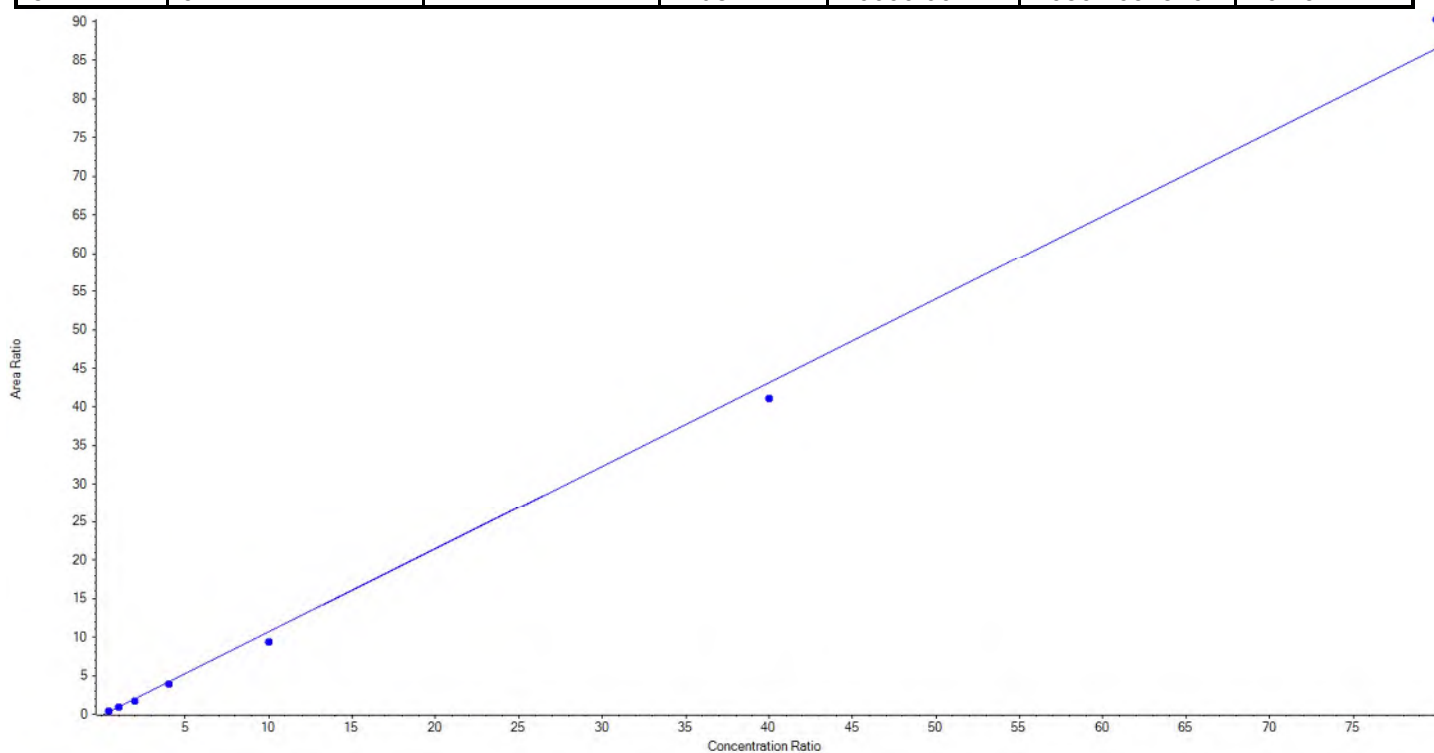
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Analyte Name	NEtFOSAA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	584.0 / 419.0	Result Table	18-0500_BASE_A
Internal Standard	d5-EtFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.08361 x + -0.17934$ ($r = 0.99815$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	127.151255	127.2
3	JY39	L2	True	250.00	265.679934	106.3
4	JY40	L3	True	500.00	423.940233	84.8
5	JY41	L4	True	1000.00	937.778212	93.8
6	JY42	L5	True	2500.00	2212.318765	88.5
7	JY43	L6	True	10000.00	9520.499075	95.2
8	JY44	L7	True	20000.00	20862.632526	104.3





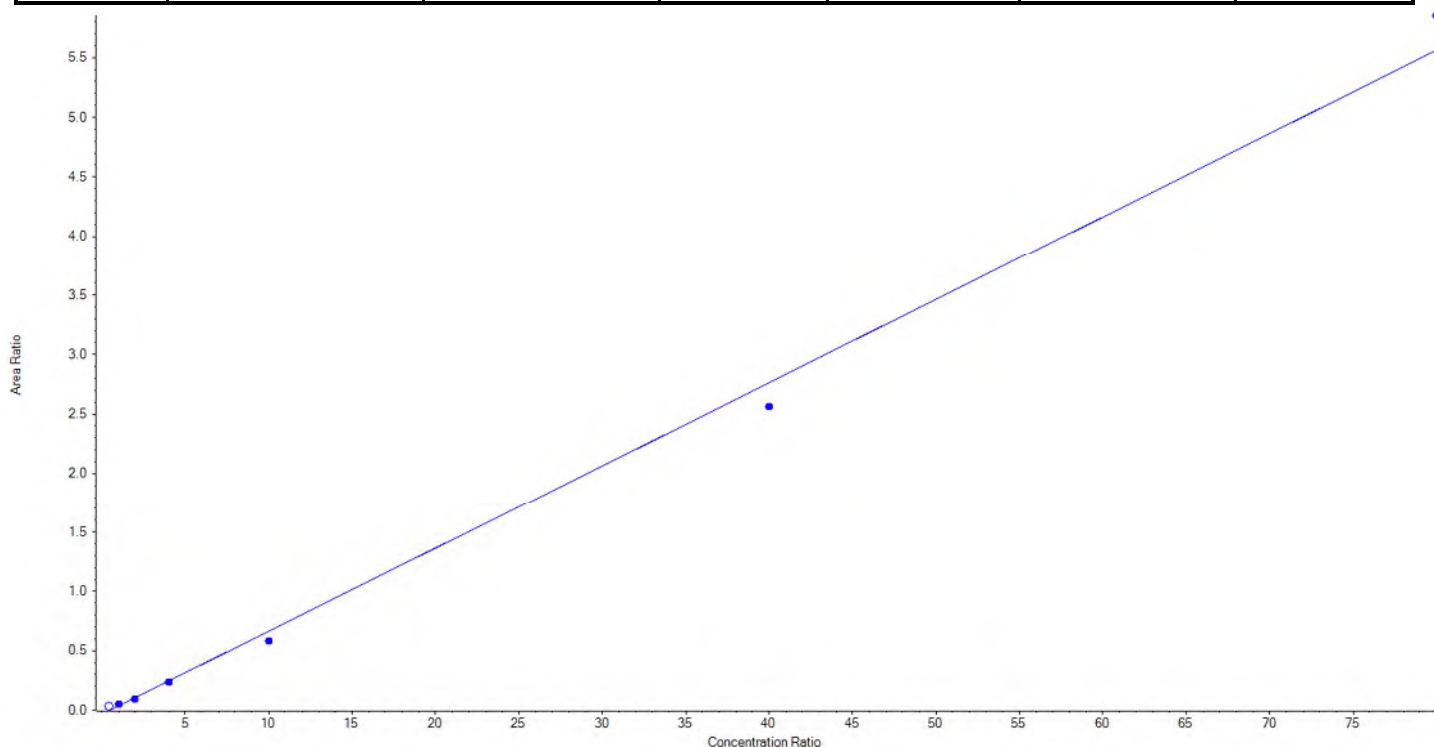
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Analyte Name	NEtFOSAA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	584.0 / 483.0	Result Table	18-0500_BASE_A
Internal Standard	d5-EtFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.06998x + -0.03555$ ($r = 0.99717$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	236.281227	236.3
3	JY39	L2	True	250.00	319.753372	127.9
4	JY40	L3	True	500.00	443.979478	88.8
5	JY41	L4	True	1000.00	974.254801	97.4
6	JY42	L5	True	2500.00	2197.277628	87.9
7	JY43	L6	True	10000.00	9282.499347	92.8
8	JY44	L7	True	20000.00	21032.235373	105.2





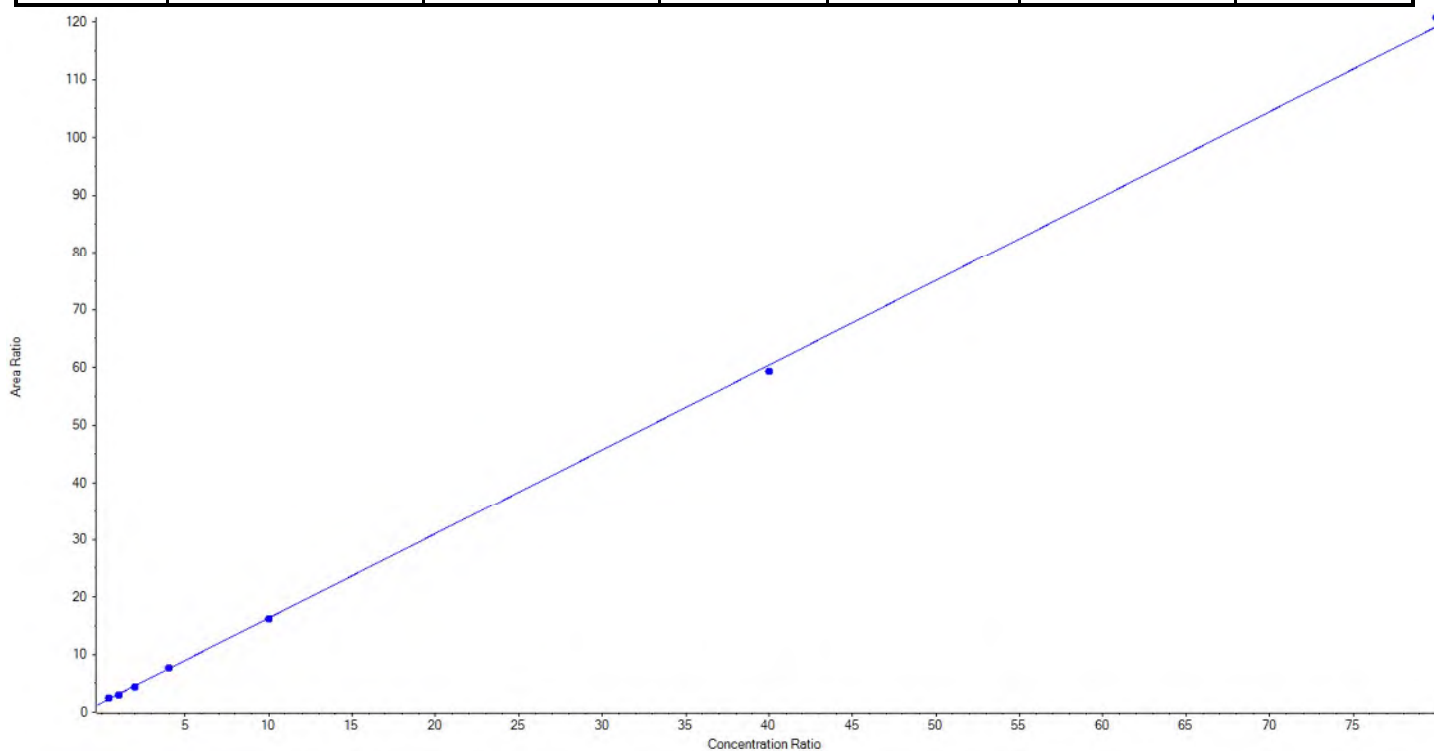
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Analyte Name	PFBA	Data File	18-0501-515-520-500.wiff
MRM Transition	213.0 / 169.0	Result Table	18-0500_BASE_A
Internal Standard	13C4-PFBA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.46946 x + 1.63390$ ($r = 0.99961$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	124.856664	124.9
3	JY39	L2	True	250.00	211.435722	84.6
4	JY40	L3	True	500.00	452.995070	90.6
5	JY41	L4	True	1000.00	1019.166566	101.9
6	JY42	L5	True	2500.00	2465.258691	98.6
7	JY43	L6	True	10000.00	9812.318480	98.1
8	JY44	L7	True	20000.00	20263.968808	101.3





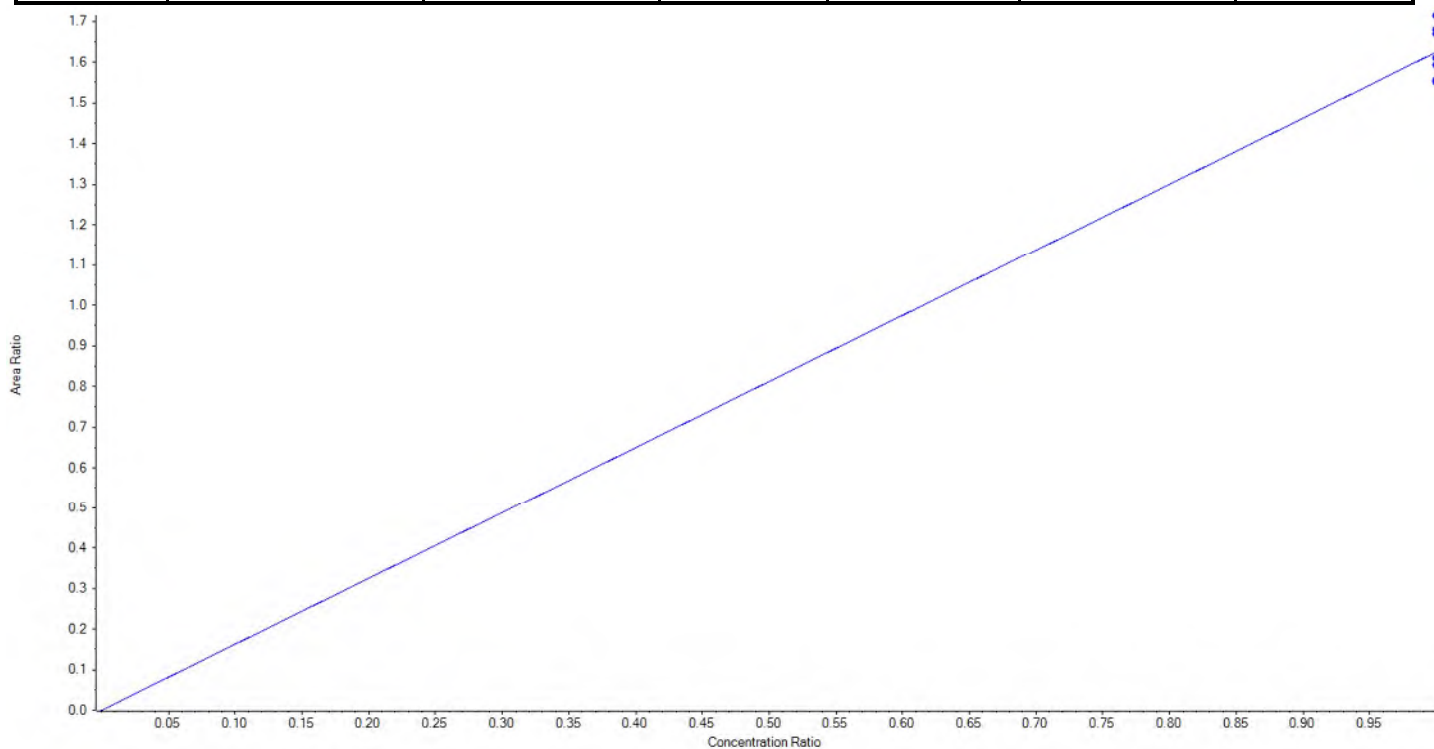
Calibration Summary Report

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Analyte Name	13C4-PFBA	Data File	18-0501-515-520-500.wiff
MRM Transition	217.0 / 172.0	Result Table	18-0500_SIS_A
Internal Standard	13C3-PFBA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.62506 x$ (std. dev. = 0.06335) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	263.706951	105.5
3	JY39	L2	True	250.00	258.296214	103.3
4	JY40	L3	True	250.00	245.137022	98.1
5	JY41	L4	True	250.00	247.884907	99.2
6	JY42	L5	True	250.00	239.575462	95.8
7	JY43	L6	True	250.00	238.595520	95.4
8	JY44	L7	True	250.00	256.803925	102.7





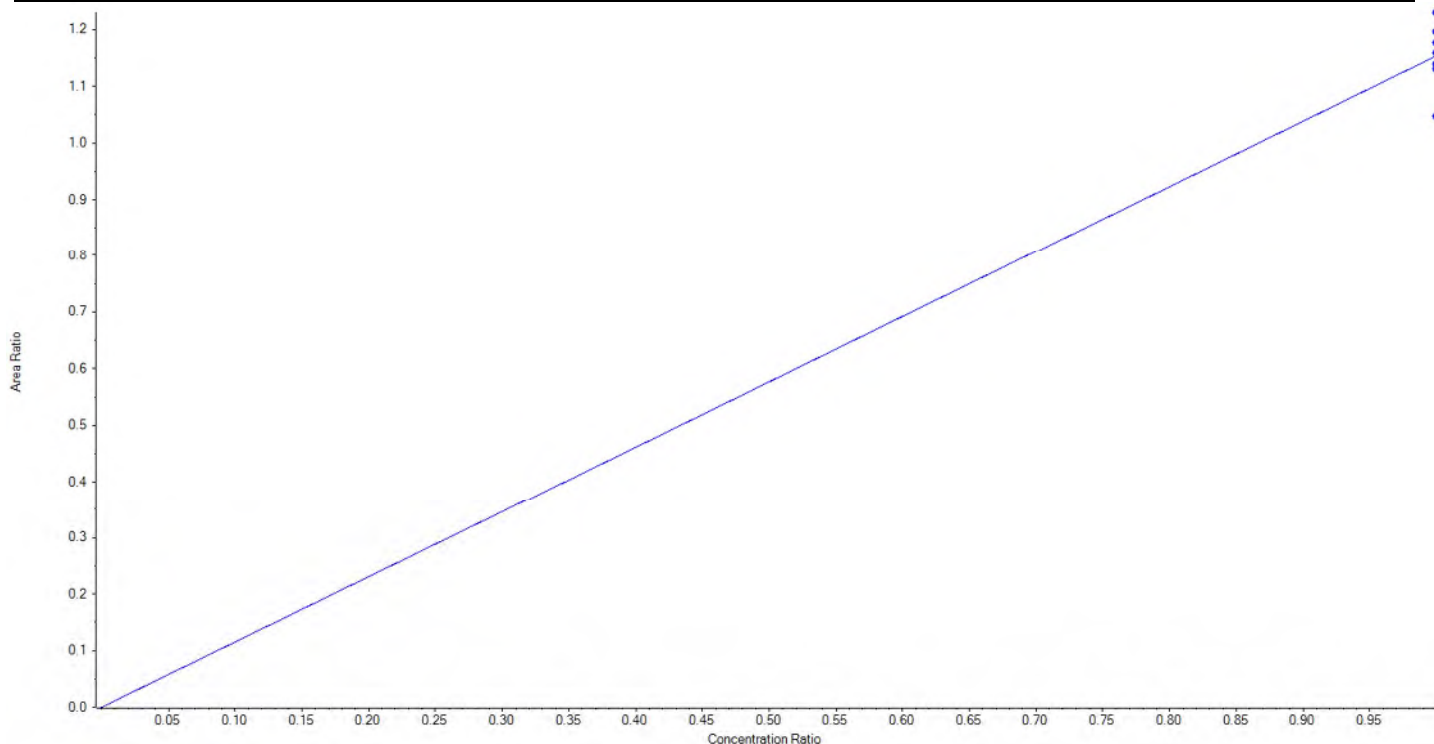
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Analyte Name	13C2-PFDoA	Data File	18-0501-515-520-500.wiff
MRM Transition	615.0 / 570.0	Result Table	18-0500_SIS_A
Internal Standard	13C2-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.15355 x$ (std. dev. = 0.05775) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	259.030708	103.6
3	JY39	L2	True	250.00	244.929132	98.0
4	JY40	L3	True	250.00	251.034787	100.4
5	JY41	L4	True	250.00	246.787054	98.7
6	JY42	L5	True	250.00	254.752203	101.9
7	JY43	L6	True	250.00	227.018868	90.8
8	JY44	L7	True	250.00	266.447249	106.6





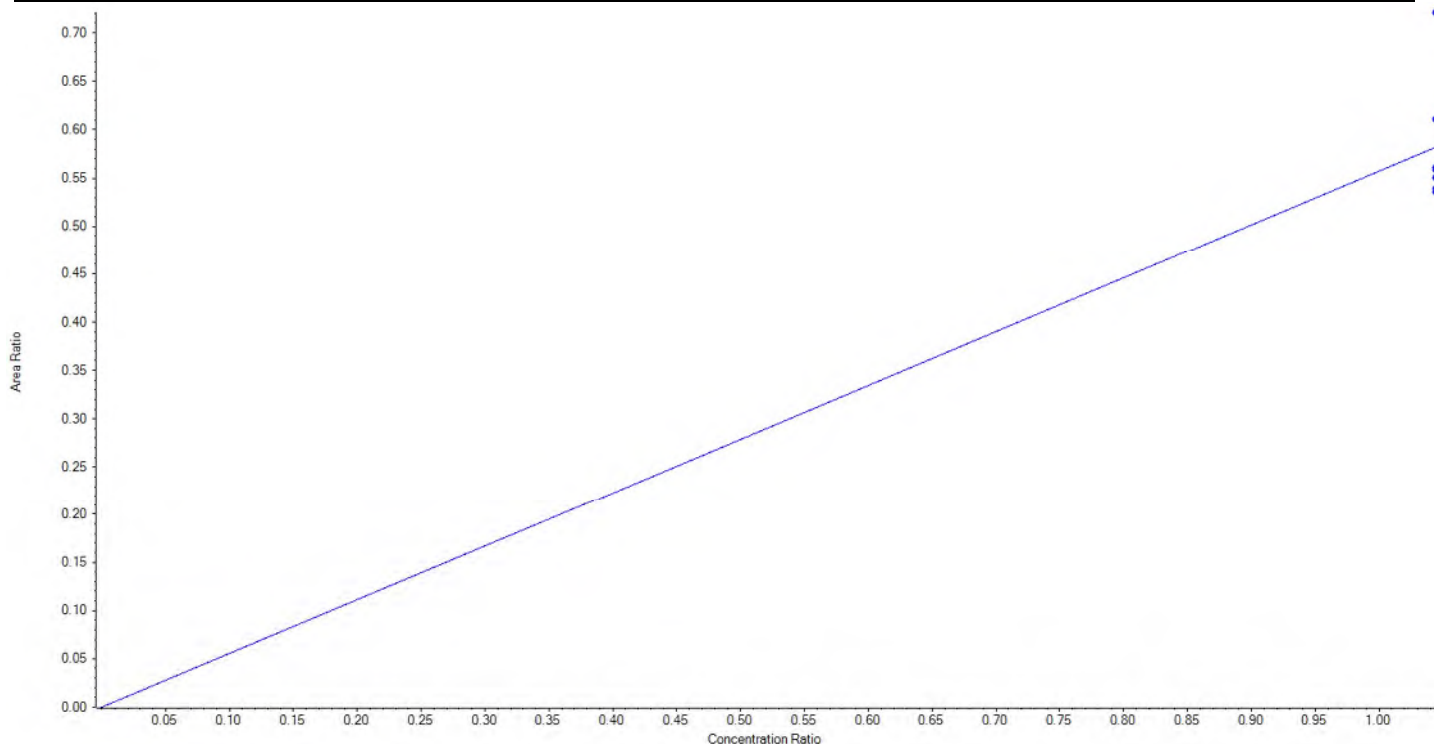
Calibration Summary Report

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Analyte Name	d3-MeFOSAA	Data File	18-0501-515-520-500.wiff
MRM Transition	573.0 / 419.0	Result Table	18-0500_SIS_A
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.55727 x$ (std. dev. = 0.06311) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	240.622830	96.3
3	JY39	L2	True	250.00	231.485404	92.6
4	JY40	L3	True	250.00	229.902068	92.0
5	JY41	L4	True	250.00	236.565126	94.6
6	JY42	L5	True	250.00	239.715946	95.9
7	JY43	L6	True	250.00	262.212753	104.9
8	JY44	L7	True	250.00	309.495872	123.8





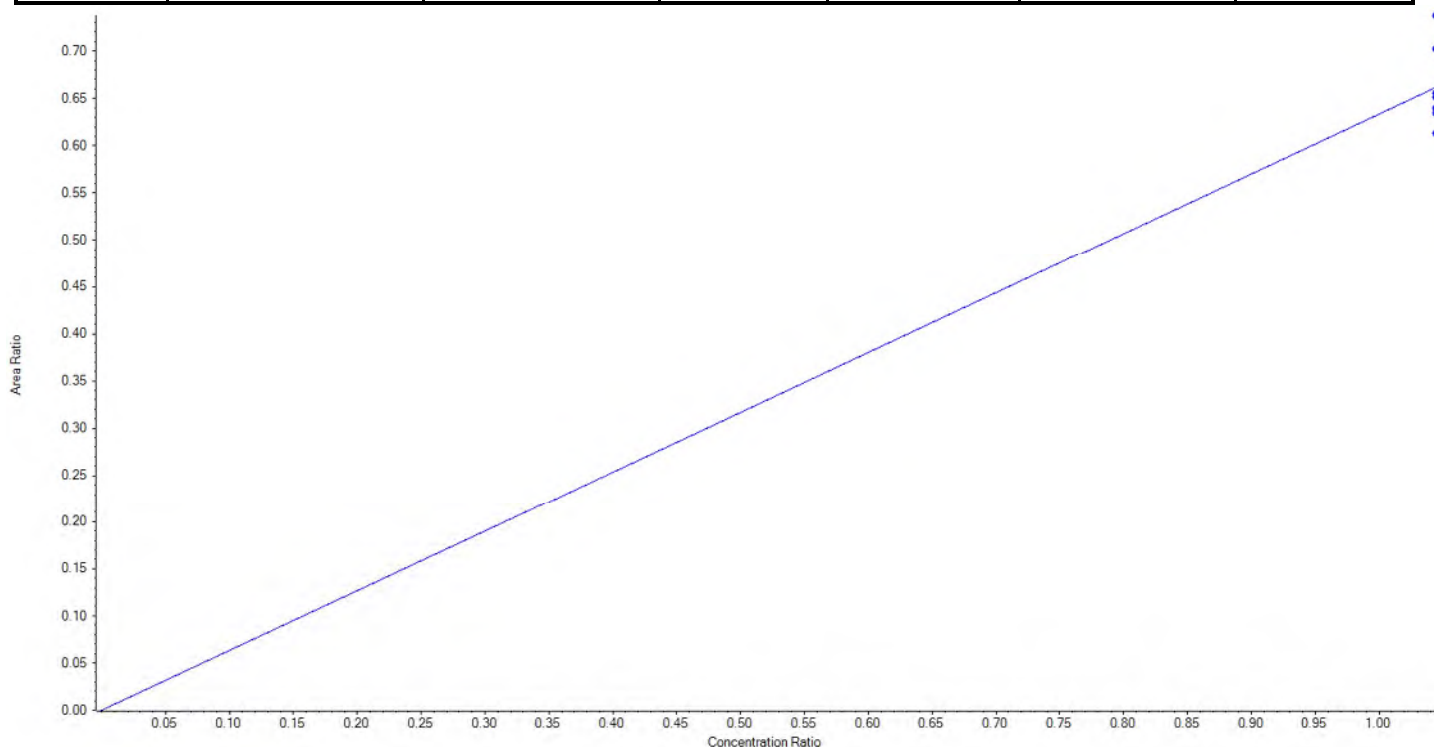
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Analyte Name	d5-EtFOSAA	Data File	18-0501-515-520-500.wiff
MRM Transition	589.0 / 419.0	Result Table	18-0500_SIS_A
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.63350 x$ (std. dev. = 0.04112) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	245.891395	98.4
3	JY39	L2	True	250.00	239.620284	95.9
4	JY40	L3	True	250.00	265.122265	106.1
5	JY41	L4	True	250.00	247.730920	99.1
6	JY42	L5	True	250.00	278.506795	111.4
7	JY43	L6	True	250.00	231.672410	92.7
8	JY44	L7	True	250.00	241.455931	96.6





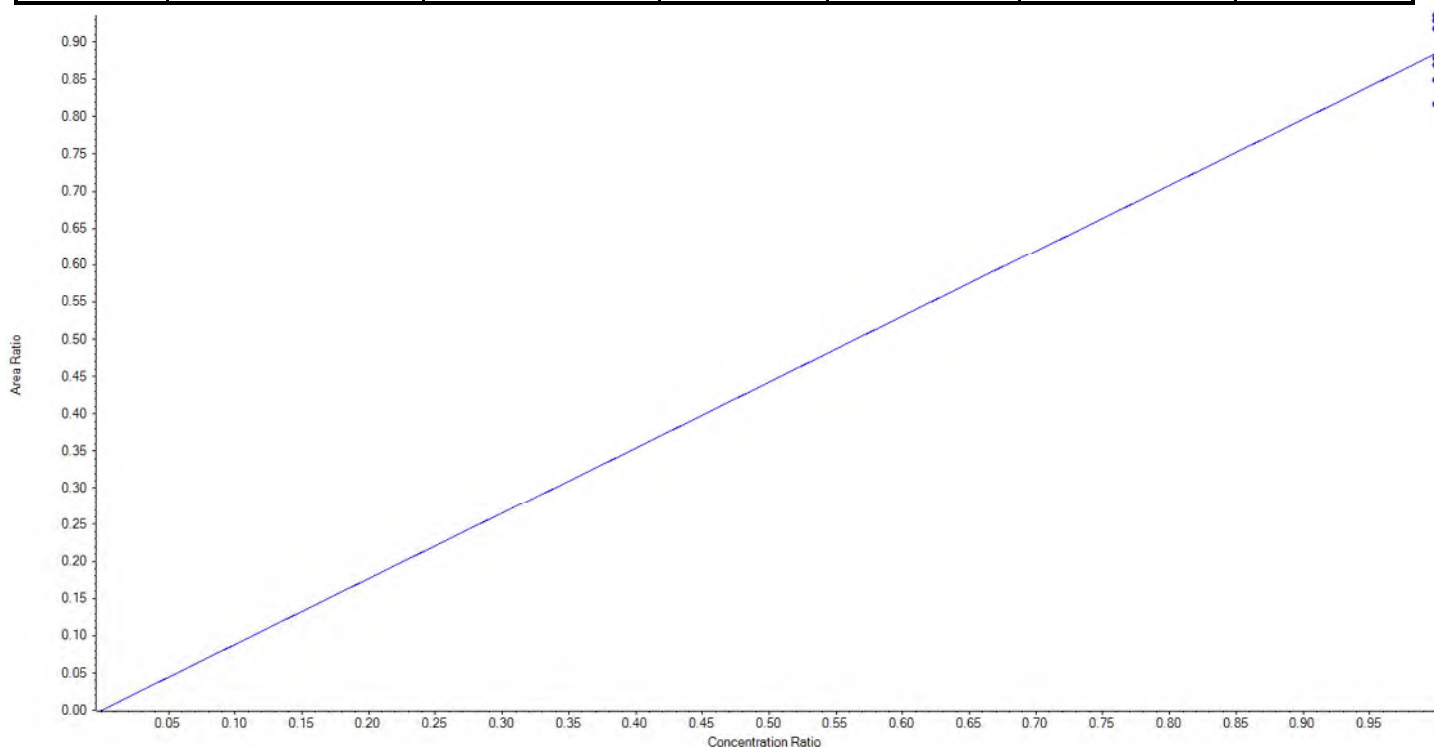
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Analyte Name	13C5-PFHxA	Data File	18-0501-515-520-500.wiff
MRM Transition	318.0 / 273.0	Result Table	18-0500_SIS_A
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.88489 x$ (std. dev. = 0.04408) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	245.578330	98.2
3	JY39	L2	True	250.00	230.912320	92.4
4	JY40	L3	True	250.00	248.137717	99.3
5	JY41	L4	True	250.00	264.228232	105.7
6	JY42	L5	True	250.00	259.099772	103.6
7	JY43	L6	True	250.00	239.714839	95.9
8	JY44	L7	True	250.00	262.328791	104.9





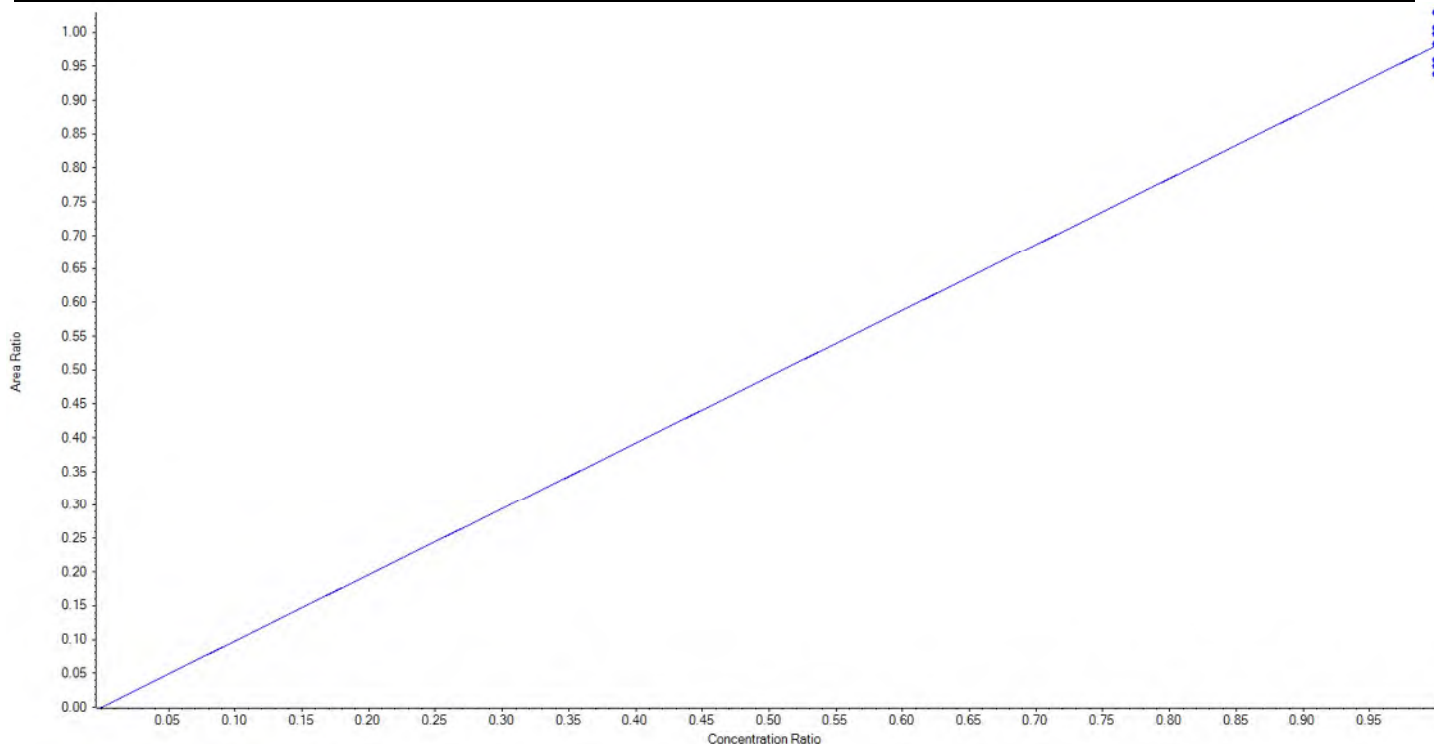
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Analyte Name	13C4-PFHpA	Data File	18-0501-515-520-500.wiff
MRM Transition	367.0 / 322.0	Result Table	18-0500_SIS_A
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.98067 x$ (std. dev. = 0.03293) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	256.566788	102.6
3	JY39	L2	True	250.00	244.532935	97.8
4	JY40	L3	True	250.00	254.422857	101.8
5	JY41	L4	True	250.00	242.205202	96.9
6	JY42	L5	True	250.00	262.318521	104.9
7	JY43	L6	True	250.00	239.178000	95.7
8	JY44	L7	True	250.00	250.775698	100.3





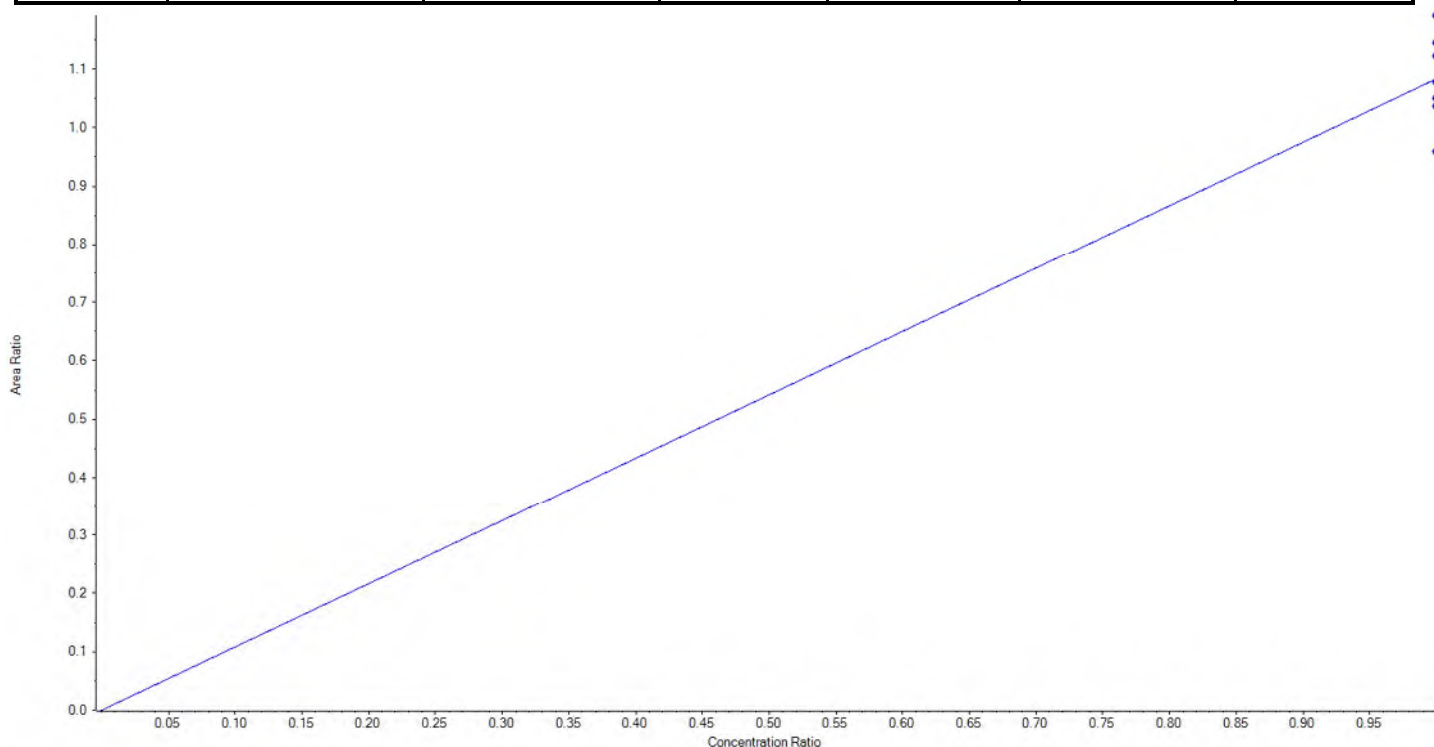
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Analyte Name	13C8-PFOA	Data File	18-0501-515-520-500.wiff
MRM Transition	421.0 / 376.0	Result Table	18-0500_SIS_A
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.08347 x$ (std. dev. = 0.07668) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	274.833039	109.9
3	JY39	L2	True	250.00	248.718208	99.5
4	JY40	L3	True	250.00	258.955725	103.6
5	JY41	L4	True	250.00	242.556696	97.0
6	JY42	L5	True	250.00	264.099346	105.6
7	JY43	L6	True	250.00	239.321013	95.7
8	JY44	L7	True	250.00	221.515973	88.6





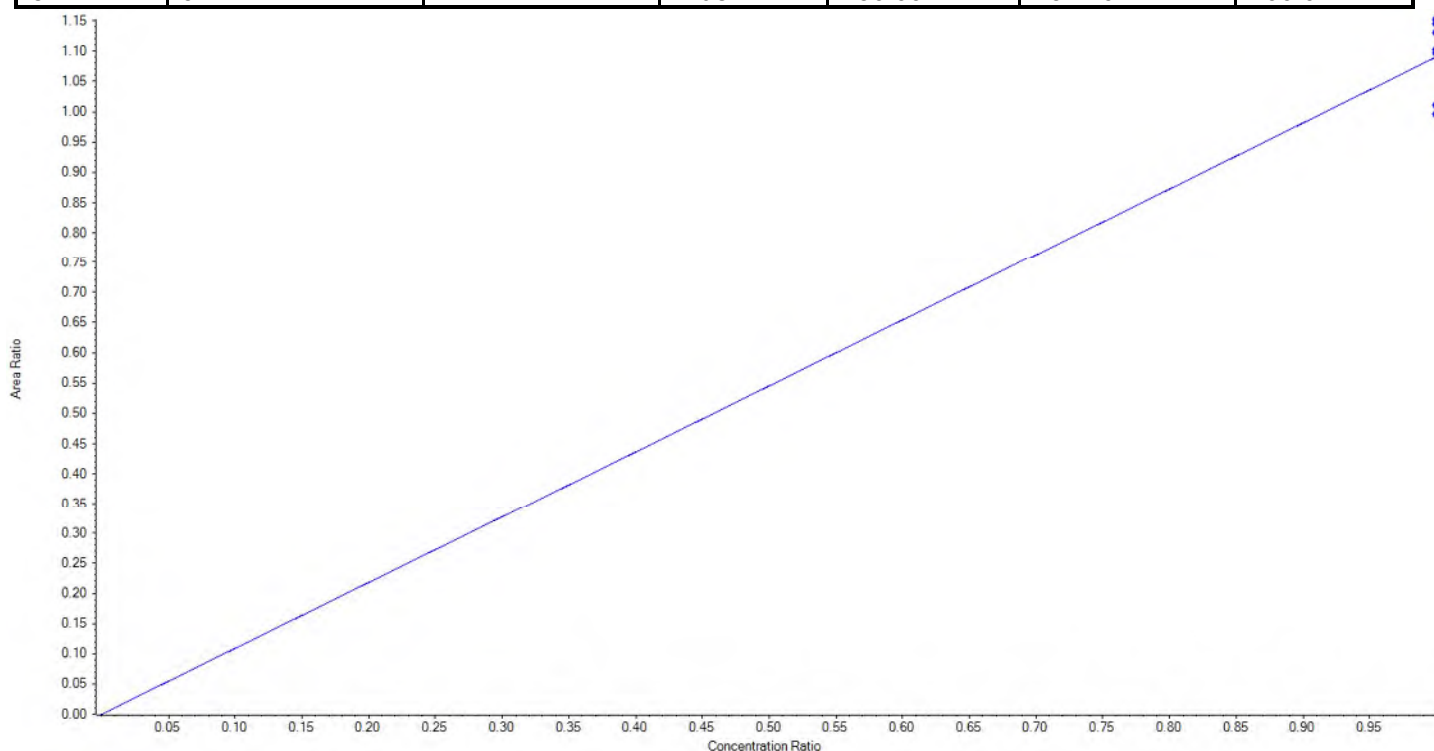
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Analyte Name	13C9-PFNA	Data File	18-0501-515-520-500.wiff
MRM Transition	472.0 / 427.0	Result Table	18-0500_SIS_A
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.09055 x$ (std. dev. = 0.06296) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	264.071238	105.6
3	JY39	L2	True	250.00	228.389124	91.4
4	JY40	L3	True	250.00	252.783354	101.1
5	JY41	L4	True	250.00	259.093464	103.6
6	JY42	L5	True	250.00	262.556550	105.0
7	JY43	L6	True	250.00	231.704047	92.7
8	JY44	L7	True	250.00	251.402222	100.6





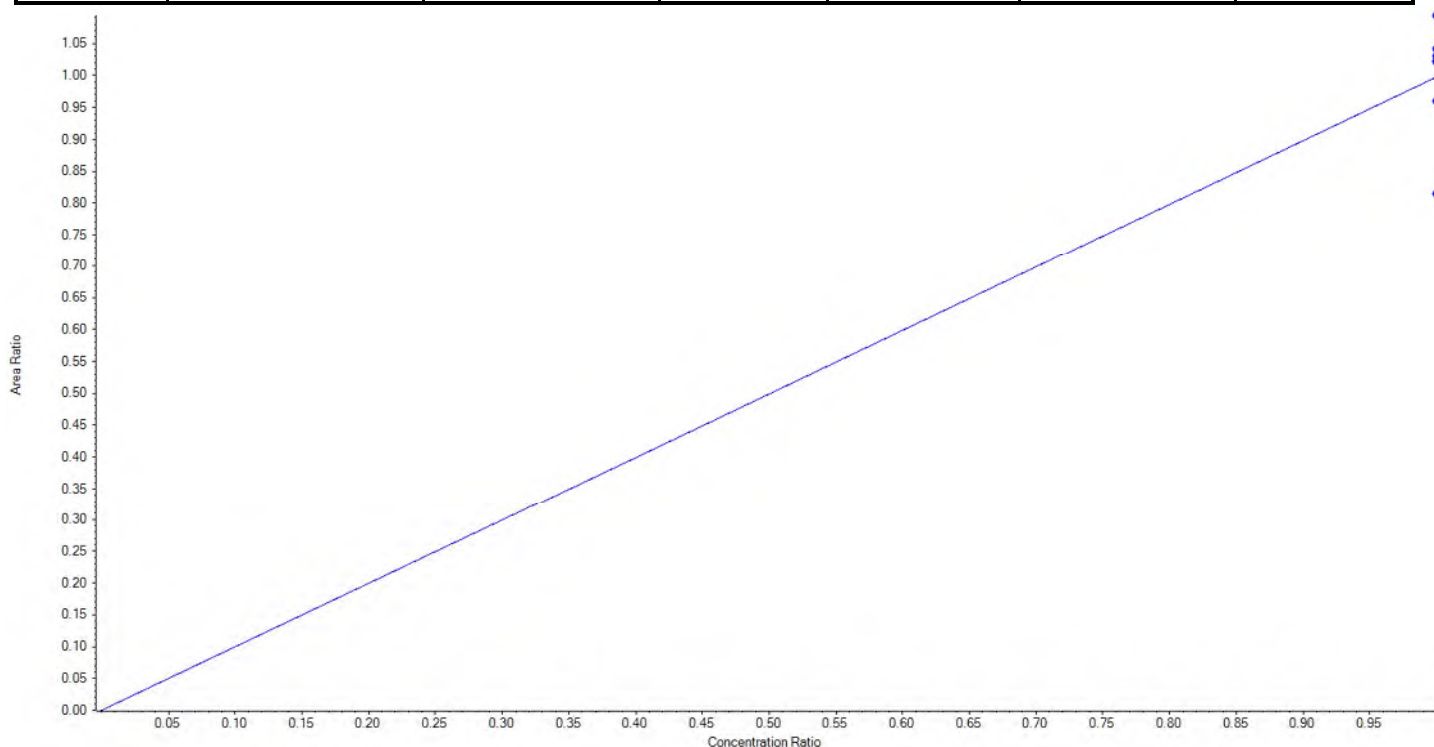
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Analyte Name	13C6-PFDA	Data File	18-0501-515-520-500.wiff
MRM Transition	519.0 / 474.0	Result Table	18-0500_SIS_A
Internal Standard	13C2-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.99750 x$ (std. dev. = 0.08970) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	258.394010	103.4
3	JY39	L2	True	250.00	256.184390	102.5
4	JY40	L3	True	250.00	274.097858	109.6
5	JY41	L4	True	250.00	255.777869	102.3
6	JY42	L5	True	250.00	260.896381	104.4
7	JY43	L6	True	250.00	204.171083	81.7
8	JY44	L7	True	250.00	240.478408	96.2





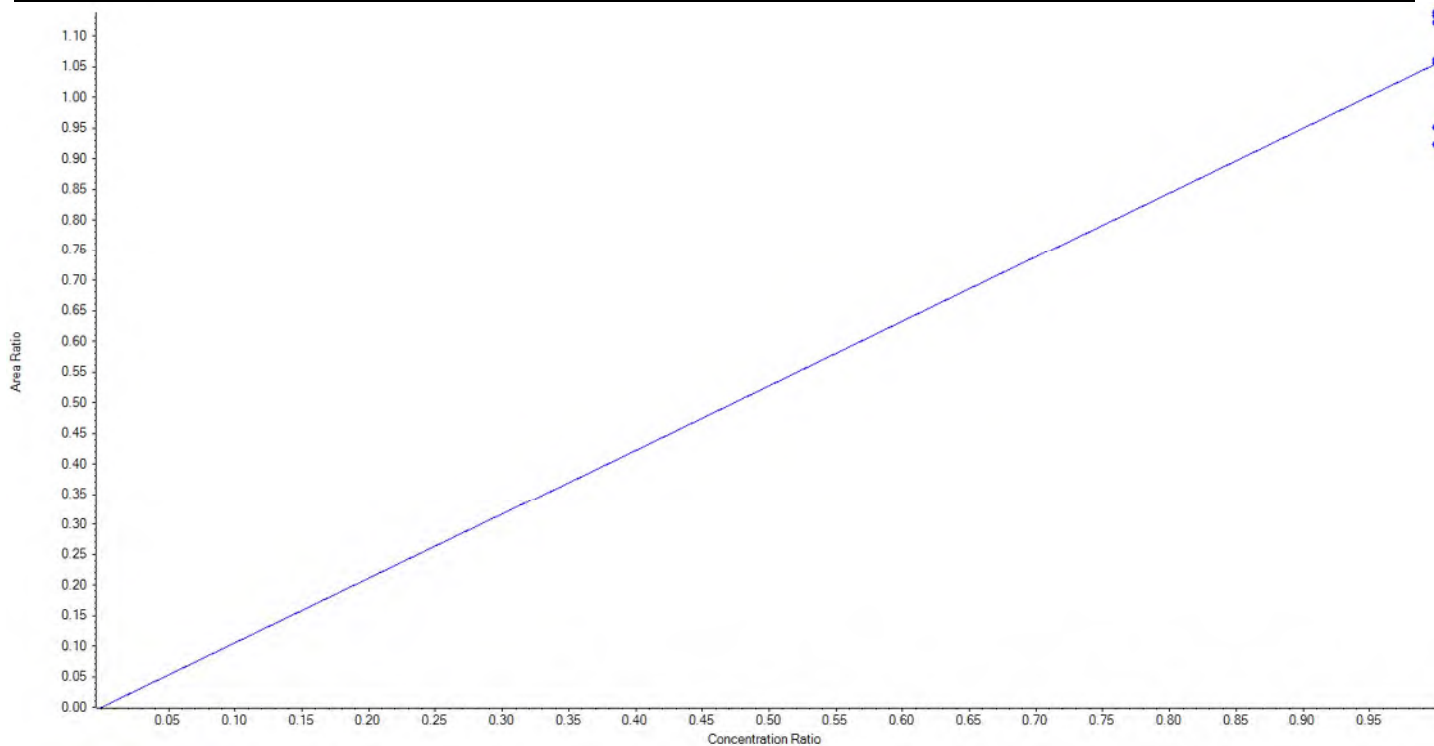
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Analyte Name	13C7-PFUnA	Data File	18-0501-515-520-500.wiff
MRM Transition	570.0 / 525.0	Result Table	18-0500_SIS_A
Internal Standard	13C2-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.05476 x$ (std. dev. = 0.08717) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	268.458038	107.4
3	JY39	L2	True	250.00	250.304696	100.1
4	JY40	L3	True	250.00	269.689373	107.9
5	JY41	L4	True	250.00	265.824961	106.3
6	JY42	L5	True	250.00	251.537659	100.6
7	JY43	L6	True	250.00	218.740566	87.5
8	JY44	L7	True	250.00	225.444707	90.2





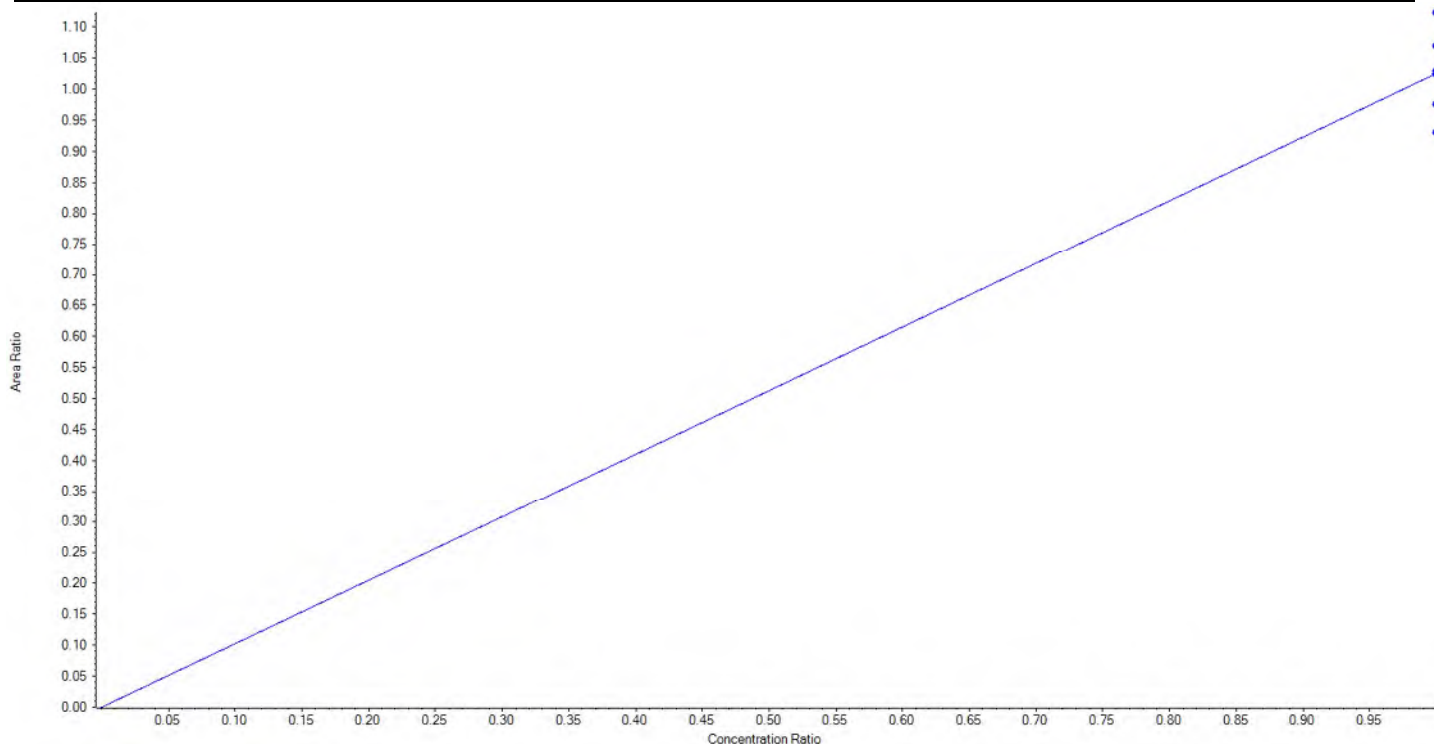
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Analyte Name	13C2-PFTeDA	Data File	18-0501-515-520-500.wiff
MRM Transition	715.0 / 670.0	Result Table	18-0500_SIS_A
Internal Standard	13C2-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.02571 x$ (std. dev. = 0.06177) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	250.00	250.237589	100.1
3	JY39	L2	True	250.00	237.775971	95.1
4	JY40	L3	True	250.00	249.812083	99.9
5	JY41	L4	True	250.00	250.729332	100.3
6	JY42	L5	True	250.00	260.649072	104.3
7	JY43	L6	True	250.00	226.987549	90.8
8	JY44	L7	True	250.00	273.808403	109.5





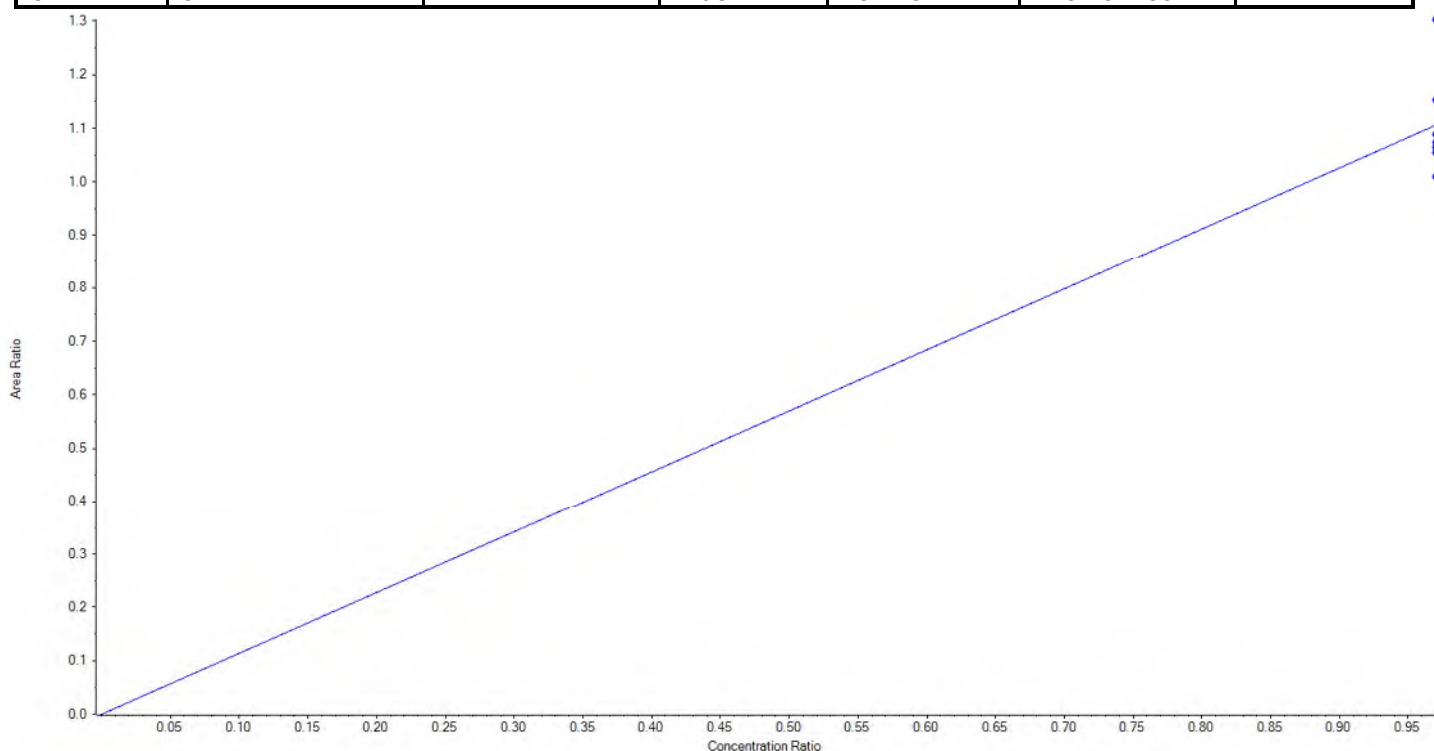
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Analyte Name	13C3-PFBS	Data File	18-0501-515-520-500.wiff
MRM Transition	302.0 / 99.0	Result Table	18-0500_SIS_A
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.13968 x$ (std. dev. = 0.09942) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	232.25	221.351762	95.3
3	JY39	L2	True	232.25	228.397779	98.3
4	JY40	L3	True	232.25	223.373990	96.2
5	JY41	L4	True	232.25	225.300822	97.0
6	JY42	L5	True	232.25	241.948342	104.2
7	JY43	L6	True	232.25	211.944846	91.3
8	JY44	L7	True	232.25	273.432459	117.7





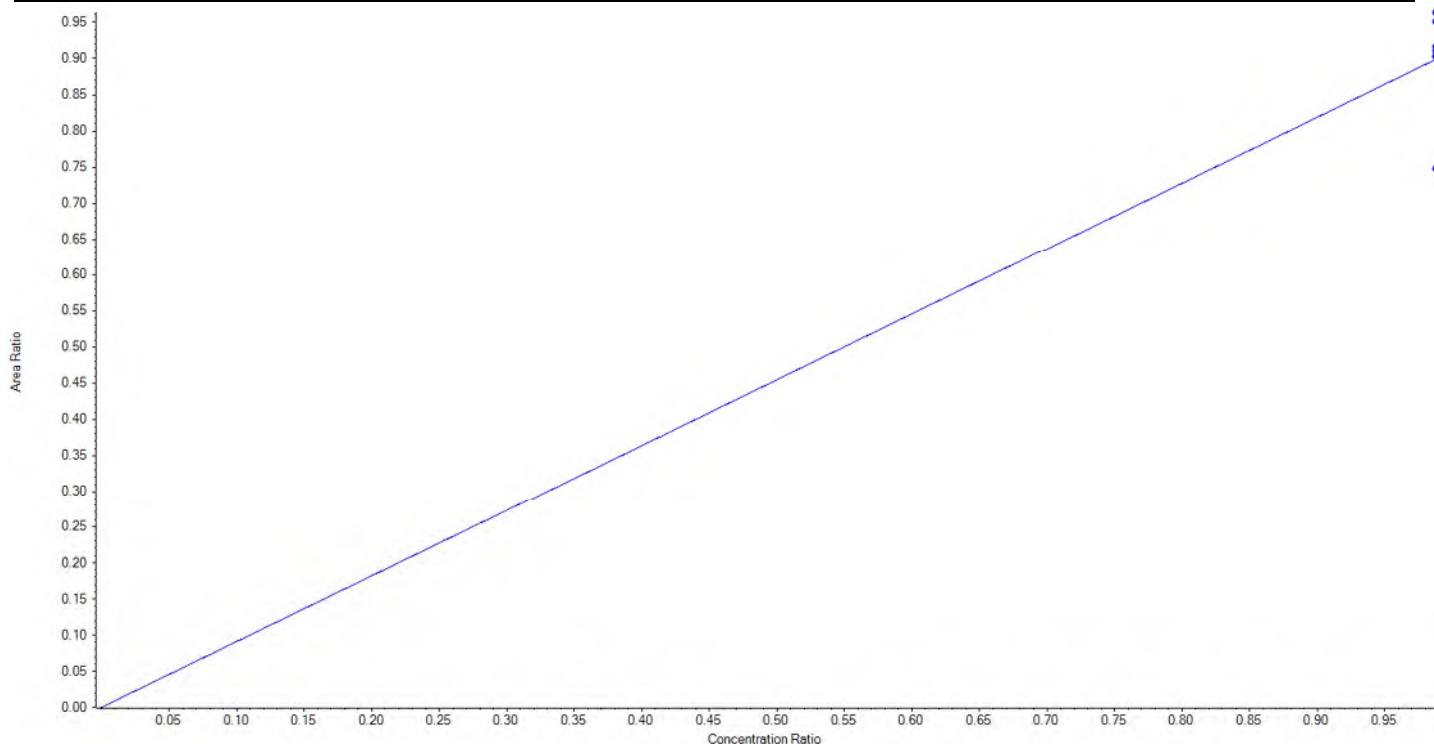
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Analyte Name	13C3-PFHxS	Data File	18-0501-515-520-500.wiff
MRM Transition	402.0 / 99.0	Result Table	18-0500_SIS_A
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.90959 x$ (std. dev. = 0.07143) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	236.50	250.091901	105.8
3	JY39	L2	True	236.50	239.380330	101.2
4	JY40	L3	True	236.50	237.793450	100.6
5	JY41	L4	True	236.50	237.288278	100.3
6	JY42	L5	True	236.50	240.764048	101.8
7	JY43	L6	True	236.50	196.846714	83.2
8	JY44	L7	True	236.50	253.335280	107.1





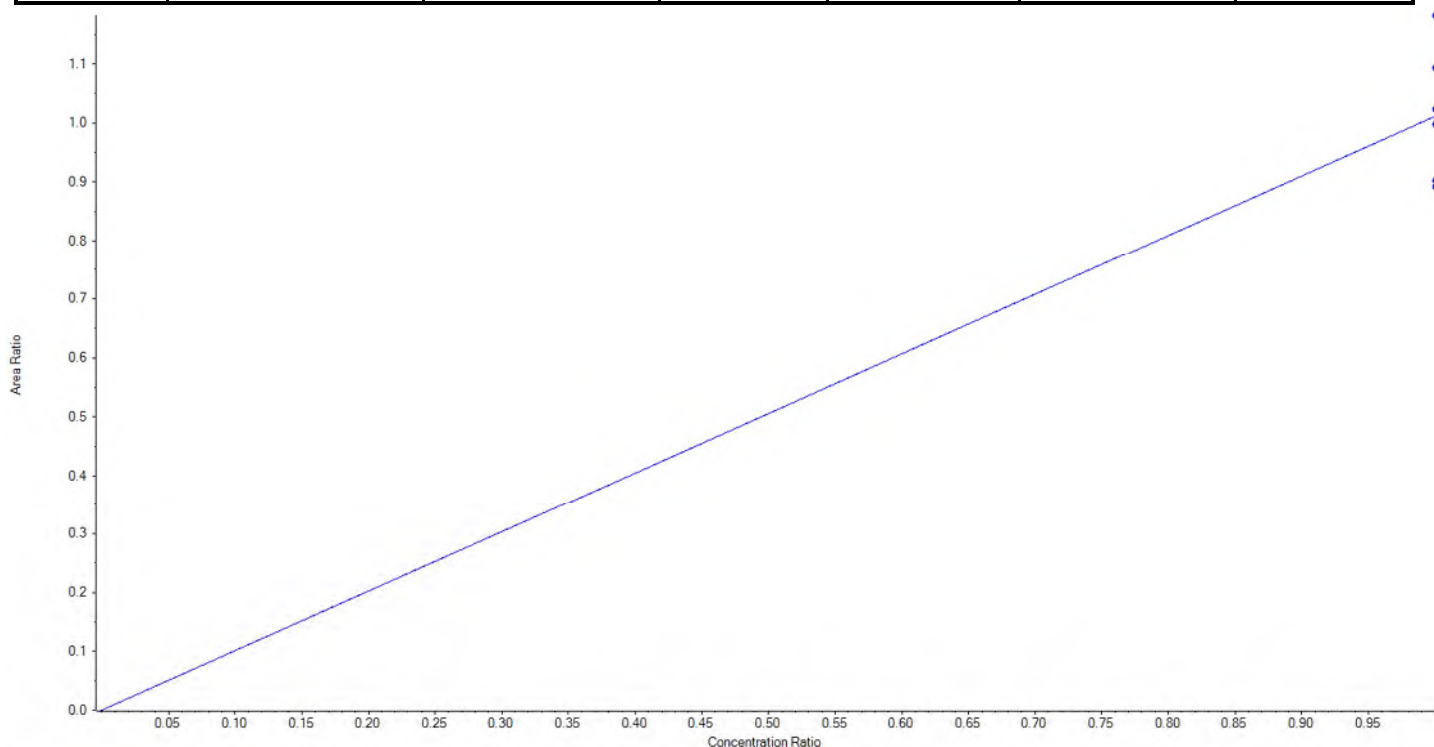
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Analyte Name	13C8-PFOS	Data File	18-0501-515-520-500.wiff
MRM Transition	507.0 / 99.0	Result Table	18-0500_SIS_A
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.01129 x$ (std. dev. = 0.10175) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	239.50	241.972269	101.0
3	JY39	L2	True	239.50	235.916847	98.5
4	JY40	L3	True	239.50	236.141470	98.6
5	JY41	L4	True	239.50	210.976319	88.1
6	JY42	L5	True	239.50	279.522268	116.7
7	JY43	L6	True	239.50	213.470569	89.1
8	JY44	L7	True	239.50	258.500259	107.9





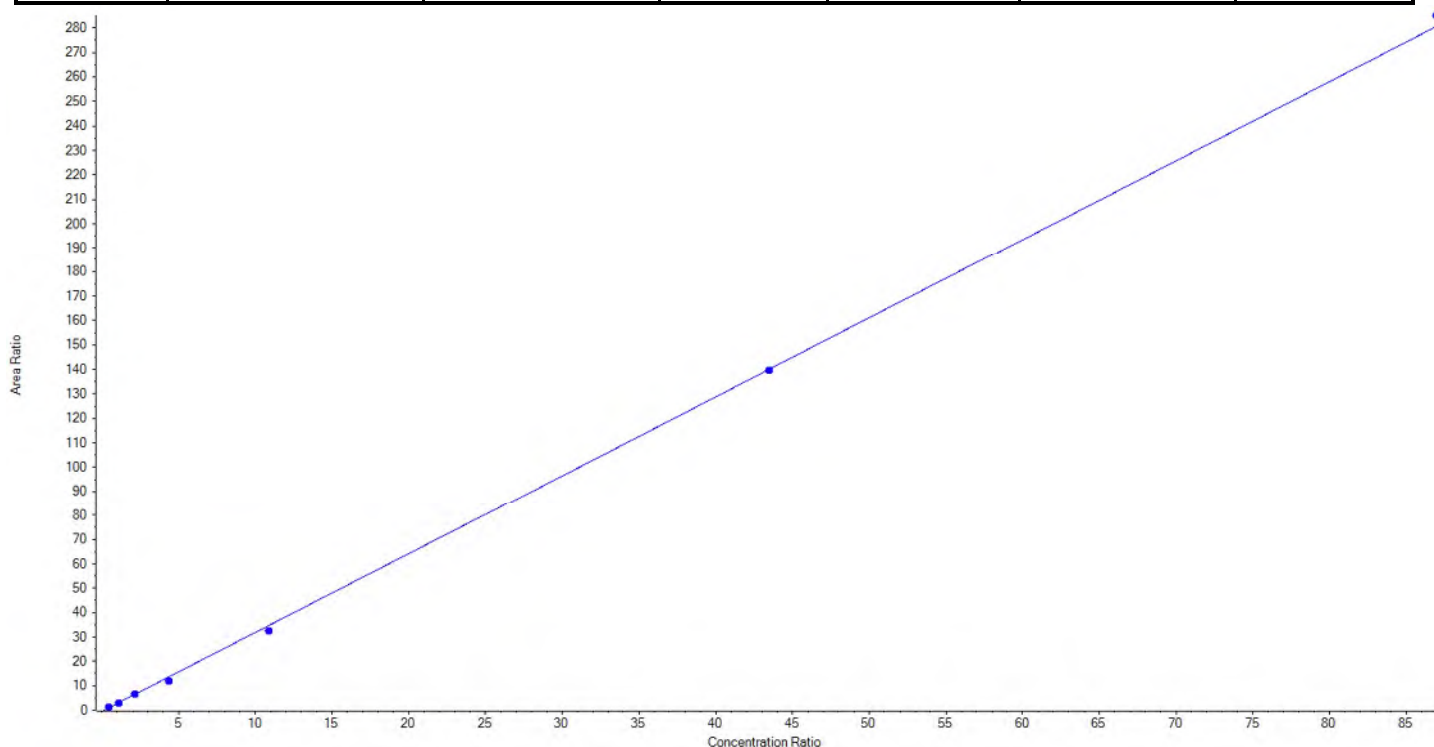
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Analyte Name	PFBS_1	Data File	18-0511_18-0517.wiff
MRM Transition	298.9 / 80.0	Result Table	18-0500_BASE_R
Internal Standard	13C3-PFBS	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 3.23171 x + -0.49806$ ($r = 0.99947$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	101.00	119.143551	118.0
17	JY39	L2	True	252.50	254.701746	100.9
18	JY40	L3	True	505.00	497.430653	98.5
19	JY41	L4	True	1010.00	890.457094	88.2
20	JY42	L5	True	2525.00	2357.071583	93.4
21	JY43	L6	True	10100.00	10057.514027	99.6
22	JY44	L7	True	20200.00	20517.181346	101.6





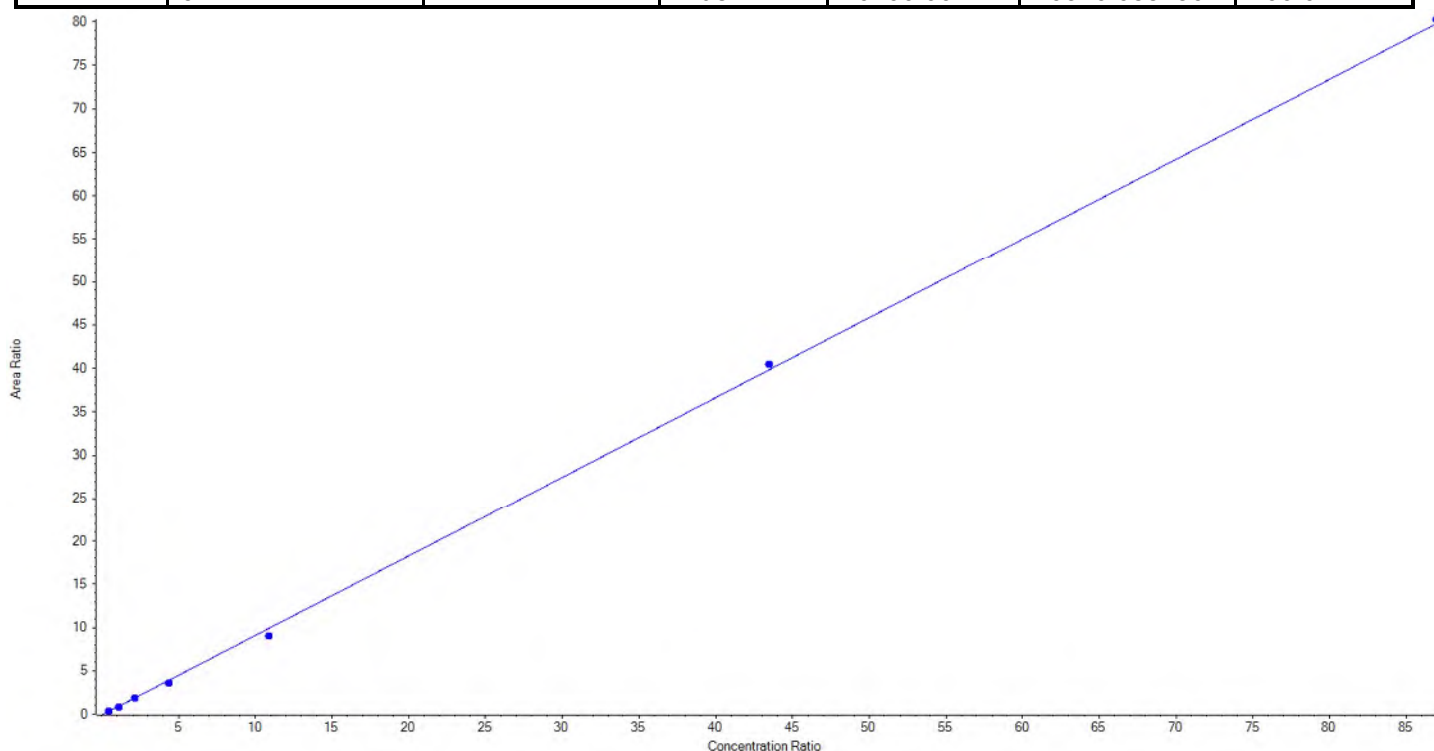
Calibration Summary Report

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Analyte Name	PFBS_2	Data File	18-0511_18-0517.wiff
MRM Transition	298.9 / 99.0	Result Table	18-0500_BASE_R
Internal Standard	13C3-PFBS	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.91866x + -0.11165$ ($r = 0.99952$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	101.00	117.630528	116.5
17	JY39	L2	True	252.50	244.365287	96.8
18	JY40	L3	True	505.00	510.228071	101.0
19	JY41	L4	True	1010.00	928.235183	91.9
20	JY42	L5	True	2525.00	2313.575234	91.6
21	JY43	L6	True	10100.00	10262.777442	101.6
22	JY44	L7	True	20200.00	20316.688256	100.6





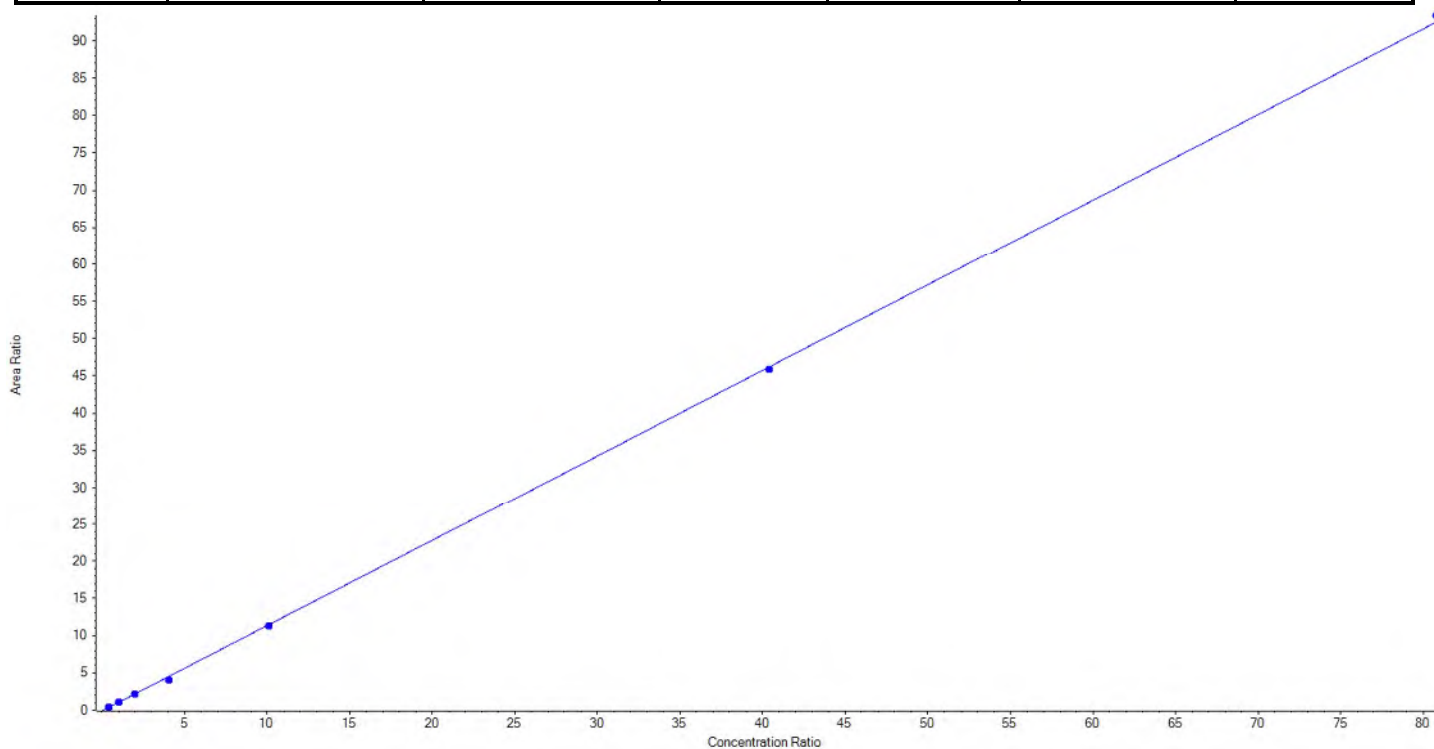
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Analyte Name	PFHxA_1	Data File	18-0511_18-0517.wiff
MRM Transition	313.0 / 269.0	Result Table	18-0500_BASE_R
Internal Standard	13C5-PFHxA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.14644 x + -0.12526$ ($r = 0.99979$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	101.00	114.255254	113.1
17	JY39	L2	True	252.50	248.825405	98.5
18	JY40	L3	True	505.00	498.762780	98.8
19	JY41	L4	True	1010.00	916.052278	90.7
20	JY42	L5	True	2525.00	2487.580680	98.5
21	JY43	L6	True	10100.00	10042.691010	99.4
22	JY44	L7	True	20200.00	20385.332592	100.9





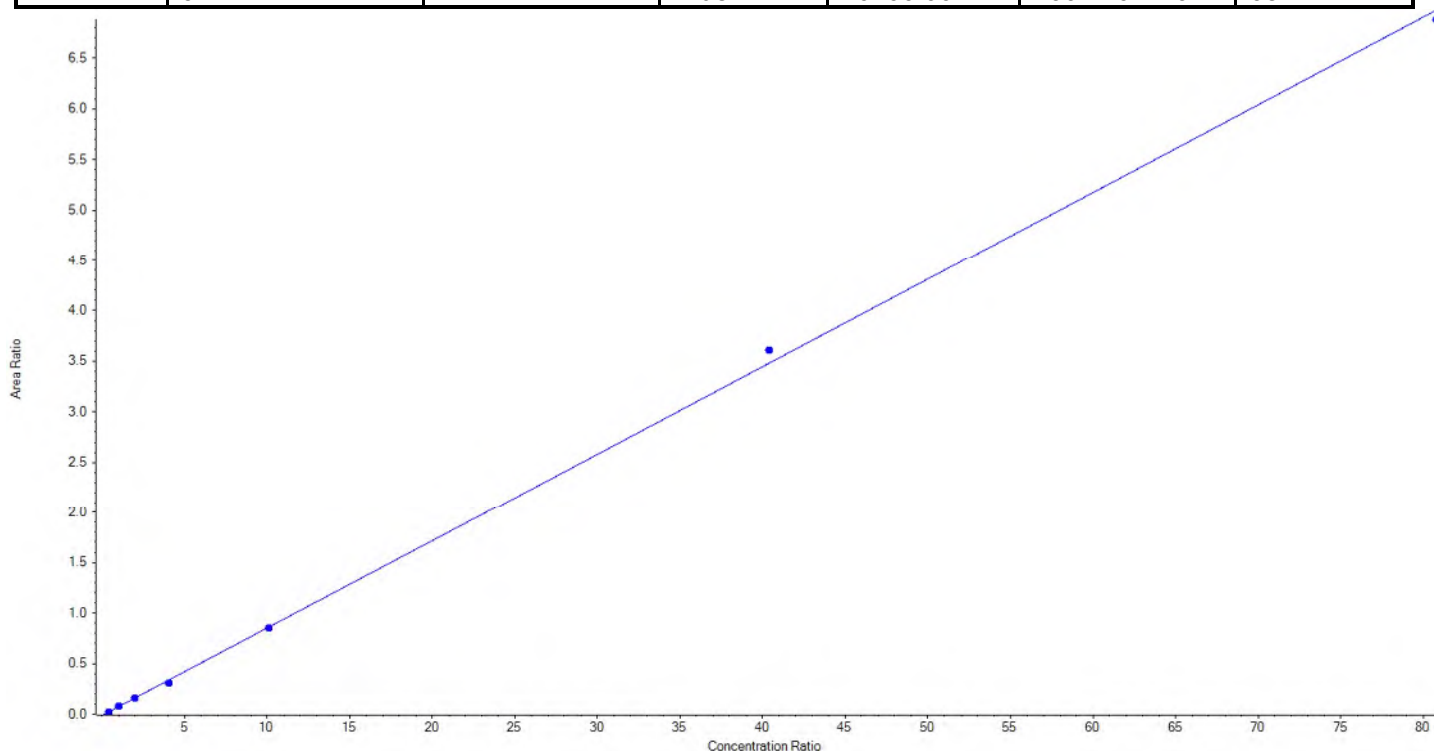
Calibration Summary Report

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Analyte Name	PFHxA_2	Data File	18-0511_18-0517.wiff
MRM Transition	313.0 / 119.0	Result Table	18-0500_BASE_R
Internal Standard	13C5-PFHxA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.08646 x + -0.01325$ ($r = 0.99955$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	101.00	100.073175	99.1
17	JY39	L2	True	252.50	280.317758	111.0
18	JY40	L3	True	505.00	491.197324	97.3
19	JY41	L4	True	1010.00	917.039732	90.8
20	JY42	L5	True	2525.00	2514.854222	99.6
21	JY43	L6	True	10100.00	10462.405295	103.6
22	JY44	L7	True	20200.00	19927.612494	98.7





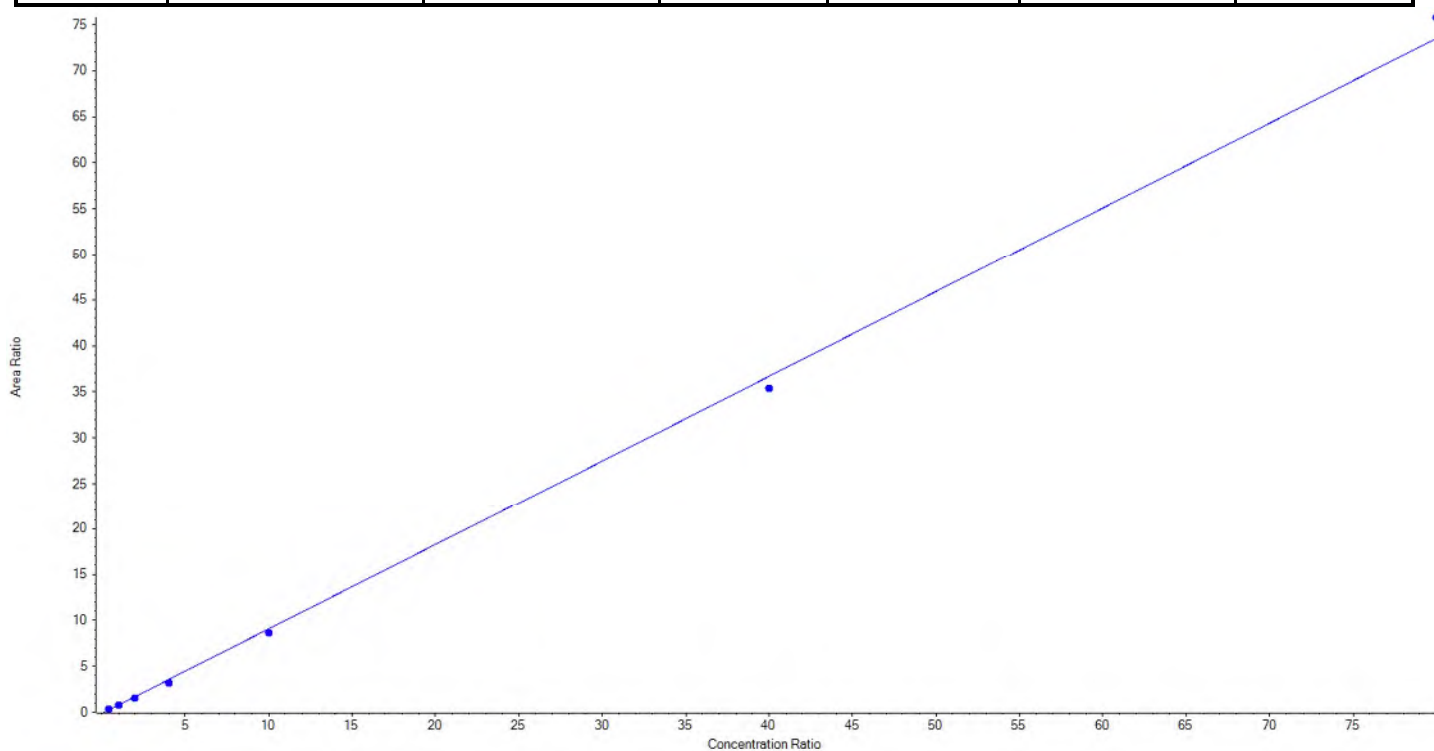
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Analyte Name	PFHpA_1	Data File	18-0511_18-0517.wiff
MRM Transition	363.0 / 319.0	Result Table	18-0500_BASE_R
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.92088x + -0.14757$ ($r = 0.99907$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	124.537268	124.5
17	JY39	L2	True	250.00	251.461407	100.6
18	JY40	L3	True	500.00	453.046919	90.6
19	JY41	L4	True	1000.00	897.053998	89.7
20	JY42	L5	True	2500.00	2378.797571	95.2
21	JY43	L6	True	10000.00	9637.193632	96.4
22	JY44	L7	True	20000.00	20607.909205	103.0





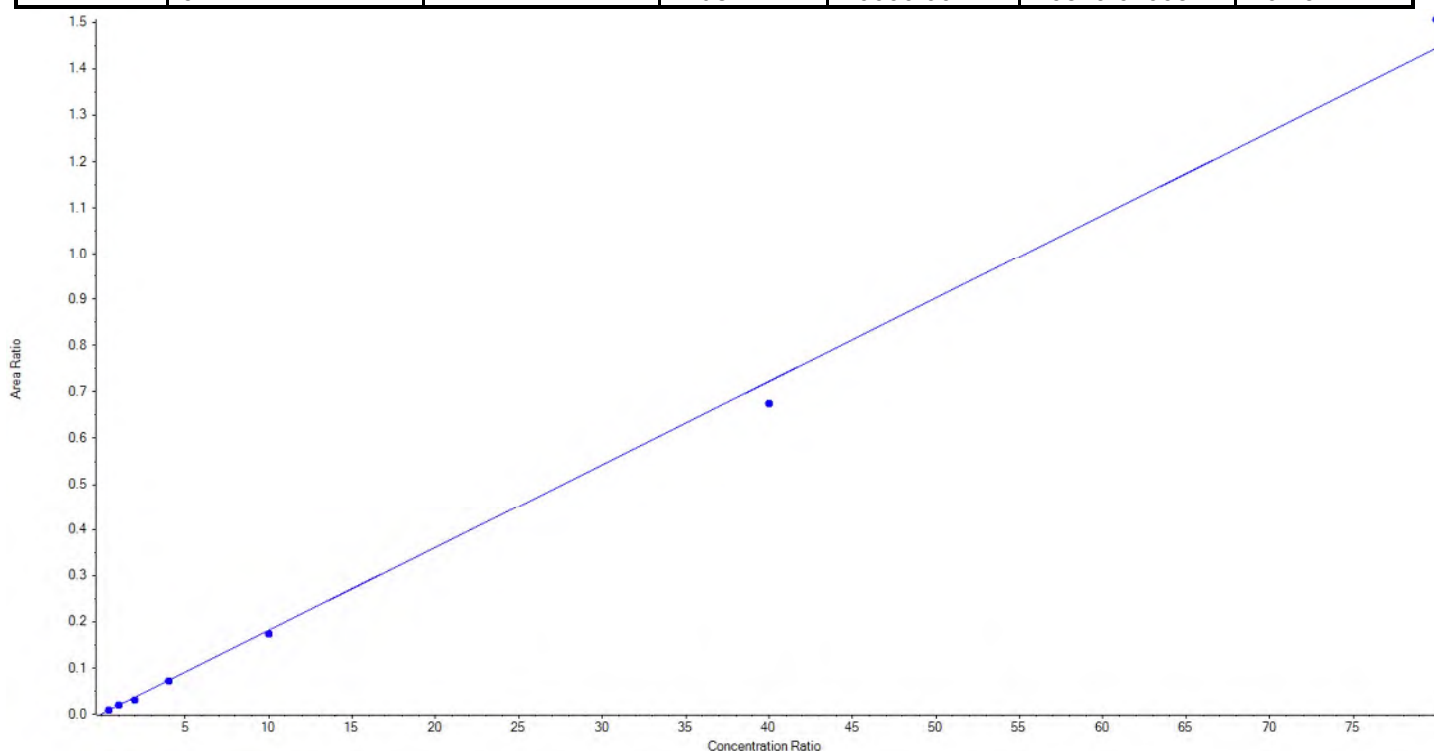
Calibration Summary Report

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Analyte Name	PFHpA_2	Data File	18-0511_18-0517.wiff
MRM Transition	363.0 / 169.0	Result Table	18-0500_BASE_R
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.01805x + 7.13759e-4$ ($r = 0.99827$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	124.809303	124.8
17	JY39	L2	True	250.00	253.944317	101.6
18	JY40	L3	True	500.00	405.808337	81.2
19	JY41	L4	True	1000.00	987.656245	98.8
20	JY42	L5	True	2500.00	2405.202025	96.2
21	JY43	L6	True	10000.00	9322.939718	93.2
22	JY44	L7	True	20000.00	20849.640054	104.3





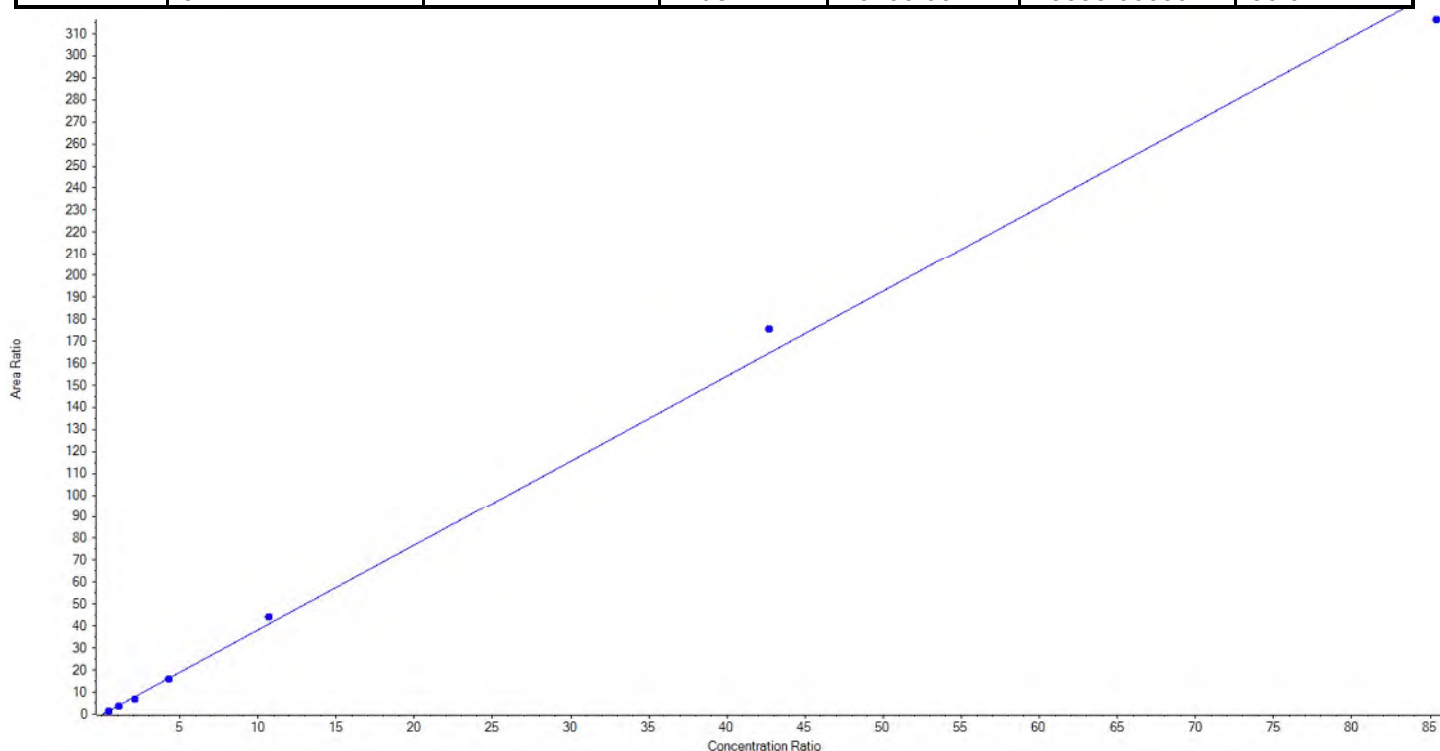
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Analyte Name	PFHxS_1	Data File	18-0511_18-0517.wiff
MRM Transition	399.0 / 80.0	Result Table	18-0500_BASE_R
Internal Standard	13C3-PFHxS	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 3.86052x + -0.26493$ ($r = 0.99837$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	101.00	106.833074	105.8
17	JY39	L2	True	252.50	247.811371	98.1
18	JY40	L3	True	505.00	438.291325	86.8
19	JY41	L4	True	1010.00	993.703461	98.4
20	JY42	L5	True	2525.00	2730.783046	108.2
21	JY43	L6	True	10100.00	10780.411132	106.7
22	JY44	L7	True	20200.00	19395.666591	96.0





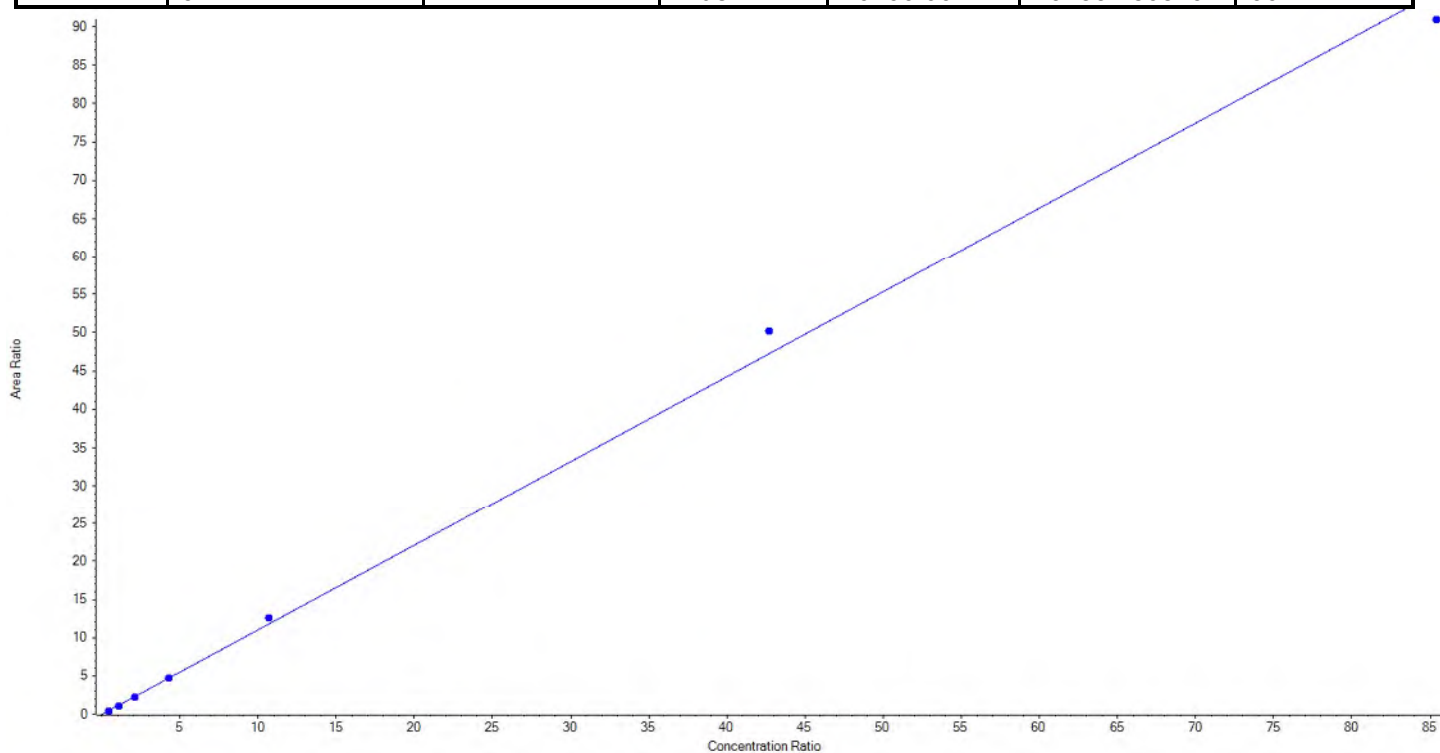
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Analyte Name	PFHxS_2	Data File	18-0511_18-0517.wiff
MRM Transition	399.0 / 99.0	Result Table	18-0500_BASE_R
Internal Standard	13C3-PFHxS	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.10734 x + -0.05053$ ($r = 0.99873$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	101.00	99.387183	98.4
17	JY39	L2	True	252.50	244.724335	96.9
18	JY40	L3	True	505.00	475.019404	94.1
19	JY41	L4	True	1010.00	1024.638250	101.5
20	JY42	L5	True	2525.00	2697.465775	106.8
21	JY43	L6	True	10100.00	10719.084226	106.1
22	JY44	L7	True	20200.00	19433.180829	96.2





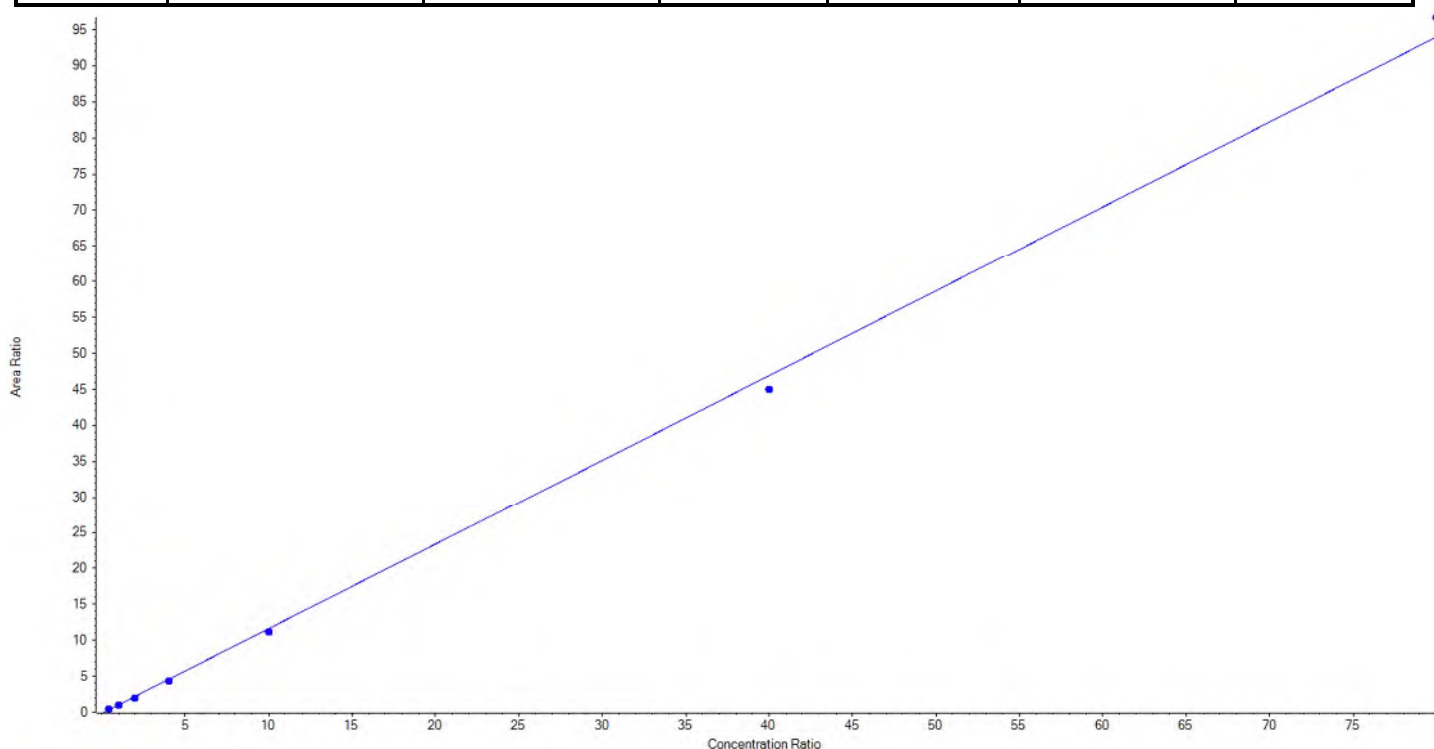
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Analyte Name	PFOA_1	Data File	18-0511_18-0517.wiff
MRM Transition	413.0 / 369.0	Result Table	18-0500_BASE_R
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.17689x + -0.16720$ ($r = 0.99925$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	122.378104	122.4
17	JY39	L2	True	250.00	239.701480	95.9
18	JY40	L3	True	500.00	455.994933	91.2
19	JY41	L4	True	1000.00	952.338996	95.2
20	JY42	L5	True	2500.00	2412.042978	96.5
21	JY43	L6	True	10000.00	9597.796282	96.0
22	JY44	L7	True	20000.00	20569.747227	102.9





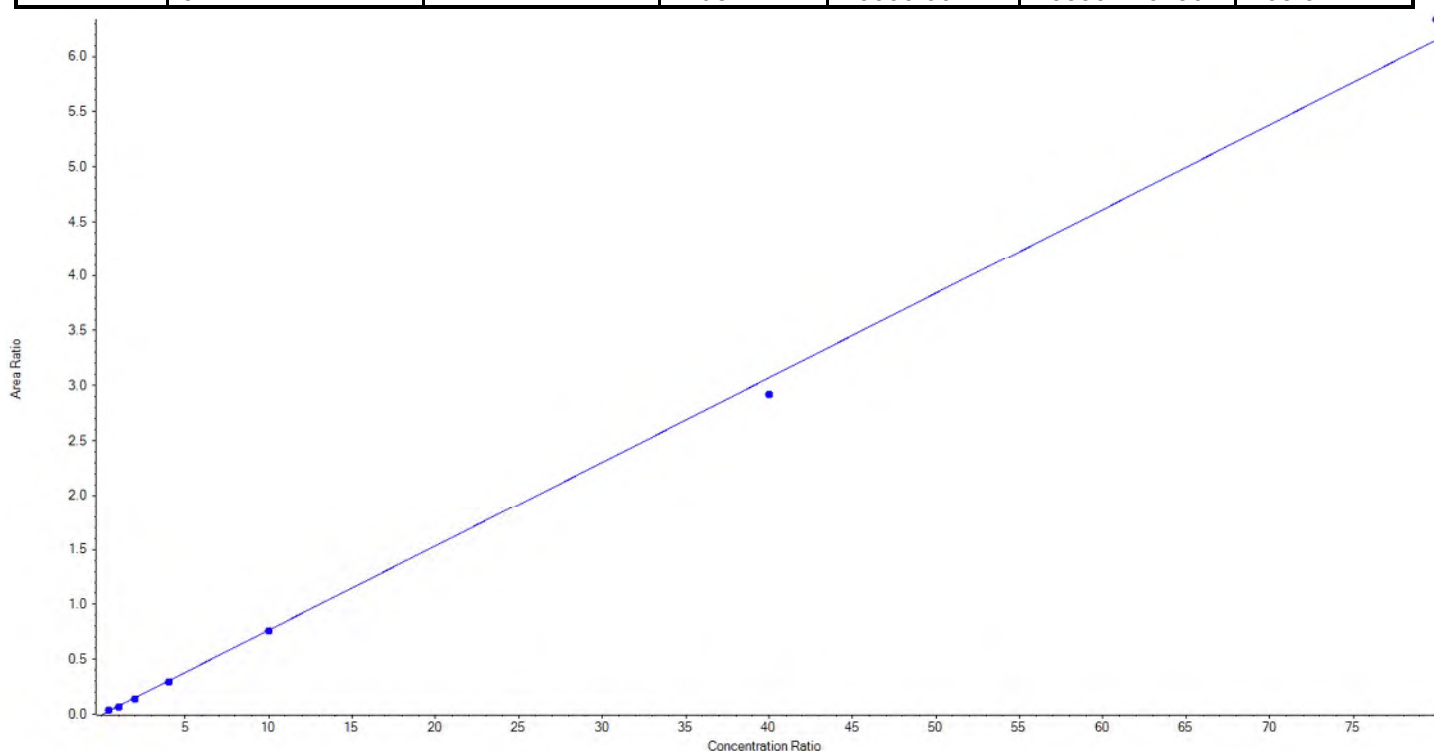
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Analyte Name	PFOA_2	Data File	18-0511_18-0517.wiff
MRM Transition	413.0 / 169.0	Result Table	18-0500_BASE_R
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.07693x + -0.00494$ ($r = 0.99912$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	122.370347	122.4
17	JY39	L2	True	250.00	235.359733	94.1
18	JY40	L3	True	500.00	453.174945	90.6
19	JY41	L4	True	1000.00	954.512338	95.5
20	JY42	L5	True	2500.00	2485.031465	99.4
21	JY43	L6	True	10000.00	9500.104415	95.0
22	JY44	L7	True	20000.00	20599.446756	103.0





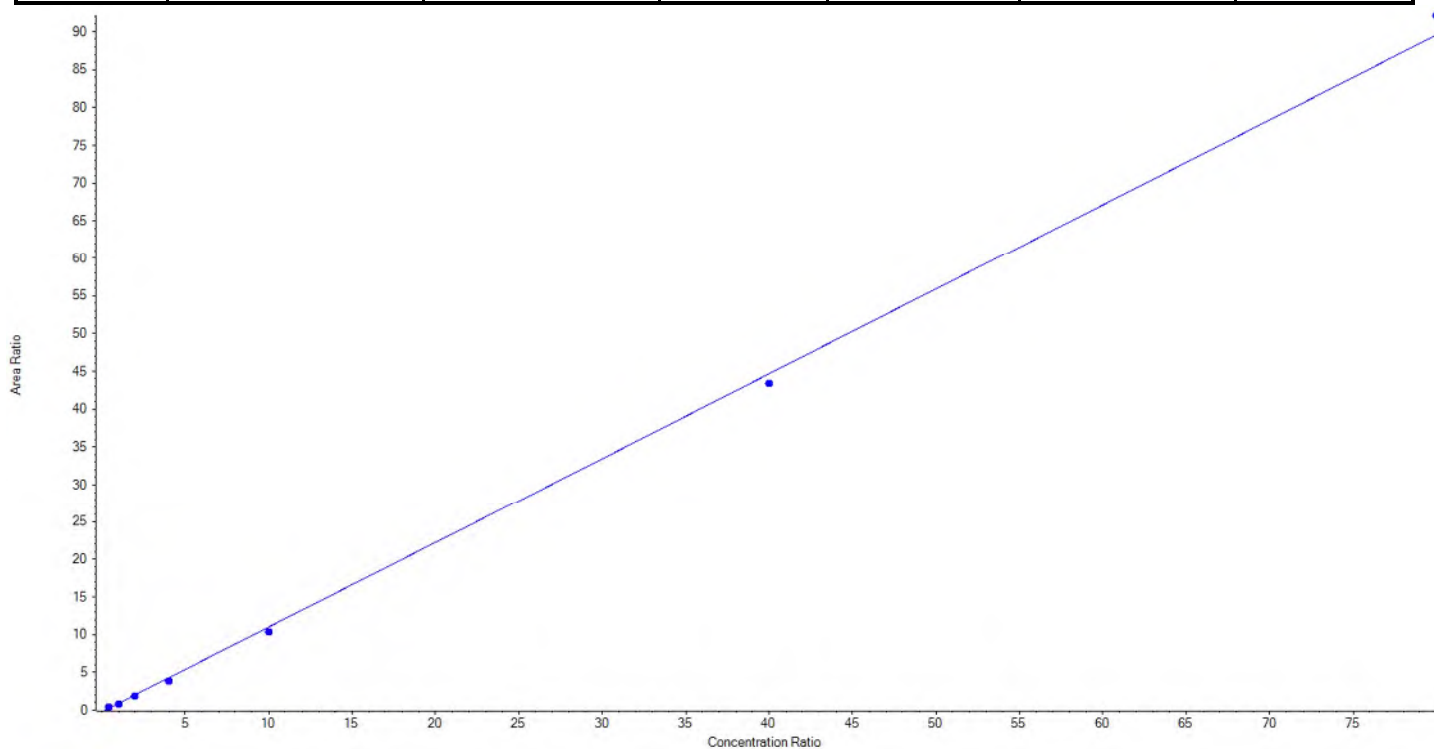
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Analyte Name	PFNA_1	Data File	18-0511_18-0517.wiff
MRM Transition	463.0 / 419.0	Result Table	18-0500_BASE_R
Internal Standard	13C9-PFNA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.12264 x + -0.22701$ ($r = 0.99915$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	127.095747	127.1
17	JY39	L2	True	250.00	242.088156	96.8
18	JY40	L3	True	500.00	457.523481	91.5
19	JY41	L4	True	1000.00	907.339887	90.7
20	JY42	L5	True	2500.00	2349.574991	94.0
21	JY43	L6	True	10000.00	9703.083553	97.0
22	JY44	L7	True	20000.00	20563.294185	102.8





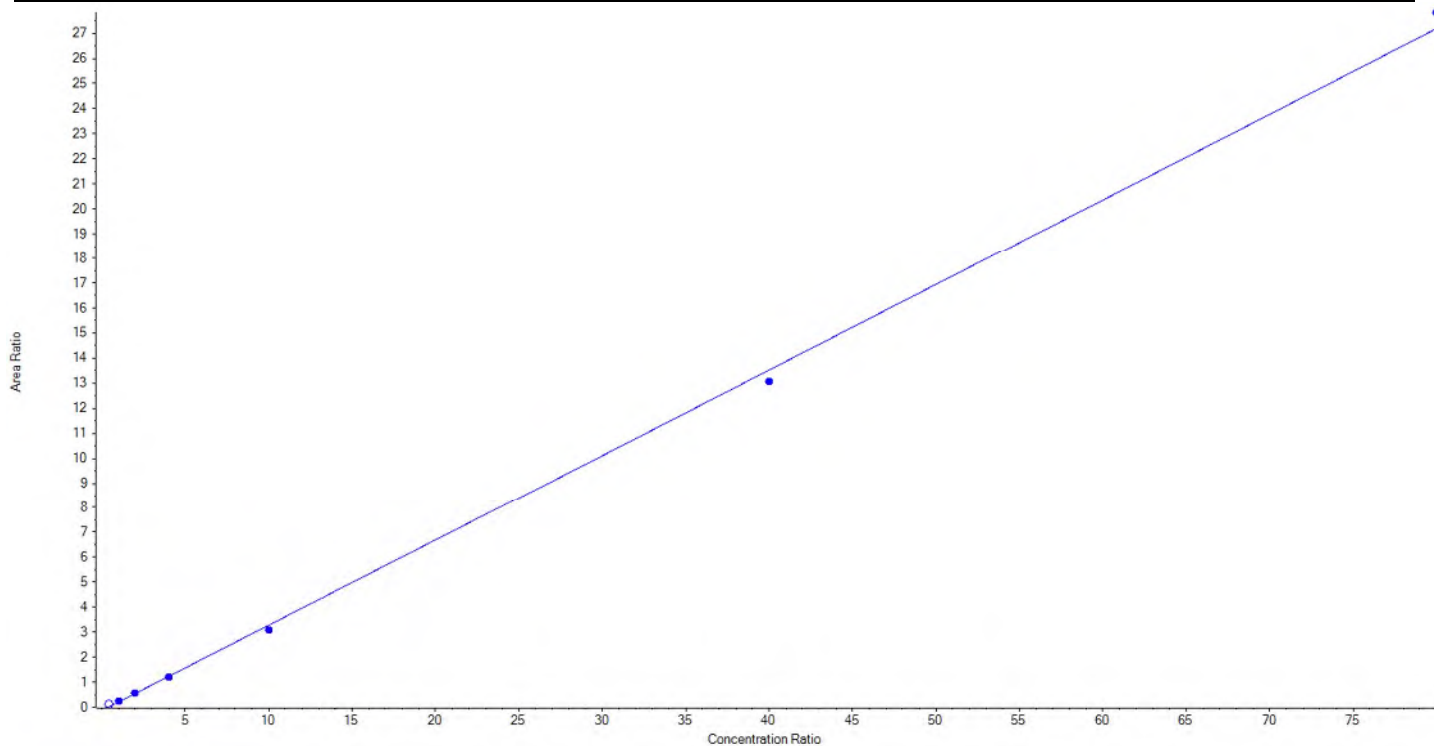
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Analyte Name	PFNA_2	Data File	18-0511_18-0517.wiff
MRM Transition	463.0 / 219.0	Result Table	18-0500_BASE_R
Internal Standard	13C9-PFNA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.34158x + -0.13919$ ($r = 0.99946$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	False	100.00	182.660313	182.7
17	JY39	L2	True	250.00	271.700105	108.7
18	JY40	L3	True	500.00	501.320099	100.3
19	JY41	L4	True	1000.00	974.387409	97.4
20	JY42	L5	True	2500.00	2364.139055	94.6
21	JY43	L6	True	10000.00	9671.873659	96.7
22	JY44	L7	True	20000.00	20466.579673	102.3





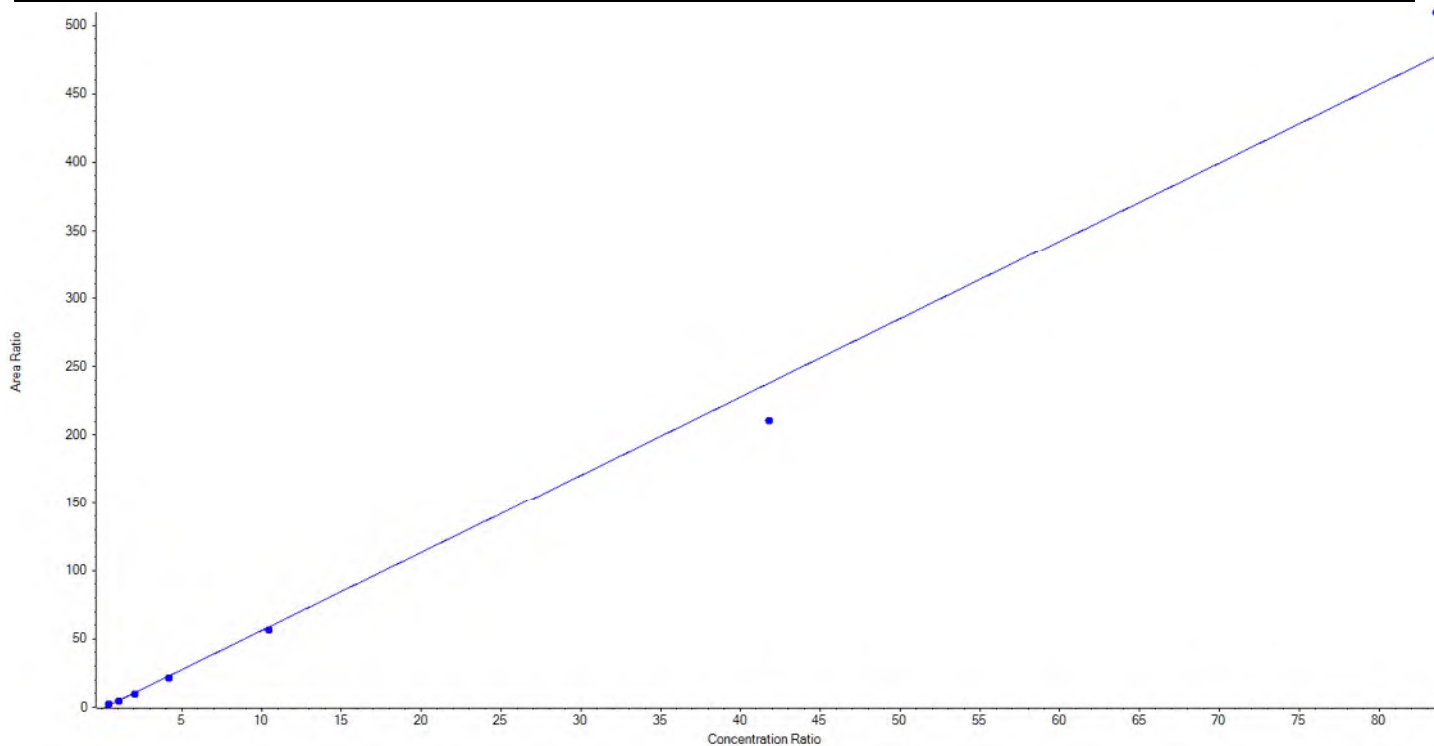
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Analyte Name	PFOS_1	Data File	18-0511_18-0517.wiff
MRM Transition	499.0 / 80.0	Result Table	18-0500_BASE_R
Internal Standard	13C8-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 5.72547 x + -1.25038$ ($r = 0.99619$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	128.920274	128.9
17	JY39	L2	True	250.00	235.031735	94.0
18	JY40	L3	True	500.00	457.419001	91.5
19	JY41	L4	True	1000.00	938.240867	93.8
20	JY42	L5	True	2500.00	2416.896980	96.7
21	JY43	L6	True	10000.00	8843.162110	88.4
22	JY44	L7	True	20000.00	21330.329034	106.7





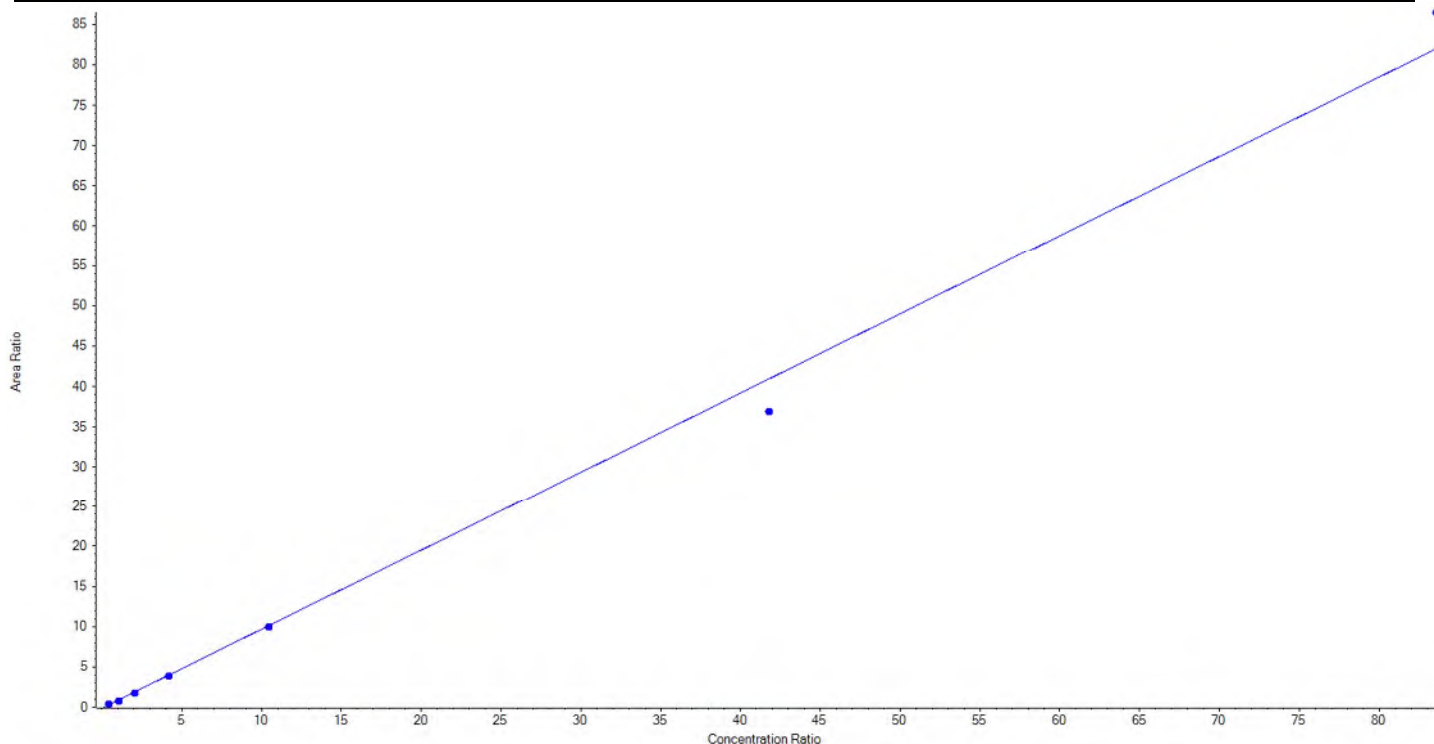
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Analyte Name	PFOS_2	Data File	18-0511_18-0517.wiff
MRM Transition	499.0 / 99.0	Result Table	18-0500_BASE_R
Internal Standard	13C8-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.98272x + -0.14044$ ($r = 0.99726$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	128.697842	128.7
17	JY39	L2	True	250.00	212.082162	84.8
18	JY40	L3	True	500.00	469.669636	93.9
19	JY41	L4	True	1000.00	985.018915	98.5
20	JY42	L5	True	2500.00	2463.595659	98.5
21	JY43	L6	True	10000.00	9006.993858	90.1
22	JY44	L7	True	20000.00	21083.941928	105.4





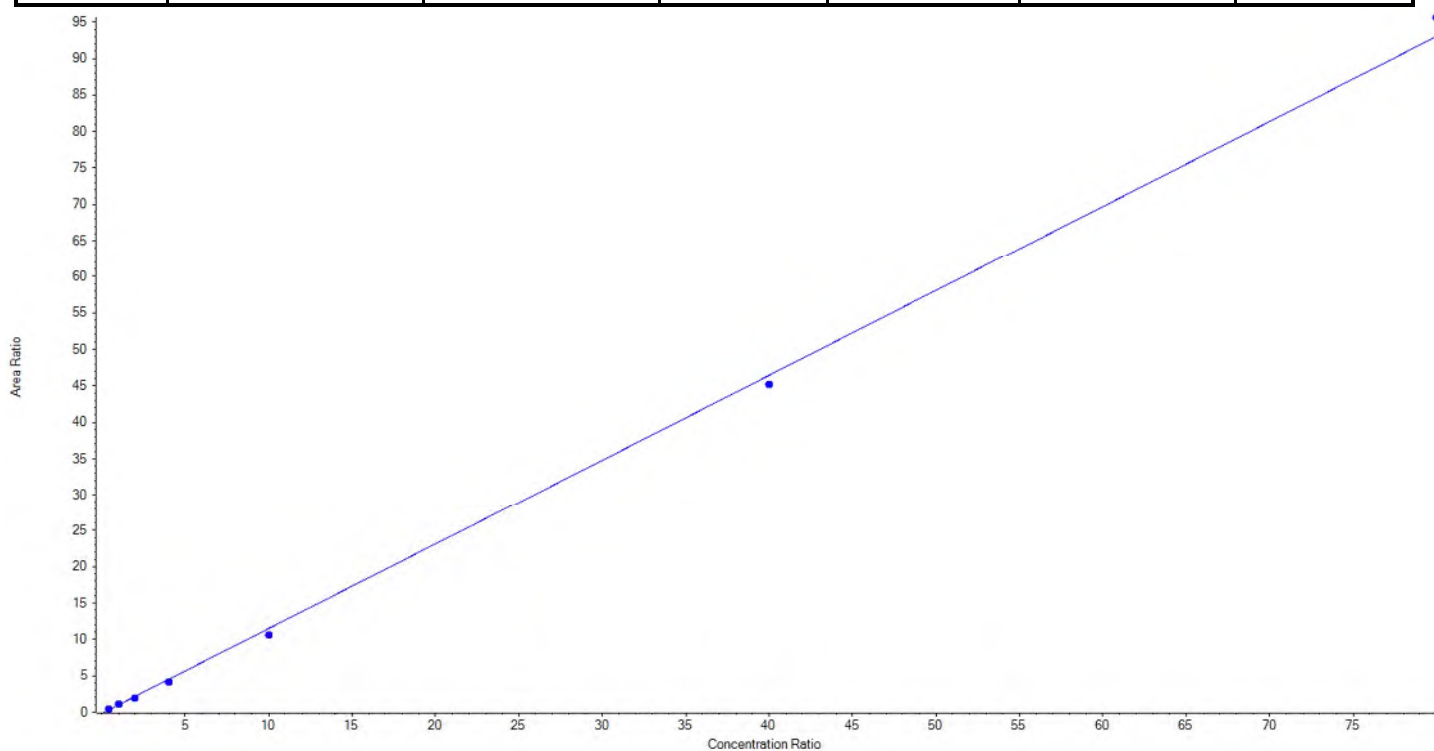
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Analyte Name	PFDA_1	Data File	18-0511_18-0517.wiff
MRM Transition	513.0 / 469.0	Result Table	18-0500_BASE_R
Internal Standard	13C6-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.16463x + -0.16116$ ($r = 0.99919$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	121.392810	121.4
17	JY39	L2	True	250.00	257.200209	102.9
18	JY40	L3	True	500.00	453.274700	90.7
19	JY41	L4	True	1000.00	923.260952	92.3
20	JY42	L5	True	2500.00	2318.858099	92.8
21	JY43	L6	True	10000.00	9722.336100	97.2
22	JY44	L7	True	20000.00	20553.677130	102.8





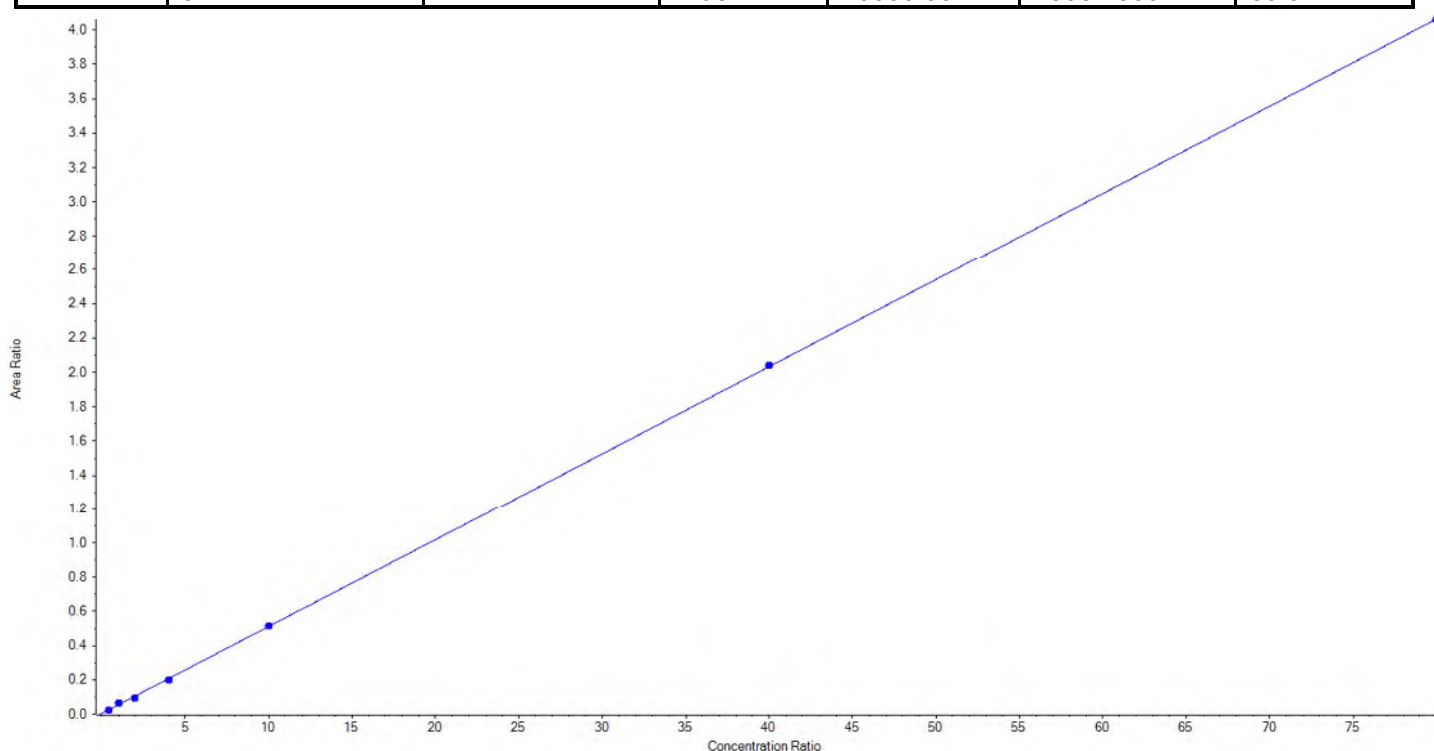
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Analyte Name	PFDA_2	Data File	18-0511_18-0517.wiff
MRM Transition	513.0 / 219.0	Result Table	18-0500_BASE_R
Internal Standard	13C6-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.05073 x + 0.00420$ ($r = 0.99974$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	94.190347	94.2
17	JY39	L2	True	250.00	296.354444	118.5
18	JY40	L3	True	500.00	444.891179	89.0
19	JY41	L4	True	1000.00	970.218567	97.0
20	JY42	L5	True	2500.00	2524.611014	101.0
21	JY43	L6	True	10000.00	10036.934036	100.4
22	JY44	L7	True	20000.00	19982.800414	99.9





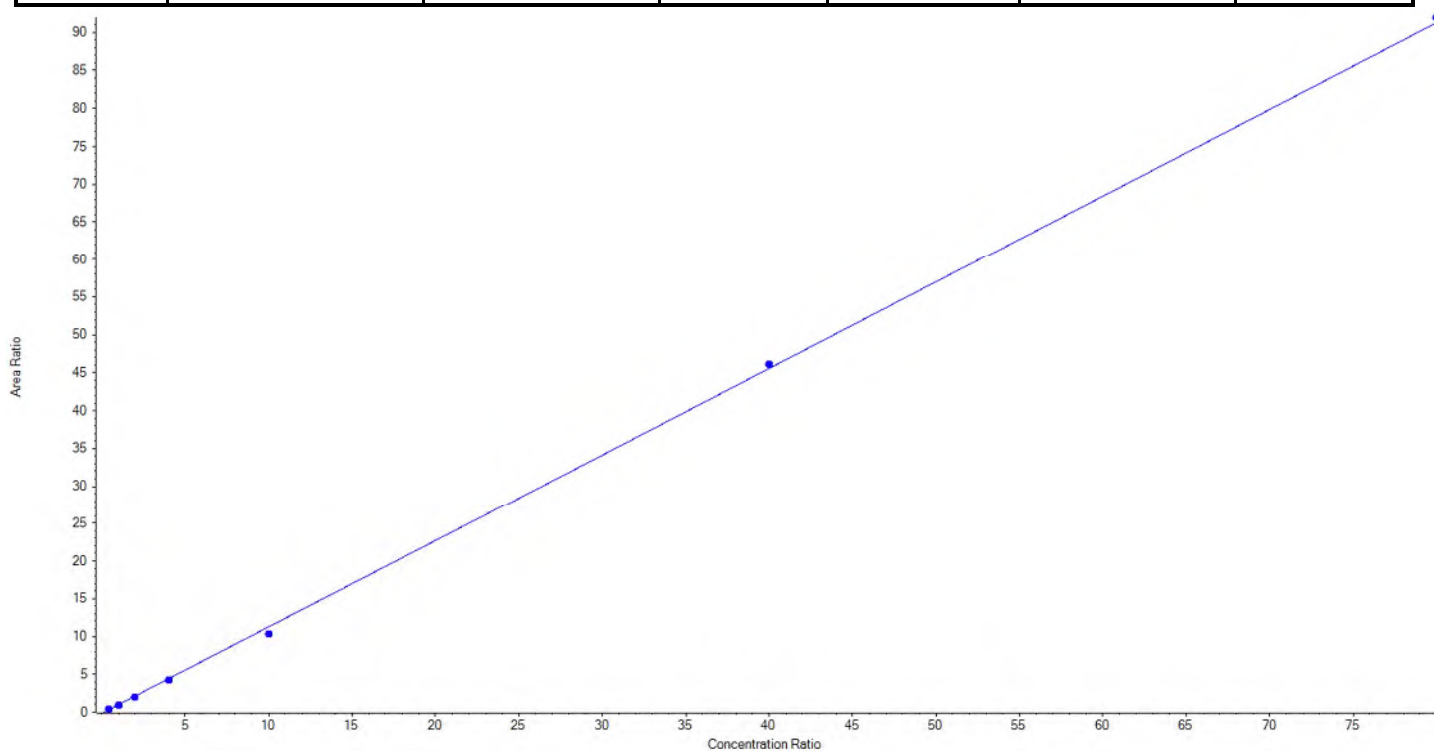
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Analyte Name	PFUnA_1	Data File	18-0511_18-0517.wiff
MRM Transition	563.0 / 519.0	Result Table	18-0500_BASE_R
Internal Standard	13C7-PFUnA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.14304 x + -0.15953$ ($r = 0.99960$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	119.016261	119.0
17	JY39	L2	True	250.00	241.564481	96.6
18	JY40	L3	True	500.00	467.741523	93.6
19	JY41	L4	True	1000.00	970.107575	97.0
20	JY42	L5	True	2500.00	2300.335601	92.0
21	JY43	L6	True	10000.00	10105.857543	101.1
22	JY44	L7	True	20000.00	20145.377016	100.7





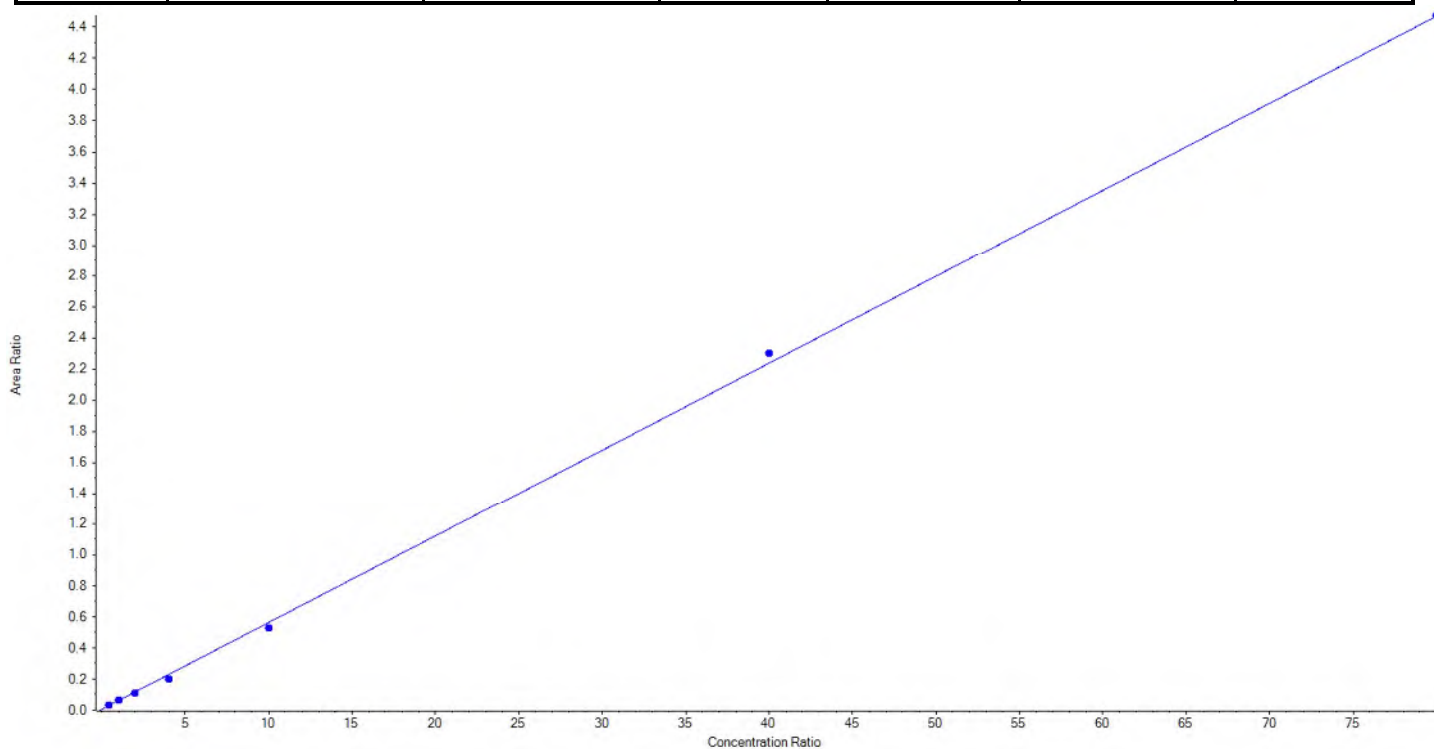
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Analyte Name	PFUnA_2	Data File	18-0511_18-0517.wiff
MRM Transition	563.0 / 269.0	Result Table	18-0500_BASE_R
Internal Standard	13C7-PFUnA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.05580 x + 0.00547$ ($r = 0.99929$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	113.798412	113.8
17	JY39	L2	True	250.00	276.385634	110.6
18	JY40	L3	True	500.00	465.429835	93.1
19	JY41	L4	True	1000.00	862.672395	86.3
20	JY42	L5	True	2500.00	2335.268906	93.4
21	JY43	L6	True	10000.00	10280.229409	102.8
22	JY44	L7	True	20000.00	20016.215408	100.1





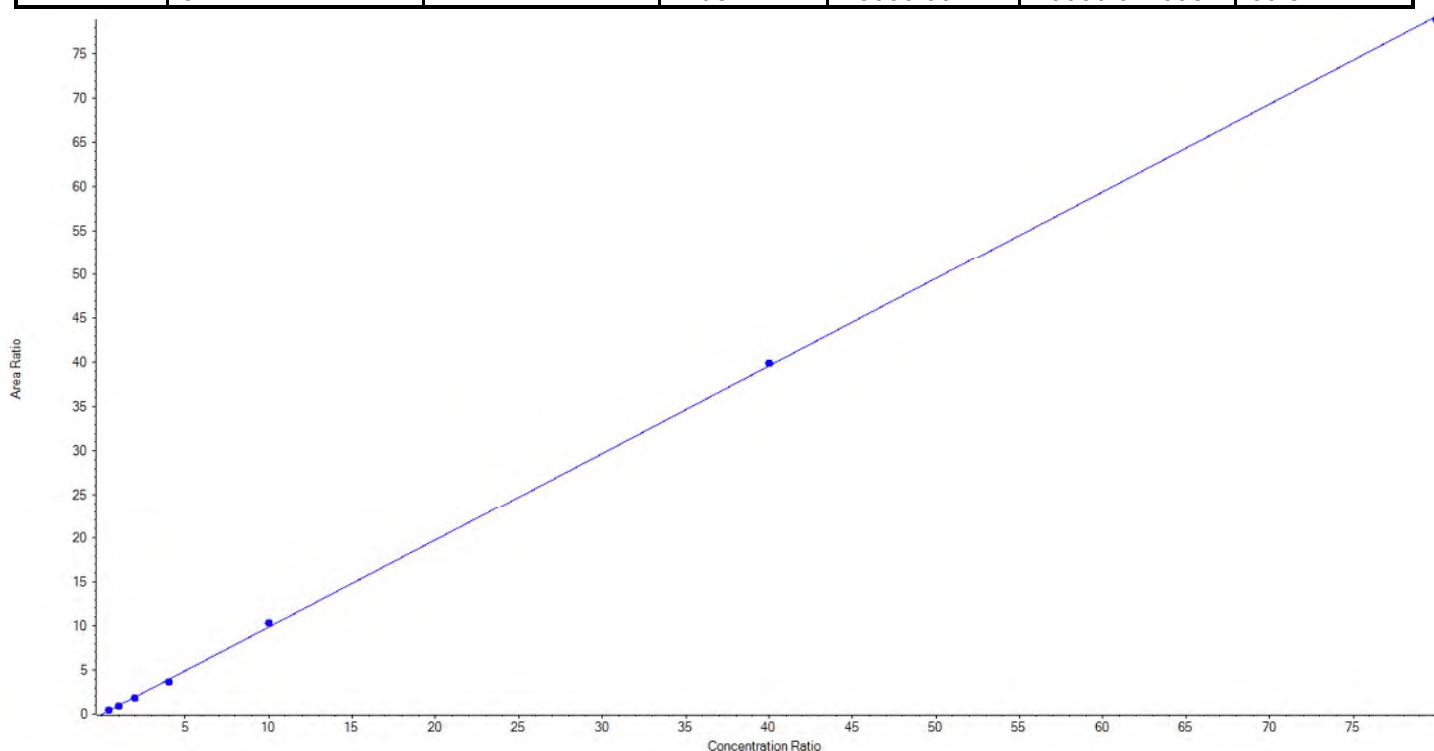
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Analyte Name	PFDaA_1	Data File	18-0511_18-0517.wiff
MRM Transition	613.0 / 569.0	Result Table	18-0500_BASE_R
Internal Standard	13C2-PFDaA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.99139x + -0.04305$ ($r = 0.99975$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	112.133275	112.1
17	JY39	L2	True	250.00	241.700657	96.7
18	JY40	L3	True	500.00	459.119430	91.8
19	JY41	L4	True	1000.00	942.059622	94.2
20	JY42	L5	True	2500.00	2624.559975	105.0
21	JY43	L6	True	10000.00	10064.415944	100.6
22	JY44	L7	True	20000.00	19906.011098	99.5





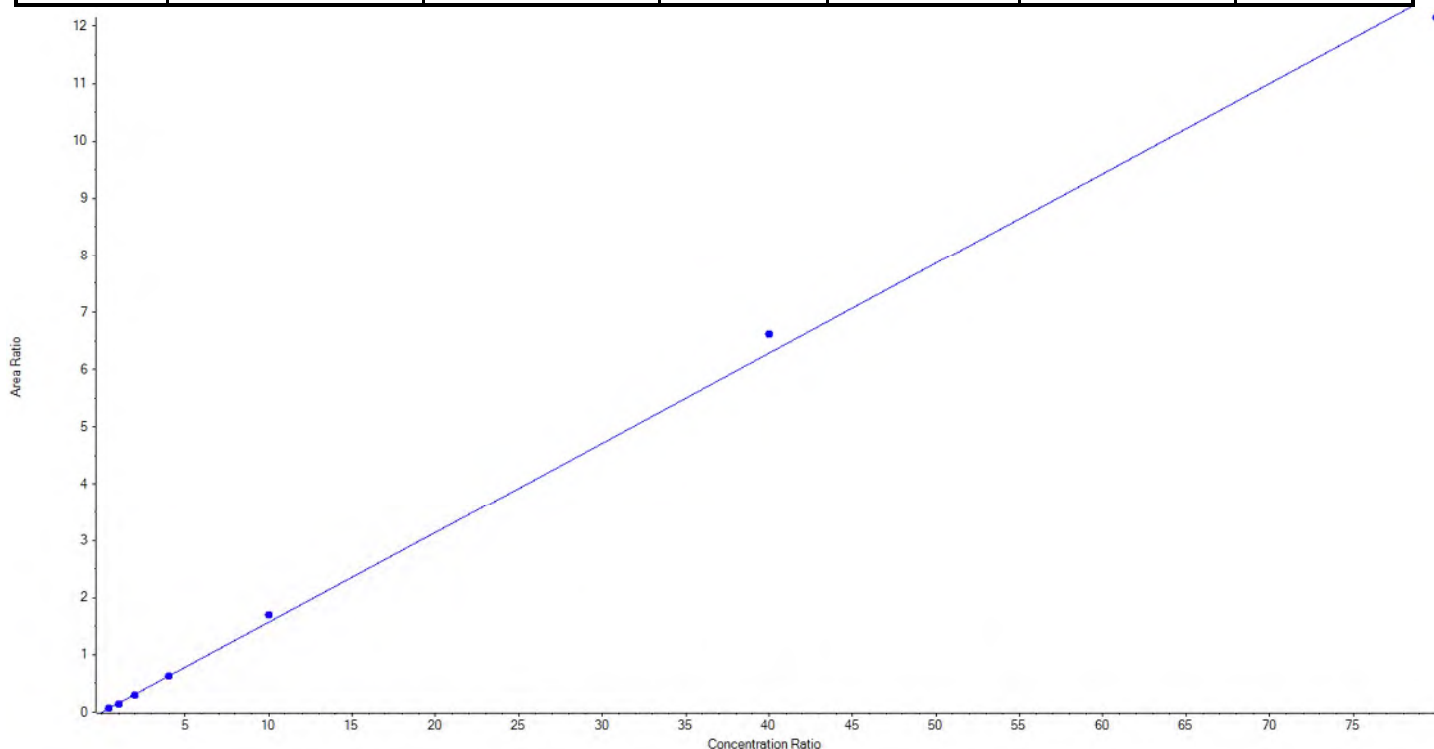
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Analyte Name	PFDaA_2	Data File	18-0511_18-0517.wiff
MRM Transition	613.0 / 319.0	Result Table	18-0500_BASE_R
Internal Standard	13C2-PFDaA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.15717x + -0.00138$ ($r = 0.99889$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	105.358138	105.4
17	JY39	L2	True	250.00	217.554942	87.0
18	JY40	L3	True	500.00	488.393595	97.7
19	JY41	L4	True	1000.00	1001.753233	100.2
20	JY42	L5	True	2500.00	2700.462708	108.0
21	JY43	L6	True	10000.00	10512.989394	105.1
22	JY44	L7	True	20000.00	19323.487988	96.6





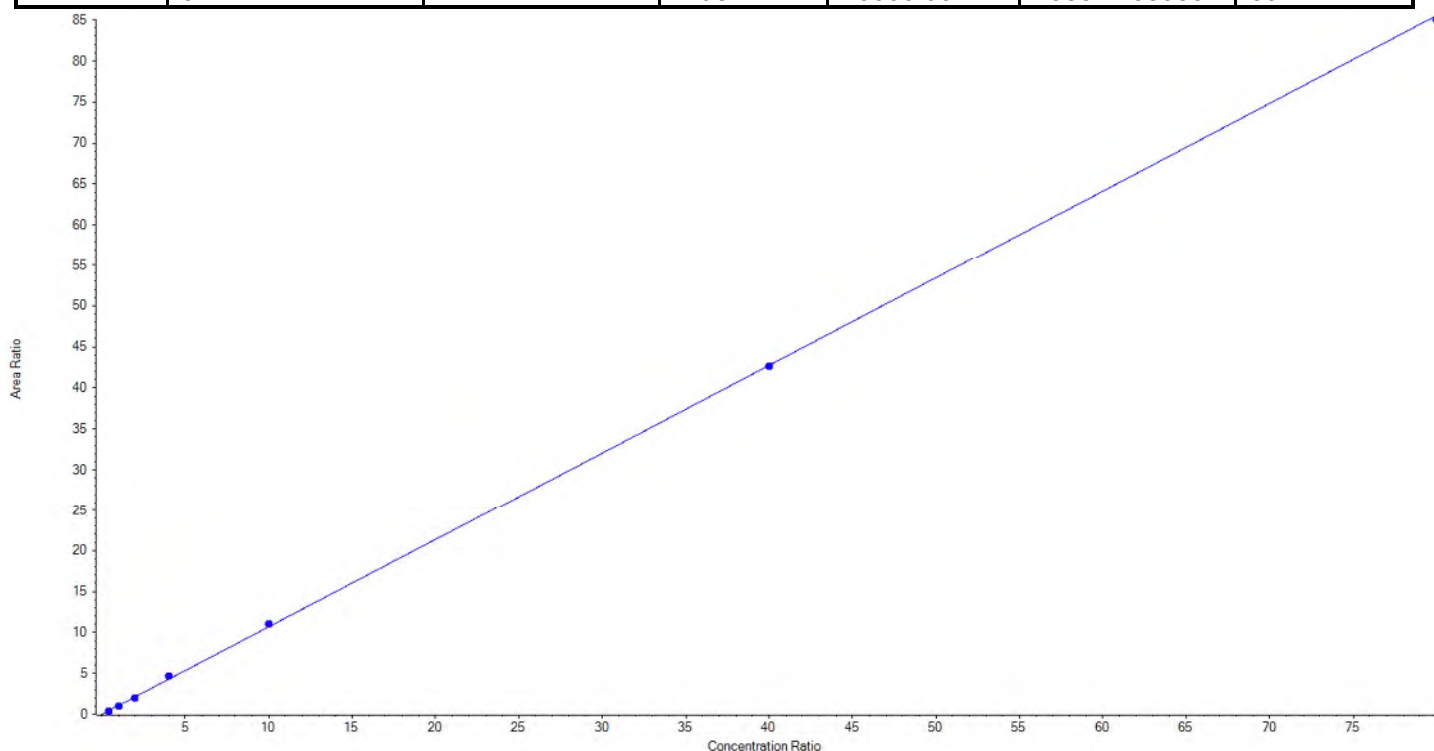
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Analyte Name	PFTTrDA_1	Data File	18-0511_18-0517.wiff
MRM Transition	663.0 / 619.0	Result Table	18-0500_BASE_R
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.06914x + -0.02151$ ($r = 0.99980$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	97.925055	97.9
17	JY39	L2	True	250.00	242.562278	97.0
18	JY40	L3	True	500.00	470.354028	94.1
19	JY41	L4	True	1000.00	1080.349090	108.0
20	JY42	L5	True	2500.00	2592.613859	103.7
21	JY43	L6	True	10000.00	9981.757307	99.8
22	JY44	L7	True	20000.00	19884.438383	99.4





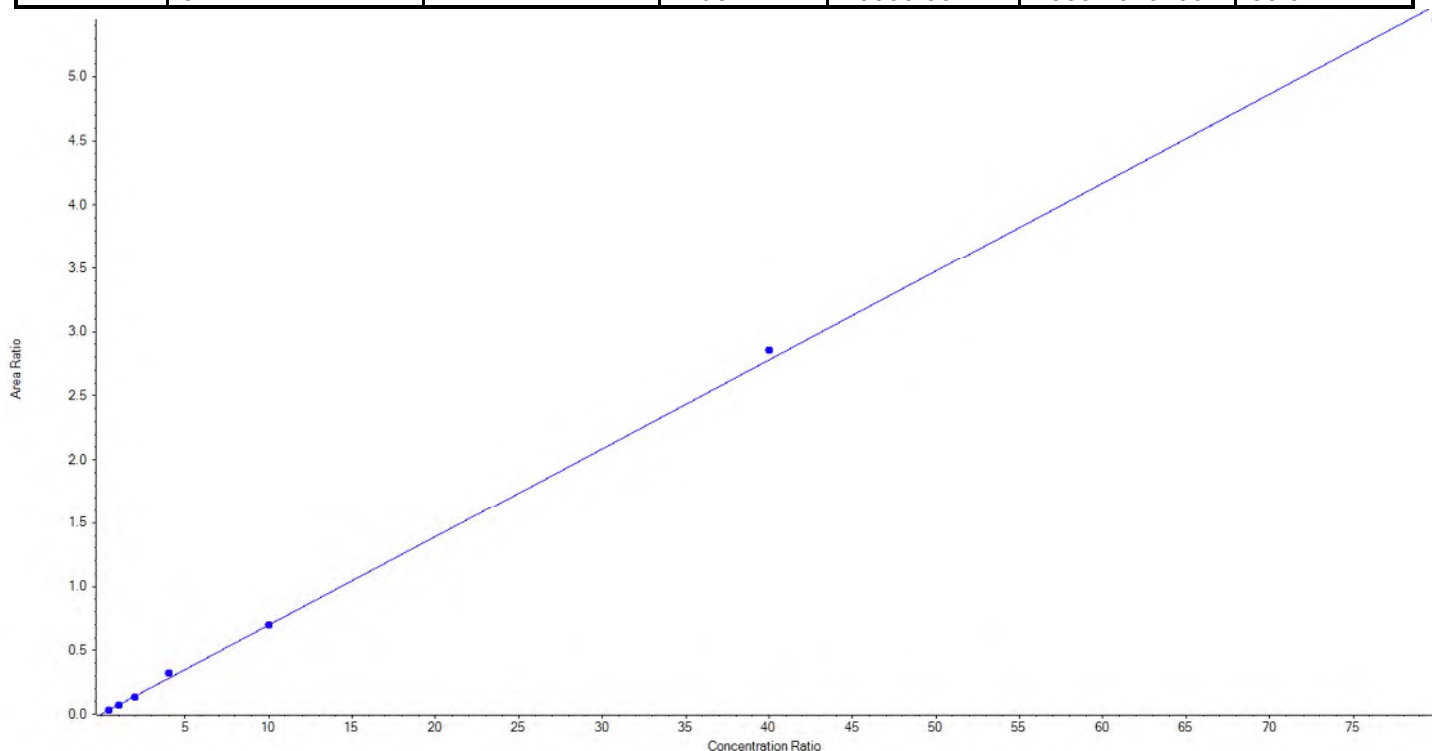
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Analyte Name	PFTTrDA_2	Data File	18-0511_18-0517.wiff
MRM Transition	663.0 / 169.0	Result Table	18-0500_BASE_R
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.06946x + 0.00211$ ($r = 0.99934$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	94.524748	94.5
17	JY39	L2	True	250.00	232.598312	93.0
18	JY40	L3	True	500.00	479.459843	95.9
19	JY41	L4	True	1000.00	1150.265021	115.0
20	JY42	L5	True	2500.00	2518.035578	100.7
21	JY43	L6	True	10000.00	10284.090238	102.8
22	JY44	L7	True	20000.00	19591.026260	98.0





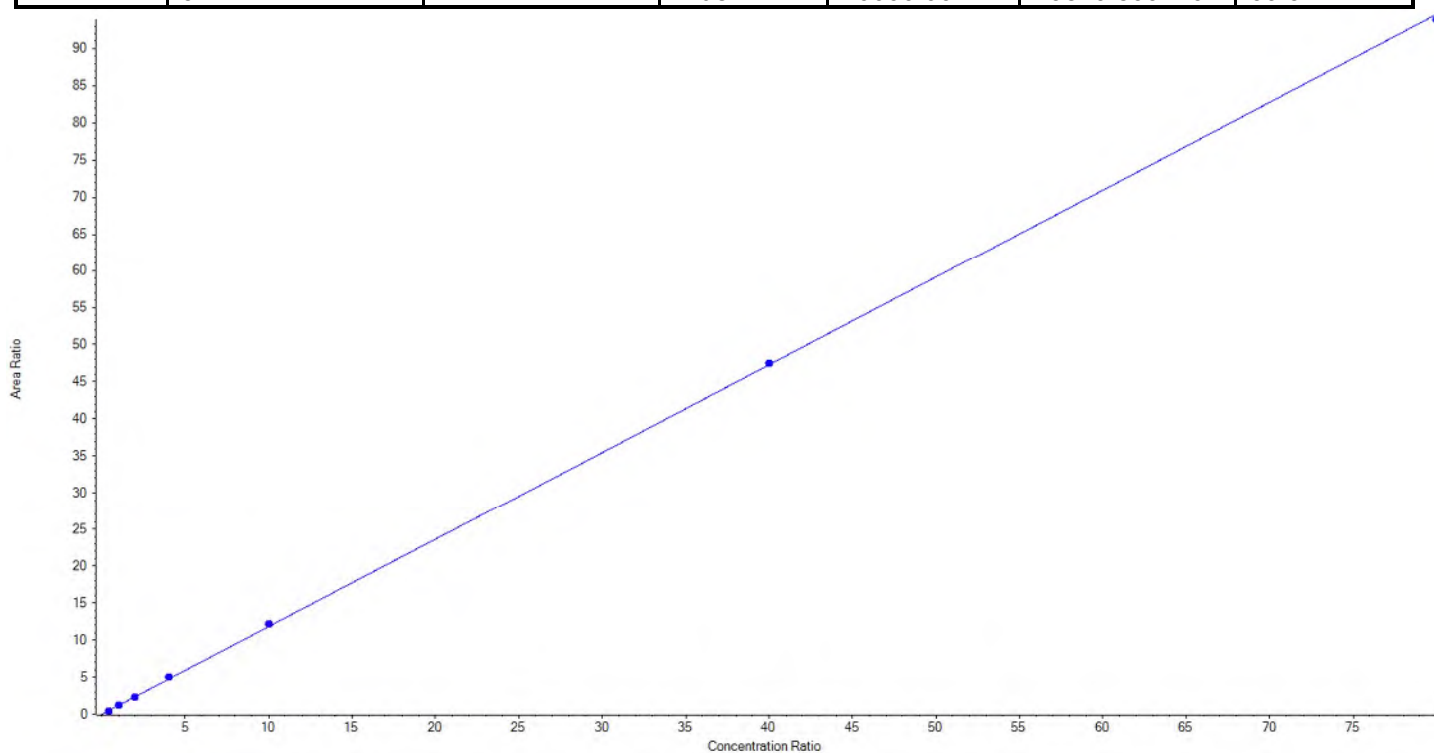
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Analyte Name	PFTeDA_1	Data File	18-0511_18-0517.wiff
MRM Transition	713.0 / 669.0	Result Table	18-0500_BASE_R
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.18280x + -0.01271$ ($r = 0.99988$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	97.781779	97.8
17	JY39	L2	True	250.00	247.418581	99.0
18	JY40	L3	True	500.00	477.243455	95.5
19	JY41	L4	True	1000.00	1050.613295	105.1
20	JY42	L5	True	2500.00	2574.027828	103.0
21	JY43	L6	True	10000.00	10053.015953	100.5
22	JY44	L7	True	20000.00	19849.899110	99.3





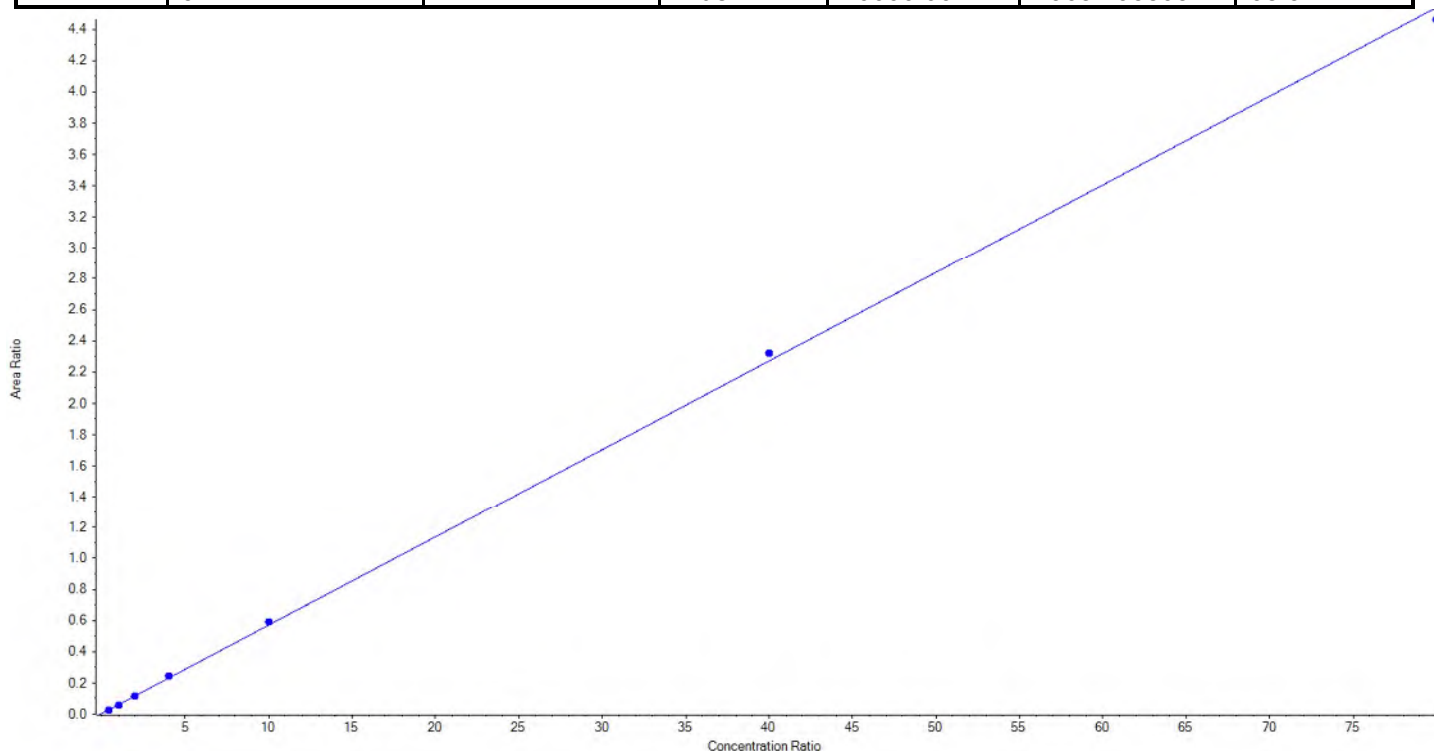
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Analyte Name	PFTeDA_2	Data File	18-0511_18-0517.wiff
MRM Transition	713.0 / 169.0	Result Table	18-0500_BASE_R
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.05669x + 0.00398$ ($r = 0.99969$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	94.772432	94.8
17	JY39	L2	True	250.00	245.531266	98.2
18	JY40	L3	True	500.00	480.829524	96.2
19	JY41	L4	True	1000.00	1071.559211	107.2
20	JY42	L5	True	2500.00	2580.328361	103.2
21	JY43	L6	True	10000.00	10219.041173	102.2
22	JY44	L7	True	20000.00	19657.938034	98.3





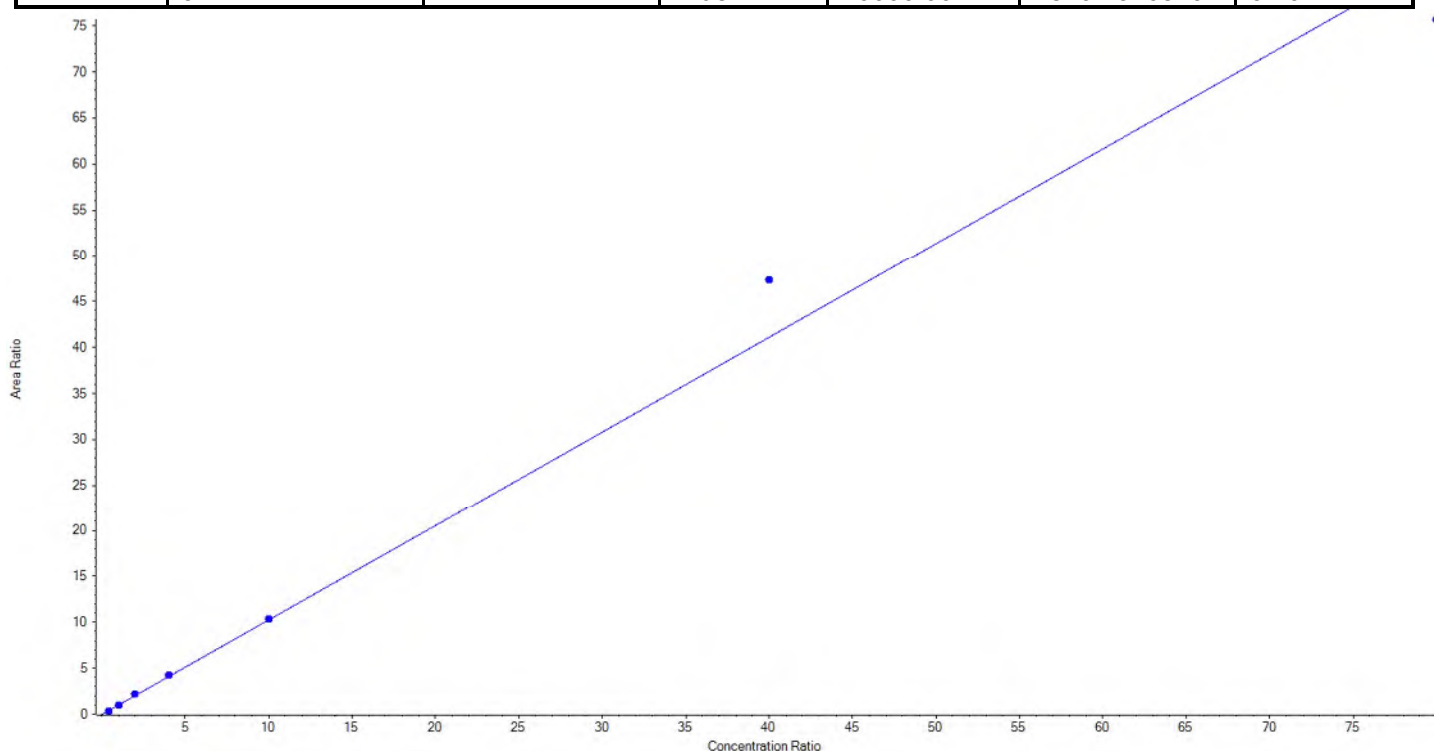
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Analyte Name	NMeFOSAA_1	Data File	18-0511_18-0517.wiff
MRM Transition	570.0 / 419.0	Result Table	18-0500_BASE_R
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.02819x + -0.03840$ ($r = 0.99425$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	82.782049	82.8
17	JY39	L2	True	250.00	235.752361	94.3
18	JY40	L3	True	500.00	551.603355	110.3
19	JY41	L4	True	1000.00	1048.742817	104.9
20	JY42	L5	True	2500.00	2514.949799	100.6
21	JY43	L6	True	10000.00	11508.642791	115.1
22	JY44	L7	True	20000.00	18407.526829	92.0





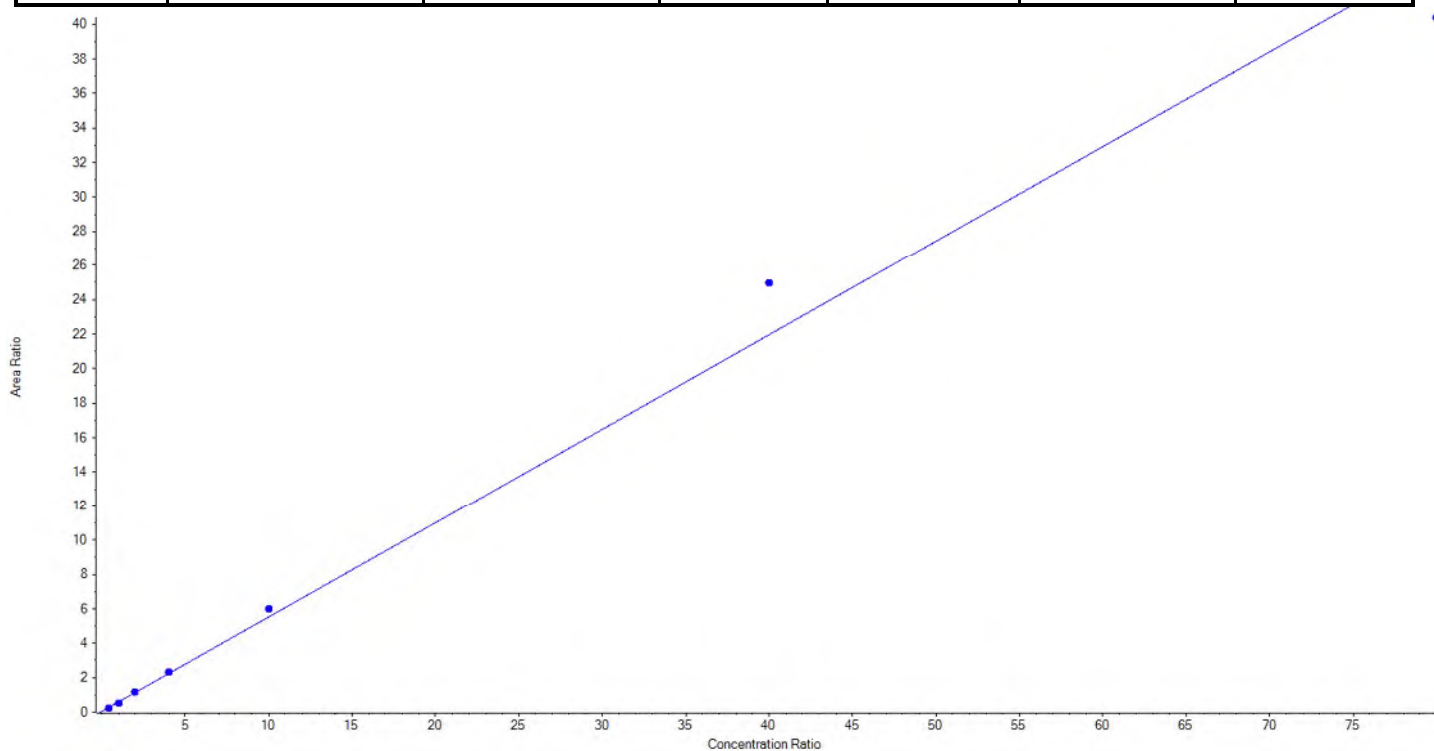
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Analyte Name	NMeFOSAA_2	Data File	18-0511_18-0517.wiff
MRM Transition	570.0 / 512.0	Result Table	18-0500_BASE_R
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.54797 x + 0.04389$ ($r = 0.99469$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	88.329106	88.3
17	JY39	L2	True	250.00	228.950311	91.6
18	JY40	L3	True	500.00	508.283885	101.7
19	JY41	L4	True	1000.00	1045.973992	104.6
20	JY42	L5	True	2500.00	2702.270084	108.1
21	JY43	L6	True	10000.00	11372.965311	113.7
22	JY44	L7	True	20000.00	18403.227310	92.0





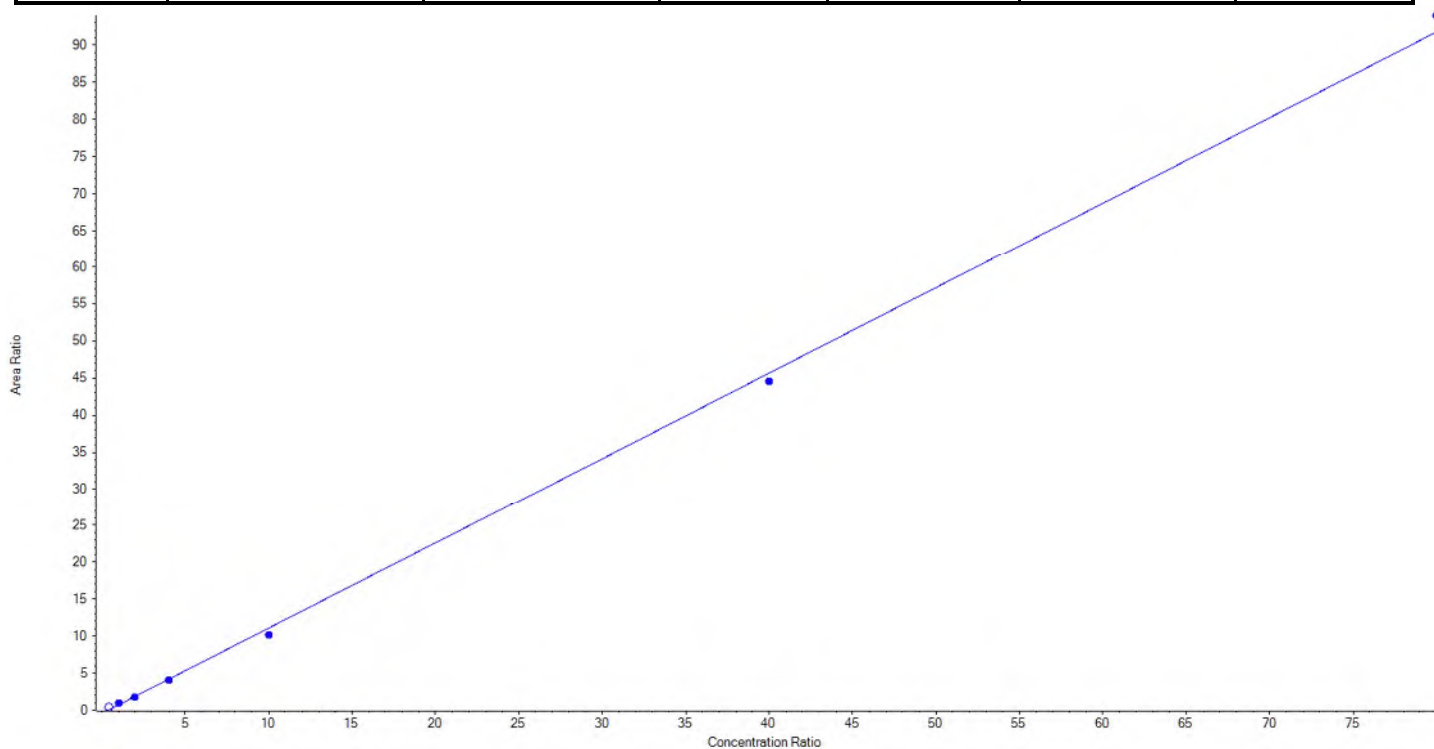
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Analyte Name	NEtFOSAA_1	Data File	18-0511_18-0517.wiff
MRM Transition	584.0 / 419.0	Result Table	18-0500_BASE_R
Internal Standard	d5-EtFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.15271 x + -0.44500$ ($r = 0.99924$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	False	100.00	183.838274	183.8
17	JY39	L2	True	250.00	291.768822	116.7
18	JY40	L3	True	500.00	475.784135	95.2
19	JY41	L4	True	1000.00	967.249045	96.7
20	JY42	L5	True	2500.00	2288.284973	91.5
21	JY43	L6	True	10000.00	9748.955119	97.5
22	JY44	L7	True	20000.00	20477.957906	102.4





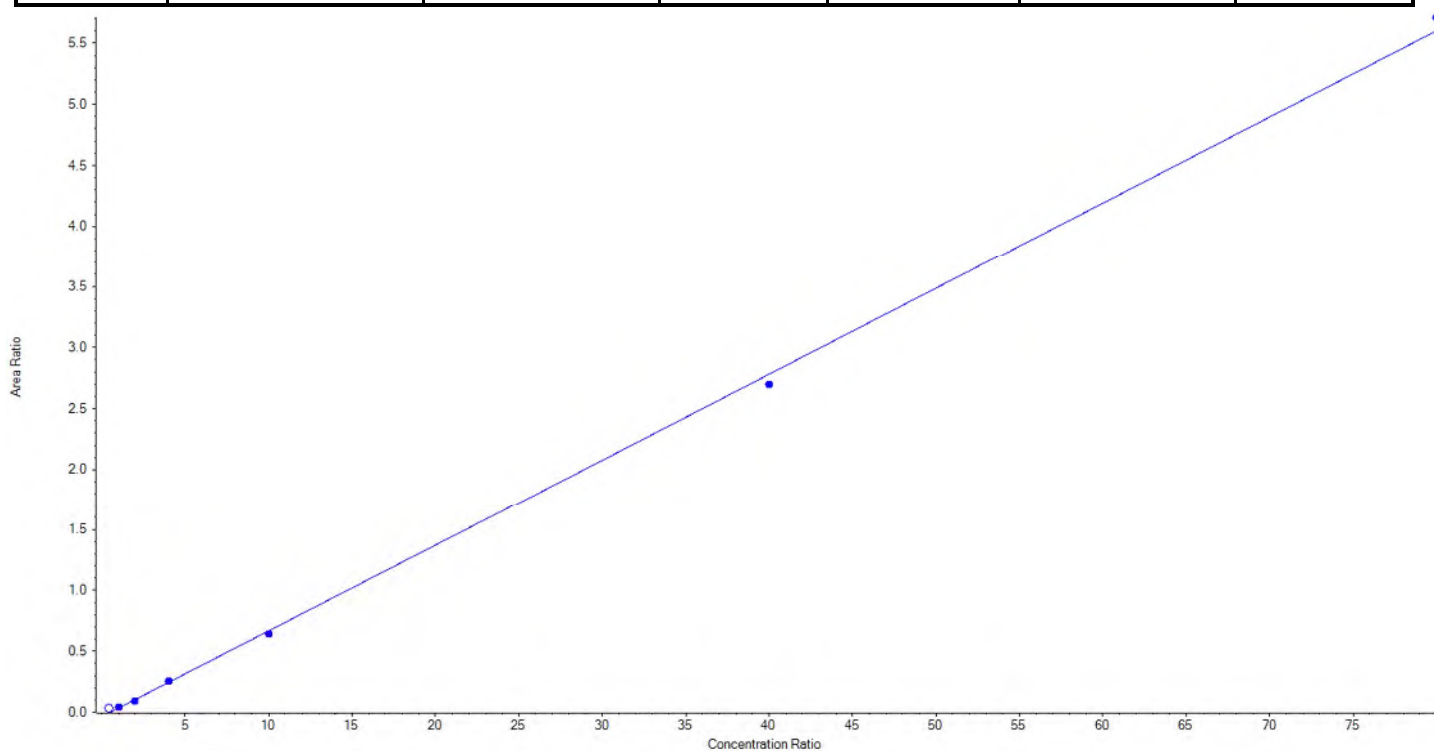
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Analyte Name	NEtFOSAA_2	Data File	18-0511_18-0517.wiff
MRM Transition	584.0 / 483.0	Result Table	18-0500_BASE_R
Internal Standard	d5-EtFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.07048x + -0.03780$ ($r = 0.99947$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	False	100.00	257.659715	257.7
17	JY39	L2	True	250.00	283.436437	113.4
18	JY40	L3	True	500.00	441.128614	88.2
19	JY41	L4	True	1000.00	1029.079847	102.9
20	JY42	L5	True	2500.00	2414.680611	96.6
21	JY43	L6	True	10000.00	9699.224188	97.0
22	JY44	L7	True	20000.00	20382.450304	101.9





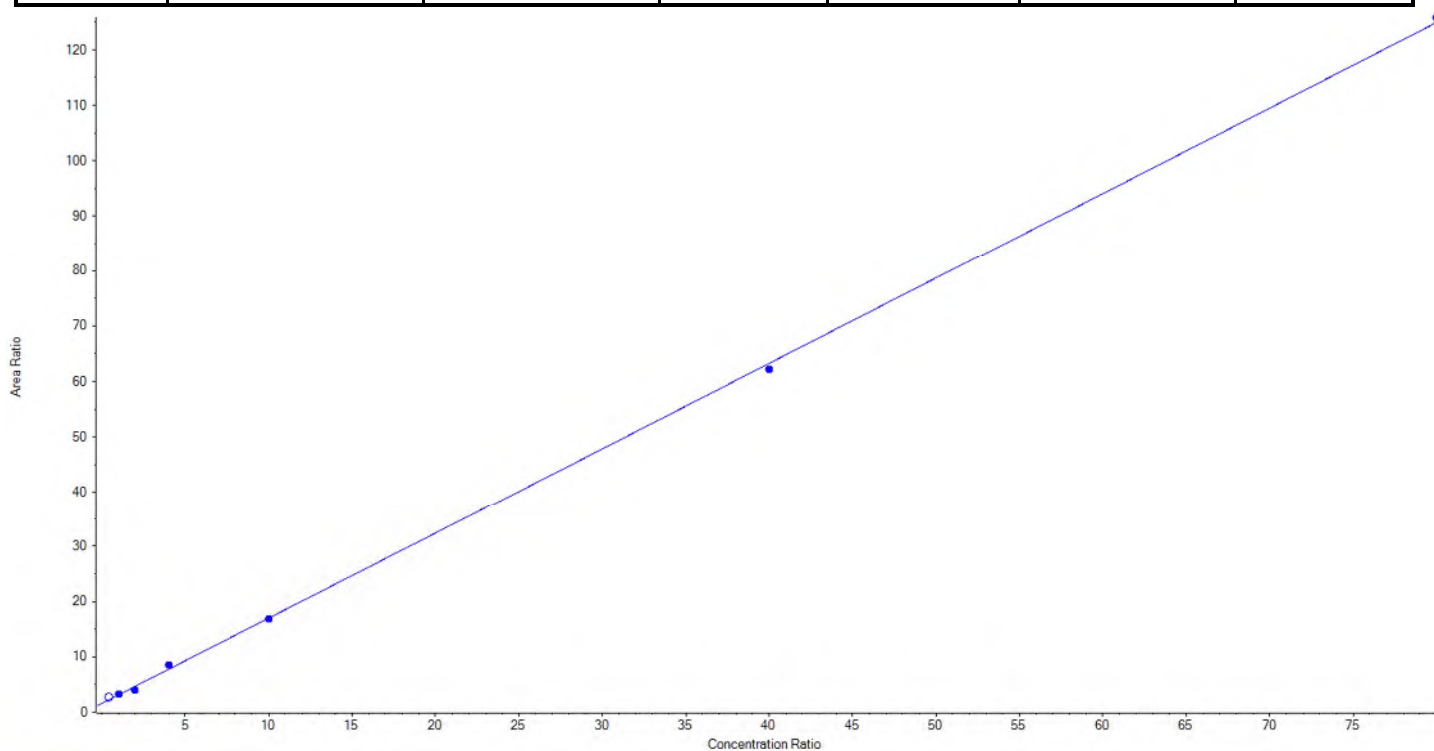
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Analyte Name	PFBA	Data File	18-0511_18-0517.wiff
MRM Transition	213.0 / 169.0	Result Table	18-0500_BASE_R
Internal Standard	13C4-PFBA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.54145x + 1.57832$ ($r = 0.99925$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	False	100.00	199.494040	199.5
17	JY39	L2	True	250.00	269.760043	107.9
18	JY40	L3	True	500.00	400.763360	80.2
19	JY41	L4	True	1000.00	1136.820309	113.7
20	JY42	L5	True	2500.00	2485.081441	99.4
21	JY43	L6	True	10000.00	9814.029596	98.1
22	JY44	L7	True	20000.00	20143.545251	100.7





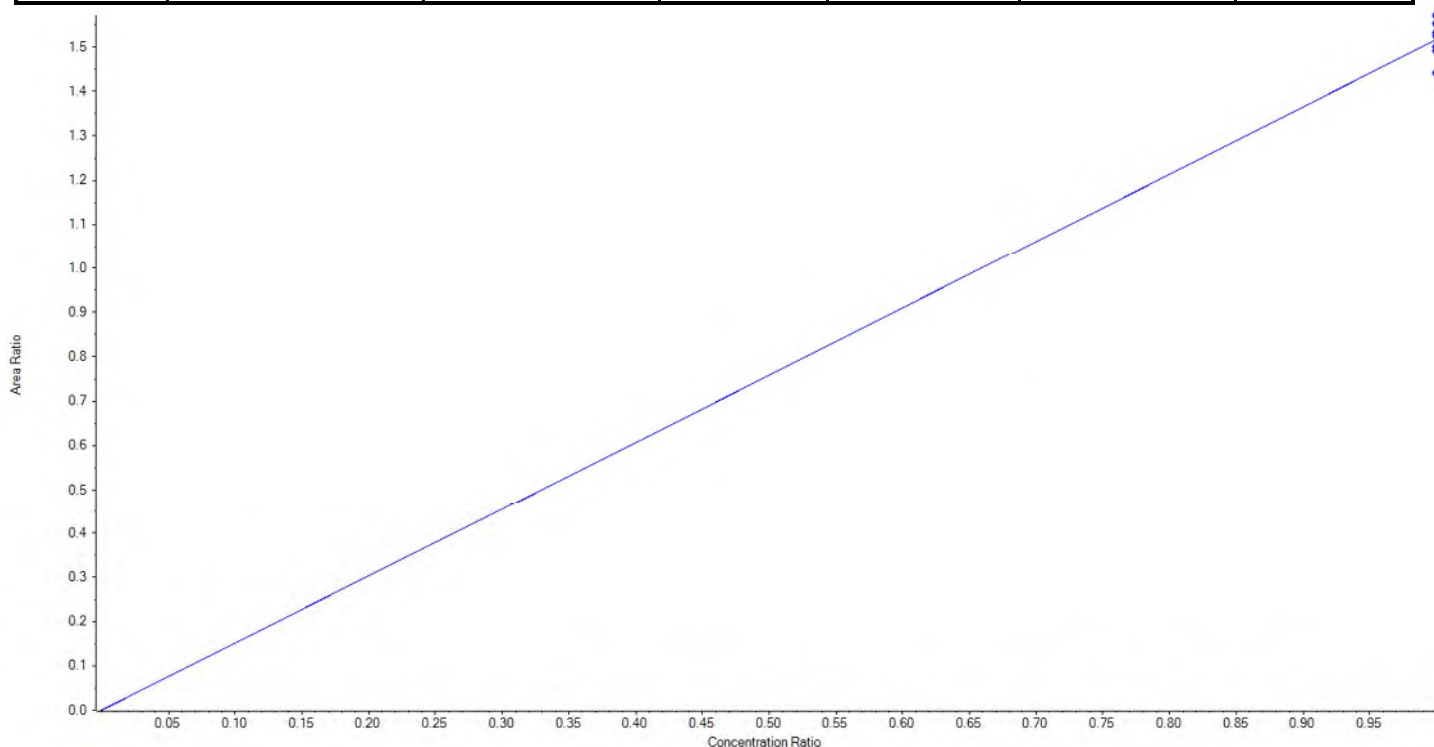
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Analyte Name	13C4-PFBA	Data File	18-0511_18-0517.wiff
MRM Transition	217.0 / 172.0	Result Table	18-0500_SIS_R
Internal Standard	13C3-PFBA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.51649 x$ (std. dev. = 0.04266) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	250.00	237.760559	95.1
17	JY39	L2	True	250.00	245.932181	98.4
18	JY40	L3	True	250.00	256.021629	102.4
19	JY41	L4	True	250.00	251.379912	100.6
20	JY42	L5	True	250.00	252.660953	101.1
21	JY43	L6	True	250.00	247.391142	99.0
22	JY44	L7	True	250.00	258.853624	103.5





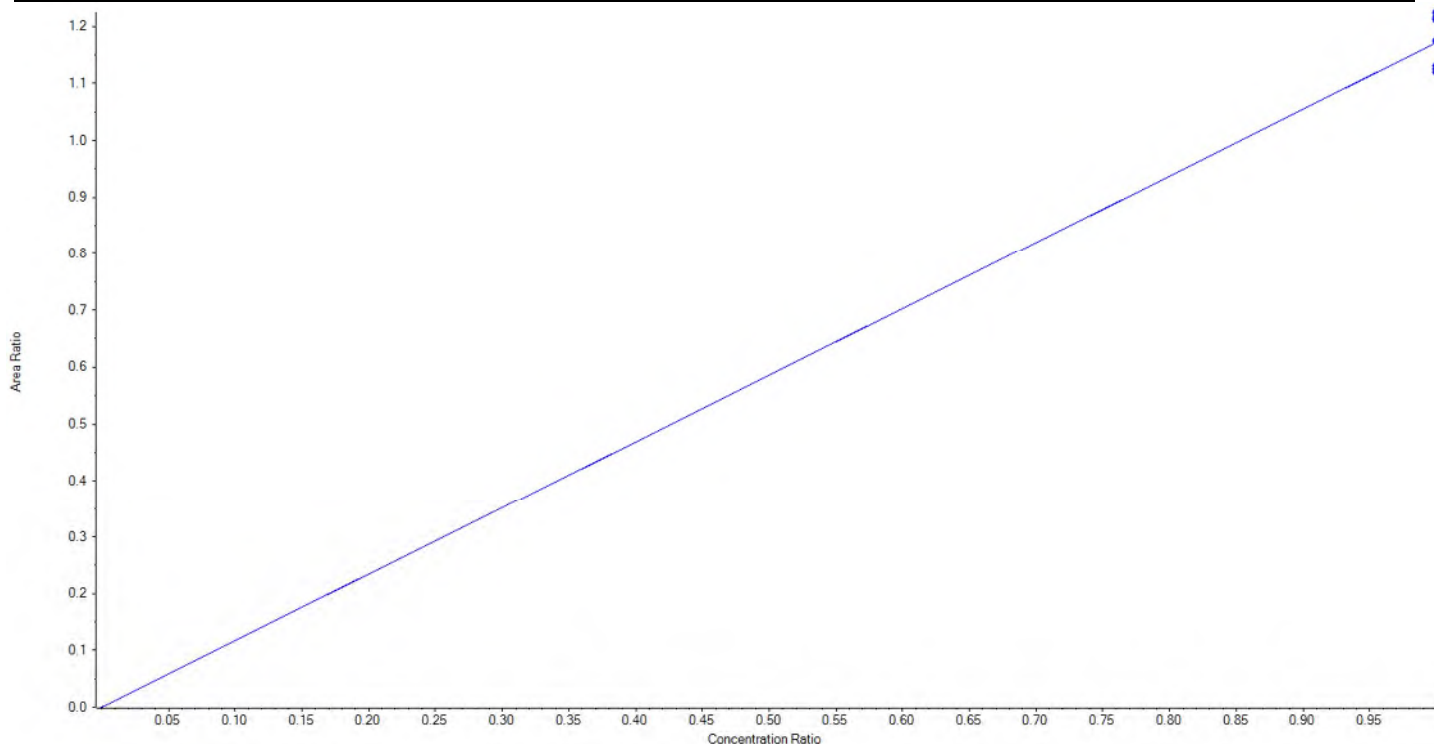
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Analyte Name	13C2-PFDoA	Data File	18-0511_18-0517.wiff
MRM Transition	615.0 / 570.0	Result Table	18-0500_SIS_R
Internal Standard	13C2-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.17190 x$ (std. dev. = 0.04610) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	250.00	238.926033	95.6
17	JY39	L2	True	250.00	261.144688	104.5
18	JY40	L3	True	250.00	240.150022	96.1
19	JY41	L4	True	250.00	259.253419	103.7
20	JY42	L5	True	250.00	250.787720	100.3
21	JY43	L6	True	250.00	258.533374	103.4
22	JY44	L7	True	250.00	241.204744	96.5





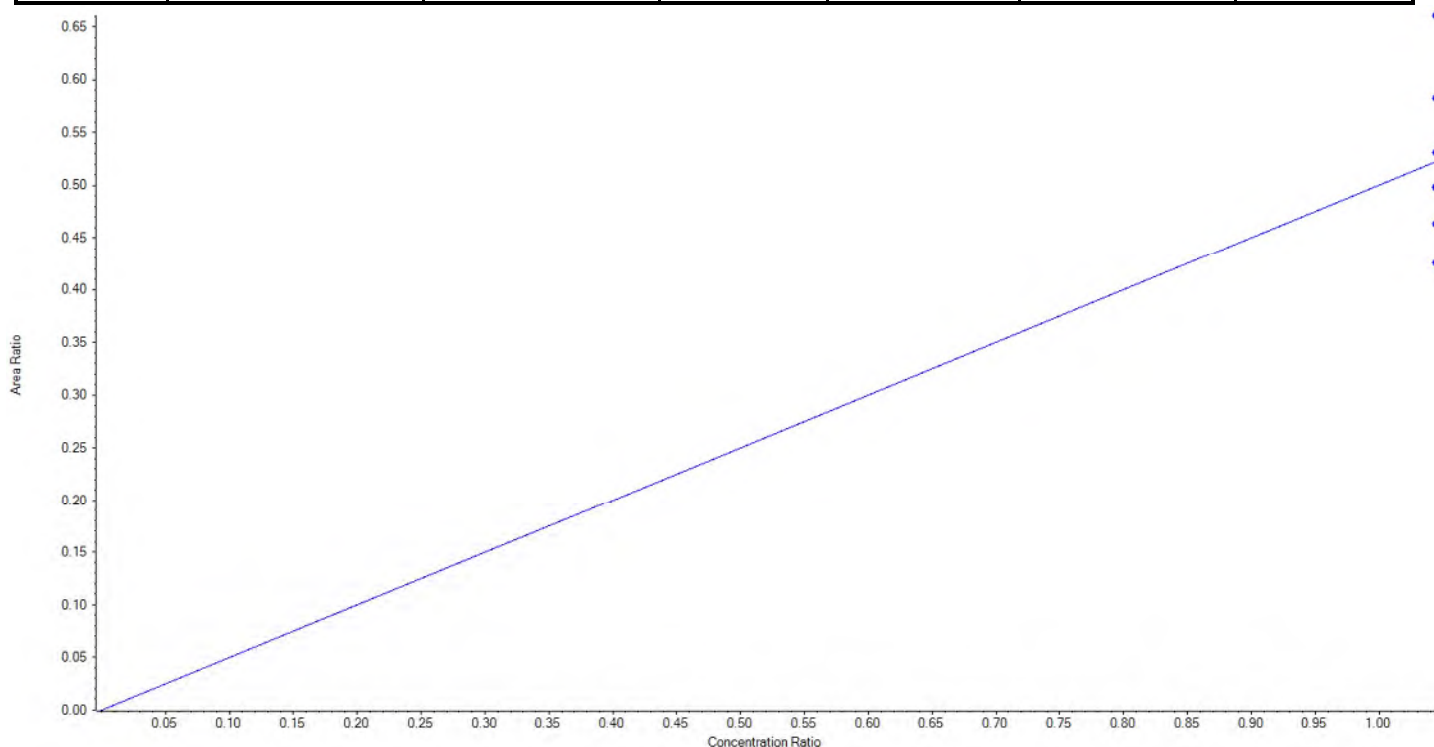
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Analyte Name	d3-MeFOSAA	Data File	18-0511_18-0517.wiff
MRM Transition	573.0 / 419.0	Result Table	18-0500_SIS_R
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.50025 x$ (std. dev. = 0.07510) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	250.00	238.441686	95.4
17	JY39	L2	True	250.00	203.316025	81.3
18	JY40	L3	True	250.00	221.584037	88.6
19	JY41	L4	True	250.00	278.683193	111.5
20	JY42	L5	True	250.00	238.053659	95.2
21	JY43	L6	True	250.00	253.965937	101.6
22	JY44	L7	True	250.00	315.955464	126.4





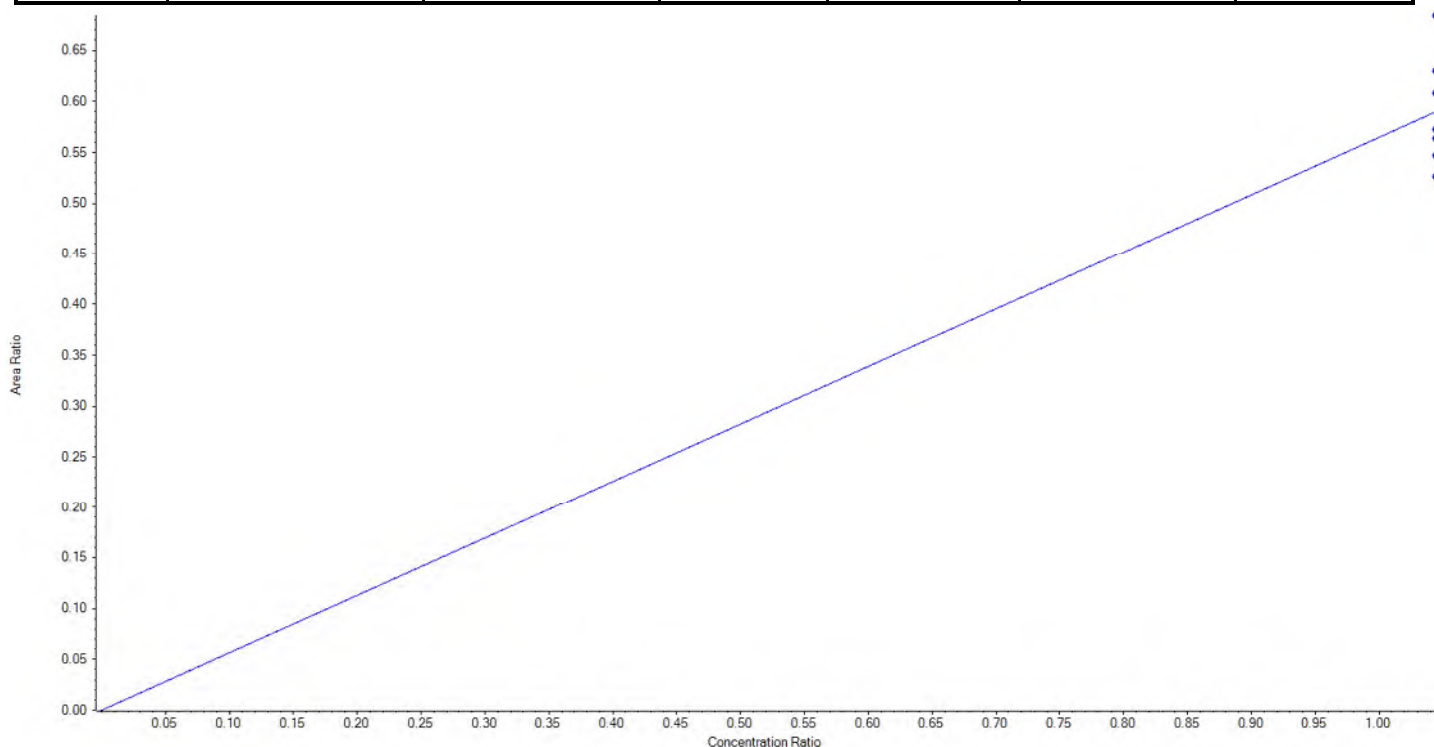
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Analyte Name	d5-EtFOSAA	Data File	18-0511_18-0517.wiff
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Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.56486 x$ (std. dev. = 0.05197) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	250.00	238.660187	95.5
17	JY39	L2	True	250.00	257.599510	103.0
18	JY40	L3	True	250.00	266.816806	106.7
19	JY41	L4	True	250.00	289.734246	115.9
20	JY42	L5	True	250.00	222.784609	89.1
21	JY43	L6	True	250.00	242.585009	97.0
22	JY44	L7	True	250.00	231.819634	92.7





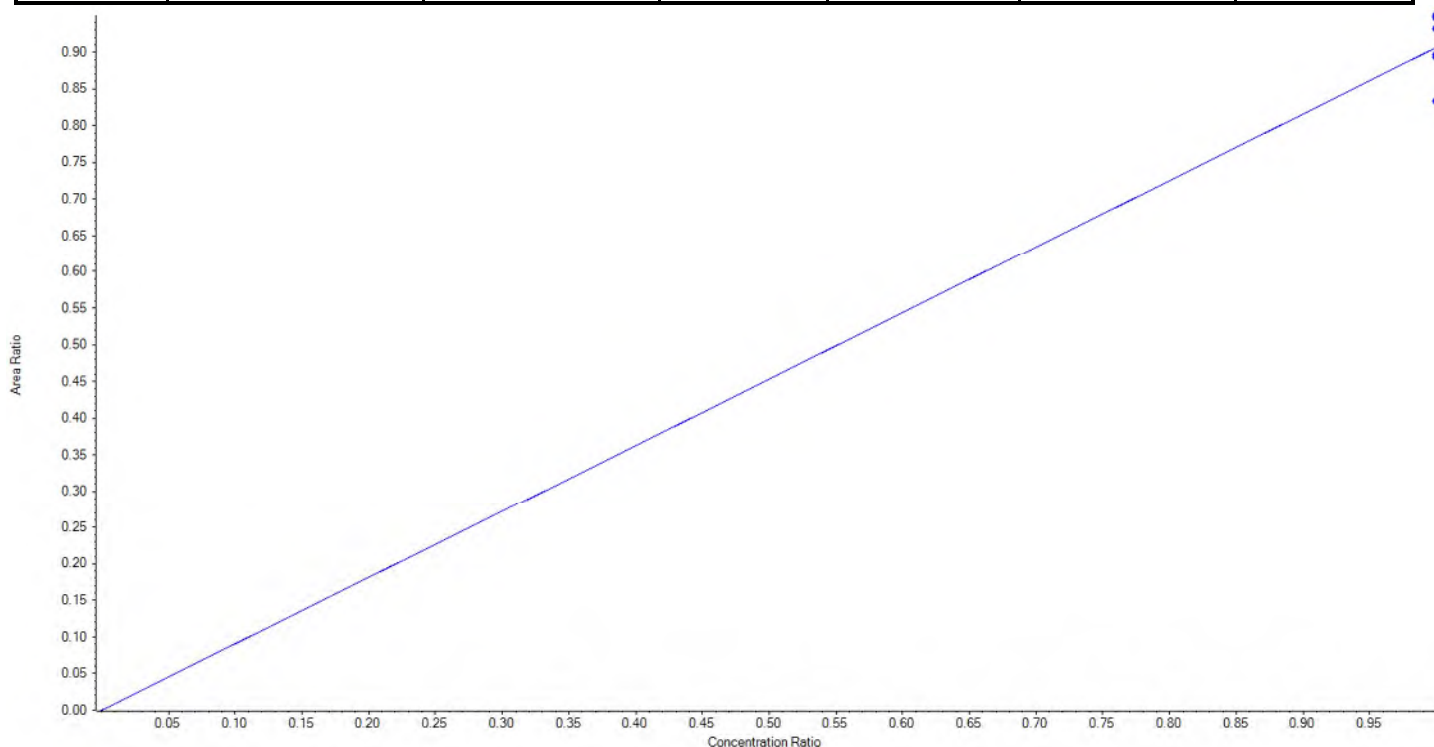
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Analyte Name	13C5-PFHxA	Data File	18-0511_18-0517.wiff
MRM Transition	318.0 / 273.0	Result Table	18-0500_SIS_R
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.90647 x$ (std. dev. = 0.04098) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	250.00	246.549834	98.6
17	JY39	L2	True	250.00	246.330079	98.5
18	JY40	L3	True	250.00	247.248938	98.9
19	JY41	L4	True	250.00	261.896594	104.8
20	JY42	L5	True	250.00	261.325623	104.5
21	JY43	L6	True	250.00	229.640595	91.9
22	JY44	L7	True	250.00	257.008337	102.8





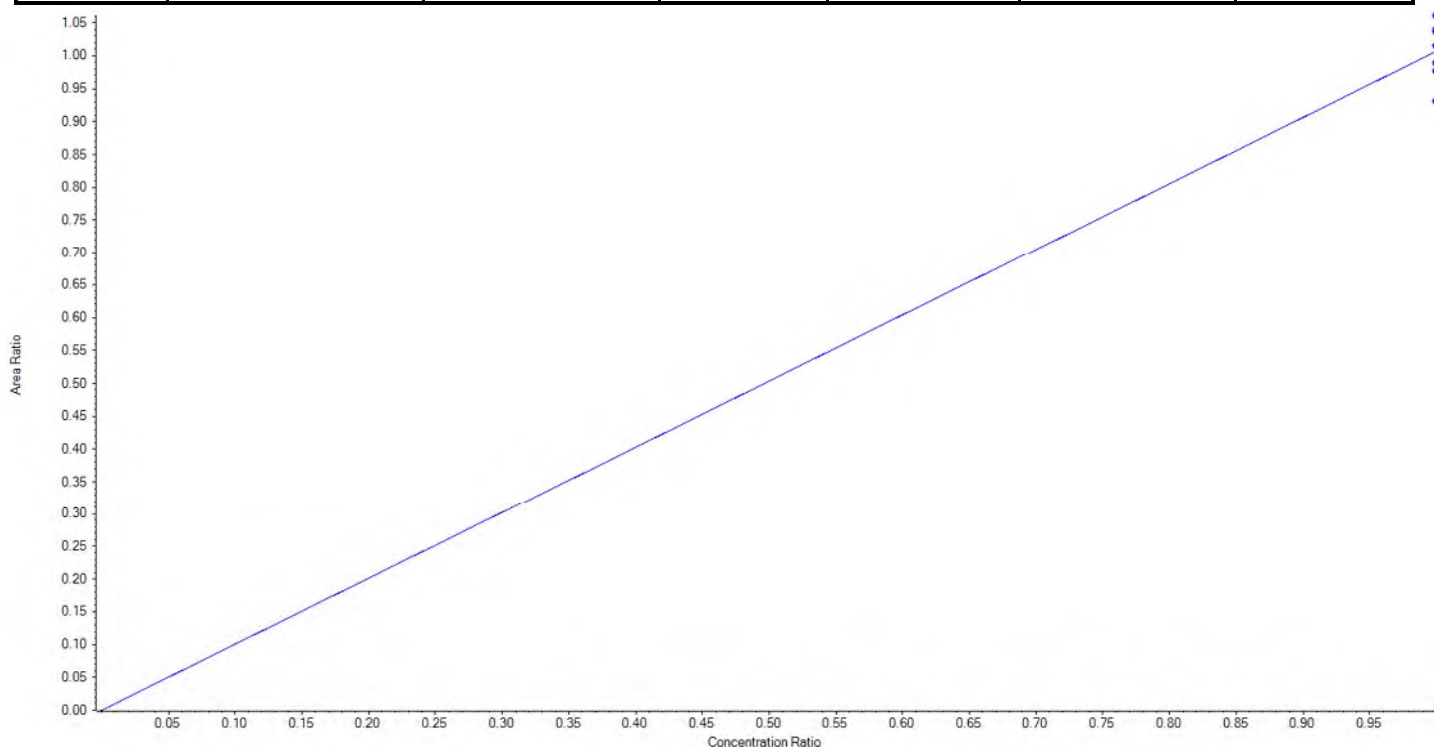
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Analyte Name	13C4-PFHpA	Data File	18-0511_18-0517.wiff
MRM Transition	367.0 / 322.0	Result Table	18-0500_SIS_R
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.00695 x$ (std. dev. = 0.04467) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	250.00	245.440599	98.2
17	JY39	L2	True	250.00	263.400755	105.4
18	JY40	L3	True	250.00	252.129036	100.9
19	JY41	L4	True	250.00	258.072963	103.2
20	JY42	L5	True	250.00	257.333936	102.9
21	JY43	L6	True	250.00	231.056212	92.4
22	JY44	L7	True	250.00	242.566499	97.0





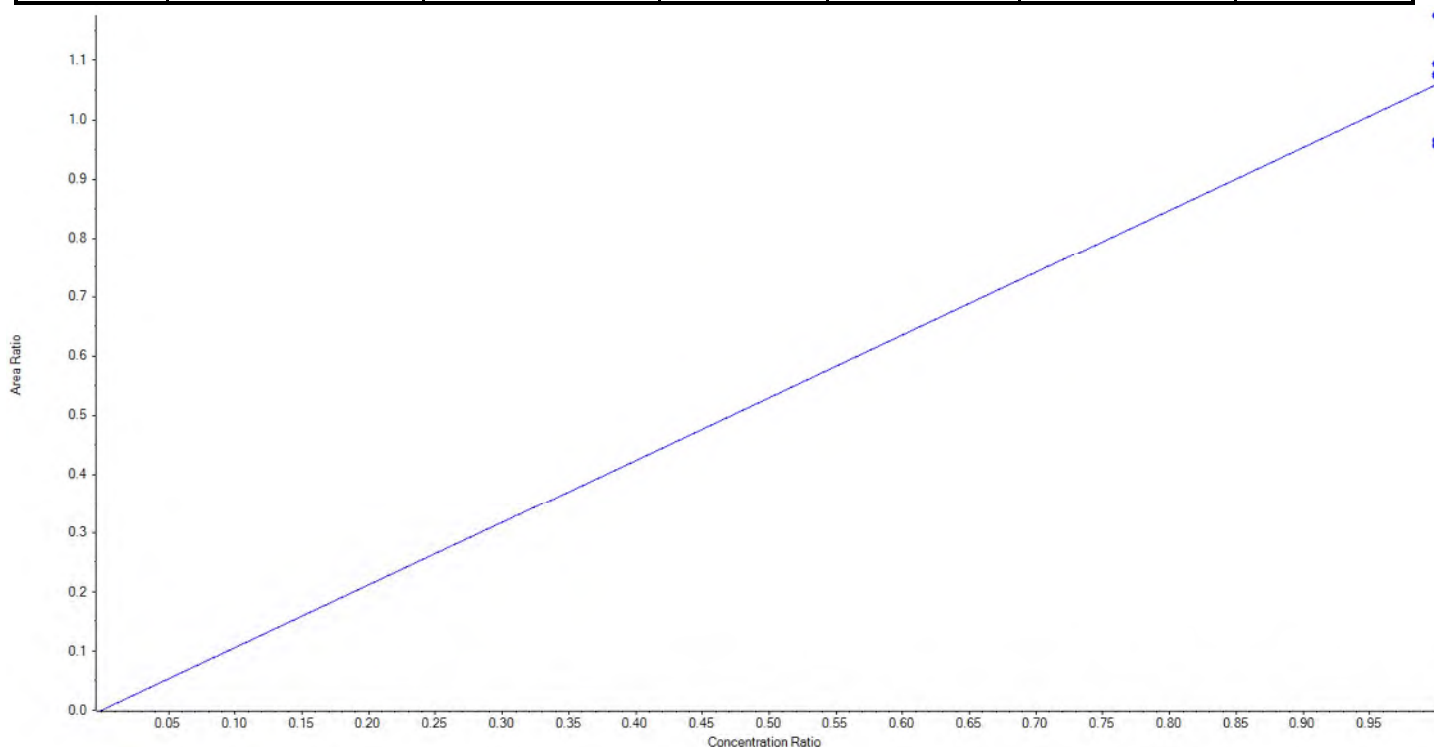
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Analyte Name	13C8-PFOA	Data File	18-0511_18-0517.wiff
MRM Transition	421.0 / 376.0	Result Table	18-0500_SIS_R
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.05924 x$ (std. dev. = 0.07608) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	250.00	253.416185	101.4
17	JY39	L2	True	250.00	277.407122	111.0
18	JY40	L3	True	250.00	254.059106	101.6
19	JY41	L4	True	250.00	253.261508	101.3
20	JY42	L5	True	250.00	258.229938	103.3
21	JY43	L6	True	250.00	225.927553	90.4
22	JY44	L7	True	250.00	227.698588	91.1





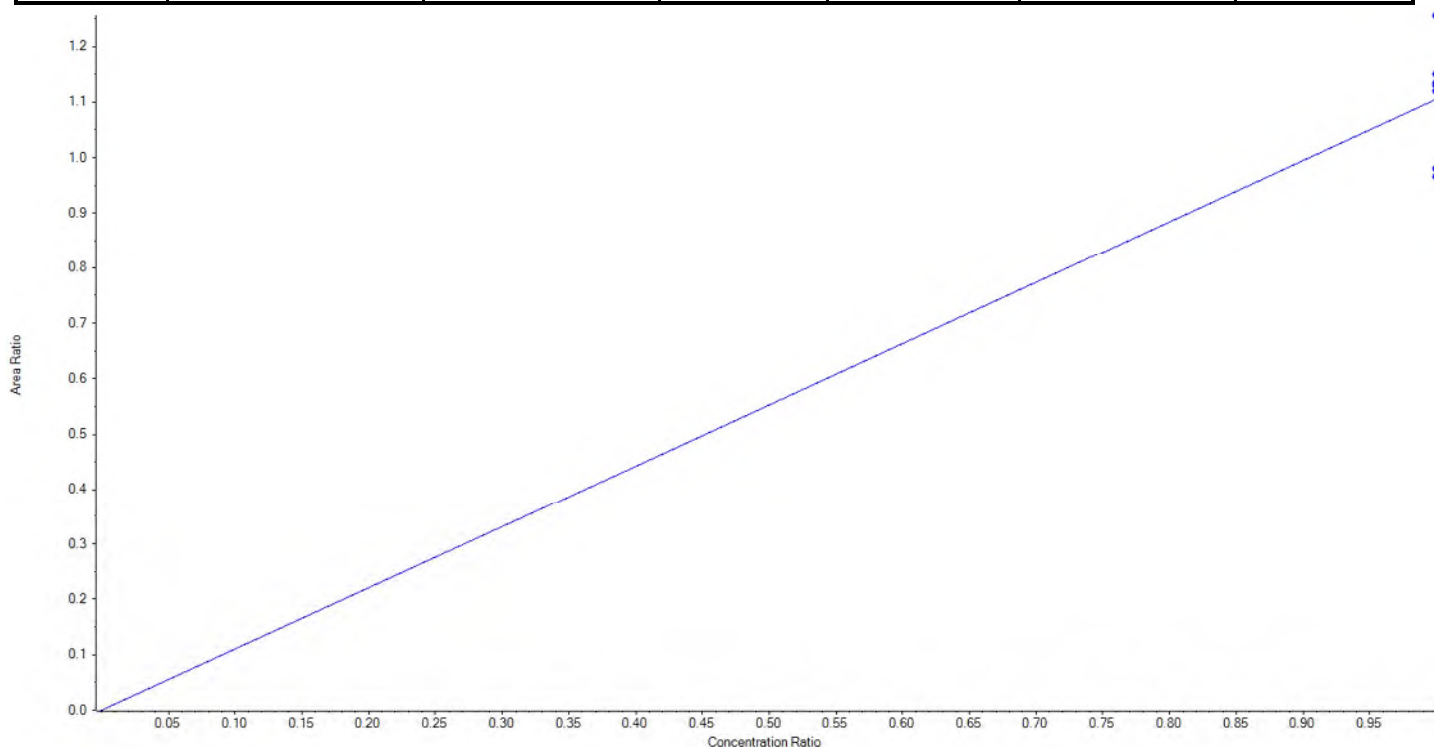
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MRM Transition	472.0 / 427.0	Result Table	18-0500_SIS_R
Internal Standard	13C2-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.10517 x$ (std. dev. = 0.10110) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	250.00	260.080124	104.0
17	JY39	L2	True	250.00	283.931036	113.6
18	JY40	L3	True	250.00	256.553174	102.6
19	JY41	L4	True	250.00	253.409603	101.4
20	JY42	L5	True	250.00	255.861542	102.3
21	JY43	L6	True	250.00	221.862578	88.8
22	JY44	L7	True	250.00	218.301942	87.3





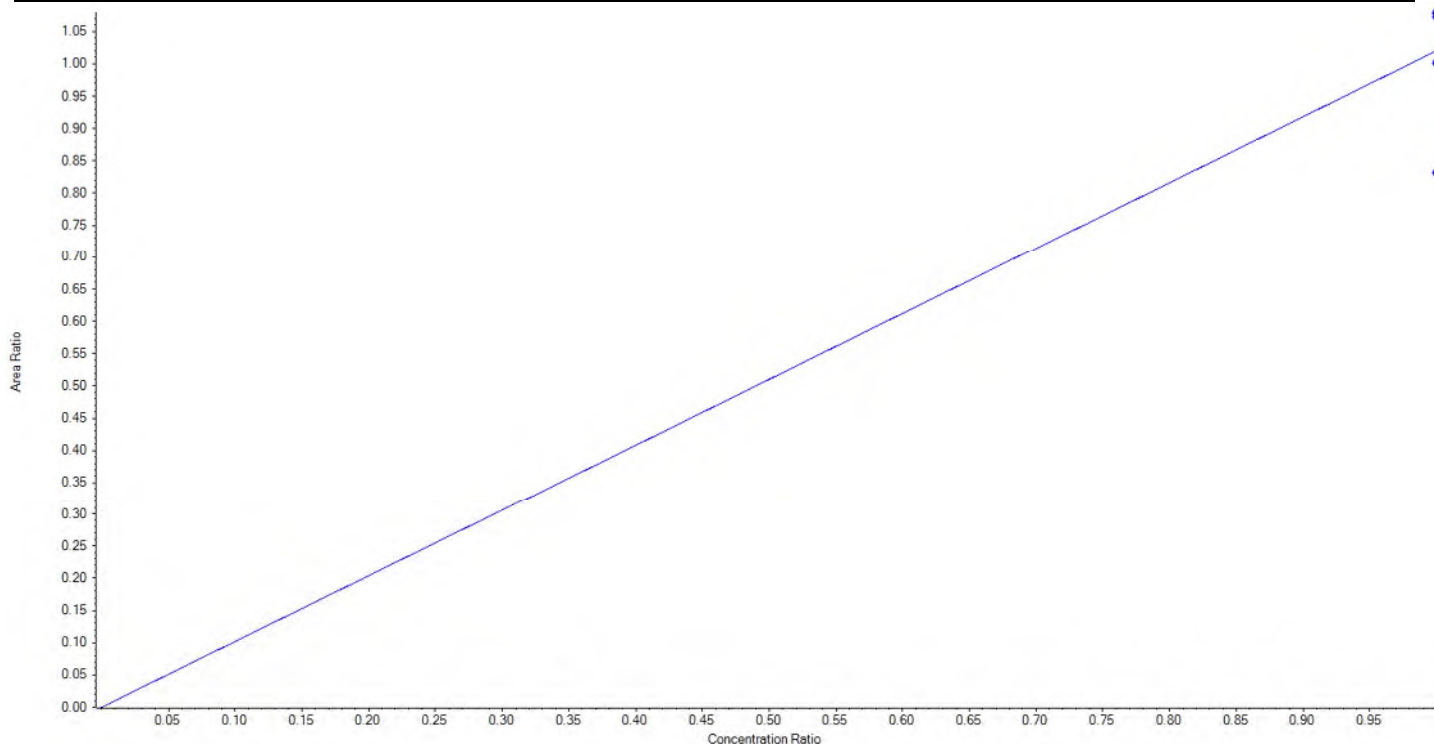
Calibration Summary Report

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Analyte Name	13C6-PFDA	Data File	18-0511_18-0517.wiff
MRM Transition	519.0 / 474.0	Result Table	18-0500_SIS_R
Internal Standard	13C2-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.02001 x$ (std. dev. = 0.09014) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	250.00	245.307175	98.1
17	JY39	L2	True	250.00	263.975242	105.6
18	JY40	L3	True	250.00	262.886479	105.2
19	JY41	L4	True	250.00	264.442593	105.8
20	JY42	L5	True	250.00	264.003958	105.6
21	JY43	L6	True	250.00	245.423764	98.2
22	JY44	L7	True	250.00	203.960790	81.6





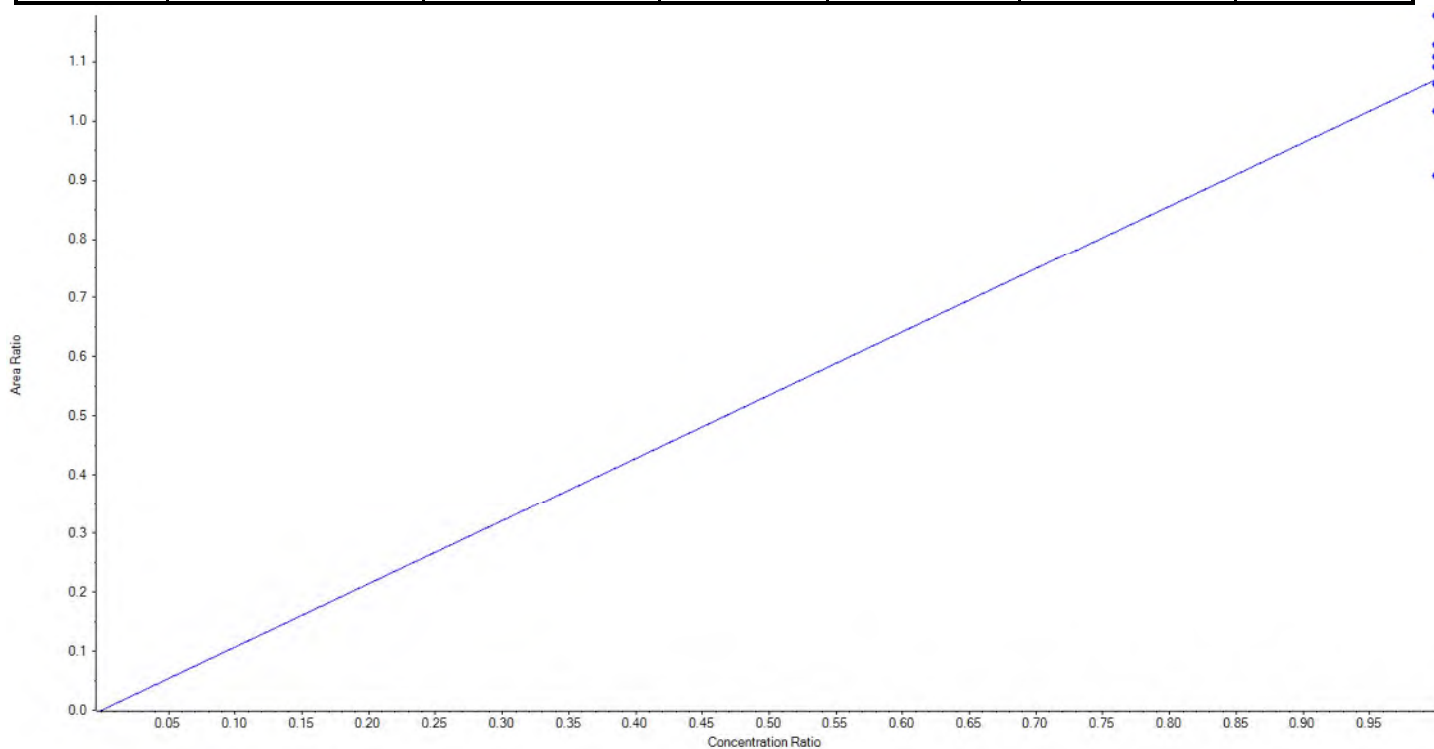
Calibration Summary Report

Created with Analyst Reporter
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Analyte Name	13C7-PFUnA	Data File	18-0511_18-0517.wiff
MRM Transition	570.0 / 525.0	Result Table	18-0500_SIS_R
Internal Standard	13C2-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.07023 x$ (std. dev. = 0.08777) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	250.00	248.152872	99.3
17	JY39	L2	True	250.00	275.080982	110.0
18	JY40	L3	True	250.00	255.050198	102.0
19	JY41	L4	True	250.00	258.776965	103.5
20	JY42	L5	True	250.00	263.560699	105.4
21	JY43	L6	True	250.00	237.376644	95.0
22	JY44	L7	True	250.00	212.001641	84.8





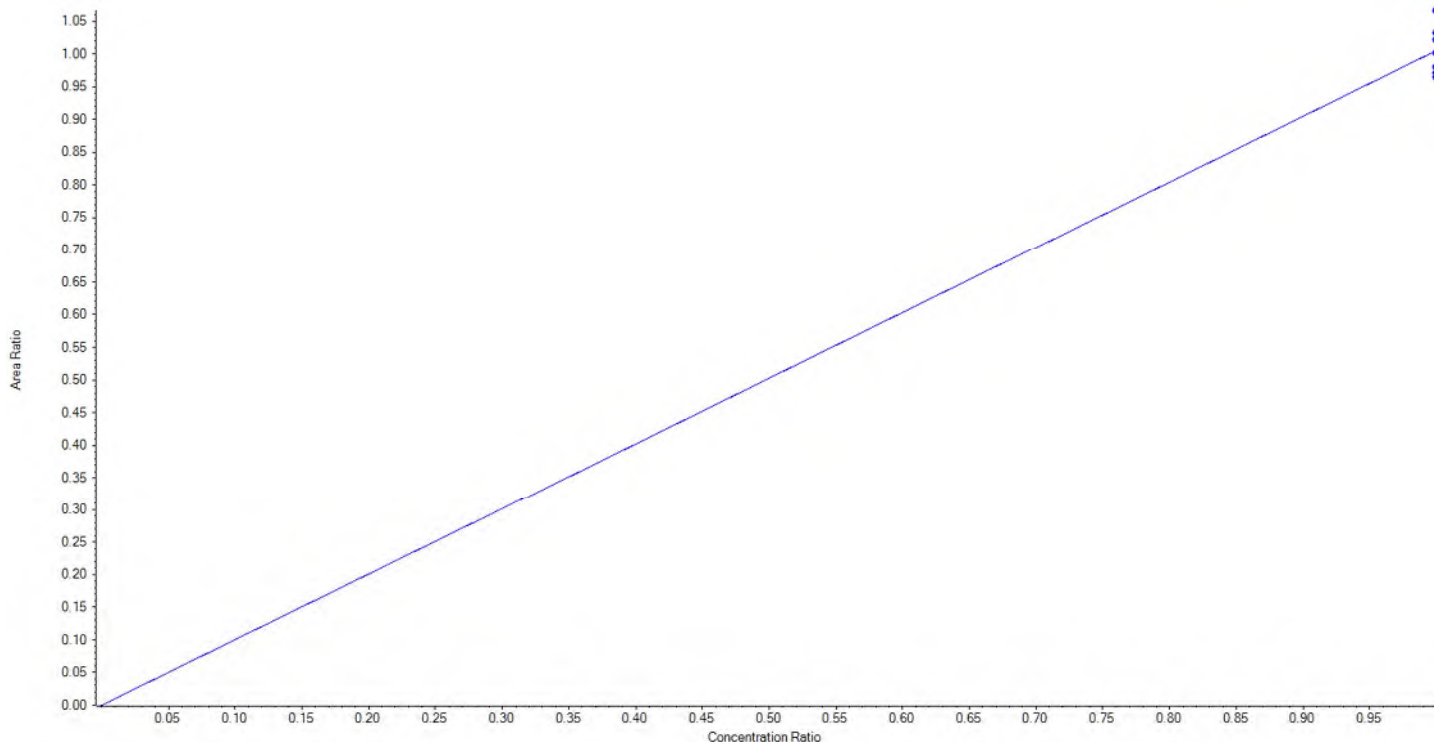
Calibration Summary Report

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Analyte Name	13C2-PFTeDA	Data File	18-0511_18-0517.wiff
MRM Transition	715.0 / 670.0	Result Table	18-0500_SIS_R
Internal Standard	13C2-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.00548 x$ (std. dev. = 0.03693) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	250.00	239.838865	95.9
17	JY39	L2	True	250.00	254.186196	101.7
18	JY40	L3	True	250.00	243.760872	97.5
19	JY41	L4	True	250.00	241.507200	96.6
20	JY42	L5	True	250.00	256.629590	102.7
21	JY43	L6	True	250.00	265.129568	106.1
22	JY44	L7	True	250.00	248.947709	99.6





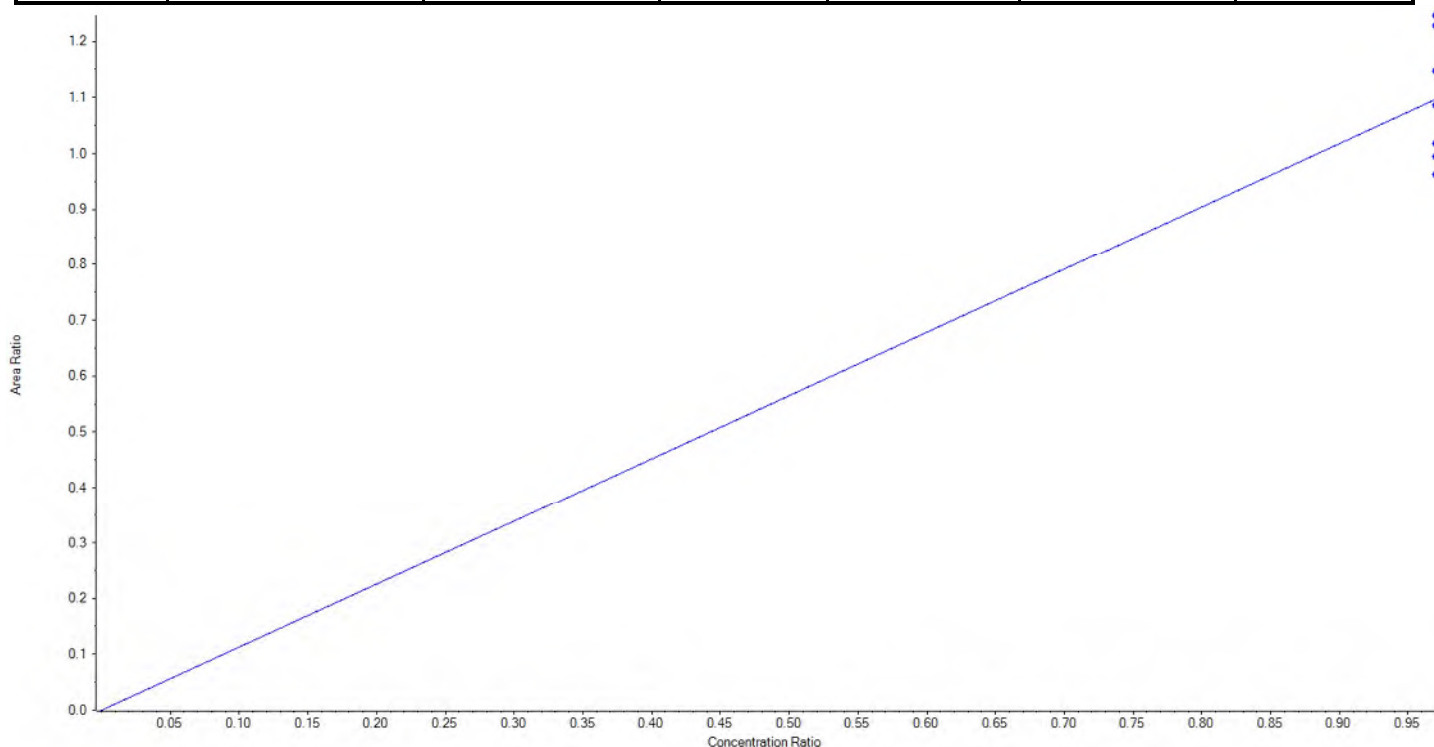
Calibration Summary Report

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Analyte Name	13C3-PFBS	Data File	18-0511_18-0517.wiff
MRM Transition	302.0 / 99.0	Result Table	18-0500_SIS_R
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.13039 x$ (std. dev. = 0.11681) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	232.25	229.728024	98.9
17	JY39	L2	True	232.25	215.407920	92.8
18	JY40	L3	True	232.25	210.598836	90.7
19	JY41	L4	True	232.25	259.993260	112.0
20	JY42	L5	True	232.25	203.492368	87.6
21	JY43	L6	True	232.25	242.842221	104.6
22	JY44	L7	True	232.25	263.687371	113.5





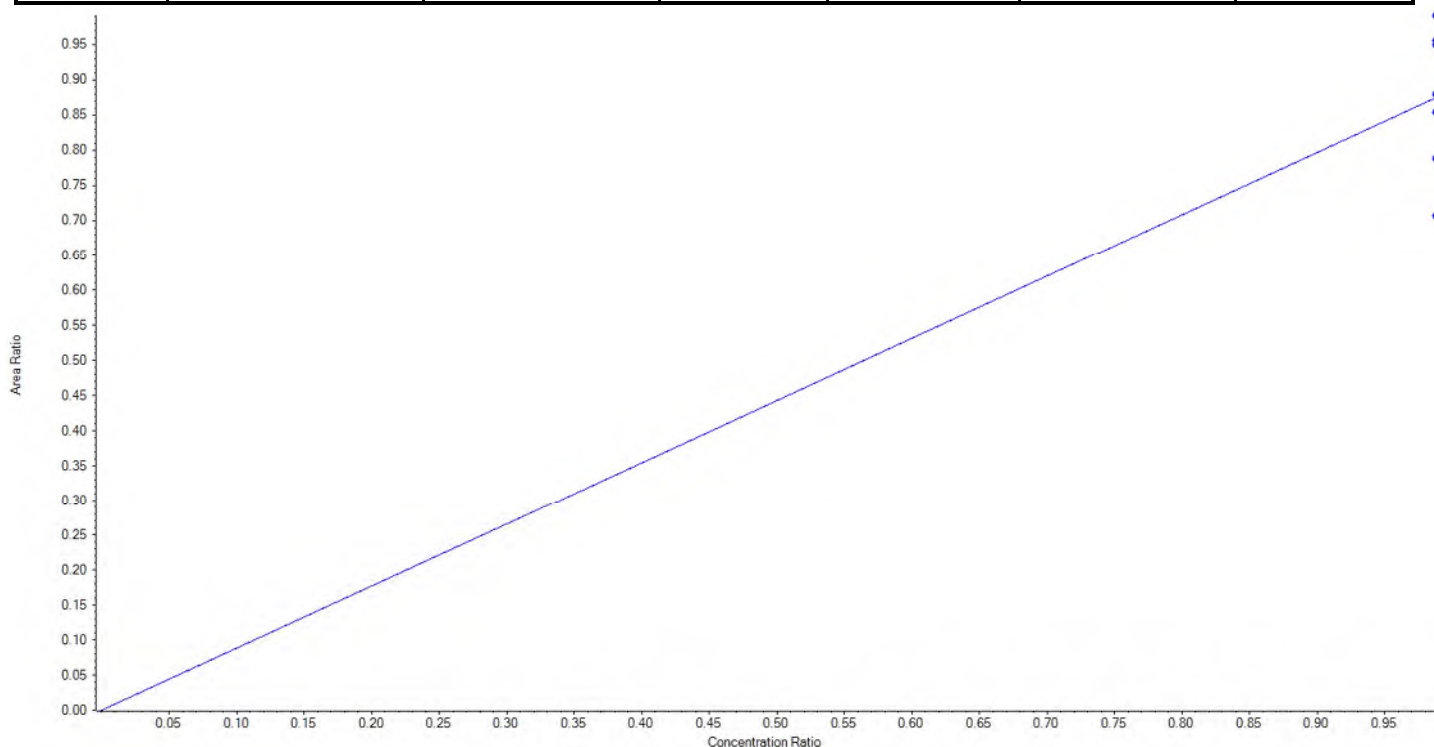
Calibration Summary Report

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Analyte Name	13C3-PFHxS	Data File	18-0511_18-0517.wiff
MRM Transition	402.0 / 99.0	Result Table	18-0500_SIS_R
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.88531 x$ (std. dev. = 0.10277) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	236.50	237.751178	100.5
17	JY39	L2	True	236.50	213.071641	90.1
18	JY40	L3	True	236.50	256.812154	108.6
19	JY41	L4	True	236.50	258.329491	109.2
20	JY42	L5	True	236.50	191.060993	80.8
21	JY43	L6	True	236.50	230.618349	97.5
22	JY44	L7	True	236.50	267.856194	113.3





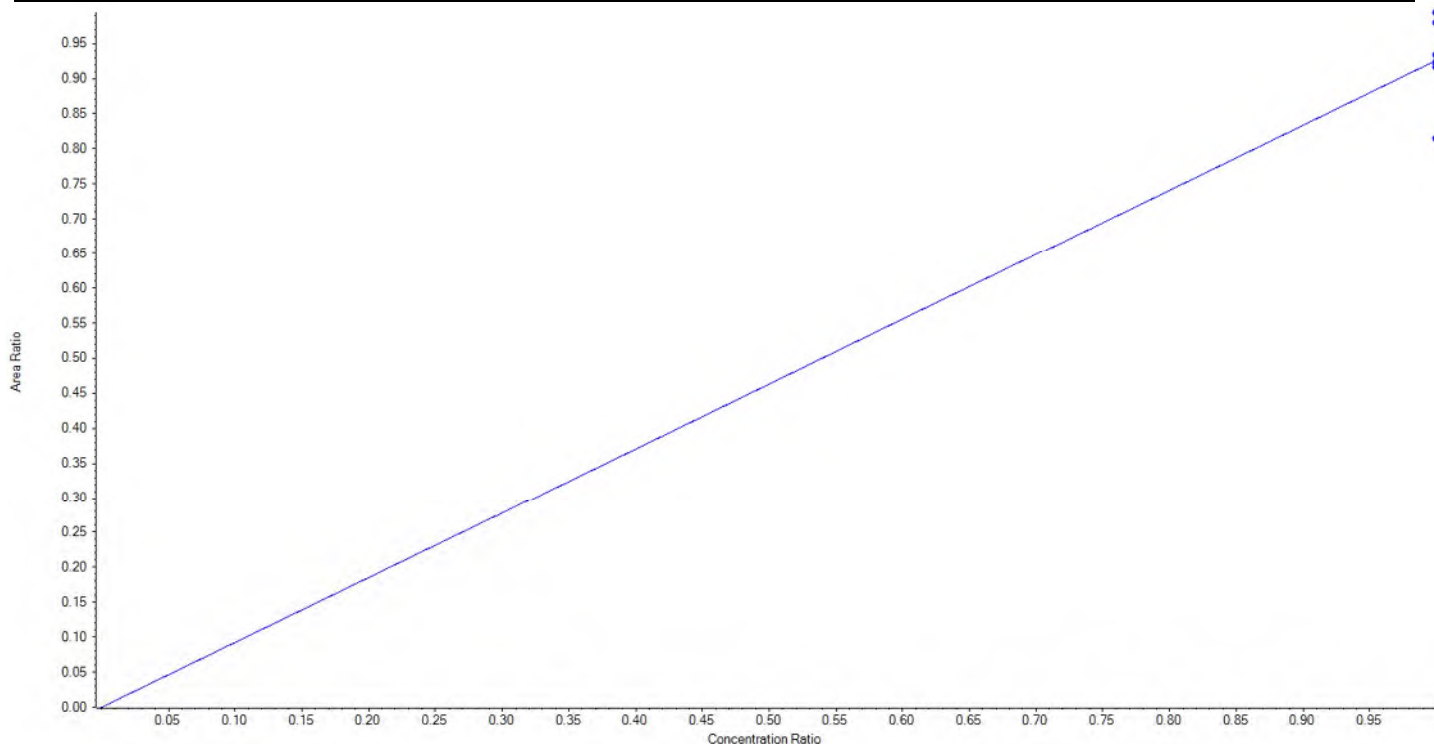
Calibration Summary Report

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Analyte Name	13C8-PFOS	Data File	18-0511_18-0517.wiff
MRM Transition	507.0 / 99.0	Result Table	18-0500_SIS_R
Internal Standard	13C4-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.92614 x$ (std. dev. = 0.05787) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	239.25	241.075184	100.8
17	JY39	L2	True	239.25	253.113619	105.8
18	JY40	L3	True	239.25	237.894938	99.4
19	JY41	L4	True	239.25	236.769157	99.0
20	JY42	L5	True	239.25	210.422534	88.0
21	JY43	L6	True	239.25	256.743159	107.3
22	JY44	L7	True	239.25	238.731408	99.8



Sample Name	JY38	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:36:54	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	41649.85	118.174563	85.0	false
PFBS_2	298.9 / 99.0	1.56	12872.12	124.006251	76.1	false
PFHxA_1	313.0 / 269.0	1.88	33461.72	117.846366	16.3	false
PFHxA_2	313.0 / 119.0	1.88	1689.26	108.429840	11.7	false
PFHpA_1	363.0 / 319.0	2.27	31348.10	183.037265	36.4	true
PFHpA_2	363.0 / 169.0	2.28	671.82	126.881979	27.1	false
PFHxS_1	399.0 / 80.0	2.30	44567.50	126.099371	95.1	false
PFHxS_2	399.0 / 99.0	2.29	12570.96	125.405816	102.7	false
PFOA_1	413.0 / 369.0	2.68	41215.80	124.723500	49.9	false
PFOA_2	413.0 / 169.0	2.68	2642.72	115.729454	37.2	false
PFNA_1	463.0 / 419.0	3.07	34370.68	107.015449	55.6	true
PFNA_2	463.0 / 219.0	3.07	12316.25	107.867314	58.5	false
PFOS_1	499.0 / 80.0	3.06	83724.22	108.675584	75.5	true
PFOS_2	499.0 / 99.0	3.06	15331.11	117.347383	117.5	false
PFDA_1	513.0 / 469.0	3.42	42400.52	110.198423	78.0	true
PFDA_2	513.0 / 219.0	3.42	3180.08	114.079000	52.9	false
PFUnA_1	563.0 / 519.0	3.74	43104.56	122.943043	54.1	false
PFUnA_2	563.0 / 269.0	3.74	3704.11	129.206562	39.6	false
PFDoA_1	613.0 / 569.0	4.02	44814.93	98.610714	83.5	false
PFDoA_2	613.0 / 319.0	4.02	7054.90	100.020562	57.6	false
PFTrDA_1	663.0 / 619.0	4.27	43195.76	103.989990	90.6	false
PFTrDA_2	663.0 / 169.0	4.27	3035.38	108.287462	59.7	false
PFTeDA_1	713.0 / 669.0	4.49	47536.93	98.523721	244.5	false
PFTeDA_2	713.0 / 169.0	4.49	2324.51	103.942641	121.3	false
NMeFOSAA_1	570.0 / 419.0	3.57	7224.16	83.446543	114.3	true
NMeFOSAA_2	570.0 / 512.0	3.57	4499.33	94.256719	81.5	false
NEtFOSAA_1	584.0 / 419.0	3.73	8030.73	127.151255	177.4	false
NEtFOSAA_2	584.0 / 483.0	3.74	660.85	236.281227	47.5	true
PFBA	213.0 / 169.0	1.17	226226.69	124.856664	192.6	true

Sample Name	JY39	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:47:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	103246.53	254.441490	163.1	false
PFBS_2	298.9 / 99.0	1.55	29864.10	251.390877	125.6	false
PFHxA_1	313.0 / 269.0	1.87	78722.32	259.195130	30.6	true
PFHxA_2	313.0 / 119.0	1.87	5638.12	269.130230	27.0	false
PFHpA_1	363.0 / 319.0	2.27	67995.37	289.678245	56.6	false
PFHpA_2	363.0 / 169.0	2.26	1778.67	291.012163	51.1	false
PFHxS_1	399.0 / 80.0	2.29	101506.53	246.750083	131.9	false
PFHxS_2	399.0 / 99.0	2.29	27525.16	238.832101	173.3	false
PFOA_1	413.0 / 369.0	2.67	95556.33	250.507586	88.8	false
PFOA_2	413.0 / 169.0	2.67	5943.93	235.595736	76.5	false
PFNA_1	463.0 / 419.0	3.06	95256.94	278.560077	117.1	true
PFNA_2	463.0 / 219.0	3.06	27560.41	253.733268	107.7	false
PFOS_1	499.0 / 80.0	3.06	160039.46	234.616933	94.1	true
PFOS_2	499.0 / 99.0	3.06	25677.64	217.248927	161.7	false
PFDA_1	513.0 / 469.0	3.41	103304.88	231.107869	145.6	true
PFDA_2	513.0 / 219.0	3.42	6726.68	275.419951	96.9	false
PFUnA_1	563.0 / 519.0	3.73	107778.50	246.726851	87.9	false
PFUnA_2	563.0 / 269.0	3.73	6544.92	241.347698	66.6	true
PFDoA_1	613.0 / 569.0	4.02	105680.00	233.920658	136.4	false
PFDoA_2	613.0 / 319.0	4.02	18069.50	250.671630	125.7	false
PFTTrDA_1	663.0 / 619.0	4.26	99682.92	237.901063	171.2	false
PFTTrDA_2	663.0 / 169.0	4.26	6805.60	250.336593	111.2	false
PFTeDA_1	713.0 / 669.0	4.49	118627.90	248.858327	364.4	false
PFTeDA_2	713.0 / 169.0	4.48	5496.50	243.654642	172.6	false
NMeFOSAA_1	570.0 / 419.0	3.57	17705.28	244.399054	377.7	true
NMeFOSAA_2	570.0 / 512.0	3.57	9203.85	226.726746	156.3	false
NEtFOSAA_1	584.0 / 419.0	3.73	19253.19	265.679934	332.3	false
NEtFOSAA_2	584.0 / 483.0	3.73	1068.59	319.753372	42.7	false
PFBA	213.0 / 169.0	1.17	264955.26	211.435722	215.3	true

Sample Name	JY40	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:58:41	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	193288.81	456.707111	221.8	false
PFBS_2	298.9 / 99.0	1.55	57080.68	457.925956	168.2	false
PFHxA_1	313.0 / 269.0	1.87	152769.69	465.851790	40.9	true
PFHxA_2	313.0 / 119.0	1.87	12404.87	521.629051	41.9	false
PFHpA_1	363.0 / 319.0	2.27	144122.44	493.381350	82.0	false
PFHpA_2	363.0 / 169.0	2.27	2705.11	419.166669	76.4	false
PFHxS_1	399.0 / 80.0	2.29	207299.32	455.053362	171.7	false
PFHxS_2	399.0 / 99.0	2.29	59474.77	462.800440	231.9	false
PFOA_1	413.0 / 369.0	2.67	191239.02	455.668756	166.1	false
PFOA_2	413.0 / 169.0	2.67	13248.34	480.697290	121.7	false
PFNA_1	463.0 / 419.0	3.06	177694.25	464.832649	167.8	true
PFNA_2	463.0 / 219.0	3.06	59245.56	495.088887	185.9	false
PFOS_1	499.0 / 80.0	3.06	319809.88	479.887763	156.4	true
PFOS_2	499.0 / 99.0	3.06	55535.36	477.582506	310.0	false
PFDA_1	513.0 / 469.0	3.41	225205.85	470.043896	223.3	true
PFDA_2	513.0 / 219.0	3.42	10813.82	457.576231	146.9	false
PFUnA_1	563.0 / 519.0	3.73	229056.85	463.660604	130.5	false
PFUnA_2	563.0 / 269.0	3.73	12842.78	467.242328	100.3	true
PFDoA_1	613.0 / 569.0	4.02	210586.05	475.852120	169.0	false
PFDoA_2	613.0 / 319.0	4.02	33790.53	475.157931	157.1	false
PFTrDA_1	663.0 / 619.0	4.26	214300.23	506.941023	221.2	false
PFTrDA_2	663.0 / 169.0	4.26	12771.24	472.911739	178.3	false
PFTeDA_1	713.0 / 669.0	4.48	233745.27	490.541916	390.4	false
PFTeDA_2	713.0 / 169.0	4.48	11347.68	499.075940	282.1	false
NMeFOSAA_1	570.0 / 419.0	3.57	34228.88	483.064727	337.1	false
NMeFOSAA_2	570.0 / 512.0	3.57	19867.20	502.520187	268.8	false
NEtFOSAA_1	584.0 / 419.0	3.73	36544.99	423.940233	481.1	false
NEtFOSAA_2	584.0 / 483.0	3.73	1955.63	443.979478	87.6	false
PFBA	213.0 / 169.0	1.17	394446.21	452.995070	341.4	true

Sample Name	JY41	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:09:34	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	435495.04	973.620829	326.2	false
PFBS_2	298.9 / 99.0	1.56	123090.43	933.624261	251.1	false
PFHxA_1	313.0 / 269.0	1.87	341562.43	919.737382	66.5	true
PFHxA_2	313.0 / 119.0	1.87	22835.64	839.959766	64.5	false
PFHpA_1	363.0 / 319.0	2.27	314924.78	984.594709	142.0	false
PFHpA_2	363.0 / 169.0	2.27	5919.45	899.978240	104.1	false
PFHxS_1	399.0 / 80.0	2.29	451134.33	928.278420	244.2	false
PFHxS_2	399.0 / 99.0	2.29	127704.10	934.199524	280.5	false
PFOA_1	413.0 / 369.0	2.67	408545.72	957.408716	284.1	false
PFOA_2	413.0 / 169.0	2.67	27996.35	1013.337499	187.3	false
PFNA_1	463.0 / 419.0	3.06	386253.44	927.907689	278.0	true
PFNA_2	463.0 / 219.0	3.06	120991.07	944.716102	266.6	false
PFOS_1	499.0 / 80.0	3.06	669172.99	1108.586887	211.1	true
PFOS_2	499.0 / 99.0	3.06	115535.53	1091.956540	415.8	false
PFDA_1	513.0 / 469.0	3.42	481757.48	1035.018294	395.6	true
PFDA_2	513.0 / 219.0	3.41	20199.76	940.050222	202.6	false
PFUnA_1	563.0 / 519.0	3.73	477965.96	919.395673	223.4	false
PFUnA_2	563.0 / 269.0	3.73	26437.74	968.076678	140.0	true
PFDoA_1	613.0 / 569.0	4.02	456783.23	1032.761138	218.0	false
PFDoA_2	613.0 / 319.0	4.02	73642.16	1031.153986	225.7	false
PFTrDA_1	663.0 / 619.0	4.27	427536.28	989.873487	296.5	false
PFTrDA_2	663.0 / 169.0	4.27	25724.32	938.882600	229.5	false
PFTeDA_1	713.0 / 669.0	4.49	491133.71	1012.450240	549.8	false
PFTeDA_2	713.0 / 169.0	4.48	23092.54	993.942996	355.9	false
NMeFOSAA_1	570.0 / 419.0	3.57	79808.75	1097.700385	893.7	false
NMeFOSAA_2	570.0 / 512.0	3.57	43375.34	1068.138462	320.6	false
NEtFOSAA_1	584.0 / 419.0	3.73	80775.32	937.778212	683.5	false
NEtFOSAA_2	584.0 / 483.0	3.73	4930.74	974.254801	601.2	false
PFBA	213.0 / 169.0	1.17	711122.82	1019.166566	385.5	true

Sample Name	JY42	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:20:26	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	1151128.03	2311.981236	595.1	false
PFBS_2	298.9 / 99.0	1.55	336525.31	2287.352093	444.5	false
PFHxA_1	313.0 / 269.0	1.87	923942.58	2428.348557	136.4	true
PFHxA_2	313.0 / 119.0	1.86	70167.85	2467.526138	119.9	false
PFHpA_1	363.0 / 319.0	2.27	856331.77	2235.657765	252.4	false
PFHpA_2	363.0 / 169.0	2.27	15771.47	2081.185199	164.4	false
PFHxS_1	399.0 / 80.0	2.29	1199797.73	2316.855490	389.7	false
PFHxS_2	399.0 / 99.0	2.28	345898.05	2375.949764	848.5	false
PFOA_1	413.0 / 369.0	2.67	1127261.70	2291.377116	389.6	false
PFOA_2	413.0 / 169.0	2.67	76078.28	2405.851339	436.2	false
PFNA_1	463.0 / 419.0	3.06	1050546.15	2371.276802	476.8	true
PFNA_2	463.0 / 219.0	3.06	317090.93	2348.525773	454.1	false
PFOS_1	499.0 / 80.0	3.06	1785938.01	2213.074605	292.5	true
PFOS_2	499.0 / 99.0	3.06	310347.72	2190.256613	700.5	false
PFDA_1	513.0 / 469.0	3.41	1233199.14	2432.445932	569.5	true
PFDA_2	513.0 / 219.0	3.41	48233.14	2132.114826	208.8	false
PFUnA_1	563.0 / 519.0	3.73	1268044.53	2369.453411	323.4	false
PFUnA_2	563.0 / 269.0	3.73	58622.01	2157.204163	212.2	true
PFDoA_1	613.0 / 569.0	4.02	1296301.87	2688.000463	326.6	false
PFDoA_2	613.0 / 319.0	4.02	196020.75	2511.466237	316.0	false
PFTrDA_1	663.0 / 619.0	4.27	1164491.82	2452.401261	508.2	false
PFTrDA_2	663.0 / 169.0	4.26	75669.28	2523.167722	360.3	false
PFTeDA_1	713.0 / 669.0	4.48	1351478.94	2540.117327	811.6	false
PFTeDA_2	713.0 / 169.0	4.48	62212.25	2435.881968	577.4	false
NMeFOSAA_1	570.0 / 419.0	3.57	211546.26	2838.922966	977.8	false
NMeFOSAA_2	570.0 / 512.0	3.57	115076.60	2765.525131	736.4	false
NEtFOSAA_1	584.0 / 419.0	3.73	223779.17	2212.318765	806.5	false
NEtFOSAA_2	584.0 / 483.0	3.73	13782.19	2197.277628	346.1	false
PFBA	213.0 / 169.0	1.16	1559351.55	2465.258691	495.0	true

Sample Name	JY43	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:31:18	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	4722904.78	10594.642449	1147.7	false
PFBS_2	298.9 / 99.0	1.55	1392113.94	10559.938920	893.9	false
PFHxA_1	313.0 / 269.0	1.86	3578486.35	10136.988023	314.0	true
PFHxA_2	313.0 / 119.0	1.86	273369.19	10292.222124	300.5	false
PFHpA_1	363.0 / 319.0	2.27	3308188.41	9266.642157	474.7	false
PFHpA_2	363.0 / 169.0	2.27	64942.59	9395.142275	480.6	false
PFHxS_1	399.0 / 80.0	2.28	4577214.25	10517.109004	848.3	false
PFHxS_2	399.0 / 99.0	2.28	1277716.04	10452.350229	1330.6	false
PFOA_1	413.0 / 369.0	2.67	4051212.33	9038.437378	833.1	false
PFOA_2	413.0 / 169.0	2.67	263105.48	9166.209412	720.2	false
PFNA_1	463.0 / 419.0	3.06	3907197.52	9990.022487	920.1	true
PFNA_2	463.0 / 219.0	3.06	1239288.32	10441.723314	976.5	false
PFOS_1	499.0 / 80.0	3.06	6448175.67	10218.525269	525.0	true
PFOS_2	499.0 / 99.0	3.06	1157242.10	10430.517196	1147.6	false
PFDA_1	513.0 / 469.0	3.41	4455092.59	10438.811237	651.0	true
PFDA_2	513.0 / 219.0	3.41	196948.16	10558.871916	535.1	false
PFUnA_1	563.0 / 519.0	3.73	4819181.12	9555.457961	587.2	false
PFUnA_2	563.0 / 269.0	3.73	230697.64	9155.089249	410.2	false
PFDoA_1	613.0 / 569.0	4.01	4846323.85	10550.038320	544.6	false
PFDoA_2	613.0 / 319.0	4.01	762283.61	10239.500617	471.2	false
PFTTrDA_1	663.0 / 619.0	4.26	4607652.47	10416.702985	713.4	false
PFTTrDA_2	663.0 / 169.0	4.25	289339.48	10379.703023	724.6	false
PFTeDA_1	713.0 / 669.0	4.47	5066779.77	10235.461016	1389.1	false
PFTeDA_2	713.0 / 169.0	4.47	245444.68	10316.645427	986.0	false
NMeFOSAA_1	570.0 / 419.0	3.56	836072.04	10168.320127	1408.9	false
NMeFOSAA_2	570.0 / 512.0	3.56	446714.30	9729.906041	1087.5	false
NEtFOSAA_1	584.0 / 419.0	3.73	822149.74	9520.499075	1213.9	false
NEtFOSAA_2	584.0 / 483.0	3.73	51283.90	9282.499347	484.6	false
PFBA	213.0 / 169.0	1.16	5400203.01	9812.318480	1067.0	true

Sample Name	JY44	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:42:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	10092400.92	19983.932322	1629.2	false
PFBS_2	298.9 / 99.0	1.55	2999136.08	20079.261643	1109.4	false
PFHxA_1	313.0 / 269.0	1.86	7816243.50	20365.532752	394.2	true
PFHxA_2	313.0 / 119.0	1.86	583740.94	20194.602851	395.6	false
PFHpA_1	363.0 / 319.0	2.26	6920691.34	20980.045774	670.1	false
PFHpA_2	363.0 / 169.0	2.26	134460.94	21136.633475	641.5	false
PFHxS_1	399.0 / 80.0	2.28	9895755.88	20103.354269	887.9	false
PFHxS_2	399.0 / 99.0	2.28	2779515.13	20103.962127	1126.4	false
PFOA_1	413.0 / 369.0	2.66	8761176.97	21231.876948	1550.4	false
PFOA_2	413.0 / 169.0	2.66	552786.63	20932.579270	889.2	false
PFNA_1	463.0 / 419.0	3.05	8519144.49	20210.384848	1266.7	true
PFNA_2	463.0 / 219.0	3.05	2525457.60	19758.345342	1156.0	false
PFOS_1	499.0 / 80.0	3.04	13396043.63	19986.632959	420.0	true
PFOS_2	499.0 / 99.0	3.04	2336719.24	19825.090835	1088.5	false
PFDA_1	513.0 / 469.0	3.40	9064512.14	19632.374349	812.0	true
PFDA_2	513.0 / 219.0	3.40	399937.08	19871.887855	536.5	false
PFUnA_1	563.0 / 519.0	3.72	9885099.15	20672.362456	787.7	false
PFUnA_2	563.0 / 269.0	3.72	505827.71	21231.833322	474.3	false
PFDoA_1	613.0 / 569.0	4.01	9534710.25	19270.816586	808.0	false
PFDoA_2	613.0 / 319.0	4.00	1583325.10	19742.029037	766.3	false
PFTTrDA_1	663.0 / 619.0	4.25	9618909.65	19642.190190	1080.0	false
PFTTrDA_2	663.0 / 169.0	4.25	607046.90	19676.710861	866.0	false
PFTeDA_1	713.0 / 669.0	4.47	10807688.71	19724.047452	1763.5	false
PFTeDA_2	713.0 / 169.0	4.47	520379.78	19756.856386	1294.5	false
NMeFOSAA_1	570.0 / 419.0	3.55	1653167.25	19434.146196	1149.3	false
NMeFOSAA_2	570.0 / 512.0	3.55	948142.22	19962.926715	1394.2	false
NEtFOSAA_1	584.0 / 419.0	3.72	1650549.79	20862.632526	1264.2	false
NEtFOSAA_2	584.0 / 483.0	3.72	107026.84	21032.235373	697.8	false
PFBA	213.0 / 169.0	1.16	11383778.49	20263.968808	1370.7	true

Sample Name	JY38	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:36:54	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.17	95543.41	263.706951	1396.2	false
13C2-PFDoA	615.0 / 570.0	4.01	121558.79	259.030708	854.2	false
d3-MeFOSAA	573.0 / 419.0	3.57	18593.51	240.622830	155.5	false
d5-EtFOSAA	589.0 / 419.0	3.73	21600.05	245.891395	202.2	false
13C5-PFHxA	318.0 / 273.0	1.86	77959.28	245.578330	487.3	false
13C4-PFHpA	367.0 / 322.0	2.26	90262.77	256.566788	629.3	false
13C8-PFOA	421.0 / 376.0	2.67	106825.04	274.833039	3235.7	false
13C9-PFNA	472.0 / 427.0	3.06	103312.76	264.071238	904.7	false
13C6-PFDA	519.0 / 474.0	3.41	104855.93	258.394010	613.6	false
13C7-PFUnA	570.0 / 525.0	3.72	115193.55	268.458038	953.1	false
13C2-PFTeDA	715.0 / 670.0	4.48	104417.85	250.237589	1525.7	false
13C3-PFBS	302.0 / 99.0	1.54	34980.72	221.351762	663.2	false
13C3-PFHxS	402.0 / 99.0	2.28	31543.31	250.091901	295.3	false
13C8-PFOS	507.0 / 99.0	3.05	33931.33	241.972269	213.0	false

Sample Name	JY39	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:47:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.17	92104.27	258.296214	1413.1	false
13C2-PFDoA	615.0 / 570.0	4.01	118292.59	244.929132	970.6	false
d3-MeFOSAA	573.0 / 419.0	3.56	16828.42	231.485404	156.1	false
d5-EtFOSAA	589.0 / 419.0	3.72	19802.95	239.620284	166.6	false
13C5-PFHxA	318.0 / 273.0	1.85	73872.08	230.912320	509.1	false
13C4-PFHpA	367.0 / 322.0	2.25	86696.39	244.532935	916.1	false
13C8-PFOA	421.0 / 376.0	2.66	97424.27	248.718208	1025.8	false
13C9-PFNA	472.0 / 427.0	3.05	90045.86	228.389124	1121.3	false
13C6-PFDA	519.0 / 474.0	3.40	106990.49	256.184390	908.2	false
13C7-PFUnA	570.0 / 525.0	3.72	110535.74	250.304696	571.6	false
13C2-PFTeDA	715.0 / 670.0	4.48	102110.90	237.775971	1774.0	false
13C3-PFBS	302.0 / 99.0	1.54	33957.26	228.397779	551.0	false
13C3-PFHxS	402.0 / 99.0	2.28	28404.76	239.380330	321.2	false
13C8-PFOS	507.0 / 99.0	3.04	31123.56	235.916847	198.6	false

Sample Name	JY40	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:58:41	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.17	91805.61	245.137022	1839.3	false
13C2-PFDoA	615.0 / 570.0	4.01	114977.10	251.034787	926.2	false
d3-MeFOSAA	573.0 / 419.0	3.56	16811.19	229.902068	139.7	false
d5-EtFOSAA	589.0 / 419.0	3.72	22038.82	265.122265	215.1	false
13C5-PFHxA	318.0 / 273.0	1.85	76699.30	248.137717	543.4	false
13C4-PFHpA	367.0 / 322.0	2.26	87153.57	254.422857	827.8	false
13C8-PFOA	421.0 / 376.0	2.66	98005.51	258.955725	835.4	false
13C9-PFNA	472.0 / 427.0	3.05	96294.65	252.783354	1043.1	false
13C6-PFDA	519.0 / 474.0	3.40	108557.17	274.097858	1741.3	false
13C7-PFUnA	570.0 / 525.0	3.72	112942.63	269.689373	924.6	false
13C2-PFTeDA	715.0 / 670.0	4.48	101736.77	249.812083	1514.6	false
13C3-PFBS	302.0 / 99.0	1.54	33404.82	223.373990	572.6	false
13C3-PFHxS	402.0 / 99.0	2.28	28381.69	237.793450	345.9	false
13C8-PFOS	507.0 / 99.0	3.04	31335.63	236.141470	209.7	false

Sample Name	JY41	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:09:34	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.17	93269.26	247.884907	1533.0	false
13C2-PFDoA	615.0 / 570.0	4.01	114449.09	246.787054	980.2	false
d3-MeFOSAA	573.0 / 419.0	3.56	17463.24	236.565126	124.0	false
d5-EtFOSAA	589.0 / 419.0	3.72	20789.36	247.730920	198.5	false
13C5-PFHxA	318.0 / 273.0	1.86	84047.21	264.228232	620.7	false
13C4-PFHpA	367.0 / 322.0	2.26	85380.36	242.205202	846.0	false
13C8-PFOA	421.0 / 376.0	2.66	94467.78	242.556696	1362.9	false
13C9-PFNA	472.0 / 427.0	3.05	101567.70	259.093464	1081.5	false
13C6-PFDA	519.0 / 474.0	3.40	102571.89	255.777869	665.8	false
13C7-PFUnA	570.0 / 525.0	3.72	112720.36	265.824961	837.0	false
13C2-PFTeDA	715.0 / 670.0	4.48	103390.87	250.729332	1269.1	false
13C3-PFBS	302.0 / 99.0	1.54	34014.03	225.300822	532.6	false
13C3-PFHxS	402.0 / 99.0	2.28	28591.27	237.288278	426.9	false
13C8-PFOS	507.0 / 99.0	3.05	28263.02	210.976319	210.4	false

Sample Name	JY42	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:20:26	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.17	96708.07	239.575462	1313.0	false
13C2-PFDoA	615.0 / 570.0	4.01	124526.00	254.752203	1150.1	false
d3-MeFOSAA	573.0 / 419.0	3.56	18005.76	239.715946	173.1	false
d5-EtFOSAA	589.0 / 419.0	3.72	23781.37	278.506795	198.8	false
13C5-PFHxA	318.0 / 273.0	1.85	84931.23	259.099772	529.2	false
13C4-PFHpA	367.0 / 322.0	2.25	95292.73	262.318521	659.8	false
13C8-PFOA	421.0 / 376.0	2.66	105997.11	264.099346	927.9	false
13C9-PFNA	472.0 / 427.0	3.05	106066.51	262.556550	1835.3	false
13C6-PFDA	519.0 / 474.0	3.40	110277.16	260.896381	997.8	false
13C7-PFUnA	570.0 / 525.0	3.72	112424.70	251.537659	611.4	false
13C2-PFTeDA	715.0 / 670.0	4.48	113288.38	260.649072	1327.5	false
13C3-PFBS	302.0 / 99.0	1.54	37167.05	241.948342	560.9	false
13C3-PFHxS	402.0 / 99.0	2.28	29518.14	240.764048	328.8	false
13C8-PFOS	507.0 / 99.0	3.04	38101.45	279.522268	203.0	false

Sample Name	JY43	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:31:18	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.17	91051.66	238.595520	1610.0	false
13C2-PFDoA	615.0 / 570.0	4.00	118499.11	227.018868	1026.3	false
d3-MeFOSAA	573.0 / 419.0	3.56	19922.38	262.212753	124.0	false
d5-EtFOSAA	589.0 / 419.0	3.72	20010.07	231.672410	142.8	false
13C5-PFHxA	318.0 / 273.0	1.85	77887.15	239.714839	636.2	false
13C4-PFHpA	367.0 / 322.0	2.25	86123.67	239.178000	758.9	false
13C8-PFOA	421.0 / 376.0	2.66	95209.01	239.321013	1091.6	false
13C9-PFNA	472.0 / 427.0	3.04	92781.11	231.704047	1558.6	false
13C6-PFDA	519.0 / 474.0	3.40	92155.82	204.171083	793.2	false
13C7-PFUnA	570.0 / 525.0	3.71	104399.66	218.740566	758.3	false
13C2-PFTeDA	715.0 / 670.0	4.47	105351.86	226.987549	1311.4	false
13C3-PFBS	302.0 / 99.0	1.54	32933.01	211.944846	628.3	false
13C3-PFHxS	402.0 / 99.0	2.27	24411.73	196.846714	371.2	false
13C8-PFOS	507.0 / 99.0	3.04	29433.11	213.470569	186.0	false

Sample Name	JY44	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:42:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.16	94281.51	256.803925	1559.4	false
13C2-PFDoA	615.0 / 570.0	3.99	127613.93	266.447249	1009.2	false
d3-MeFOSAA	573.0 / 419.0	3.55	20621.38	309.495872	103.1	false
d5-EtFOSAA	589.0 / 419.0	3.71	18288.89	241.455931	128.2	false
13C5-PFHxA	318.0 / 273.0	1.85	84543.45	262.328791	661.1	false
13C4-PFHpA	367.0 / 322.0	2.25	89567.38	250.775698	590.7	false
13C8-PFOA	421.0 / 376.0	2.65	87410.86	221.515973	5863.8	false
13C9-PFNA	472.0 / 427.0	3.03	99852.33	251.402222	1376.2	false
13C6-PFDA	519.0 / 474.0	3.38	99595.19	240.478408	903.1	false
13C7-PFUnA	570.0 / 525.0	3.71	98728.73	225.444707	696.7	false
13C2-PFTeDA	715.0 / 670.0	4.46	116605.95	273.808403	1262.7	false
13C3-PFBS	302.0 / 99.0	1.53	37259.25	273.432459	816.4	false
13C3-PFHxS	402.0 / 99.0	2.27	27551.26	253.335280	321.2	false
13C8-PFOS	507.0 / 99.0	3.03	31256.08	258.500259	214.6	false

Sample Name	JY38	Injection Vial	16
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:04:50	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	37707.51	119.143551	95.5	false
PFBS_2	298.9 / 99.0	1.53	11497.52	117.630528	77.4	false
PFHxA_1	313.0 / 269.0	1.84	30056.20	114.255254	7.6	false
PFHxA_2	313.0 / 119.0	1.34	1610.46	100.073175	5.1	false
PFHpA_1	363.0 / 319.0	2.25	28433.41	124.537268	19.3	false
PFHpA_2	363.0 / 169.0	2.24	888.45	124.809303	15.7	true
PFHxS_1	399.0 / 80.0	2.27	38974.40	106.833074	89.2	false
PFHxS_2	399.0 / 99.0	2.27	10931.66	99.387183	107.1	false
PFOA_1	413.0 / 369.0	2.65	37363.45	122.378104	37.3	false
PFOA_2	413.0 / 169.0	2.65	2989.36	122.370347	35.0	true
PFNA_1	463.0 / 419.0	3.05	33326.09	127.095747	48.2	true
PFNA_2	463.0 / 219.0	3.05	10703.10	182.660313	47.1	true
PFOS_1	499.0 / 80.0	3.04	51168.63	128.920274	59.1	true
PFOS_2	499.0 / 99.0	3.04	10825.78	128.697842	68.5	false
PFDA_1	513.0 / 469.0	3.40	39617.28	121.392810	58.0	false
PFDA_2	513.0 / 219.0	3.39	2284.10	94.190347	39.1	false
PFUnA_1	563.0 / 519.0	3.72	40000.19	119.016261	42.4	false
PFUnA_2	563.0 / 269.0	3.71	3210.34	113.798412	24.3	false
PFDoA_1	613.0 / 569.0	4.00	44034.02	112.133275	97.0	false
PFDoA_2	613.0 / 319.0	3.99	7110.49	105.358138	63.2	false
PFTrDA_1	663.0 / 619.0	4.24	37514.07	97.925055	127.1	false
PFTrDA_2	663.0 / 169.0	4.24	2679.57	94.524748	78.9	false
PFTeDA_1	713.0 / 669.0	4.45	42484.71	97.781779	213.5	false
PFTeDA_2	713.0 / 169.0	4.45	2405.24	94.772432	104.9	false
NMeFOSAA_1	570.0 / 419.0	3.55	4510.94	82.782049	128.8	false
NMeFOSAA_2	570.0 / 512.0	3.55	3546.71	88.329106	105.9	false
NEtFOSAA_1	584.0 / 419.0	3.71	6795.83	183.838274	143.3	false
NEtFOSAA_2	584.0 / 483.0	3.71	588.09	257.659715	36.2	false
PFBA	213.0 / 169.0	1.11	247410.94	199.494040	94.1	true

Sample Name	JY39	Injection Vial	17
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:15:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	89567.39	254.701746	194.1	false
PFBS_2	298.9 / 99.0	1.54	25138.78	244.365287	131.0	false
PFHxA_1	313.0 / 269.0	1.85	63838.57	248.825405	18.0	false
PFHxA_2	313.0 / 119.0	1.85	5260.04	280.317758	17.7	false
PFHpA_1	363.0 / 319.0	2.25	65152.65	251.461407	40.5	false
PFHpA_2	363.0 / 169.0	2.25	1593.44	253.944317	40.6	false
PFHxS_1	399.0 / 80.0	2.28	86111.74	247.811371	106.5	false
PFHxS_2	399.0 / 99.0	2.27	24950.85	244.724335	176.7	false
PFOA_1	413.0 / 369.0	2.66	80422.85	239.701480	65.8	false
PFOA_2	413.0 / 169.0	2.65	5646.25	235.359733	48.9	true
PFNA_1	463.0 / 419.0	3.05	75962.62	242.088156	78.3	false
PFNA_2	463.0 / 219.0	3.05	20494.11	271.700105	78.1	false
PFOS_1	499.0 / 80.0	3.04	128449.93	235.031735	103.8	true
PFOS_2	499.0 / 99.0	3.04	21457.31	212.082162	124.4	false
PFDA_1	513.0 / 469.0	3.40	88394.75	257.200209	111.0	false
PFDA_2	513.0 / 219.0	3.40	5484.06	296.354444	61.1	false
PFUnA_1	563.0 / 519.0	3.71	88069.03	241.564481	83.3	false
PFUnA_2	563.0 / 269.0	3.71	6259.53	276.385634	43.9	false
PFDoA_1	613.0 / 569.0	4.00	88690.03	241.700657	130.9	false
PFDoA_2	613.0 / 319.0	4.00	13116.81	217.554942	102.0	false
PFTTrDA_1	663.0 / 619.0	4.24	82189.78	242.562278	153.5	false
PFTTrDA_2	663.0 / 169.0	4.24	5400.00	232.598312	98.4	false
PFTeDA_1	713.0 / 669.0	4.45	93682.83	247.418581	268.7	false
PFTeDA_2	713.0 / 169.0	4.45	4826.74	245.531266	178.0	false
NMeFOSAA_1	570.0 / 419.0	3.55	11437.18	235.752361	189.7	false
NMeFOSAA_2	570.0 / 512.0	3.55	6702.71	228.950311	178.8	false
NEtFOSAA_1	584.0 / 419.0	3.71	15819.37	291.768822	244.7	false
NEtFOSAA_2	584.0 / 483.0	3.72	739.94	283.436437	47.4	false
PFBA	213.0 / 169.0	1.13	259308.77	269.760043	124.3	true

Sample Name	JY40	Injection Vial	18
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:26:32	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	190206.41	497.430653	265.0	false
PFBS_2	298.9 / 99.0	1.53	56454.16	510.228071	197.1	false
PFHxA_1	313.0 / 269.0	1.85	158973.17	498.762780	30.9	false
PFHxA_2	313.0 / 119.0	1.85	11517.16	491.197324	26.3	false
PFHpA_1	363.0 / 319.0	2.25	135583.68	453.046919	56.5	false
PFHpA_2	363.0 / 169.0	2.25	2674.42	405.808337	37.7	false
PFHxS_1	399.0 / 80.0	2.27	194834.97	438.291325	155.2	false
PFHxS_2	399.0 / 99.0	2.27	61469.19	475.019404	258.0	false
PFOA_1	413.0 / 369.0	2.66	176419.71	455.994933	116.9	false
PFOA_2	413.0 / 169.0	2.65	11988.29	453.174945	94.2	false
PFNA_1	463.0 / 419.0	3.05	170005.87	457.523481	149.7	false
PFNA_2	463.0 / 219.0	3.05	50771.87	501.320099	130.3	false
PFOS_1	499.0 / 80.0	3.04	272363.65	457.419001	136.4	true
PFOS_2	499.0 / 99.0	3.04	50245.76	469.669636	220.4	false
PFDA_1	513.0 / 469.0	3.40	197981.50	453.274700	229.1	false
PFDA_2	513.0 / 219.0	3.40	9590.22	444.891179	100.7	false
PFUnA_1	563.0 / 519.0	3.72	204497.42	467.741523	141.8	false
PFUnA_2	563.0 / 269.0	3.72	11300.22	465.429835	68.4	false
PFDoA_1	613.0 / 569.0	4.00	189380.76	459.119430	173.8	false
PFDoA_2	613.0 / 319.0	4.00	32563.37	488.393595	156.7	false
PFTTrDA_1	663.0 / 619.0	4.24	184632.80	470.354028	220.9	false
PFTTrDA_2	663.0 / 169.0	4.24	12556.32	479.459843	191.5	false
PFTeDA_1	713.0 / 669.0	4.45	208312.92	477.243455	427.2	false
PFTeDA_2	713.0 / 169.0	4.45	10485.17	480.829524	304.2	false
NMeFOSAA_1	570.0 / 419.0	3.55	30749.32	551.603355	371.2	false
NMeFOSAA_2	570.0 / 512.0	3.55	15965.90	508.283885	227.6	false
NEtFOSAA_1	584.0 / 419.0	3.71	32782.74	475.784135	270.3	false
NEtFOSAA_2	584.0 / 483.0	3.71	1622.84	441.128614	84.6	false
PFBA	213.0 / 169.0	1.14	355157.39	400.763360	140.7	true

Sample Name	JY41	Injection Vial	19
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:37:24	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	342676.23	890.457094	339.4	false
PFBS_2	298.9 / 99.0	1.53	102578.96	928.235183	326.7	false
PFHxA_1	313.0 / 269.0	1.85	276805.72	916.052278	45.2	false
PFHxA_2	313.0 / 119.0	1.85	20640.43	917.039732	41.0	false
PFHpA_1	363.0 / 319.0	2.25	244314.91	897.053998	77.4	false
PFHpA_2	363.0 / 169.0	2.25	5572.96	987.656245	87.9	false
PFHxS_1	399.0 / 80.0	2.27	357777.62	993.703461	189.5	false
PFHxS_2	399.0 / 99.0	2.27	106442.51	1024.638250	324.0	false
PFOA_1	413.0 / 369.0	2.66	334033.52	952.338996	200.3	false
PFOA_2	413.0 / 169.0	2.66	22349.66	954.512338	113.2	false
PFNA_1	463.0 / 419.0	3.05	308273.27	907.339887	277.7	false
PFNA_2	463.0 / 219.0	3.05	95520.25	974.387409	304.7	false
PFOS_1	499.0 / 80.0	3.04	461479.49	938.240867	164.7	true
PFOS_2	499.0 / 99.0	3.04	85005.04	985.018915	234.5	false
PFDA_1	513.0 / 469.0	3.40	354650.43	923.260952	297.5	false
PFDA_2	513.0 / 219.0	3.40	17226.05	970.218567	147.2	false
PFUnA_1	563.0 / 519.0	3.72	376112.66	970.107575	191.4	false
PFUnA_2	563.0 / 269.0	3.71	17418.79	862.672395	122.9	false
PFDoA_1	613.0 / 569.0	4.00	356323.87	942.059622	208.0	false
PFDoA_2	613.0 / 319.0	4.00	60635.00	1001.753233	204.3	false
PFTTrDA_1	663.0 / 619.0	4.24	354660.40	1080.349090	314.4	false
PFTTrDA_2	663.0 / 169.0	4.24	24811.85	1150.265021	251.6	false
PFTeDA_1	713.0 / 669.0	4.45	382367.61	1050.613295	551.8	false
PFTeDA_2	713.0 / 169.0	4.45	19046.01	1071.559211	435.7	false
NMeFOSAA_1	570.0 / 419.0	3.55	58430.38	1048.742817	526.5	false
NMeFOSAA_2	570.0 / 512.0	3.55	31936.98	1045.973992	438.1	false
NEtFOSAA_1	584.0 / 419.0	3.71	64420.87	967.249045	506.5	false
NEtFOSAA_2	584.0 / 483.0	3.72	4048.83	1029.079847	130.5	false
PFBA	213.0 / 169.0	1.14	654589.28	1136.820309	227.8	true

Sample Name	JY42	Injection Vial	20
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:48:15	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	959814.48	2357.071583	535.3	false
PFBS_2	298.9 / 99.0	1.53	268618.10	2313.575234	521.5	false
PFHxA_1	313.0 / 269.0	1.84	755651.99	2487.580680	73.6	false
PFHxA_2	313.0 / 119.0	1.84	57364.81	2514.854222	72.5	false
PFHpA_1	363.0 / 319.0	2.24	671431.73	2378.797571	129.1	false
PFHpA_2	363.0 / 169.0	2.24	13587.34	2405.202025	103.4	false
PFHxS_1	399.0 / 80.0	2.26	968255.56	2730.783046	299.8	false
PFHxS_2	399.0 / 99.0	2.26	274878.75	2697.465775	463.5	false
PFOA_1	413.0 / 369.0	2.64	871958.40	2412.042978	295.9	false
PFOA_2	413.0 / 169.0	2.64	59213.51	2485.031465	248.8	false
PFNA_1	463.0 / 419.0	3.03	825418.80	2349.574991	397.2	false
PFNA_2	463.0 / 219.0	3.03	247134.31	2364.139055	446.1	false
PFOS_1	499.0 / 80.0	3.03	1416199.61	2416.896980	242.7	false
PFOS_2	499.0 / 99.0	3.03	249733.97	2463.595659	596.4	false
PFDA_1	513.0 / 469.0	3.38	946549.21	2318.858099	296.2	false
PFDA_2	513.0 / 219.0	3.38	45943.73	2524.611014	241.1	false
PFUnA_1	563.0 / 519.0	3.70	965095.43	2300.335601	310.9	false
PFUnA_2	563.0 / 269.0	3.70	49078.51	2335.268906	169.1	false
PFDoA_1	613.0 / 569.0	3.98	1006223.38	2624.559975	412.2	false
PFDoA_2	613.0 / 319.0	3.98	164679.39	2700.462708	287.7	false
PFTTrDA_1	663.0 / 619.0	4.22	943197.00	2592.613859	558.8	false
PFTTrDA_2	663.0 / 169.0	4.22	59814.18	2518.035578	405.1	false
PFTeDA_1	713.0 / 669.0	4.44	1036913.85	2574.027828	812.2	false
PFTeDA_2	713.0 / 169.0	4.44	50209.03	2580.328361	691.1	false
NMeFOSAA_1	570.0 / 419.0	3.54	158532.04	2514.949799	697.7	false
NMeFOSAA_2	570.0 / 512.0	3.53	91795.68	2702.270084	531.1	false
NEtFOSAA_1	584.0 / 419.0	3.70	164288.06	2288.284973	771.2	false
NEtFOSAA_2	584.0 / 483.0	3.70	10452.58	2414.680611	238.7	false
PFBA	213.0 / 169.0	1.14	1324262.59	2485.081441	291.9	true

Sample Name	JY43	Injection Vial	21
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:59:08	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	4342817.41	10057.514027	1008.6	false
PFBS_2	298.9 / 99.0	1.53	1260725.84	10262.777442	1001.9	false
PFHxA_1	313.0 / 269.0	1.84	3199972.00	10042.691010	207.8	false
PFHxA_2	313.0 / 119.0	1.84	251174.80	10462.405295	197.0	false
PFHpA_1	363.0 / 319.0	2.25	2855927.01	9637.193632	352.7	false
PFHpA_2	363.0 / 169.0	2.25	54425.13	9322.939718	306.0	false
PFHxS_1	399.0 / 80.0	2.27	4069936.45	10780.411132	486.8	false
PFHxS_2	399.0 / 99.0	2.27	1161345.07	10719.084226	768.4	false
PFOA_1	413.0 / 369.0	2.65	3636635.96	9597.796282	770.6	false
PFOA_2	413.0 / 169.0	2.65	235766.76	9500.104415	683.7	false
PFNA_1	463.0 / 419.0	3.04	3557328.65	9703.083553	904.8	false
PFNA_2	463.0 / 219.0	3.04	1073129.46	9671.873659	843.9	false
PFOS_1	499.0 / 80.0	3.04	5843089.45	8843.162110	390.6	true
PFOS_2	499.0 / 99.0	3.04	1023661.38	9006.993858	1024.4	false
PFDA_1	513.0 / 469.0	3.39	3907207.20	9722.336100	558.0	false
PFDA_2	513.0 / 219.0	3.39	176697.01	10036.934036	358.1	false
PFUnA_1	563.0 / 519.0	3.71	4045627.89	10105.857543	558.9	false
PFUnA_2	563.0 / 269.0	3.71	202095.58	10280.229409	471.1	false
PFDoA_1	613.0 / 569.0	3.99	4177426.65	10064.415944	627.9	false
PFDoA_2	613.0 / 319.0	3.99	692374.78	10512.989394	567.9	false
PFTTrDA_1	663.0 / 619.0	4.24	3933581.30	9981.757307	923.5	false
PFTTrDA_2	663.0 / 169.0	4.24	263640.41	10284.090238	789.7	false
PFTeDA_1	713.0 / 669.0	4.45	4383846.85	10053.015953	1647.2	false
PFTeDA_2	713.0 / 169.0	4.45	213997.78	10219.041173	1062.3	false
NMeFOSAA_1	570.0 / 419.0	3.55	681661.05	11508.642791	1043.1	false
NMeFOSAA_2	570.0 / 512.0	3.55	359930.59	11372.965311	1005.8	false
NEtFOSAA_1	584.0 / 419.0	3.71	691862.30	9748.955119	1044.6	false
NEtFOSAA_2	584.0 / 483.0	3.71	41921.45	9699.224188	482.8	false
PFBA	213.0 / 169.0	1.14	4965219.59	9814.029596	480.4	true

Sample Name	JY44	Injection Vial	22
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:09:59	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	8868434.35	20517.181346	1643.5	false
PFBS_2	298.9 / 99.0	1.54	2497234.13	20316.688256	1344.3	false
PFHxA_1	313.0 / 269.0	1.85	6830737.79	20385.332592	304.6	false
PFHxA_2	313.0 / 119.0	1.85	503280.76	19927.612494	268.1	false
PFHpA_1	363.0 / 319.0	2.25	5788629.99	20607.909205	552.4	false
PFHpA_2	363.0 / 169.0	2.25	115046.13	20849.640054	387.1	false
PFHxS_1	399.0 / 80.0	2.27	7831568.95	19395.666591	707.9	false
PFHxS_2	399.0 / 99.0	2.27	2251358.67	19433.180829	1010.6	false
PFOA_1	413.0 / 369.0	2.66	7385810.88	20569.747227	1000.1	false
PFOA_2	413.0 / 169.0	2.65	483934.95	20599.446756	970.1	false
PFNA_1	463.0 / 419.0	3.05	6979667.38	20563.294185	1111.0	false
PFNA_2	463.0 / 219.0	3.05	2108367.93	20466.579673	1106.9	false
PFOS_1	499.0 / 80.0	3.05	11043118.78	21330.329034	517.0	true
PFOS_2	499.0 / 99.0	3.04	1875106.26	21083.941928	1082.9	false
PFDA_1	513.0 / 469.0	3.40	7485882.63	20553.677130	942.5	false
PFDA_2	513.0 / 219.0	3.40	317892.84	19982.800414	438.1	false
PFUnA_1	563.0 / 519.0	3.71	7853254.44	20145.377016	783.0	false
PFUnA_2	563.0 / 269.0	3.71	382072.53	20016.215408	463.2	false
PFDoA_1	613.0 / 569.0	4.00	8394920.76	19906.011098	833.1	false
PFDoA_2	613.0 / 319.0	3.99	1292475.38	19323.487988	627.1	false
PFTTrDA_1	663.0 / 619.0	4.24	8010590.58	19884.438383	1244.7	false
PFTTrDA_2	663.0 / 169.0	4.23	513111.70	19591.026260	924.1	false
PFTeDA_1	713.0 / 669.0	4.45	8847807.45	19849.899110	2208.0	false
PFTeDA_2	713.0 / 169.0	4.45	420378.28	19657.938034	1699.2	false
NMeFOSAA_1	570.0 / 419.0	3.55	1328626.60	18407.526829	1095.3	false
NMeFOSAA_2	570.0 / 512.0	3.55	709052.43	18403.227310	991.3	false
NEtFOSAA_1	584.0 / 419.0	3.71	1284685.53	20477.957906	1124.2	false
NEtFOSAA_2	584.0 / 483.0	3.71	78039.43	20382.450304	757.6	false
PFBA	213.0 / 169.0	1.14	10035476.54	20143.545251	841.6	false

Sample Name	JY38	Injection Vial	16
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:04:50	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.15	88098.01	237.760559	1271.1	false
13C2-PFDoA	615.0 / 570.0	3.98	109640.46	238.926033	1007.9	false
d3-MeFOSAA	573.0 / 419.0	3.54	14933.87	238.441686	165.4	false
d5-EtFOSAA	589.0 / 419.0	3.70	16878.01	238.660187	136.9	false
13C5-PFHxA	318.0 / 273.0	1.83	75387.68	246.549834	602.1	false
13C4-PFHpA	367.0 / 322.0	2.24	83367.87	245.440599	696.1	false
13C8-PFOA	421.0 / 376.0	2.64	90546.42	253.416185	876.2	false
13C9-PFNA	472.0 / 427.0	3.03	96957.67	260.080124	951.1	false
13C6-PFDA	519.0 / 474.0	3.38	97978.63	245.307175	782.0	false
13C7-PFUnA	570.0 / 525.0	3.70	103995.40	248.152872	821.4	false
13C2-PFTeDA	715.0 / 670.0	4.45	94429.51	239.838865	1918.4	false
13C3-PFBS	302.0 / 99.0	1.51	32512.04	229.728024	499.0	false
13C3-PFHxS	402.0 / 99.0	2.26	26352.51	237.751178	314.0	false
13C8-PFOS	507.0 / 99.0	3.03	27953.13	241.075184	202.9	false

Sample Name	JY39	Injection Vial	17
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:15:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.15	79993.90	245.932181	1605.0	false
13C2-PFDoA	615.0 / 570.0	3.98	96883.38	261.144688	1195.1	false
d3-MeFOSAA	573.0 / 419.0	3.54	12282.33	203.316025	115.7	false
d5-EtFOSAA	589.0 / 419.0	3.70	17571.35	257.599510	197.3	false
13C5-PFHxA	318.0 / 273.0	1.84	62845.95	246.330079	521.7	false
13C4-PFHpA	367.0 / 322.0	2.24	74650.63	263.400755	680.3	false
13C8-PFOA	421.0 / 376.0	2.65	82702.51	277.407122	1094.4	false
13C9-PFNA	472.0 / 427.0	3.03	88318.58	283.931036	785.6	false
13C6-PFDA	519.0 / 474.0	3.38	85240.31	263.975242	1395.1	false
13C7-PFUnA	570.0 / 525.0	3.70	93200.04	275.080982	496.9	false
13C2-PFTeDA	715.0 / 670.0	4.45	80909.75	254.186196	1818.7	false
13C3-PFBS	302.0 / 99.0	1.52	29404.30	215.407920	383.7	false
13C3-PFHxS	402.0 / 99.0	2.26	22779.48	213.071641	250.8	false
13C8-PFOS	507.0 / 99.0	3.03	28308.21	253.113619	179.6	false

Sample Name	JY40	Injection Vial	18
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:26:32	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.15	87707.29	256.021629	1385.0	false
13C2-PFDoA	615.0 / 570.0	3.99	106536.09	240.150022	1146.4	false
d3-MeFOSAA	573.0 / 419.0	3.54	13787.65	221.584037	136.2	false
d5-EtFOSAA	589.0 / 419.0	3.71	18746.31	266.816806	168.6	false
13C5-PFHxA	318.0 / 273.0	1.83	73532.42	247.248938	491.7	false
13C4-PFHpA	367.0 / 322.0	2.24	83295.96	252.129036	891.6	false
13C8-PFOA	421.0 / 376.0	2.65	88291.82	254.059106	1293.2	false
13C9-PFNA	472.0 / 427.0	3.03	93025.32	256.553174	1067.7	false
13C6-PFDA	519.0 / 474.0	3.38	101507.03	262.886479	866.7	false
13C7-PFUnA	570.0 / 525.0	3.70	103330.19	255.050198	524.2	false
13C2-PFTeDA	715.0 / 670.0	4.45	92780.97	243.760872	1014.9	false
13C3-PFBS	302.0 / 99.0	1.52	29610.64	210.598836	419.0	false
13C3-PFHxS	402.0 / 99.0	2.26	28279.80	256.812154	241.9	false
13C8-PFOS	507.0 / 99.0	3.03	27404.67	237.894938	206.6	false

Sample Name	JY41	Injection Vial	19
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:37:24	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.15	76223.74	251.379912	1655.6	false
13C2-PFDoA	615.0 / 570.0	3.99	96492.69	259.253419	1023.0	false
d3-MeFOSAA	573.0 / 419.0	3.54	13668.50	278.683193	140.2	false
d5-EtFOSAA	589.0 / 419.0	3.70	16045.78	289.734246	127.8	false
13C5-PFHxA	318.0 / 273.0	1.83	67918.87	261.896594	510.5	false
13C4-PFHpA	367.0 / 322.0	2.24	74346.36	258.072963	757.5	false
13C8-PFOA	421.0 / 376.0	2.65	76748.70	253.261508	2590.1	false
13C9-PFNA	472.0 / 427.0	3.03	80124.07	253.409603	852.4	false
13C6-PFDA	519.0 / 474.0	3.39	85667.29	264.442593	785.1	false
13C7-PFUnA	570.0 / 525.0	3.70	87959.54	258.776965	842.4	false
13C2-PFTeDA	715.0 / 670.0	4.45	77122.45	241.507200	1862.8	false
13C3-PFBS	302.0 / 99.0	1.52	28814.58	259.993260	542.3	false
13C3-PFHxS	402.0 / 99.0	2.26	22422.97	258.329491	247.0	false
13C8-PFOS	507.0 / 99.0	3.03	21499.23	236.769157	198.5	false

Sample Name	JY42	Injection Vial	20
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:48:15	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.15	78354.76	252.660953	1425.6	false
13C2-PFDoA	615.0 / 570.0	3.97	97080.52	250.787720	1193.4	false
d3-MeFOSAA	573.0 / 419.0	3.53	15384.04	238.053659	153.0	false
d5-EtFOSAA	589.0 / 419.0	3.69	16256.67	222.784609	136.9	false
13C5-PFHxA	318.0 / 273.0	1.82	66977.47	261.325623	558.3	false
13C4-PFHpA	367.0 / 322.0	2.23	73265.65	257.333936	699.3	false
13C8-PFOA	421.0 / 376.0	2.63	77338.29	258.229938	1814.5	false
13C9-PFNA	472.0 / 427.0	3.02	79952.32	255.861542	1094.7	false
13C6-PFDA	519.0 / 474.0	3.37	88950.83	264.003958	30502.0	false
13C7-PFUnA	570.0 / 525.0	3.69	93173.83	263.560699	1008.6	false
13C2-PFTeDA	715.0 / 670.0	4.43	85234.10	256.629590	1485.0	false
13C3-PFBS	302.0 / 99.0	1.51	29715.54	203.492368	361.5	false
13C3-PFHxS	402.0 / 99.0	2.25	21851.26	191.060993	251.4	false
13C8-PFOS	507.0 / 99.0	3.02	25175.35	210.422534	209.8	false

Sample Name	JY43	Injection Vial	21
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:59:08	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.15	79968.42	247.391142	1829.5	false
13C2-PFDoA	615.0 / 570.0	3.98	104781.12	258.533374	797.8	false
d3-MeFOSAA	573.0 / 419.0	3.54	14413.32	253.965937	84.3	false
d5-EtFOSAA	589.0 / 419.0	3.70	15545.46	242.585009	156.4	false
13C5-PFHxA	318.0 / 273.0	1.83	69673.54	229.640595	629.4	false
13C4-PFHpA	367.0 / 322.0	2.24	77874.18	231.056212	628.0	false
13C8-PFOA	421.0 / 376.0	2.64	80099.47	225.927553	1853.9	false
13C9-PFNA	472.0 / 427.0	3.03	82069.65	221.862578	1385.0	false
13C6-PFDA	519.0 / 474.0	3.38	86575.86	245.423764	765.1	false
13C7-PFUnA	570.0 / 525.0	3.70	87860.14	237.376644	674.8	false
13C2-PFTeDA	715.0 / 670.0	4.44	92194.59	265.129568	1140.3	false
13C3-PFBS	302.0 / 99.0	1.51	31142.46	242.842221	494.6	false
13C3-PFHxS	402.0 / 99.0	2.26	23162.82	230.618349	291.3	false
13C8-PFOS	507.0 / 99.0	3.03	26975.85	256.743159	186.5	false

Sample Name	JY44	Injection Vial	22
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:09:59	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.15	79786.21	258.853624	1429.2	false
13C2-PFDoA	615.0 / 570.0	3.98	106405.32	241.204744	943.7	false
d3-MeFOSAA	573.0 / 419.0	3.54	16500.90	315.955464	95.3	true
d5-EtFOSAA	589.0 / 419.0	3.70	13670.45	231.819634	107.7	false
13C5-PFHxA	318.0 / 273.0	1.83	73167.98	257.008337	536.7	false
13C4-PFHpA	367.0 / 322.0	2.24	76711.65	242.566499	739.5	false
13C8-PFOA	421.0 / 376.0	2.64	75748.75	227.698588	1109.7	false
13C9-PFNA	472.0 / 427.0	3.03	75772.36	218.301942	937.9	false
13C6-PFDA	519.0 / 474.0	3.38	78313.74	203.960790	704.4	false
13C7-PFUnA	570.0 / 525.0	3.70	85409.11	212.001641	1077.9	false
13C2-PFTeDA	715.0 / 670.0	4.45	94225.07	248.947709	1612.6	false
13C3-PFBS	302.0 / 99.0	1.52	31117.96	263.687371	441.2	false
13C3-PFHxS	402.0 / 99.0	2.26	24756.69	267.856194	242.2	false
13C8-PFOS	507.0 / 99.0	3.03	23082.30	238.731408	188.1	false

Sample Name	JY38	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:36:54	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.56	PFBS	0.309	0.294	ü
PFHxA_1	313.0 / 269.0	1.88	PFHxA			
PFHxA_2	313.0 / 119.0	1.88	PFHxA	0.051	0.071	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.28	PFHpA	0.021	0.020	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.282	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.064	0.066	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.358	0.316	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.183	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.075	0.051	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.086	0.058	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.157	0.161	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.070	0.064	ü
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.49	PFTeDA	0.049	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.623	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.74	NEtFOSAA	0.082	0.060	ü
PFBA	213.0 / 169.0	1.17				

Sample Name	JY39	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:47:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.289	0.294	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.072	0.071	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.026	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.271	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.062	0.066	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.289	0.316	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.160	0.174	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.065	0.051	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.061	0.058	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.171	0.161	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.068	0.064	ü
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.046	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.520	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.056	0.060	ü
PFBA	213.0 / 169.0	1.17				

Sample Name	JY40	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:58:41	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.295	0.294	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.081	0.071	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.019	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.287	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.069	0.066	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.333	0.316	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.174	0.174	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.048	0.051	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.056	0.058	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.161	0.161	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.060	0.064	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.049	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.580	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.054	0.060	ü
PFBA	213.0 / 169.0	1.17				

Sample Name	JY41	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:09:34	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.56	PFBS	0.283	0.294	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.067	0.071	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.019	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.283	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.069	0.066	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.313	0.316	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.173	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.042	0.051	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.055	0.058	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.161	0.161	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.060	0.064	ü
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.047	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.544	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.061	0.060	ü
PFBA	213.0 / 169.0	1.17				

Sample Name	JY42	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:20:26	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.292	0.294	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.076	0.071	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.018	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.288	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.068	0.066	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.302	0.316	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.174	0.174	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.039	0.051	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.046	0.058	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.151	0.161	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.065	0.064	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.046	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.544	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.062	0.060	ü
PFBA	213.0 / 169.0	1.16				

Sample Name	JY43	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:31:18	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.295	0.294	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.076	0.071	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.279	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.065	0.066	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.317	0.316	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	0.044	0.051	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.048	0.058	ü
PFDaA_1	613.0 / 569.0	4.01	PFDaA			
PFDaA_2	613.0 / 319.0	4.01	PFDaA	0.157	0.161	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.063	0.064	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.048	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.56	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.56	NMeFOSAA	0.534	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.062	0.060	ü
PFBA	213.0 / 169.0	1.16				

Sample Name	JY44	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:42:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.297	0.294	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.075	0.071	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.019	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.281	0.282	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.063	0.066	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.296	0.316	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.174	0.174	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.044	0.051	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	PFUnA	0.051	0.058	ü
PFDaA_1	613.0 / 569.0	4.01	PFDaA			
PFDaA_2	613.0 / 319.0	4.00	PFDaA	0.166	0.161	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.063	0.064	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.048	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.574	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.72	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.72	NEtFOSAA	0.065	0.060	ü
PFBA	213.0 / 169.0	1.16				

Sample Name	JY38	Injection Vial	16
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:04:50	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.305	0.291	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.34	PFHxA	0.054	0.073	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	PFHpA	0.031	0.023	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.281	0.291	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.080	0.069	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.321	0.297	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.212	0.181	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.39	PFDA	0.058	0.050	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	3.71	PFUnA	0.080	0.058	ü
PFDaA_1	613.0 / 569.0	4.00	PFDaA			
PFDaA_2	613.0 / 319.0	3.99	PFDaA	0.162	0.162	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.24	PFTrDA	0.071	0.067	ü
PFTeDA_1	713.0 / 669.0	4.45	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.45	PFTeDA	0.057	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.786	0.583	ü
NEtFOSAA_1	584.0 / 419.0	3.71	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	NEtFOSAA	0.087	0.057	
PFBA	213.0 / 169.0	1.11				

Sample Name	JY39	Injection Vial	17
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:15:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.281	0.291	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.082	0.073	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.025	0.023	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.290	0.291	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.070	0.069	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.270	0.297	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.167	0.181	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.062	0.050	ü
PFUnA_1	563.0 / 519.0	3.71	PFUnA			
PFUnA_2	563.0 / 269.0	3.71	PFUnA	0.071	0.058	ü
PFDaA_1	613.0 / 569.0	4.00	PFDaA			
PFDaA_2	613.0 / 319.0	4.00	PFDaA	0.148	0.162	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.24	PFTrDA	0.066	0.067	ü
PFTeDA_1	713.0 / 669.0	4.45	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.45	PFTeDA	0.052	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.586	0.583	ü
NEtFOSAA_1	584.0 / 419.0	3.71	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.72	NEtFOSAA	0.047	0.057	ü
PFBA	213.0 / 169.0	1.13				

Sample Name	JY40	Injection Vial	18
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:26:32	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.297	0.291	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.072	0.073	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.023	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.316	0.291	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.068	0.069	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.299	0.297	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.185	0.181	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.048	0.050	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	PFUnA	0.055	0.058	ü
PFDaA_1	613.0 / 569.0	4.00	PFDaA			
PFDaA_2	613.0 / 319.0	4.00	PFDaA	0.172	0.162	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.24	PFTrDA	0.068	0.067	ü
PFTeDA_1	713.0 / 669.0	4.45	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.45	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.519	0.583	ü
NEtFOSAA_1	584.0 / 419.0	3.71	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	NEtFOSAA	0.050	0.057	ü
PFBA	213.0 / 169.0	1.14				

Sample Name	JY41	Injection Vial	19
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:37:24	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.299	0.291	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.075	0.073	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.023	0.023	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.298	0.291	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.067	0.069	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.310	0.297	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.184	0.181	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.049	0.050	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	3.71	PFUnA	0.046	0.058	ü
PFDaA_1	613.0 / 569.0	4.00	PFDaA			
PFDaA_2	613.0 / 319.0	4.00	PFDaA	0.170	0.162	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.24	PFTrDA	0.070	0.067	ü
PFTeDA_1	713.0 / 669.0	4.45	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.45	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.547	0.583	ü
NEtFOSAA_1	584.0 / 419.0	3.71	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.72	NEtFOSAA	0.063	0.057	ü
PFBA	213.0 / 169.0	1.14				

Sample Name	JY42	Injection Vial	20
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:48:15	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.280	0.291	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.076	0.073	ü
PFHpA_1	363.0 / 319.0	2.24	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	PFHpA	0.020	0.023	ü
PFHxS_1	399.0 / 80.0	2.26	PFHxS			
PFHxS_2	399.0 / 99.0	2.26	PFHxS	0.284	0.291	ü
PFOA_1	413.0 / 369.0	2.64	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.068	0.069	ü
PFNA_1	463.0 / 419.0	3.03	PFNA			
PFNA_2	463.0 / 219.0	3.03	PFNA	0.299	0.297	ü
PFOS_1	499.0 / 80.0	3.03	PFOS			
PFOS_2	499.0 / 99.0	3.03	PFOS	0.176	0.181	ü
PFDA_1	513.0 / 469.0	3.38	PFDA			
PFDA_2	513.0 / 219.0	3.38	PFDA	0.049	0.050	ü
PFUnA_1	563.0 / 519.0	3.70	PFUnA			
PFUnA_2	563.0 / 269.0	3.70	PFUnA	0.051	0.058	ü
PFDaA_1	613.0 / 569.0	3.98	PFDaA			
PFDaA_2	613.0 / 319.0	3.98	PFDaA	0.164	0.162	ü
PFTrDA_1	663.0 / 619.0	4.22	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.22	PFTrDA	0.063	0.067	ü
PFTeDA_1	713.0 / 669.0	4.44	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.44	PFTeDA	0.048	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.54	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.53	NMeFOSAA	0.579	0.583	ü
NEtFOSAA_1	584.0 / 419.0	3.70	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.70	NEtFOSAA	0.064	0.057	ü
PFBA	213.0 / 169.0	1.14				

Sample Name	JY43	Injection Vial	21
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:59:08	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.291	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.079	0.073	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.019	0.023	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.285	0.291	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.065	0.069	ü
PFNA_1	463.0 / 419.0	3.04	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.302	0.297	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.175	0.181	ü
PFDA_1	513.0 / 469.0	3.39	PFDA			
PFDA_2	513.0 / 219.0	3.39	PFDA	0.045	0.050	ü
PFUnA_1	563.0 / 519.0	3.71	PFUnA			
PFUnA_2	563.0 / 269.0	3.71	PFUnA	0.050	0.058	ü
PFDaA_1	613.0 / 569.0	3.99	PFDaA			
PFDaA_2	613.0 / 319.0	3.99	PFDaA	0.166	0.162	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.24	PFTrDA	0.067	0.067	ü
PFTeDA_1	713.0 / 669.0	4.45	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.45	PFTeDA	0.049	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.528	0.583	ü
NEtFOSAA_1	584.0 / 419.0	3.71	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	NEtFOSAA	0.061	0.057	ü
PFBA	213.0 / 169.0	1.14				

Sample Name	JY44	Injection Vial	22
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:09:59	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.282	0.291	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.074	0.073	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.023	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.288	0.291	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.066	0.069	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.302	0.297	ü
PFOS_1	499.0 / 80.0	3.05	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.170	0.181	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.043	0.050	ü
PFUnA_1	563.0 / 519.0	3.71	PFUnA			
PFUnA_2	563.0 / 269.0	3.71	PFUnA	0.049	0.058	ü
PFDaA_1	613.0 / 569.0	4.00	PFDaA			
PFDaA_2	613.0 / 319.0	3.99	PFDaA	0.154	0.162	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.23	PFTrDA	0.064	0.067	ü
PFTeDA_1	713.0 / 669.0	4.45	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.45	PFTeDA	0.048	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.534	0.583	ü
NEtFOSAA_1	584.0 / 419.0	3.71	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	NEtFOSAA	0.061	0.057	ü
PFBA	213.0 / 169.0	1.14				

Sample Name	JY38	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:36:54	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.56	13C3-PFBS	302.0 / 99.0	34980.72	232.25
PFBS_2	298.9 / 99.0	1.56	13C3-PFBS	302.0 / 99.0	34980.72	232.25
PFHxA_1	313.0 / 269.0	1.88	13C5-PFHxA	318.0 / 273.0	76262.60	250.00
PFHxA_2	313.0 / 119.0	1.88	13C5-PFHxA	318.0 / 273.0	76262.60	250.00
PFHpA_1	363.0 / 319.0	2.27	13C8-PFOA	421.0 / 376.0	106825.04	250.00
PFHpA_2	363.0 / 169.0	2.28	13C8-PFOA	421.0 / 376.0	106825.04	250.00
PFHxS_1	399.0 / 80.0	2.30	13C3-PFHxS	402.0 / 99.0	31543.31	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	31543.31	236.50
PFOA_1	413.0 / 369.0	2.68	13C8-PFOA	421.0 / 376.0	106825.04	250.00
PFOA_2	413.0 / 169.0	2.68	13C8-PFOA	421.0 / 376.0	106825.04	250.00
PFNA_1	463.0 / 419.0	3.07	13C9-PFNA	472.0 / 427.0	103312.76	250.00
PFNA_2	463.0 / 219.0	3.07	13C9-PFNA	472.0 / 427.0	103312.76	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	34842.72	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	34842.72	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	104855.93	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	104855.93	250.00
PFUnA_1	563.0 / 519.0	3.74	13C7-PFUnA	570.0 / 525.0	115193.55	250.00
PFUnA_2	563.0 / 269.0	3.74	13C7-PFUnA	570.0 / 525.0	115193.55	250.00
PFDaA_1	613.0 / 569.0	4.02	13C2-PFDaA	615.0 / 570.0	121558.79	250.00
PFDaA_2	613.0 / 319.0	4.02	13C2-PFDaA	615.0 / 570.0	121558.79	250.00
PFTeDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	104417.85	250.00
PFTeDA_2	663.0 / 169.0	4.27	13C2-PFTeDA	715.0 / 670.0	104417.85	250.00
PFTeDA_1	713.0 / 669.0	4.49	13C2-PFTeDA	715.0 / 670.0	104417.85	250.00
PFTeDA_2	713.0 / 169.0	4.49	13C2-PFTeDA	715.0 / 670.0	104417.85	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	18593.51	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	18593.51	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	21600.05	250.00
NEtFOSAA_2	584.0 / 483.0	3.74	d5-EtFOSAA	589.0 / 419.0	21600.05	250.00
PFBA	213.0 / 169.0	1.17	13C4-PFBA	217.0 / 172.0	95543.41	250.00

Sample Name	JY39	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:47:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.56	13C3-PFBS	302.0 / 99.0	33957.26	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	33957.26	232.25
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	71790.11	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	71790.11	250.00
PFHpA_1	363.0 / 319.0	2.27	13C8-PFOA	421.0 / 376.0	97424.27	250.00
PFHpA_2	363.0 / 169.0	2.26	13C8-PFOA	421.0 / 376.0	97424.27	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	28404.76	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	28404.76	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	97424.27	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	97424.27	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	90045.86	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	90045.86	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	31968.05	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	31968.05	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	106990.49	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	106990.49	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	110535.74	250.00
PFUnA_2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	110535.74	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	118292.59	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	118292.59	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	102110.90	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	102110.90	250.00
PFTeDA_1	713.0 / 669.0	4.49	13C2-PFTeDA	715.0 / 670.0	102110.90	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	102110.90	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	16828.42	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	16828.42	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	19802.95	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	19802.95	250.00
PFBA	213.0 / 169.0	1.17	13C4-PFBA	217.0 / 172.0	92104.27	250.00

Sample Name	JY40	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:58:41	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.56	13C3-PFBS	302.0 / 99.0	33404.82	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	33404.82	232.25
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	74222.13	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	74222.13	250.00
PFHpA_1	363.0 / 319.0	2.27	13C8-PFOA	421.0 / 376.0	98005.51	250.00
PFHpA_2	363.0 / 169.0	2.27	13C8-PFOA	421.0 / 376.0	98005.51	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	28381.69	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	28381.69	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	98005.51	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	98005.51	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	96294.65	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	96294.65	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	31739.18	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	31739.18	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	108557.17	250.00
PFDA_2	513.0 / 219.0	3.42	13C6-PFDA	519.0 / 474.0	108557.17	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	112942.63	250.00
PFUnA_2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	112942.63	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	114977.10	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	114977.10	250.00
PFTrDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	101736.77	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	101736.77	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	101736.77	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	101736.77	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	16811.19	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	16811.19	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	22038.82	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	22038.82	250.00
PFBA	213.0 / 169.0	1.17	13C4-PFBA	217.0 / 172.0	91805.61	250.00

Sample Name	JY41	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:09:34	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.56	13C3-PFBS	302.0 / 99.0	34014.03	232.25
PFBS_2	298.9 / 99.0	1.56	13C3-PFBS	302.0 / 99.0	34014.03	232.25
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	81899.30	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	81899.30	250.00
PFHpA_1	363.0 / 319.0	2.27	13C8-PFOA	421.0 / 376.0	94467.78	250.00
PFHpA_2	363.0 / 169.0	2.27	13C8-PFOA	421.0 / 376.0	94467.78	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	28591.27	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	28591.27	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	94467.78	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	94467.78	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	101567.70	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	101567.70	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	29003.78	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	29003.78	239.25
PFDA_1	513.0 / 469.0	3.42	13C6-PFDA	519.0 / 474.0	102571.89	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	102571.89	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	112720.36	250.00
PFUnA_2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	112720.36	250.00
PFDaA_1	613.0 / 569.0	4.02	13C2-PFDaA	615.0 / 570.0	114449.09	250.00
PFDaA_2	613.0 / 319.0	4.02	13C2-PFDaA	615.0 / 570.0	114449.09	250.00
PFTeDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	103390.87	250.00
PFTeDA_2	663.0 / 169.0	4.27	13C2-PFTeDA	715.0 / 670.0	103390.87	250.00
PFTeDA_1	713.0 / 669.0	4.49	13C2-PFTeDA	715.0 / 670.0	103390.87	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	103390.87	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	17463.24	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	17463.24	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	20789.36	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	20789.36	250.00
PFBA	213.0 / 169.0	1.17	13C4-PFBA	217.0 / 172.0	93269.26	250.00

Sample Name	JY42	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:20:26	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	37167.05	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	37167.05	232.25
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	82560.36	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	82560.36	250.00
PFHpA_1	363.0 / 319.0	2.27	13C8-PFOA	421.0 / 376.0	105997.11	250.00
PFHpA_2	363.0 / 169.0	2.27	13C8-PFOA	421.0 / 376.0	105997.11	250.00
PFHxS_1	399.0 / 80.0	2.29	13C3-PFHxS	402.0 / 99.0	29518.14	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	29518.14	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	105997.11	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	105997.11	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	106066.51	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	106066.51	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	38907.11	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	38907.11	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	110277.16	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	110277.16	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	112424.70	250.00
PFUnA_2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	112424.70	250.00
PFDoA_1	613.0 / 569.0	4.02	13C2-PFDoA	615.0 / 570.0	124526.00	250.00
PFDoA_2	613.0 / 319.0	4.02	13C2-PFDoA	615.0 / 570.0	124526.00	250.00
PFTrDA_1	663.0 / 619.0	4.27	13C2-PFTeDA	715.0 / 670.0	113288.38	250.00
PFTrDA_2	663.0 / 169.0	4.26	13C2-PFTeDA	715.0 / 670.0	113288.38	250.00
PFTeDA_1	713.0 / 669.0	4.48	13C2-PFTeDA	715.0 / 670.0	113288.38	250.00
PFTeDA_2	713.0 / 169.0	4.48	13C2-PFTeDA	715.0 / 670.0	113288.38	250.00
NMeFOSAA_1	570.0 / 419.0	3.57	d3-MeFOSAA	573.0 / 419.0	18005.76	250.00
NMeFOSAA_2	570.0 / 512.0	3.57	d3-MeFOSAA	573.0 / 419.0	18005.76	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	23781.37	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	23781.37	250.00
PFBA	213.0 / 169.0	1.16	13C4-PFBA	217.0 / 172.0	96708.07	250.00

Sample Name	JY43	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:31:18	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.56	13C3-PFBS	302.0 / 99.0	32933.01	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	32933.01	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	76033.36	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	76033.36	250.00
PFHpA_1	363.0 / 319.0	2.27	13C8-PFOA	421.0 / 376.0	95209.01	250.00
PFHpA_2	363.0 / 169.0	2.27	13C8-PFOA	421.0 / 376.0	95209.01	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	24411.73	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	24411.73	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	95209.01	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	95209.01	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	92781.11	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	92781.11	250.00
PFOS_1	499.0 / 80.0	3.06	13C8-PFOS	507.0 / 99.0	30504.85	239.25
PFOS_2	499.0 / 99.0	3.06	13C8-PFOS	507.0 / 99.0	30504.85	239.25
PFDA_1	513.0 / 469.0	3.41	13C6-PFDA	519.0 / 474.0	92155.82	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	92155.82	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	104399.66	250.00
PFUnA_2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	104399.66	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	118499.11	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	118499.11	250.00
PFTeDA_1	663.0 / 619.0	4.26	13C2-PFTeDA	715.0 / 670.0	105351.86	250.00
PFTeDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	105351.86	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	105351.86	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	105351.86	250.00
NMeFOSAA_1	570.0 / 419.0	3.56	d3-MeFOSAA	573.0 / 419.0	19922.38	250.00
NMeFOSAA_2	570.0 / 512.0	3.56	d3-MeFOSAA	573.0 / 419.0	19922.38	250.00
NEtFOSAA_1	584.0 / 419.0	3.73	d5-EtFOSAA	589.0 / 419.0	20010.07	250.00
NEtFOSAA_2	584.0 / 483.0	3.73	d5-EtFOSAA	589.0 / 419.0	20010.07	250.00
PFBA	213.0 / 169.0	1.16	13C4-PFBA	217.0 / 172.0	91051.66	250.00

Sample Name	JY44	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:42:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	37259.25	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	37259.25	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	82567.32	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	82567.32	250.00
PFHpA_1	363.0 / 319.0	2.26	13C8-PFOA	421.0 / 376.0	87410.86	250.00
PFHpA_2	363.0 / 169.0	2.26	13C8-PFOA	421.0 / 376.0	87410.86	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	27551.26	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	27551.26	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	87410.86	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	87410.86	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	99852.33	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	99852.33	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	32412.63	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	32412.63	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	99595.19	250.00
PFDA_2	513.0 / 219.0	3.40	13C6-PFDA	519.0 / 474.0	99595.19	250.00
PFUnA_1	563.0 / 519.0	3.72	13C7-PFUnA	570.0 / 525.0	98728.73	250.00
PFUnA_2	563.0 / 269.0	3.72	13C7-PFUnA	570.0 / 525.0	98728.73	250.00
PFDaA_1	613.0 / 569.0	4.01	13C2-PFDaA	615.0 / 570.0	127613.93	250.00
PFDaA_2	613.0 / 319.0	4.00	13C2-PFDaA	615.0 / 570.0	127613.93	250.00
PFTeDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	116605.95	250.00
PFTeDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	116605.95	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	116605.95	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	116605.95	250.00
NMeFOSAA_1	570.0 / 419.0	3.55	d3-MeFOSAA	573.0 / 419.0	20621.38	250.00
NMeFOSAA_2	570.0 / 512.0	3.55	d3-MeFOSAA	573.0 / 419.0	20621.38	250.00
NEtFOSAA_1	584.0 / 419.0	3.72	d5-EtFOSAA	589.0 / 419.0	18288.89	250.00
NEtFOSAA_2	584.0 / 483.0	3.72	d5-EtFOSAA	589.0 / 419.0	18288.89	250.00
PFBA	213.0 / 169.0	1.16	13C4-PFBA	217.0 / 172.0	94281.51	250.00

Sample Name	JY38	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:36:54	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.17	13C3-PFBA	216.0 / 172.0	55737.70	250.00
13C2-PFDoA	615.0 / 570.0	4.01	13C2-PFDA	515.0 / 470.0	101703.93	250.00
d3-MeFOSAA	573.0 / 419.0	3.57	13C4-PFOS	503.0 / 99.0	33175.18	239.25
d5-EtFOSAA	589.0 / 419.0	3.73	13C4-PFOS	503.0 / 99.0	33175.18	239.25
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	89686.34	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	89686.34	250.00
13C8-PFOA	421.0 / 376.0	2.67	13C2-PFOA	415.0 / 370.0	89686.34	250.00
13C9-PFNA	472.0 / 427.0	3.06	13C2-PFOA	415.0 / 370.0	89686.34	250.00
13C6-PFDA	519.0 / 474.0	3.41	13C2-PFDA	515.0 / 470.0	101703.93	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	101703.93	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	101703.93	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	33175.18	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	33175.18	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	33175.18	239.25

Sample Name	JY39	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:47:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.17	13C3-PFBA	216.0 / 172.0	54856.95	250.00
13C2-PFDoA	615.0 / 570.0	4.01	13C2-PFDA	515.0 / 470.0	104669.39	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	31211.04	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	31211.04	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	90381.96	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	90381.96	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	90381.96	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	90381.96	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	104669.39	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	104669.39	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	104669.39	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	31211.04	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	31211.04	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	31211.04	239.25

Sample Name	JY40	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:58:41	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.17	13C3-PFBA	216.0 / 172.0	57614.29	250.00
13C2-PFDoA	615.0 / 570.0	4.01	13C2-PFDA	515.0 / 470.0	99261.32	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	31393.82	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	31393.82	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	87326.72	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	87326.72	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	87326.72	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	87326.72	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	99261.32	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	99261.32	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	99261.32	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	31393.82	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	31393.82	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	31393.82	239.25

Sample Name	JY41	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:09:34	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.17	13C3-PFBA	216.0 / 172.0	57883.97	250.00
13C2-PFDoA	615.0 / 570.0	4.01	13C2-PFDA	515.0 / 470.0	100506.14	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	31692.96	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	31692.96	239.25
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	89865.42	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	89865.42	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	89865.42	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	89865.42	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	100506.14	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	100506.14	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	100506.14	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	31692.96	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	31692.96	239.25
13C8-PFOS	507.0 / 99.0	3.05	13C4-PFOS	503.0 / 99.0	31692.96	239.25

Sample Name	JY42	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:20:26	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.17	13C3-PFBA	216.0 / 172.0	62099.81	250.00
13C2-PFDoA	615.0 / 570.0	4.01	13C2-PFDA	515.0 / 470.0	105936.28	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	32248.02	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	32248.02	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	92608.08	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	92608.08	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	92608.08	250.00
13C9-PFNA	472.0 / 427.0	3.05	13C2-PFOA	415.0 / 370.0	92608.08	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	105936.28	250.00
13C7-PFUnA	570.0 / 525.0	3.72	13C2-PFDA	515.0 / 470.0	105936.28	250.00
13C2-PFTeDA	715.0 / 670.0	4.48	13C2-PFDA	515.0 / 470.0	105936.28	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	32248.02	239.25
13C3-PFHxS	402.0 / 99.0	2.28	13C4-PFOS	503.0 / 99.0	32248.02	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	32248.02	239.25

Sample Name	JY43	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:31:18	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.17	13C3-PFBA	216.0 / 172.0	58707.76	250.00
13C2-PFDoA	615.0 / 570.0	4.00	13C2-PFDA	515.0 / 470.0	113124.25	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	32619.41	239.25
d5-EtFOSAA	589.0 / 419.0	3.72	13C4-PFOS	503.0 / 99.0	32619.41	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	91795.08	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	91795.08	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	91795.08	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	91795.08	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	113124.25	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	113124.25	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	113124.25	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	32619.41	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	32619.41	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	32619.41	239.25

Sample Name	JY44	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:42:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.16	13C3-PFBA	216.0 / 172.0	56480.01	250.00
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	103798.12	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	28605.63	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	28605.63	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	91050.54	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	91050.54	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	91050.54	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	91050.54	250.00
13C6-PFDA	519.0 / 474.0	3.38	13C2-PFDA	515.0 / 470.0	103798.12	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	103798.12	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	103798.12	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	28605.63	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	28605.63	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	28605.63	239.25

Sample Name	JY38	Injection Vial	16
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:04:50	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	32512.04	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	32512.04	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	75387.68	250.00
PFHxA_2	313.0 / 119.0	1.34	13C5-PFHxA	318.0 / 273.0	75387.68	250.00
PFHpA_1	363.0 / 319.0	2.25	13C8-PFOA	421.0 / 376.0	91375.83	250.00
PFHpA_2	363.0 / 169.0	2.24	13C8-PFOA	421.0 / 376.0	91375.83	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	26352.51	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	26352.51	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	91375.83	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	91375.83	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	96957.67	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	96957.67	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	27887.85	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	27887.85	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	97978.63	250.00
PFDA_2	513.0 / 219.0	3.39	13C6-PFDA	519.0 / 474.0	97978.63	250.00
PFUnA_1	563.0 / 519.0	3.72	13C7-PFUnA	570.0 / 525.0	103995.40	250.00
PFUnA_2	563.0 / 269.0	3.71	13C7-PFUnA	570.0 / 525.0	103995.40	250.00
PFDaA_1	613.0 / 569.0	4.00	13C2-PFDaA	615.0 / 570.0	109640.46	250.00
PFDaA_2	613.0 / 319.0	3.99	13C2-PFDaA	615.0 / 570.0	109640.46	250.00
PFTeDA_1	663.0 / 619.0	4.24	13C2-PFTeDA	715.0 / 670.0	94429.51	250.00
PFTeDA_2	663.0 / 169.0	4.24	13C2-PFTeDA	715.0 / 670.0	94429.51	250.00
PFTeDA_1	713.0 / 669.0	4.45	13C2-PFTeDA	715.0 / 670.0	94429.51	250.00
PFTeDA_2	713.0 / 169.0	4.45	13C2-PFTeDA	715.0 / 670.0	94429.51	250.00
NMeFOSAA_1	570.0 / 419.0	3.55	d3-MeFOSAA	573.0 / 419.0	14933.87	250.00
NMeFOSAA_2	570.0 / 512.0	3.55	d3-MeFOSAA	573.0 / 419.0	14933.87	250.00
NEtFOSAA_1	584.0 / 419.0	3.71	d5-EtFOSAA	589.0 / 419.0	16878.01	250.00
NEtFOSAA_2	584.0 / 483.0	3.71	d5-EtFOSAA	589.0 / 419.0	16878.01	250.00
PFBA	213.0 / 169.0	1.11	13C4-PFBA	217.0 / 172.0	88098.01	250.00

Sample Name	JY39	Injection Vial	17
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:15:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	29404.30	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	29404.30	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	62845.95	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	62845.95	250.00
PFHpA_1	363.0 / 319.0	2.25	13C8-PFOA	421.0 / 376.0	83668.64	250.00
PFHpA_2	363.0 / 169.0	2.25	13C8-PFOA	421.0 / 376.0	83668.64	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	22779.48	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	22779.48	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	83668.64	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	83668.64	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	88318.58	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	88318.58	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	29365.73	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	29365.73	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	85240.31	250.00
PFDA_2	513.0 / 219.0	3.40	13C6-PFDA	519.0 / 474.0	85240.31	250.00
PFUnA_1	563.0 / 519.0	3.71	13C7-PFUnA	570.0 / 525.0	93200.04	250.00
PFUnA_2	563.0 / 269.0	3.71	13C7-PFUnA	570.0 / 525.0	93200.04	250.00
PFDoA_1	613.0 / 569.0	4.00	13C2-PFDoA	615.0 / 570.0	96883.38	250.00
PFDoA_2	613.0 / 319.0	4.00	13C2-PFDoA	615.0 / 570.0	96883.38	250.00
PFTeDA_1	663.0 / 619.0	4.24	13C2-PFTeDA	715.0 / 670.0	80909.75	250.00
PFTeDA_2	663.0 / 169.0	4.24	13C2-PFTeDA	715.0 / 670.0	80909.75	250.00
PFTeDA_1	713.0 / 669.0	4.45	13C2-PFTeDA	715.0 / 670.0	80909.75	250.00
PFTeDA_2	713.0 / 169.0	4.45	13C2-PFTeDA	715.0 / 670.0	80909.75	250.00
NMeFOSAA_1	570.0 / 419.0	3.55	d3-MeFOSAA	573.0 / 419.0	12282.33	250.00
NMeFOSAA_2	570.0 / 512.0	3.55	d3-MeFOSAA	573.0 / 419.0	12282.33	250.00
NEtFOSAA_1	584.0 / 419.0	3.71	d5-EtFOSAA	589.0 / 419.0	17571.35	250.00
NEtFOSAA_2	584.0 / 483.0	3.72	d5-EtFOSAA	589.0 / 419.0	17571.35	250.00
PFBA	213.0 / 169.0	1.13	13C4-PFBA	217.0 / 172.0	79993.90	250.00

Sample Name	JY40	Injection Vial	18
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:26:32	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	29610.64	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	29610.64	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	73532.42	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	73532.42	250.00
PFHpA_1	363.0 / 319.0	2.25	13C8-PFOA	421.0 / 376.0	89126.82	250.00
PFHpA_2	363.0 / 169.0	2.25	13C8-PFOA	421.0 / 376.0	89126.82	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	28279.80	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	28279.80	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	89126.82	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	89126.82	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	93025.32	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	93025.32	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	28090.10	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	28090.10	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	101507.03	250.00
PFDA_2	513.0 / 219.0	3.40	13C6-PFDA	519.0 / 474.0	101507.03	250.00
PFUnA_1	563.0 / 519.0	3.72	13C7-PFUnA	570.0 / 525.0	103330.19	250.00
PFUnA_2	563.0 / 269.0	3.72	13C7-PFUnA	570.0 / 525.0	103330.19	250.00
PFDoA_1	613.0 / 569.0	4.00	13C2-PFDoA	615.0 / 570.0	106536.09	250.00
PFDoA_2	613.0 / 319.0	4.00	13C2-PFDoA	615.0 / 570.0	106536.09	250.00
PFTeDA_1	663.0 / 619.0	4.24	13C2-PFTeDA	715.0 / 670.0	92780.97	250.00
PFTeDA_2	663.0 / 169.0	4.24	13C2-PFTeDA	715.0 / 670.0	92780.97	250.00
PFTeDA_1	713.0 / 669.0	4.45	13C2-PFTeDA	715.0 / 670.0	92780.97	250.00
PFTeDA_2	713.0 / 169.0	4.45	13C2-PFTeDA	715.0 / 670.0	92780.97	250.00
NMeFOSAA_1	570.0 / 419.0	3.55	d3-MeFOSAA	573.0 / 419.0	13787.65	250.00
NMeFOSAA_2	570.0 / 512.0	3.55	d3-MeFOSAA	573.0 / 419.0	13787.65	250.00
NEtFOSAA_1	584.0 / 419.0	3.71	d5-EtFOSAA	589.0 / 419.0	18746.31	250.00
NEtFOSAA_2	584.0 / 483.0	3.71	d5-EtFOSAA	589.0 / 419.0	18746.31	250.00
PFBA	213.0 / 169.0	1.14	13C4-PFBA	217.0 / 172.0	87707.29	250.00

Sample Name	JY41	Injection Vial	19
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:37:24	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	28814.58	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	28814.58	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	67918.87	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	67918.87	250.00
PFHpA_1	363.0 / 319.0	2.25	13C8-PFOA	421.0 / 376.0	77394.27	250.00
PFHpA_2	363.0 / 169.0	2.25	13C8-PFOA	421.0 / 376.0	77394.27	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	22422.97	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	22422.97	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	77394.27	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	77394.27	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	80124.07	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	80124.07	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	21765.25	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	21765.25	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	85667.29	250.00
PFDA_2	513.0 / 219.0	3.40	13C6-PFDA	519.0 / 474.0	85667.29	250.00
PFUnA_1	563.0 / 519.0	3.72	13C7-PFUnA	570.0 / 525.0	87959.54	250.00
PFUnA_2	563.0 / 269.0	3.71	13C7-PFUnA	570.0 / 525.0	87959.54	250.00
PFDoA_1	613.0 / 569.0	4.00	13C2-PFDoA	615.0 / 570.0	96492.69	250.00
PFDoA_2	613.0 / 319.0	4.00	13C2-PFDoA	615.0 / 570.0	96492.69	250.00
PFTeDA_1	663.0 / 619.0	4.24	13C2-PFTeDA	715.0 / 670.0	77122.45	250.00
PFTeDA_2	663.0 / 169.0	4.24	13C2-PFTeDA	715.0 / 670.0	77122.45	250.00
PFTeDA_1	713.0 / 669.0	4.45	13C2-PFTeDA	715.0 / 670.0	77122.45	250.00
PFTeDA_2	713.0 / 169.0	4.45	13C2-PFTeDA	715.0 / 670.0	77122.45	250.00
NMeFOSAA_1	570.0 / 419.0	3.55	d3-MeFOSAA	573.0 / 419.0	13668.50	250.00
NMeFOSAA_2	570.0 / 512.0	3.55	d3-MeFOSAA	573.0 / 419.0	13668.50	250.00
NEtFOSAA_1	584.0 / 419.0	3.71	d5-EtFOSAA	589.0 / 419.0	16045.78	250.00
NEtFOSAA_2	584.0 / 483.0	3.72	d5-EtFOSAA	589.0 / 419.0	16045.78	250.00
PFBA	213.0 / 169.0	1.14	13C4-PFBA	217.0 / 172.0	76223.74	250.00

Sample Name	JY42	Injection Vial	20
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:48:15	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	29715.54	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	29715.54	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	66977.47	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	66977.47	250.00
PFHpA_1	363.0 / 319.0	2.24	13C8-PFOA	421.0 / 376.0	77939.32	250.00
PFHpA_2	363.0 / 169.0	2.24	13C8-PFOA	421.0 / 376.0	77939.32	250.00
PFHxS_1	399.0 / 80.0	2.26	13C3-PFHxS	402.0 / 99.0	21851.26	236.50
PFHxS_2	399.0 / 99.0	2.26	13C3-PFHxS	402.0 / 99.0	21851.26	236.50
PFOA_1	413.0 / 369.0	2.64	13C8-PFOA	421.0 / 376.0	77939.32	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	77939.32	250.00
PFNA_1	463.0 / 419.0	3.03	13C9-PFNA	472.0 / 427.0	79952.32	250.00
PFNA_2	463.0 / 219.0	3.03	13C9-PFNA	472.0 / 427.0	79952.32	250.00
PFOS_1	499.0 / 80.0	3.03	13C8-PFOS	507.0 / 99.0	25026.43	239.25
PFOS_2	499.0 / 99.0	3.03	13C8-PFOS	507.0 / 99.0	25026.43	239.25
PFDA_1	513.0 / 469.0	3.38	13C6-PFDA	519.0 / 474.0	88950.83	250.00
PFDA_2	513.0 / 219.0	3.38	13C6-PFDA	519.0 / 474.0	88950.83	250.00
PFUnA_1	563.0 / 519.0	3.70	13C7-PFUnA	570.0 / 525.0	93173.83	250.00
PFUnA_2	563.0 / 269.0	3.70	13C7-PFUnA	570.0 / 525.0	93173.83	250.00
PFDoA_1	613.0 / 569.0	3.98	13C2-PFDoA	615.0 / 570.0	97080.52	250.00
PFDoA_2	613.0 / 319.0	3.98	13C2-PFDoA	615.0 / 570.0	97080.52	250.00
PFTeDA_1	663.0 / 619.0	4.22	13C2-PFTeDA	715.0 / 670.0	85234.10	250.00
PFTeDA_2	663.0 / 169.0	4.22	13C2-PFTeDA	715.0 / 670.0	85234.10	250.00
PFTeDA_1	713.0 / 669.0	4.44	13C2-PFTeDA	715.0 / 670.0	85234.10	250.00
PFTeDA_2	713.0 / 169.0	4.44	13C2-PFTeDA	715.0 / 670.0	85234.10	250.00
NMeFOSAA_1	570.0 / 419.0	3.54	d3-MeFOSAA	573.0 / 419.0	15384.04	250.00
NMeFOSAA_2	570.0 / 512.0	3.53	d3-MeFOSAA	573.0 / 419.0	15384.04	250.00
NEtFOSAA_1	584.0 / 419.0	3.70	d5-EtFOSAA	589.0 / 419.0	16256.67	250.00
NEtFOSAA_2	584.0 / 483.0	3.70	d5-EtFOSAA	589.0 / 419.0	16256.67	250.00
PFBA	213.0 / 169.0	1.14	13C4-PFBA	217.0 / 172.0	78354.76	250.00

Sample Name	JY43	Injection Vial	21
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:59:08	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	31142.46	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	31142.46	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	69673.54	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	69673.54	250.00
PFHpA_1	363.0 / 319.0	2.25	13C8-PFOA	421.0 / 376.0	80787.03	250.00
PFHpA_2	363.0 / 169.0	2.25	13C8-PFOA	421.0 / 376.0	80787.03	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	23162.82	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	23162.82	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	80787.03	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	80787.03	250.00
PFNA_1	463.0 / 419.0	3.04	13C9-PFNA	472.0 / 427.0	82069.65	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	82069.65	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	27774.70	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	27774.70	239.25
PFDA_1	513.0 / 469.0	3.39	13C6-PFDA	519.0 / 474.0	86575.86	250.00
PFDA_2	513.0 / 219.0	3.39	13C6-PFDA	519.0 / 474.0	86575.86	250.00
PFUnA_1	563.0 / 519.0	3.71	13C7-PFUnA	570.0 / 525.0	87860.14	250.00
PFUnA_2	563.0 / 269.0	3.71	13C7-PFUnA	570.0 / 525.0	87860.14	250.00
PFDoA_1	613.0 / 569.0	3.99	13C2-PFDoA	615.0 / 570.0	104781.12	250.00
PFDoA_2	613.0 / 319.0	3.99	13C2-PFDoA	615.0 / 570.0	104781.12	250.00
PFTeDA_1	663.0 / 619.0	4.24	13C2-PFTeDA	715.0 / 670.0	92194.59	250.00
PFTeDA_2	663.0 / 169.0	4.24	13C2-PFTeDA	715.0 / 670.0	92194.59	250.00
PFTeDA_1	713.0 / 669.0	4.45	13C2-PFTeDA	715.0 / 670.0	92194.59	250.00
PFTeDA_2	713.0 / 169.0	4.45	13C2-PFTeDA	715.0 / 670.0	92194.59	250.00
NMeFOSAA_1	570.0 / 419.0	3.55	d3-MeFOSAA	573.0 / 419.0	14413.32	250.00
NMeFOSAA_2	570.0 / 512.0	3.55	d3-MeFOSAA	573.0 / 419.0	14413.32	250.00
NEtFOSAA_1	584.0 / 419.0	3.71	d5-EtFOSAA	589.0 / 419.0	15545.46	250.00
NEtFOSAA_2	584.0 / 483.0	3.71	d5-EtFOSAA	589.0 / 419.0	15545.46	250.00
PFBA	213.0 / 169.0	1.14	13C4-PFBA	217.0 / 172.0	79968.42	250.00

Sample Name	JY44	Injection Vial	22
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:09:59	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	31117.96	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	31117.96	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	73167.98	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	73167.98	250.00
PFHpA_1	363.0 / 319.0	2.25	13C8-PFOA	421.0 / 376.0	76405.21	250.00
PFHpA_2	363.0 / 169.0	2.25	13C8-PFOA	421.0 / 376.0	76405.21	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	24756.69	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	24756.69	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	76405.21	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	76405.21	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	75772.36	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	75772.36	250.00
PFOS_1	499.0 / 80.0	3.05	13C8-PFOS	507.0 / 99.0	21687.03	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	21687.03	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	78313.74	250.00
PFDA_2	513.0 / 219.0	3.40	13C6-PFDA	519.0 / 474.0	78313.74	250.00
PFUnA_1	563.0 / 519.0	3.71	13C7-PFUnA	570.0 / 525.0	85409.11	250.00
PFUnA_2	563.0 / 269.0	3.71	13C7-PFUnA	570.0 / 525.0	85409.11	250.00
PFDoA_1	613.0 / 569.0	4.00	13C2-PFDoA	615.0 / 570.0	106405.32	250.00
PFDoA_2	613.0 / 319.0	3.99	13C2-PFDoA	615.0 / 570.0	106405.32	250.00
PFTeDA_1	663.0 / 619.0	4.24	13C2-PFTeDA	715.0 / 670.0	94225.07	250.00
PFTeDA_2	663.0 / 169.0	4.23	13C2-PFTeDA	715.0 / 670.0	94225.07	250.00
PFTeDA_1	713.0 / 669.0	4.45	13C2-PFTeDA	715.0 / 670.0	94225.07	250.00
PFTeDA_2	713.0 / 169.0	4.45	13C2-PFTeDA	715.0 / 670.0	94225.07	250.00
NMeFOSAA_1	570.0 / 419.0	3.55	d3-MeFOSAA	573.0 / 419.0	17558.81	250.00
NMeFOSAA_2	570.0 / 512.0	3.55	d3-MeFOSAA	573.0 / 419.0	17558.81	250.00
NEtFOSAA_1	584.0 / 419.0	3.71	d5-EtFOSAA	589.0 / 419.0	13670.45	250.00
NEtFOSAA_2	584.0 / 483.0	3.71	d5-EtFOSAA	589.0 / 419.0	13670.45	250.00
PFBA	213.0 / 169.0	1.14	13C4-PFBA	217.0 / 172.0	79786.21	250.00

Sample Name	JY38	Injection Vial	16
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:04:50	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.15	13C3-PFBA	216.0 / 172.0	61083.71	250.00
13C2-PFDoA	615.0 / 570.0	3.98	13C2-PFDA	515.0 / 470.0	97894.02	250.00
d3-MeFOSAA	573.0 / 419.0	3.54	13C4-PFOS	503.0 / 99.0	29953.96	239.25
d5-EtFOSAA	589.0 / 419.0	3.70	13C4-PFOS	503.0 / 99.0	29953.96	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	84330.39	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	84330.39	250.00
13C8-PFOA	421.0 / 376.0	2.64	13C2-PFOA	415.0 / 370.0	84330.39	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	84330.39	250.00
13C6-PFDA	519.0 / 474.0	3.38	13C2-PFDA	515.0 / 470.0	97894.02	250.00
13C7-PFUnA	570.0 / 525.0	3.70	13C2-PFDA	515.0 / 470.0	97894.02	250.00
13C2-PFTeDA	715.0 / 670.0	4.45	13C2-PFDA	515.0 / 470.0	97894.02	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	29953.96	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	29953.96	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	29953.96	239.25

Sample Name	JY39	Injection Vial	17
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:15:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.15	13C3-PFBA	216.0 / 172.0	53621.70	250.00
13C2-PFDoA	615.0 / 570.0	3.98	13C2-PFDA	515.0 / 470.0	79143.80	250.00
d3-MeFOSAA	573.0 / 419.0	3.54	13C4-PFOS	503.0 / 99.0	28891.71	239.25
d5-EtFOSAA	589.0 / 419.0	3.70	13C4-PFOS	503.0 / 99.0	28891.71	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	70363.64	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	70363.64	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	70363.64	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	70363.64	250.00
13C6-PFDA	519.0 / 474.0	3.38	13C2-PFDA	515.0 / 470.0	79143.80	250.00
13C7-PFUnA	570.0 / 525.0	3.70	13C2-PFDA	515.0 / 470.0	79143.80	250.00
13C2-PFTeDA	715.0 / 670.0	4.45	13C2-PFDA	515.0 / 470.0	79143.80	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	28891.71	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	28891.71	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	28891.71	239.25

Sample Name	JY40	Injection Vial	18
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:26:32	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.15	13C3-PFBA	216.0 / 172.0	56475.25	250.00
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	94637.43	250.00
d3-MeFOSAA	573.0 / 419.0	3.54	13C4-PFOS	503.0 / 99.0	29758.83	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	29758.83	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	82022.48	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	82022.48	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	82022.48	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	82022.48	250.00
13C6-PFDA	519.0 / 474.0	3.38	13C2-PFDA	515.0 / 470.0	94637.43	250.00
13C7-PFUnA	570.0 / 525.0	3.70	13C2-PFDA	515.0 / 470.0	94637.43	250.00
13C2-PFTeDA	715.0 / 670.0	4.45	13C2-PFDA	515.0 / 470.0	94637.43	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	29758.83	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	29758.83	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	29758.83	239.25

Sample Name	JY41	Injection Vial	19
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:37:24	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.15	13C3-PFBA	216.0 / 172.0	49987.19	250.00
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	79399.67	250.00
d3-MeFOSAA	573.0 / 419.0	3.54	13C4-PFOS	503.0 / 99.0	23457.09	239.25
d5-EtFOSAA	589.0 / 419.0	3.70	13C4-PFOS	503.0 / 99.0	23457.09	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	71523.55	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	71523.55	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	71523.55	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	71523.55	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	79399.67	250.00
13C7-PFUnA	570.0 / 525.0	3.70	13C2-PFDA	515.0 / 470.0	79399.67	250.00
13C2-PFTeDA	715.0 / 670.0	4.45	13C2-PFDA	515.0 / 470.0	79399.67	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	23457.09	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	23457.09	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	23457.09	239.25

Sample Name	JY42	Injection Vial	20
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:48:15	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.15	13C3-PFBA	216.0 / 172.0	51124.18	250.00
13C2-PFDoA	615.0 / 570.0	3.97	13C2-PFDA	515.0 / 470.0	82579.96	250.00
d3-MeFOSAA	573.0 / 419.0	3.53	13C4-PFOS	503.0 / 99.0	30907.19	239.25
d5-EtFOSAA	589.0 / 419.0	3.69	13C4-PFOS	503.0 / 99.0	30907.19	239.25
13C5-PFHxA	318.0 / 273.0	1.82	13C2-PFOA	415.0 / 370.0	70686.29	250.00
13C4-PFHpA	367.0 / 322.0	2.23	13C2-PFOA	415.0 / 370.0	70686.29	250.00
13C8-PFOA	421.0 / 376.0	2.63	13C2-PFOA	415.0 / 370.0	70686.29	250.00
13C9-PFNA	472.0 / 427.0	3.02	13C2-PFOA	415.0 / 370.0	70686.29	250.00
13C6-PFDA	519.0 / 474.0	3.37	13C2-PFDA	515.0 / 470.0	82579.96	250.00
13C7-PFUnA	570.0 / 525.0	3.69	13C2-PFDA	515.0 / 470.0	82579.96	250.00
13C2-PFTeDA	715.0 / 670.0	4.43	13C2-PFDA	515.0 / 470.0	82579.96	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	30907.19	239.25
13C3-PFHxS	402.0 / 99.0	2.25	13C4-PFOS	503.0 / 99.0	30907.19	239.25
13C8-PFOS	507.0 / 99.0	3.02	13C4-PFOS	503.0 / 99.0	30907.19	239.25

Sample Name	JY43	Injection Vial	21
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:59:08	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.15	13C3-PFBA	216.0 / 172.0	53288.49	250.00
13C2-PFDoA	615.0 / 570.0	3.98	13C2-PFDA	515.0 / 470.0	86460.00	250.00
d3-MeFOSAA	573.0 / 419.0	3.54	13C4-PFOS	503.0 / 99.0	27142.68	239.25
d5-EtFOSAA	589.0 / 419.0	3.70	13C4-PFOS	503.0 / 99.0	27142.68	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	83677.30	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	83677.30	250.00
13C8-PFOA	421.0 / 376.0	2.64	13C2-PFOA	415.0 / 370.0	83677.30	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	83677.30	250.00
13C6-PFDA	519.0 / 474.0	3.38	13C2-PFDA	515.0 / 470.0	86460.00	250.00
13C7-PFUnA	570.0 / 525.0	3.70	13C2-PFDA	515.0 / 470.0	86460.00	250.00
13C2-PFTeDA	715.0 / 670.0	4.44	13C2-PFDA	515.0 / 470.0	86460.00	250.00
13C3-PFBS	302.0 / 99.0	1.51	13C4-PFOS	503.0 / 99.0	27142.68	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	27142.68	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	27142.68	239.25

Sample Name	JY44	Injection Vial	22
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:09:59	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.15	13C3-PFBA	216.0 / 172.0	50812.75	250.00
13C2-PFDoA	615.0 / 570.0	3.98	13C2-PFDA	515.0 / 470.0	94107.95	250.00
d3-MeFOSAA	573.0 / 419.0	3.54	13C4-PFOS	503.0 / 99.0	24977.32	239.25
d5-EtFOSAA	589.0 / 419.0	3.70	13C4-PFOS	503.0 / 99.0	24977.32	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	78516.75	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	78516.75	250.00
13C8-PFOA	421.0 / 376.0	2.64	13C2-PFOA	415.0 / 370.0	78516.75	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	78516.75	250.00
13C6-PFDA	519.0 / 474.0	3.38	13C2-PFDA	515.0 / 470.0	94107.95	250.00
13C7-PFUnA	570.0 / 525.0	3.70	13C2-PFDA	515.0 / 470.0	94107.95	250.00
13C2-PFTeDA	715.0 / 670.0	4.45	13C2-PFDA	515.0 / 470.0	94107.95	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	24977.32	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	24977.32	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	24977.32	239.25

Sample Name	JY45 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T00:03:55	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.55	945.317305	1010.00	93.60
PFBS_2	298.9 / 99.0	1.55	935.514031	1010.00	92.63
PFHxA_1	313.0 / 269.0	1.86	923.318126	1010.00	91.42
PFHxA_2	313.0 / 119.0	1.86	976.518151	1010.00	96.68
PFHpA_1	363.0 / 319.0	2.26	915.508298	1000.00	91.55
PFHpA_2	363.0 / 169.0	2.27	790.761915	1000.00	79.08
PFHxS_1	399.0 / 80.0	2.28	965.455677	1010.00	95.59
PFHxS_2	399.0 / 99.0	2.28	995.242077	1010.00	98.54
PFOA_1	413.0 / 369.0	2.67	918.699957	1000.00	91.87
PFOA_2	413.0 / 169.0	2.67	955.460599	1000.00	95.55
PFNA_1	463.0 / 419.0	3.05	945.837479	1000.00	94.58
PFNA_2	463.0 / 219.0	3.05	977.984830	1000.00	97.80
PFOS_1	499.0 / 80.0	3.05	835.338725	1000.00	83.53
PFOS_2	499.0 / 99.0	3.05	883.759256	1000.00	88.38
PFDA_1	513.0 / 469.0	3.40	993.565292	1000.00	99.36
PFDA_2	513.0 / 219.0	3.41	898.454706	1000.00	89.85
PFUnA_1	563.0 / 519.0	3.73	945.238689	1000.00	94.52
PFUnA_2	563.0 / 269.0	3.73	853.408516	1000.00	85.34
PFDoA_1	613.0 / 569.0	4.01	1005.730822	1000.00	100.57
PFDoA_2	613.0 / 319.0	4.01	983.797996	1000.00	98.38
PFTTrDA_1	663.0 / 619.0	4.25	1016.995563	1000.00	101.70
PFTTrDA_2	663.0 / 169.0	4.25	1017.066538	1000.00	101.71
PFTeDA_1	713.0 / 669.0	4.47	1006.665369	1000.00	100.67
PFTeDA_2	713.0 / 169.0	4.47	964.000724	1000.00	96.40
NMeFOSAA_1	570.0 / 419.0	3.56	1038.070101	1000.00	103.81
NMeFOSAA_2	570.0 / 512.0	3.56	1030.221581	1000.00	103.02
NEtFOSAA_1	584.0 / 419.0	3.72	932.896900	1000.00	93.29
NEtFOSAA_2	584.0 / 483.0	3.72	992.807735	1000.00	99.28
PFBA	213.0 / 169.0	1.17	932.851946	1000.00	93.29

Sample Name	JY42 CCV	Injection Vial	38
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:02:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.55	2632.698149	2525.00	104.27
PFBS_2	298.9 / 99.0	1.55	2629.163632	2525.00	104.13
PFHxA_1	313.0 / 269.0	1.86	2773.254653	2525.00	109.83
PFHxA_2	313.0 / 119.0	1.86	2673.395167	2525.00	105.88
PFHpA_1	363.0 / 319.0	2.26	2107.090305	2500.00	84.28
PFHpA_2	363.0 / 169.0	2.26	2394.034106	2500.00	95.76
PFHxS_1	399.0 / 80.0	2.28	2459.194498	2525.00	97.39
PFHxS_2	399.0 / 99.0	2.28	2412.304661	2525.00	95.54
PFOA_1	413.0 / 369.0	2.66	2290.634212	2500.00	91.63
PFOA_2	413.0 / 169.0	2.66	2351.499400	2500.00	94.06
PFNA_1	463.0 / 419.0	3.05	2450.064985	2500.00	98.00
PFNA_2	463.0 / 219.0	3.05	2451.927030	2500.00	98.08
PFOS_1	499.0 / 80.0	3.04	2376.576536	2500.00	95.06
PFOS_2	499.0 / 99.0	3.04	2402.769604	2500.00	96.11
PFDA_1	513.0 / 469.0	3.40	2413.882726	2500.00	96.56
PFDA_2	513.0 / 219.0	3.40	2416.808757	2500.00	96.67
PFUnA_1	563.0 / 519.0	3.72	2386.400763	2500.00	95.46
PFUnA_2	563.0 / 269.0	3.72	2171.743398	2500.00	86.87
PFDoA_1	613.0 / 569.0	4.00	2541.861858	2500.00	101.67
PFDoA_2	613.0 / 319.0	4.00	2592.319057	2500.00	103.69
PFTTrDA_1	663.0 / 619.0	4.25	2549.148161	2500.00	101.97
PFTTrDA_2	663.0 / 169.0	4.25	2604.881254	2500.00	104.20
PFTeDA_1	713.0 / 669.0	4.47	2513.784627	2500.00	100.55
PFTeDA_2	713.0 / 169.0	4.47	2442.231780	2500.00	97.69
NMeFOSAA_1	570.0 / 419.0	3.55	2492.751041	2500.00	99.71
NMeFOSAA_2	570.0 / 512.0	3.55	2380.120387	2500.00	95.20
NEtFOSAA_1	584.0 / 419.0	3.72	2653.899480	2500.00	106.16
NEtFOSAA_2	584.0 / 483.0	3.72	2532.714032	2500.00	101.31
PFBA	213.0 / 169.0	1.16	2308.516872	2500.00	92.34

Sample Name	JY41 CCV	Injection Vial	46
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:40:38	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.55	1045.035737	1010.00	103.47
PFBS_2	298.9 / 99.0	1.55	1034.084270	1010.00	102.38
PFHxA_1	313.0 / 269.0	1.86	1034.046916	1010.00	102.38
PFHxA_2	313.0 / 119.0	1.86	1043.126148	1010.00	103.28
PFHpA_1	363.0 / 319.0	2.25	944.093451	1000.00	94.41
PFHpA_2	363.0 / 169.0	2.25	964.454229	1000.00	96.45
PFHxS_1	399.0 / 80.0	2.27	968.676582	1010.00	95.91
PFHxS_2	399.0 / 99.0	2.27	954.204725	1010.00	94.48
PFOA_1	413.0 / 369.0	2.65	944.867186	1000.00	94.49
PFOA_2	413.0 / 169.0	2.65	895.448197	1000.00	89.54
PFNA_1	463.0 / 419.0	3.04	960.424992	1000.00	96.04
PFNA_2	463.0 / 219.0	3.04	960.791914	1000.00	96.08
PFOS_1	499.0 / 80.0	3.04	1046.151446	1000.00	104.62
PFOS_2	499.0 / 99.0	3.04	1030.798386	1000.00	103.08
PFDA_1	513.0 / 469.0	3.39	943.222576	1000.00	94.32
PFDA_2	513.0 / 219.0	3.39	866.268108	1000.00	86.63
PFUnA_1	563.0 / 519.0	3.71	922.774975	1000.00	92.28
PFUnA_2	563.0 / 269.0	3.70	1003.316077	1000.00	100.33
PFDoA_1	613.0 / 569.0	3.99	1038.554705	1000.00	103.86
PFDoA_2	613.0 / 319.0	3.99	998.658194	1000.00	99.87
PFTTrDA_1	663.0 / 619.0	4.24	1057.936564	1000.00	105.79
PFTTrDA_2	663.0 / 169.0	4.24	1091.130829	1000.00	109.11
PFTeDA_1	713.0 / 669.0	4.46	1012.857374	1000.00	101.29
PFTeDA_2	713.0 / 169.0	4.45	1069.452128	1000.00	106.95
NMeFOSAA_1	570.0 / 419.0	3.54	1279.387236	1000.00	127.94
NMeFOSAA_2	570.0 / 512.0	3.54	1294.528690	1000.00	129.45
NEtFOSAA_1	584.0 / 419.0	3.70	824.462970	1000.00	82.45
NEtFOSAA_2	584.0 / 483.0	3.71	851.513995	1000.00	85.15
PFBA	213.0 / 169.0	1.16	1241.361787	1000.00	124.14

Sample Name	JY45 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T00:03:55	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C4-PFBA	217.0 / 172.0	1.17	256.423433	250.00	102.57
13C2-PFDoA	615.0 / 570.0	4.00	236.412962	250.00	94.57
d3-MeFOSAA	573.0 / 419.0	3.55	229.007354	250.00	91.60
d5-EtFOSAA	589.0 / 419.0	3.71	244.394489	250.00	97.76
13C5-PFHxA	318.0 / 273.0	1.85	257.007980	250.00	102.80
13C4-PFHpA	367.0 / 322.0	2.25	257.575529	250.00	103.03
13C8-PFOA	421.0 / 376.0	2.66	253.920137	250.00	101.57
13C9-PFNA	472.0 / 427.0	3.04	266.243110	250.00	106.50
13C6-PFDA	519.0 / 474.0	3.39	253.349129	250.00	101.34
13C7-PFUnA	570.0 / 525.0	3.71	245.125330	250.00	98.05
13C2-PFTeDA	715.0 / 670.0	4.47	231.378794	250.00	92.55
13C3-PFBS	302.0 / 99.0	1.53	214.031789	232.25	92.16
13C3-PFHxS	402.0 / 99.0	2.27	204.130881	236.50	86.31
13C8-PFOS	507.0 / 99.0	3.03	237.268489	239.50	99.07

Sample Name	JY42 CCV	Injection Vial	38
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:02:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C4-PFBA	217.0 / 172.0	1.16	245.196843	250.00	98.08
13C2-PFDoA	615.0 / 570.0	3.99	260.396935	250.00	104.16
d3-MeFOSAA	573.0 / 419.0	3.55	272.635552	250.00	109.05
d5-EtFOSAA	589.0 / 419.0	3.71	226.675426	250.00	90.67
13C5-PFHxA	318.0 / 273.0	1.85	246.708303	250.00	98.68
13C4-PFHpA	367.0 / 322.0	2.25	244.690747	250.00	97.88
13C8-PFOA	421.0 / 376.0	2.65	263.709916	250.00	105.48
13C9-PFNA	472.0 / 427.0	3.04	257.313486	250.00	102.93
13C6-PFDA	519.0 / 474.0	3.39	273.403566	250.00	109.36
13C7-PFUnA	570.0 / 525.0	3.70	254.913233	250.00	101.97
13C2-PFTeDA	715.0 / 670.0	4.46	260.143023	250.00	104.06
13C3-PFBS	302.0 / 99.0	1.53	207.246442	232.25	89.23
13C3-PFHxS	402.0 / 99.0	2.27	221.264607	236.50	93.56
13C8-PFOS	507.0 / 99.0	3.03	241.729320	239.50	100.93

Sample Name	JY41 CCV	Injection Vial	46
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:40:38	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C4-PFBA	217.0 / 172.0	1.16	242.929035	250.00	97.17
13C2-PFDoA	615.0 / 570.0	3.98	241.616856	250.00	96.65
d3-MeFOSAA	573.0 / 419.0	3.53	203.401243	250.00	81.36
d5-EtFOSAA	589.0 / 419.0	3.69	295.605155	250.00	118.24
13C5-PFHxA	318.0 / 273.0	1.84	251.148906	250.00	100.46
13C4-PFHpA	367.0 / 322.0	2.24	250.673692	250.00	100.27
13C8-PFOA	421.0 / 376.0	2.64	255.942348	250.00	102.38
13C9-PFNA	472.0 / 427.0	3.03	260.283573	250.00	104.11
13C6-PFDA	519.0 / 474.0	3.38	264.297912	250.00	105.72
13C7-PFUnA	570.0 / 525.0	3.69	253.122689	250.00	101.25
13C2-PFTeDA	715.0 / 670.0	4.45	235.846081	250.00	94.34
13C3-PFBS	302.0 / 99.0	1.53	199.706162	232.25	85.99
13C3-PFHxS	402.0 / 99.0	2.26	222.467806	236.50	94.07
13C8-PFOS	507.0 / 99.0	3.02	227.975939	239.50	95.19

Sample Name	JY45 ICC	Injection Vial	24
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.53	899.175195	1010.00	89.03
PFBS_2	298.9 / 99.0	1.53	941.677693	1010.00	93.24
PFHxA_1	313.0 / 269.0	1.85	926.144086	1010.00	91.70
PFHxA_2	313.0 / 119.0	1.85	881.587461	1010.00	87.29
PFHpA_1	363.0 / 319.0	2.25	884.166721	1000.00	88.42
PFHpA_2	363.0 / 169.0	2.25	874.558078	1000.00	87.46
PFHxS_1	399.0 / 80.0	2.27	908.144091	1010.00	89.92
PFHxS_2	399.0 / 99.0	2.27	981.070873	1010.00	97.14
PFOA_1	413.0 / 369.0	2.66	907.407600	1000.00	90.74
PFOA_2	413.0 / 169.0	2.65	869.229245	1000.00	86.92
PFNA_1	463.0 / 419.0	3.05	940.578444	1000.00	94.06
PFNA_2	463.0 / 219.0	3.05	1027.633915	1000.00	102.76
PFOS_1	499.0 / 80.0	3.04	910.670434	1000.00	91.07
PFOS_2	499.0 / 99.0	3.04	947.472421	1000.00	94.75
PFDA_1	513.0 / 469.0	3.40	944.839755	1000.00	94.48
PFDA_2	513.0 / 219.0	3.40	837.447659	1000.00	83.74
PFUnA_1	563.0 / 519.0	3.71	862.618951	1000.00	86.26
PFUnA_2	563.0 / 269.0	3.71	941.076705	1000.00	94.11
PFDoA_1	613.0 / 569.0	4.00	951.418801	1000.00	95.14
PFDoA_2	613.0 / 319.0	4.00	955.108572	1000.00	95.51
PFTTrDA_1	663.0 / 619.0	4.24	964.723863	1000.00	96.47
PFTTrDA_2	663.0 / 169.0	4.23	984.141074	1000.00	98.41
PFTeDA_1	713.0 / 669.0	4.45	1005.572055	1000.00	100.56
PFTeDA_2	713.0 / 169.0	4.45	946.095490	1000.00	94.61
NMeFOSAA_1	570.0 / 419.0	3.55	1068.319683	1000.00	106.83
NMeFOSAA_2	570.0 / 512.0	3.55	930.744436	1000.00	93.07
NEtFOSAA_1	584.0 / 419.0	3.71	950.891484	1000.00	95.09
NEtFOSAA_2	584.0 / 483.0	3.71	1072.173371	1000.00	107.22
PFBA	213.0 / 169.0	1.14	1083.124444	1000.00	108.31

Sample Name	JY41 CCV	Injection Vial	19
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.53	946.628592	1010.00	93.73
PFBS_2	298.9 / 99.0	1.53	975.673279	1010.00	96.60
PFHxA_1	313.0 / 269.0	1.84	969.967166	1010.00	96.04
PFHxA_2	313.0 / 119.0	1.84	1059.647323	1010.00	104.92
PFHpA_1	363.0 / 319.0	2.25	919.580754	1000.00	91.96
PFHpA_2	363.0 / 169.0	2.24	921.904422	1000.00	92.19
PFHxS_1	399.0 / 80.0	2.27	965.200946	1010.00	95.56
PFHxS_2	399.0 / 99.0	2.27	996.954633	1010.00	98.71
PFOA_1	413.0 / 369.0	2.65	932.514474	1000.00	93.25
PFOA_2	413.0 / 169.0	2.65	899.481477	1000.00	89.95
PFNA_1	463.0 / 419.0	3.04	1002.187874	1000.00	100.22
PFNA_2	463.0 / 219.0	3.04	1099.931508	1000.00	109.99
PFOS_1	499.0 / 80.0	3.04	1039.681997	1000.00	103.97
PFOS_2	499.0 / 99.0	3.04	1109.527969	1000.00	110.95
PFDA_1	513.0 / 469.0	3.39	957.117269	1000.00	95.71
PFDA_2	513.0 / 219.0	3.39	772.627526	1000.00	77.26
PFUnA_1	563.0 / 519.0	3.71	941.759513	1000.00	94.18
PFUnA_2	563.0 / 269.0	3.71	1119.267675	1000.00	111.93
PFDoA_1	613.0 / 569.0	3.99	966.412096	1000.00	96.64
PFDoA_2	613.0 / 319.0	3.99	920.893085	1000.00	92.09
PFTTrDA_1	663.0 / 619.0	4.23	987.761338	1000.00	98.78
PFTTrDA_2	663.0 / 169.0	4.23	929.522754	1000.00	92.95
PFTeDA_1	713.0 / 669.0	4.45	1012.400917	1000.00	101.24
PFTeDA_2	713.0 / 169.0	4.45	971.566409	1000.00	97.16
NMeFOSAA_1	570.0 / 419.0	3.55	1077.774773	1000.00	107.78
NMeFOSAA_2	570.0 / 512.0	3.54	995.090103	1000.00	99.51
NEtFOSAA_1	584.0 / 419.0	3.71	961.362287	1000.00	96.14
NEtFOSAA_2	584.0 / 483.0	3.70	1063.459152	1000.00	106.35
PFBA	213.0 / 169.0	1.14	1163.278486	1000.00	116.33

Sample Name	JY42 CCV	Injection Vial	20
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:46:39	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.54	2591.790173	2525.00	102.65
PFBS_2	298.9 / 99.0	1.54	2585.310488	2525.00	102.39
PFHxA_1	313.0 / 269.0	1.84	2486.211609	2525.00	98.46
PFHxA_2	313.0 / 119.0	1.84	2399.592339	2525.00	95.03
PFHpA_1	363.0 / 319.0	2.25	2143.523387	2500.00	85.74
PFHpA_2	363.0 / 169.0	2.25	2058.088760	2500.00	82.32
PFHxS_1	399.0 / 80.0	2.27	2485.428979	2525.00	98.43
PFHxS_2	399.0 / 99.0	2.27	2418.105170	2525.00	95.77
PFOA_1	413.0 / 369.0	2.65	2301.727409	2500.00	92.07
PFOA_2	413.0 / 169.0	2.64	2240.850501	2500.00	89.63
PFNA_1	463.0 / 419.0	3.04	2274.392560	2500.00	90.98
PFNA_2	463.0 / 219.0	3.04	2379.666505	2500.00	95.19
PFOS_1	499.0 / 80.0	3.03	2028.427880	2500.00	81.14
PFOS_2	499.0 / 99.0	3.03	2261.241648	2500.00	90.45
PFDA_1	513.0 / 469.0	3.39	2279.529303	2500.00	91.18
PFDA_2	513.0 / 219.0	3.38	2015.461396	2500.00	80.62
PFUnA_1	563.0 / 519.0	3.70	2344.244090	2500.00	93.77
PFUnA_2	563.0 / 269.0	3.70	2544.118392	2500.00	101.76
PFDoA_1	613.0 / 569.0	3.98	2616.737723	2500.00	104.67
PFDoA_2	613.0 / 319.0	3.98	2564.614197	2500.00	102.58
PFTTrDA_1	663.0 / 619.0	4.23	2554.381911	2500.00	102.18
PFTTrDA_2	663.0 / 169.0	4.22	2592.748585	2500.00	103.71
PFTeDA_1	713.0 / 669.0	4.44	2529.377308	2500.00	101.18
PFTeDA_2	713.0 / 169.0	4.44	2525.911432	2500.00	101.04
NMeFOSAA_1	570.0 / 419.0	3.54	2598.914045	2500.00	103.96
NMeFOSAA_2	570.0 / 512.0	3.54	2380.294157	2500.00	95.21
NEtFOSAA_1	584.0 / 419.0	3.70	2330.063885	2500.00	93.20
NEtFOSAA_2	584.0 / 483.0	3.70	2526.944041	2500.00	101.08
PFBA	213.0 / 169.0	1.14	2382.833799	2500.00	95.31

Sample Name	JY45 ICC	Injection Vial	24
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C4-PFBA	217.0 / 172.0	1.15	262.377969	250.00	104.95
13C2-PFDoA	615.0 / 570.0	3.98	248.752108	250.00	99.50
d3-MeFOSAA	573.0 / 419.0	3.54	264.705112	250.00	105.88
d5-EtFOSAA	589.0 / 419.0	3.70	258.928916	250.00	103.57
13C5-PFHxA	318.0 / 273.0	1.83	246.400463	250.00	98.56
13C4-PFHpA	367.0 / 322.0	2.24	249.461907	250.00	99.78
13C8-PFOA	421.0 / 376.0	2.65	248.412724	250.00	99.37
13C9-PFNA	472.0 / 427.0	3.03	242.923118	250.00	97.17
13C6-PFDA	519.0 / 474.0	3.38	247.738674	250.00	99.10
13C7-PFUnA	570.0 / 525.0	3.70	272.508574	250.00	109.00
13C2-PFTeDA	715.0 / 670.0	4.45	246.047020	250.00	98.42
13C3-PFBS	302.0 / 99.0	1.52	234.521477	232.25	100.98
13C3-PFHxS	402.0 / 99.0	2.26	254.132400	236.50	107.46
13C8-PFOS	507.0 / 99.0	3.03	232.038491	239.25	96.99

Sample Name	JY41 CCV	Injection Vial	19
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C4-PFBA	217.0 / 172.0	1.15	271.412518	250.00	108.57
13C2-PFDoA	615.0 / 570.0	3.98	256.816850	250.00	102.73
d3-MeFOSAA	573.0 / 419.0	3.54	313.321471	250.00	125.33
d5-EtFOSAA	589.0 / 419.0	3.70	315.369701	250.00	126.15
13C5-PFHxA	318.0 / 273.0	1.83	262.660478	250.00	105.06
13C4-PFHpA	367.0 / 322.0	2.23	261.866304	250.00	104.75
13C8-PFOA	421.0 / 376.0	2.64	255.735525	250.00	102.29
13C9-PFNA	472.0 / 427.0	3.03	256.758811	250.00	102.70
13C6-PFDA	519.0 / 474.0	3.38	266.766660	250.00	106.71
13C7-PFUnA	570.0 / 525.0	3.69	261.998938	250.00	104.80
13C2-PFTeDA	715.0 / 670.0	4.44	255.833059	250.00	102.33
13C3-PFBS	302.0 / 99.0	1.52	264.603165	232.25	113.93
13C3-PFHxS	402.0 / 99.0	2.26	281.168493	236.50	118.89
13C8-PFOS	507.0 / 99.0	3.02	273.786335	239.25	114.44

Sample Name	JY42 CCV	Injection Vial	20
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:46:39	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C4-PFBA	217.0 / 172.0	1.15	272.192259	250.00	108.88
13C2-PFDoA	615.0 / 570.0	3.97	239.812449	250.00	95.92
d3-MeFOSAA	573.0 / 419.0	3.53	288.293967	250.00	115.32
d5-EtFOSAA	589.0 / 419.0	3.69	279.953763	250.00	111.98
13C5-PFHxA	318.0 / 273.0	1.83	236.852067	250.00	94.74
13C4-PFHpA	367.0 / 322.0	2.24	222.708022	250.00	89.08
13C8-PFOA	421.0 / 376.0	2.64	248.521328	250.00	99.41
13C9-PFNA	472.0 / 427.0	3.02	235.745910	250.00	94.30
13C6-PFDA	519.0 / 474.0	3.37	266.202359	250.00	106.48
13C7-PFUnA	570.0 / 525.0	3.69	252.992241	250.00	101.20
13C2-PFTeDA	715.0 / 670.0	4.44	244.980626	250.00	97.99
13C3-PFBS	302.0 / 99.0	1.52	211.637892	232.25	91.13
13C3-PFHxS	402.0 / 99.0	2.26	231.837538	236.50	98.03
13C8-PFOS	507.0 / 99.0	3.02	262.389888	239.25	109.67

Sample Name	JY45 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T00:03:55	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	471977.28	945.317305	439.4	false
PFBS_2	298.9 / 99.0	1.55	137817.48	935.514031	245.3	false
PFHxA_1	313.0 / 269.0	1.86	361850.29	923.318126	61.5	false
PFHxA_2	313.0 / 119.0	1.86	28236.47	976.518151	62.8	false
PFHpA_1	363.0 / 319.0	2.26	321110.09	915.508298	130.6	false
PFHpA_2	363.0 / 169.0	2.27	5718.08	790.761915	106.0	false
PFHxS_1	399.0 / 80.0	2.28	475710.02	965.455677	280.5	false
PFHxS_2	399.0 / 99.0	2.28	138090.54	995.242077	595.8	false
PFOA_1	413.0 / 369.0	2.67	432964.90	918.699957	242.8	false
PFOA_2	413.0 / 169.0	2.67	29150.56	955.460599	155.6	false
PFNA_1	463.0 / 419.0	3.05	427938.76	945.837479	279.6	true
PFNA_2	463.0 / 219.0	3.05	136131.21	977.984830	322.9	false
PFOS_1	499.0 / 80.0	3.05	663393.11	835.338725	242.7	true
PFOS_2	499.0 / 99.0	3.05	122846.93	883.759256	364.1	false
PFDA_1	513.0 / 469.0	3.40	518015.17	993.565292	343.0	false
PFDA_2	513.0 / 219.0	3.41	21682.87	898.454706	172.0	false
PFUnA_1	563.0 / 519.0	3.73	513657.73	945.238689	227.0	false
PFUnA_2	563.0 / 269.0	3.73	24340.58	853.408516	164.8	true
PFDoA_1	613.0 / 569.0	4.01	482306.74	1005.730822	233.1	false
PFDoA_2	613.0 / 319.0	4.01	76159.29	983.797996	206.3	false
PFTrDA_1	663.0 / 619.0	4.25	458900.12	1016.995563	304.9	false
PFTrDA_2	663.0 / 169.0	4.25	29104.92	1017.066538	254.6	false
PFTeDA_1	713.0 / 669.0	4.47	510091.48	1006.665369	628.7	false
PFTeDA_2	713.0 / 169.0	4.47	23391.32	964.000724	361.4	false
NMeFOSAA_1	570.0 / 419.0	3.56	85978.48	1038.070101	656.1	false
NMeFOSAA_2	570.0 / 512.0	3.56	47649.73	1030.221581	401.3	false
NEtFOSAA_1	584.0 / 419.0	3.72	93212.32	932.896900	545.1	false
NEtFOSAA_2	584.0 / 483.0	3.72	5846.35	992.807735	145.7	false
PFBA	213.0 / 169.0	1.17	710407.76	932.851946	406.5	true

Sample Name	JY42 CCV	Injection Vial	38
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:02:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	1026213.31	2632.698149	660.6	false
PFBS_2	298.9 / 99.0	1.55	302902.74	2629.163632	544.5	false
PFHxA_1	313.0 / 269.0	1.86	921967.82	2773.254653	89.9	false
PFHxA_2	313.0 / 119.0	1.86	66439.71	2673.395167	85.1	false
PFHpA_1	363.0 / 319.0	2.26	715835.13	2107.090305	241.5	false
PFHpA_2	363.0 / 169.0	2.26	16181.93	2394.034106	199.3	false
PFHxS_1	399.0 / 80.0	2.28	1069231.35	2459.194498	427.4	false
PFHxS_2	399.0 / 99.0	2.28	294591.31	2412.304661	608.8	false
PFOA_1	413.0 / 369.0	2.66	1002515.17	2290.634212	512.2	false
PFOA_2	413.0 / 169.0	2.66	66130.63	2351.499400	332.1	false
PFNA_1	463.0 / 419.0	3.05	948133.60	2450.064985	504.9	true
PFNA_2	463.0 / 219.0	3.05	289136.22	2451.927030	570.8	false
PFOS_1	499.0 / 80.0	3.04	1526835.96	2376.576536	321.4	true
PFOS_2	499.0 / 99.0	3.04	271065.02	2402.769604	608.7	false
PFDA_1	513.0 / 469.0	3.40	1097646.73	2413.882726	487.0	false
PFDA_2	513.0 / 219.0	3.40	48945.07	2416.808757	266.3	false
PFUnA_1	563.0 / 519.0	3.72	1107980.74	2386.400763	343.3	false
PFUnA_2	563.0 / 269.0	3.72	51193.42	2171.743398	180.2	false
PFDoA_1	613.0 / 569.0	4.00	1072422.75	2541.861858	415.9	false
PFDoA_2	613.0 / 319.0	4.00	177041.49	2592.319057	319.2	false
PFTTrDA_1	663.0 / 619.0	4.25	1034154.45	2549.148161	532.3	false
PFTTrDA_2	663.0 / 169.0	4.25	66736.14	2604.881254	366.2	false
PFTeDA_1	713.0 / 669.0	4.47	1142585.97	2513.784627	912.3	false
PFTeDA_2	713.0 / 169.0	4.47	53286.52	2442.231780	486.9	false
NMeFOSAA_1	570.0 / 419.0	3.55	192873.03	2492.751041	566.7	false
NMeFOSAA_2	570.0 / 512.0	3.55	102848.01	2380.120387	465.9	false
NEtFOSAA_1	584.0 / 419.0	3.72	199998.63	2653.899480	826.1	false
NEtFOSAA_2	584.0 / 483.0	3.72	11894.02	2532.714032	715.7	false
PFBA	213.0 / 169.0	1.16	1321338.84	2308.516872	343.8	true

Sample Name	JY41 CCV	Injection Vial	46
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:40:38	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	359937.79	1045.035737	372.7	false
PFBS_2	298.9 / 99.0	1.55	105115.25	1034.084270	294.1	false
PFHxA_1	313.0 / 269.0	1.86	323965.21	1034.046916	52.6	false
PFHxA_2	313.0 / 119.0	1.86	24120.06	1043.126148	50.9	false
PFHpA_1	363.0 / 319.0	2.25	273365.54	944.093451	127.7	false
PFHpA_2	363.0 / 169.0	2.25	5790.65	964.454229	87.3	false
PFHxS_1	399.0 / 80.0	2.27	383427.47	968.676582	217.3	false
PFHxS_2	399.0 / 99.0	2.27	106117.60	954.204725	307.3	false
PFOA_1	413.0 / 369.0	2.65	366662.92	944.867186	235.4	false
PFOA_2	413.0 / 169.0	2.65	22409.12	895.448197	198.7	false
PFNA_1	463.0 / 419.0	3.04	346721.06	960.424992	297.4	false
PFNA_2	463.0 / 219.0	3.04	106631.03	960.791914	339.9	false
PFOS_1	499.0 / 80.0	3.04	570142.75	1046.151446	221.0	false
PFOS_2	499.0 / 99.0	3.04	98449.83	1030.798386	393.8	false
PFDA_1	513.0 / 469.0	3.39	396156.22	943.222576	272.4	false
PFDA_2	513.0 / 219.0	3.39	16887.15	866.268108	167.2	false
PFUnA_1	563.0 / 519.0	3.71	399866.53	922.774975	197.5	false
PFUnA_2	563.0 / 269.0	3.70	22831.25	1003.316077	136.6	false
PFDoA_1	613.0 / 569.0	3.99	393603.34	1038.554705	204.0	false
PFDoA_2	613.0 / 319.0	3.99	61097.61	998.658194	179.8	false
PFTrDA_1	663.0 / 619.0	4.24	376304.02	1057.936564	299.7	false
PFTrDA_2	663.0 / 169.0	4.24	24605.73	1091.130829	242.2	false
PFTeDA_1	713.0 / 669.0	4.46	404486.57	1012.857374	538.5	false
PFTeDA_2	713.0 / 169.0	4.45	20462.99	1069.452128	391.6	false
NMeFOSAA_1	570.0 / 419.0	3.54	69228.88	1279.387236	469.6	false
NMeFOSAA_2	570.0 / 512.0	3.54	39109.39	1294.528690	413.2	true
NEtFOSAA_1	584.0 / 419.0	3.70	72985.10	824.462970	471.9	false
NEtFOSAA_2	584.0 / 483.0	3.71	4361.08	851.513995	120.2	false
PFBA	213.0 / 169.0	1.16	735813.96	1241.361787	301.0	false

Sample Name	JY45 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T00:03:55	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.17	99817.54	256.423433	1410.3	false
13C2-PFDoA	615.0 / 570.0	4.00	124103.43	236.412962	1631.1	false
d3-MeFOSAA	573.0 / 419.0	3.55	19882.84	229.007354	184.4	false
d5-EtFOSAA	589.0 / 419.0	3.71	24121.66	244.394489	207.5	false
13C5-PFHxA	318.0 / 273.0	1.85	86418.60	257.007980	717.7	false
13C4-PFHpA	367.0 / 322.0	2.25	95983.29	257.575529	756.1	false
13C8-PFOA	421.0 / 376.0	2.66	104540.39	253.920137	1500.9	false
13C9-PFNA	472.0 / 427.0	3.04	110330.12	266.243110	794.1	false
13C6-PFDA	519.0 / 474.0	3.39	115002.52	253.349129	987.0	false
13C7-PFUnA	570.0 / 525.0	3.71	117656.88	245.125330	535.5	false
13C2-PFTeDA	715.0 / 670.0	4.47	107999.85	231.378794	2000.8	false
13C3-PFBS	302.0 / 99.0	1.53	38003.92	214.031789	493.3	false
13C3-PFHxS	402.0 / 99.0	2.27	28928.15	204.130881	429.5	false
13C8-PFOS	507.0 / 99.0	3.03	37383.49	237.268489	234.1	false

Sample Name	JY42 CCV	Injection Vial	38
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:02:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.16	86912.96	245.196843	1452.1	false
13C2-PFDoA	615.0 / 570.0	3.99	108950.75	260.396935	919.9	false
d3-MeFOSAA	573.0 / 419.0	3.55	18686.32	272.635552	148.0	false
d5-EtFOSAA	589.0 / 419.0	3.71	17661.70	226.675426	190.1	false
13C5-PFHxA	318.0 / 273.0	1.85	72050.12	246.708303	596.2	false
13C4-PFHpA	367.0 / 322.0	2.25	79195.21	244.690747	779.3	false
13C8-PFOA	421.0 / 376.0	2.65	94298.28	263.709916	1101.3	false
13C9-PFNA	472.0 / 427.0	3.04	92612.28	257.313486	985.4	false
13C6-PFDA	519.0 / 474.0	3.39	98917.69	273.403566	705.4	false
13C7-PFUnA	570.0 / 525.0	3.70	97522.18	254.913233	748.8	false
13C2-PFTeDA	715.0 / 670.0	4.46	96781.78	260.143023	957.5	false
13C3-PFBS	302.0 / 99.0	1.53	29050.22	207.246442	558.5	false
13C3-PFHxS	402.0 / 99.0	2.27	24753.48	221.264607	301.9	false
13C8-PFOS	507.0 / 99.0	3.03	30066.39	241.729320	240.5	false

Sample Name	JY41 CCV	Injection Vial	46
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:40:38	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.16	82393.95	242.929035	1059.8	false
13C2-PFDoA	615.0 / 570.0	3.98	98067.06	241.616856	999.5	false
d3-MeFOSAA	573.0 / 419.0	3.53	13015.01	203.401243	168.4	false
d5-EtFOSAA	589.0 / 419.0	3.69	21502.53	295.605155	212.2	false
13C5-PFHxA	318.0 / 273.0	1.84	68892.45	251.148906	533.7	false
13C4-PFHpA	367.0 / 322.0	2.24	76204.31	250.673692	669.1	false
13C8-PFOA	421.0 / 376.0	2.64	85962.46	255.942348	1887.4	false
13C9-PFNA	472.0 / 427.0	3.03	87991.80	260.283573	860.5	false
13C6-PFDA	519.0 / 474.0	3.38	92760.92	264.297912	514.5	false
13C7-PFUnA	570.0 / 525.0	3.69	93938.50	253.122689	628.2	false
13C2-PFTeDA	715.0 / 670.0	4.45	85116.09	235.846081	1256.6	false
13C3-PFBS	302.0 / 99.0	1.53	26133.85	199.706162	414.2	false
13C3-PFHxS	402.0 / 99.0	2.26	23234.91	222.467806	286.0	false
13C8-PFOS	507.0 / 99.0	3.02	26472.23	227.975939	313.5	false

Sample Name	JY45 ICC	Injection Vial	24
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	363472.84	899.175195	347.1	false
PFBS_2	298.9 / 99.0	1.53	109314.38	941.677693	333.2	false
PFHxA_1	313.0 / 269.0	1.85	278137.92	926.144086	42.3	false
PFHxA_2	313.0 / 119.0	1.85	19679.57	881.587461	39.1	false
PFHpA_1	363.0 / 319.0	2.25	249917.02	884.166721	82.6	false
PFHpA_2	363.0 / 169.0	2.25	5131.58	874.558078	72.8	false
PFHxS_1	399.0 / 80.0	2.27	373832.53	908.144091	208.3	false
PFHxS_2	399.0 / 99.0	2.27	116650.20	981.070873	324.0	false
PFOA_1	413.0 / 369.0	2.66	329908.34	907.407600	210.6	false
PFOA_2	413.0 / 169.0	2.65	21101.85	869.229245	140.7	false
PFNA_1	463.0 / 419.0	3.05	324176.12	940.578444	234.2	false
PFNA_2	463.0 / 219.0	3.05	102597.57	1027.633915	221.4	false
PFOS_1	499.0 / 80.0	3.04	515374.31	910.670434	197.2	true
PFOS_2	499.0 / 99.0	3.04	94112.42	947.472421	268.6	false
PFDA_1	513.0 / 469.0	3.40	367894.88	944.839755	310.3	false
PFDA_2	513.0 / 219.0	3.40	15108.20	837.447659	122.9	false
PFUnA_1	563.0 / 519.0	3.71	378956.30	862.618951	179.3	false
PFUnA_2	563.0 / 269.0	3.71	21582.05	941.076705	125.7	false
PFDoA_1	613.0 / 569.0	4.00	373311.65	951.418801	234.7	false
PFDoA_2	613.0 / 319.0	4.00	59958.70	955.108572	220.8	false
PFTTrDA_1	663.0 / 619.0	4.24	348607.96	964.723863	335.3	false
PFTTrDA_2	663.0 / 169.0	4.23	23406.09	984.141074	240.5	false
PFTeDA_1	713.0 / 669.0	4.45	403023.85	1005.572055	586.8	false
PFTeDA_2	713.0 / 169.0	4.45	18560.07	946.095490	461.2	false
NMeFOSAA_1	570.0 / 419.0	3.55	65819.39	1068.319683	462.5	false
NMeFOSAA_2	570.0 / 512.0	3.55	31493.69	930.744436	263.3	false
NEtFOSAA_1	584.0 / 419.0	3.71	65755.32	950.891484	411.1	false
NEtFOSAA_2	584.0 / 483.0	3.71	4414.61	1072.173371	182.6	false
PFBA	213.0 / 169.0	1.14	665858.96	1083.124444	212.2	true

Sample Name	JY41 CCV	Injection Vial	19
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	379589.53	946.628592	393.8	false
PFBS_2	298.9 / 99.0	1.53	112241.15	975.673279	306.7	false
PFHxA_1	313.0 / 269.0	1.84	307613.41	969.967166	41.7	false
PFHxA_2	313.0 / 119.0	1.84	25135.32	1059.647323	45.0	false
PFHpA_1	363.0 / 319.0	2.25	264914.70	919.580754	71.2	false
PFHpA_2	363.0 / 169.0	2.24	5499.97	921.904422	53.3	false
PFHxS_1	399.0 / 80.0	2.27	386105.98	965.200946	211.4	false
PFHxS_2	399.0 / 99.0	2.27	115089.85	996.954633	311.8	false
PFOA_1	413.0 / 369.0	2.65	345289.99	932.514474	161.6	false
PFOA_2	413.0 / 169.0	2.65	22228.73	899.481477	106.5	true
PFNA_1	463.0 / 419.0	3.04	362429.02	1002.187874	267.3	false
PFNA_2	463.0 / 219.0	3.04	115655.97	1099.931508	275.1	false
PFOS_1	499.0 / 80.0	3.04	609264.05	1039.681997	199.3	false
PFOS_2	499.0 / 99.0	3.04	113883.95	1109.527969	371.6	false
PFDA_1	513.0 / 469.0	3.39	411588.53	957.117269	294.7	false
PFDA_2	513.0 / 219.0	3.39	15417.84	772.627526	163.2	false
PFUnA_1	563.0 / 519.0	3.71	409211.94	941.759513	178.0	false
PFUnA_2	563.0 / 269.0	3.71	25196.86	1119.267675	108.5	false
PFDoA_1	613.0 / 569.0	3.99	401402.22	966.412096	215.9	false
PFDoA_2	613.0 / 319.0	3.99	61180.25	920.893085	186.6	false
PFTTrDA_1	663.0 / 619.0	4.23	380505.58	987.761338	345.6	false
PFTTrDA_2	663.0 / 169.0	4.23	23574.84	929.522754	254.7	false
PFTeDA_1	713.0 / 669.0	4.45	432513.42	1012.400917	693.4	false
PFTeDA_2	713.0 / 169.0	4.45	20306.32	971.566409	503.7	false
NMeFOSAA_1	570.0 / 419.0	3.55	68965.99	1077.774773	464.1	false
NMeFOSAA_2	570.0 / 512.0	3.54	34920.82	995.090103	426.6	false
NEtFOSAA_1	584.0 / 419.0	3.71	71130.10	961.362287	563.8	false
NEtFOSAA_2	584.0 / 483.0	3.70	4673.82	1063.459152	235.0	false
PFBA	213.0 / 169.0	1.14	744254.99	1163.278486	188.9	true

Sample Name	JY42 CCV	Injection Vial	20
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:46:39	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	994925.07	2591.790173	503.8	false
PFBS_2	298.9 / 99.0	1.54	282942.20	2585.310488	477.8	false
PFHxA_1	313.0 / 269.0	1.84	806932.50	2486.211609	90.9	false
PFHxA_2	313.0 / 119.0	1.84	58439.25	2399.592339	76.5	false
PFHpA_1	363.0 / 319.0	2.25	686435.96	2143.523387	155.9	false
PFHpA_2	363.0 / 169.0	2.25	13224.87	2058.088760	132.4	false
PFHxS_1	399.0 / 80.0	2.27	967351.13	2485.428979	327.8	false
PFHxS_2	399.0 / 99.0	2.27	270517.41	2418.105170	445.7	false
PFOA_1	413.0 / 369.0	2.65	945144.35	2301.727409	374.7	false
PFOA_2	413.0 / 169.0	2.64	60651.11	2240.850501	199.4	false
PFNA_1	463.0 / 419.0	3.04	867232.95	2274.392560	475.2	false
PFNA_2	463.0 / 219.0	3.04	270274.33	2379.666505	440.4	false
PFOS_1	499.0 / 80.0	3.03	1371966.15	2028.427880	296.1	false
PFOS_2	499.0 / 99.0	3.03	265379.30	2261.241648	472.7	false
PFDA_1	513.0 / 469.0	3.39	1015799.75	2279.529303	315.8	false
PFDA_2	513.0 / 219.0	3.38	40133.27	2015.461396	213.1	false
PFUnA_1	563.0 / 519.0	3.70	1022679.69	2344.244090	321.2	false
PFUnA_2	563.0 / 269.0	3.70	55533.37	2544.118392	201.8	false
PFDoA_1	613.0 / 569.0	3.98	1038876.91	2616.737723	324.3	false
PFDoA_2	613.0 / 319.0	3.98	161948.06	2564.614197	296.3	false
PFTTrDA_1	663.0 / 619.0	4.23	960657.78	2554.381911	537.6	false
PFTTrDA_2	663.0 / 169.0	4.22	63664.30	2592.748585	392.1	false
PFTeDA_1	713.0 / 669.0	4.44	1053333.70	2529.377308	984.7	false
PFTeDA_2	713.0 / 169.0	4.44	50818.19	2525.911432	702.2	false
NMeFOSAA_1	570.0 / 419.0	3.54	179604.54	2598.914045	860.2	false
NMeFOSAA_2	570.0 / 512.0	3.54	88724.05	2380.294157	367.9	false
NEtFOSAA_1	584.0 / 419.0	3.70	190428.65	2330.063885	643.6	false
NEtFOSAA_2	584.0 / 483.0	3.70	12474.35	2526.944041	238.3	false
PFBA	213.0 / 169.0	1.14	1364019.47	2382.833799	351.6	true

Sample Name	JY45 ICC	Injection Vial	24
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.15	80645.10	262.377969	1465.3	false
13C2-PFDoA	615.0 / 570.0	3.98	100087.05	248.752108	1059.3	false
d3-MeFOSAA	573.0 / 419.0	3.54	15112.36	264.705112	158.2	false
d5-EtFOSAA	589.0 / 419.0	3.70	16691.73	258.928916	194.7	false
13C5-PFHxA	318.0 / 273.0	1.83	67479.51	246.400463	493.9	false
13C4-PFHpA	367.0 / 322.0	2.24	75891.17	249.461907	1127.1	false
13C8-PFOA	421.0 / 376.0	2.65	79496.03	248.412724	5986.5	false
13C9-PFNA	472.0 / 427.0	3.03	81110.77	242.923118	853.7	false
13C6-PFDA	519.0 / 474.0	3.38	86759.82	247.738674	926.6	false
13C7-PFUnA	570.0 / 525.0	3.70	100133.35	272.508574	973.2	false
13C2-PFTeDA	715.0 / 670.0	4.45	84939.57	246.047020	1977.1	false
13C3-PFBS	302.0 / 99.0	1.52	30254.68	234.521477	529.7	false
13C3-PFHxS	402.0 / 99.0	2.26	25676.69	254.132400	272.2	false
13C8-PFOS	507.0 / 99.0	3.03	24525.49	232.038491	167.9	false

Sample Name	JY41 CCV	Injection Vial	19
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.15	85049.24	271.412518	1205.0	false
13C2-PFDoA	615.0 / 570.0	3.98	105929.70	256.816850	991.4	false
d3-MeFOSAA	573.0 / 419.0	3.54	15694.70	313.321471	183.1	false
d5-EtFOSAA	589.0 / 419.0	3.70	17837.49	315.369701	184.8	false
13C5-PFHxA	318.0 / 273.0	1.83	71161.09	262.660478	778.1	false
13C4-PFHpA	367.0 / 322.0	2.23	78810.50	261.866304	729.5	false
13C8-PFOA	421.0 / 376.0	2.64	80961.80	255.735525	1102.8	false
13C9-PFNA	472.0 / 427.0	3.03	84811.07	256.758811	952.7	false
13C6-PFDA	519.0 / 474.0	3.38	95772.21	266.766660	767.3	false
13C7-PFUnA	570.0 / 525.0	3.69	98691.83	261.998938	850.5	false
13C2-PFTeDA	715.0 / 670.0	4.44	90538.17	255.833059	2393.4	false
13C3-PFBS	302.0 / 99.0	1.52	29950.08	264.603165	398.3	false
13C3-PFHxS	402.0 / 99.0	2.26	24925.19	281.168493	282.9	false
13C8-PFOS	507.0 / 99.0	3.02	25389.98	273.786335	212.7	false

Sample Name	JY42 CCV	Injection Vial	20
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:46:39	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.15	83834.32	272.192259	1333.2	false
13C2-PFDoA	615.0 / 570.0	3.97	100531.81	239.812449	875.8	false
d3-MeFOSAA	573.0 / 419.0	3.53	16863.81	288.293967	137.3	false
d5-EtFOSAA	589.0 / 419.0	3.69	18490.87	279.953763	163.4	false
13C5-PFHxA	318.0 / 273.0	1.83	71562.56	236.852067	537.6	false
13C4-PFHpA	367.0 / 322.0	2.24	74748.27	222.708022	417.5	false
13C8-PFOA	421.0 / 376.0	2.64	87743.22	248.521328	1312.4	false
13C9-PFNA	472.0 / 427.0	3.02	86842.47	235.745910	972.6	false
13C6-PFDA	519.0 / 474.0	3.37	97130.90	266.202359	705.5	false
13C7-PFUnA	570.0 / 525.0	3.69	96855.98	252.992241	665.2	false
13C2-PFTeDA	715.0 / 670.0	4.44	88113.88	244.980626	1615.4	false
13C3-PFBS	302.0 / 99.0	1.52	27973.94	211.637892	416.8	false
13C3-PFHxS	402.0 / 99.0	2.26	24000.09	231.837538	247.6	false
13C8-PFOS	507.0 / 99.0	3.02	28415.48	262.389888	236.5	false

Sample Name	JY45 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T00:03:55	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.292	0.294	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.078	0.071	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.018	0.020	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	0.067	0.066	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.318	0.316	ü
PFOS_1	499.0 / 80.0	3.05	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.185	0.174	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.042	0.051	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.047	0.058	ü
PFDaA_1	613.0 / 569.0	4.01	PFDaA			
PFDaA_2	613.0 / 319.0	4.01	PFDaA	0.158	0.161	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.063	0.064	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.046	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.56	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.56	NMeFOSAA	0.554	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.72	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.72	NEtFOSAA	0.063	0.060	ü
PFBA	213.0 / 169.0	1.17				

Sample Name	JY42 CCV	Injection Vial	38
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:02:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.295	0.294	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.072	0.071	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.023	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.276	0.282	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.066	0.066	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.305	0.316	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.178	0.174	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.045	0.051	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	PFUnA	0.046	0.058	ü
PFDaA_1	613.0 / 569.0	4.00	PFDaA			
PFDaA_2	613.0 / 319.0	4.00	PFDaA	0.165	0.161	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.065	0.064	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.047	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.533	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.72	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.72	NEtFOSAA	0.060	0.060	ü
PFBA	213.0 / 169.0	1.16				

Sample Name	JY41 CCV	Injection Vial	46
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:40:38	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.292	0.294	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.075	0.071	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.021	0.020	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.277	0.282	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.061	0.066	ü
PFNA_1	463.0 / 419.0	3.04	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.308	0.316	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.173	0.174	ü
PFDA_1	513.0 / 469.0	3.39	PFDA			
PFDA_2	513.0 / 219.0	3.39	PFDA	0.043	0.051	ü
PFUnA_1	563.0 / 519.0	3.71	PFUnA			
PFUnA_2	563.0 / 269.0	3.70	PFUnA	0.057	0.058	ü
PFDaA_1	613.0 / 569.0	3.99	PFDaA			
PFDaA_2	613.0 / 319.0	3.99	PFDaA	0.155	0.161	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.24	PFTrDA	0.065	0.064	ü
PFTeDA_1	713.0 / 669.0	4.46	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.45	PFTeDA	0.051	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.54	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.54	NMeFOSAA	0.565	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.70	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	NEtFOSAA	0.060	0.060	ü
PFBA	213.0 / 169.0	1.16				

Sample Name	JY45 ICC	Injection Vial	24
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.301	0.291	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.071	0.073	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.021	0.023	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.312	0.291	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.064	0.069	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.317	0.297	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.183	0.181	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.041	0.050	ü
PFUnA_1	563.0 / 519.0	3.71	PFUnA			
PFUnA_2	563.0 / 269.0	3.71	PFUnA	0.057	0.058	ü
PFDaA_1	613.0 / 569.0	4.00	PFDaA			
PFDaA_2	613.0 / 319.0	4.00	PFDaA	0.161	0.162	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.23	PFTrDA	0.067	0.067	ü
PFTeDA_1	713.0 / 669.0	4.45	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.45	PFTeDA	0.046	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.479	0.583	ü
NEtFOSAA_1	584.0 / 419.0	3.71	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	NEtFOSAA	0.067	0.057	ü
PFBA	213.0 / 169.0	1.14				

Sample Name	JY41 CCV	Injection Vial	19
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.296	0.291	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.082	0.073	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	PFHpA	0.021	0.023	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.298	0.291	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.064	0.069	ü
PFNA_1	463.0 / 419.0	3.04	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.319	0.297	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.187	0.181	ü
PFDA_1	513.0 / 469.0	3.39	PFDA			
PFDA_2	513.0 / 219.0	3.39	PFDA	0.038	0.050	ü
PFUnA_1	563.0 / 519.0	3.71	PFUnA			
PFUnA_2	563.0 / 269.0	3.71	PFUnA	0.062	0.058	ü
PFDaA_1	613.0 / 569.0	3.99	PFDaA			
PFDaA_2	613.0 / 319.0	3.99	PFDaA	0.152	0.162	ü
PFTrDA_1	663.0 / 619.0	4.23	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.23	PFTrDA	0.062	0.067	ü
PFTeDA_1	713.0 / 669.0	4.45	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.45	PFTeDA	0.047	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.54	NMeFOSAA	0.506	0.583	ü
NEtFOSAA_1	584.0 / 419.0	3.71	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.70	NEtFOSAA	0.066	0.057	ü
PFBA	213.0 / 169.0	1.14				

Sample Name	JY42 CCV	Injection Vial	20
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:46:39	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.284	0.291	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.072	0.073	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.019	0.023	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.280	0.291	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.064	0.069	ü
PFNA_1	463.0 / 419.0	3.04	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.312	0.297	ü
PFOS_1	499.0 / 80.0	3.03	PFOS			
PFOS_2	499.0 / 99.0	3.03	PFOS	0.193	0.181	ü
PFDA_1	513.0 / 469.0	3.39	PFDA			
PFDA_2	513.0 / 219.0	3.38	PFDA	0.040	0.050	ü
PFUnA_1	563.0 / 519.0	3.70	PFUnA			
PFUnA_2	563.0 / 269.0	3.70	PFUnA	0.054	0.058	ü
PFDaA_1	613.0 / 569.0	3.98	PFDaA			
PFDaA_2	613.0 / 319.0	3.98	PFDaA	0.156	0.162	ü
PFTrDA_1	663.0 / 619.0	4.23	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.22	PFTrDA	0.066	0.067	ü
PFTeDA_1	713.0 / 669.0	4.44	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.44	PFTeDA	0.048	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.54	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.54	NMeFOSAA	0.494	0.583	ü
NEtFOSAA_1	584.0 / 419.0	3.70	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.70	NEtFOSAA	0.066	0.057	ü
PFBA	213.0 / 169.0	1.14				

Sample Name	JY45 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T00:03:55	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	38003.92	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	38003.92	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	86418.60	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	86418.60	250.00
PFHpA_1	363.0 / 319.0	2.26	13C8-PFOA	421.0 / 376.0	104540.39	250.00
PFHpA_2	363.0 / 169.0	2.27	13C8-PFOA	421.0 / 376.0	104540.39	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	28928.15	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	28928.15	236.50
PFOA_1	413.0 / 369.0	2.67	13C8-PFOA	421.0 / 376.0	104540.39	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	104540.39	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	110330.12	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	110330.12	250.00
PFOS_1	499.0 / 80.0	3.05	13C8-PFOS	507.0 / 99.0	38074.28	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	38074.28	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	115002.52	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	115002.52	250.00
PFUnA_1	563.0 / 519.0	3.73	13C7-PFUnA	570.0 / 525.0	117656.88	250.00
PFUnA_2	563.0 / 269.0	3.73	13C7-PFUnA	570.0 / 525.0	117656.88	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	124103.43	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	124103.43	250.00
PFTeDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	107999.85	250.00
PFTeDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	107999.85	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	107999.85	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	107999.85	250.00
NMeFOSAA_1	570.0 / 419.0	3.56	d3-MeFOSAA	573.0 / 419.0	19882.84	250.00
NMeFOSAA_2	570.0 / 512.0	3.56	d3-MeFOSAA	573.0 / 419.0	19882.84	250.00
NEtFOSAA_1	584.0 / 419.0	3.72	d5-EtFOSAA	589.0 / 419.0	24121.66	250.00
NEtFOSAA_2	584.0 / 483.0	3.72	d5-EtFOSAA	589.0 / 419.0	24121.66	250.00
PFBA	213.0 / 169.0	1.17	13C4-PFBA	217.0 / 172.0	99817.54	250.00

Sample Name	JY42 CCV	Injection Vial	38
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:02:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	29050.22	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	29050.22	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	72050.12	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	72050.12	250.00
PFHpA_1	363.0 / 319.0	2.26	13C8-PFOA	421.0 / 376.0	94298.28	250.00
PFHpA_2	363.0 / 169.0	2.26	13C8-PFOA	421.0 / 376.0	94298.28	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	24753.48	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	24753.48	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	94298.28	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	94298.28	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	92612.28	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	92612.28	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	30981.41	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	30981.41	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	98917.69	250.00
PFDA_2	513.0 / 219.0	3.40	13C6-PFDA	519.0 / 474.0	98917.69	250.00
PFUnA_1	563.0 / 519.0	3.72	13C7-PFUnA	570.0 / 525.0	97522.18	250.00
PFUnA_2	563.0 / 269.0	3.72	13C7-PFUnA	570.0 / 525.0	97522.18	250.00
PFDoA_1	613.0 / 569.0	4.00	13C2-PFDoA	615.0 / 570.0	108950.75	250.00
PFDoA_2	613.0 / 319.0	4.00	13C2-PFDoA	615.0 / 570.0	108950.75	250.00
PFTrDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	96781.78	250.00
PFTrDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	96781.78	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	96781.78	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	96781.78	250.00
NMeFOSAA_1	570.0 / 419.0	3.55	d3-MeFOSAA	573.0 / 419.0	18686.32	250.00
NMeFOSAA_2	570.0 / 512.0	3.55	d3-MeFOSAA	573.0 / 419.0	18686.32	250.00
NEtFOSAA_1	584.0 / 419.0	3.72	d5-EtFOSAA	589.0 / 419.0	17661.70	250.00
NEtFOSAA_2	584.0 / 483.0	3.72	d5-EtFOSAA	589.0 / 419.0	17661.70	250.00
PFBA	213.0 / 169.0	1.16	13C4-PFBA	217.0 / 172.0	86912.96	250.00

Sample Name	JY41 CCV	Injection Vial	46
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:40:38	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	26133.85	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	26133.85	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	68892.45	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	68892.45	250.00
PFHpA_1	363.0 / 319.0	2.25	13C8-PFOA	421.0 / 376.0	85962.46	250.00
PFHpA_2	363.0 / 169.0	2.25	13C8-PFOA	421.0 / 376.0	85962.46	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	23234.91	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	23234.91	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	85962.46	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	85962.46	250.00
PFNA_1	463.0 / 419.0	3.04	13C9-PFNA	472.0 / 427.0	87991.80	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	87991.80	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	26175.75	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	26175.75	239.25
PFDA_1	513.0 / 469.0	3.39	13C6-PFDA	519.0 / 474.0	92760.92	250.00
PFDA_2	513.0 / 219.0	3.39	13C6-PFDA	519.0 / 474.0	92760.92	250.00
PFUnA_1	563.0 / 519.0	3.71	13C7-PFUnA	570.0 / 525.0	93938.50	250.00
PFUnA_2	563.0 / 269.0	3.70	13C7-PFUnA	570.0 / 525.0	93938.50	250.00
PFDaA_1	613.0 / 569.0	3.99	13C2-PFDaA	615.0 / 570.0	98067.06	250.00
PFDaA_2	613.0 / 319.0	3.99	13C2-PFDaA	615.0 / 570.0	98067.06	250.00
PFTeDA_1	663.0 / 619.0	4.24	13C2-PFTeDA	715.0 / 670.0	85116.09	250.00
PFTeDA_2	663.0 / 169.0	4.24	13C2-PFTeDA	715.0 / 670.0	85116.09	250.00
PFTeDA_1	713.0 / 669.0	4.46	13C2-PFTeDA	715.0 / 670.0	85116.09	250.00
PFTeDA_2	713.0 / 169.0	4.45	13C2-PFTeDA	715.0 / 670.0	85116.09	250.00
NMeFOSAA_1	570.0 / 419.0	3.54	d3-MeFOSAA	573.0 / 419.0	13015.01	250.00
NMeFOSAA_2	570.0 / 512.0	3.54	d3-MeFOSAA	573.0 / 419.0	13015.01	250.00
NEtFOSAA_1	584.0 / 419.0	3.70	d5-EtFOSAA	589.0 / 419.0	21502.53	250.00
NEtFOSAA_2	584.0 / 483.0	3.71	d5-EtFOSAA	589.0 / 419.0	21502.53	250.00
PFBA	213.0 / 169.0	1.16	13C4-PFBA	217.0 / 172.0	82393.95	250.00

Sample Name	JY45 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T00:03:55	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.17	13C3-PFBA	216.0 / 172.0	59885.14	250.00
13C2-PFDoA	615.0 / 570.0	4.00	13C2-PFDA	515.0 / 470.0	113766.69	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	37275.00	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	37275.00	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	94996.84	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	94996.84	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	94996.84	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	94996.84	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	113766.69	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	113766.69	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	113766.69	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	37275.00	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	37275.00	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	37275.00	239.25

Sample Name	JY42 CCV	Injection Vial	38
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:02:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.16	13C3-PFBA	216.0 / 172.0	54530.51	250.00
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	90676.97	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	29425.91	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	29425.91	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	82508.65	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	82508.65	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	82508.65	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	82508.65	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	90676.97	250.00
13C7-PFUnA	570.0 / 525.0	3.70	13C2-PFDA	515.0 / 470.0	90676.97	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	90676.97	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	29425.91	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	29425.91	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	29425.91	239.25

Sample Name	JY41 CCV	Injection Vial	46
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:40:38	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.16	13C3-PFBA	216.0 / 172.0	52177.80	250.00
13C2-PFDoA	615.0 / 570.0	3.98	13C2-PFDA	515.0 / 470.0	87962.69	250.00
d3-MeFOSAA	573.0 / 419.0	3.53	13C4-PFOS	503.0 / 99.0	27471.32	239.25
d5-EtFOSAA	589.0 / 419.0	3.69	13C4-PFOS	503.0 / 99.0	27471.32	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	77497.71	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	77497.71	250.00
13C8-PFOA	421.0 / 376.0	2.64	13C2-PFOA	415.0 / 370.0	77497.71	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	77497.71	250.00
13C6-PFDA	519.0 / 474.0	3.38	13C2-PFDA	515.0 / 470.0	87962.69	250.00
13C7-PFUnA	570.0 / 525.0	3.69	13C2-PFDA	515.0 / 470.0	87962.69	250.00
13C2-PFTeDA	715.0 / 670.0	4.45	13C2-PFDA	515.0 / 470.0	87962.69	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	27471.32	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	27471.32	239.25
13C8-PFOS	507.0 / 99.0	3.02	13C4-PFOS	503.0 / 99.0	27471.32	239.25

Sample Name	JY45 ICC	Injection Vial	24
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	30254.68	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	30254.68	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	67479.51	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	67479.51	250.00
PFHpA_1	363.0 / 319.0	2.25	13C8-PFOA	421.0 / 376.0	80377.61	250.00
PFHpA_2	363.0 / 169.0	2.25	13C8-PFOA	421.0 / 376.0	80377.61	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	25676.69	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	25676.69	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	80377.61	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	80377.61	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	81110.77	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	81110.77	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	25087.84	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	25087.84	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	86759.82	250.00
PFDA_2	513.0 / 219.0	3.40	13C6-PFDA	519.0 / 474.0	86759.82	250.00
PFUnA_1	563.0 / 519.0	3.71	13C7-PFUnA	570.0 / 525.0	100133.35	250.00
PFUnA_2	563.0 / 269.0	3.71	13C7-PFUnA	570.0 / 525.0	100133.35	250.00
PFDaA_1	613.0 / 569.0	4.00	13C2-PFDaA	615.0 / 570.0	100087.05	250.00
PFDaA_2	613.0 / 319.0	4.00	13C2-PFDaA	615.0 / 570.0	100087.05	250.00
PFTeDA_1	663.0 / 619.0	4.24	13C2-PFTeDA	715.0 / 670.0	84939.57	250.00
PFTeDA_2	663.0 / 169.0	4.23	13C2-PFTeDA	715.0 / 670.0	84939.57	250.00
PFTeDA_1	713.0 / 669.0	4.45	13C2-PFTeDA	715.0 / 670.0	84939.57	250.00
PFTeDA_2	713.0 / 169.0	4.45	13C2-PFTeDA	715.0 / 670.0	84939.57	250.00
NMeFOSAA_1	570.0 / 419.0	3.55	d3-MeFOSAA	573.0 / 419.0	15112.36	250.00
NMeFOSAA_2	570.0 / 512.0	3.55	d3-MeFOSAA	573.0 / 419.0	15112.36	250.00
NEtFOSAA_1	584.0 / 419.0	3.71	d5-EtFOSAA	589.0 / 419.0	16691.73	250.00
NEtFOSAA_2	584.0 / 483.0	3.71	d5-EtFOSAA	589.0 / 419.0	16691.73	250.00
PFBA	213.0 / 169.0	1.14	13C4-PFBA	217.0 / 172.0	80645.10	250.00

Sample Name	JY41 CCV	Injection Vial	19
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	29950.08	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	29950.08	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	71161.09	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	71161.09	250.00
PFHpA_1	363.0 / 319.0	2.25	13C8-PFOA	421.0 / 376.0	81770.48	250.00
PFHpA_2	363.0 / 169.0	2.24	13C8-PFOA	421.0 / 376.0	81770.48	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	24925.19	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	24925.19	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	81770.48	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	81770.48	250.00
PFNA_1	463.0 / 419.0	3.04	13C9-PFNA	472.0 / 427.0	84811.07	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	84811.07	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	25783.33	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	25783.33	239.25
PFDA_1	513.0 / 469.0	3.39	13C6-PFDA	519.0 / 474.0	95772.21	250.00
PFDA_2	513.0 / 219.0	3.39	13C6-PFDA	519.0 / 474.0	95772.21	250.00
PFUnA_1	563.0 / 519.0	3.71	13C7-PFUnA	570.0 / 525.0	98691.83	250.00
PFUnA_2	563.0 / 269.0	3.71	13C7-PFUnA	570.0 / 525.0	98691.83	250.00
PFDaA_1	613.0 / 569.0	3.99	13C2-PFDaA	615.0 / 570.0	105929.70	250.00
PFDaA_2	613.0 / 319.0	3.99	13C2-PFDaA	615.0 / 570.0	105929.70	250.00
PFTeDA_1	663.0 / 619.0	4.23	13C2-PFTeDA	715.0 / 670.0	90538.17	250.00
PFTeDA_2	663.0 / 169.0	4.23	13C2-PFTeDA	715.0 / 670.0	90538.17	250.00
PFTeDA_1	713.0 / 669.0	4.45	13C2-PFTeDA	715.0 / 670.0	90538.17	250.00
PFTeDA_2	713.0 / 169.0	4.45	13C2-PFTeDA	715.0 / 670.0	90538.17	250.00
NMeFOSAA_1	570.0 / 419.0	3.55	d3-MeFOSAA	573.0 / 419.0	15694.70	250.00
NMeFOSAA_2	570.0 / 512.0	3.54	d3-MeFOSAA	573.0 / 419.0	15694.70	250.00
NEtFOSAA_1	584.0 / 419.0	3.71	d5-EtFOSAA	589.0 / 419.0	17837.49	250.00
NEtFOSAA_2	584.0 / 483.0	3.70	d5-EtFOSAA	589.0 / 419.0	17837.49	250.00
PFBA	213.0 / 169.0	1.14	13C4-PFBA	217.0 / 172.0	85049.24	250.00

Sample Name	JY42 CCV	Injection Vial	20
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:46:39	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	27973.94	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	27973.94	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	71562.56	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	71562.56	250.00
PFHpA_1	363.0 / 319.0	2.25	13C8-PFOA	421.0 / 376.0	88593.39	250.00
PFHpA_2	363.0 / 169.0	2.25	13C8-PFOA	421.0 / 376.0	88593.39	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	24000.09	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	24000.09	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	88593.39	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	88593.39	250.00
PFNA_1	463.0 / 419.0	3.04	13C9-PFNA	472.0 / 427.0	86842.47	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	86842.47	250.00
PFOS_1	499.0 / 80.0	3.03	13C8-PFOS	507.0 / 99.0	29010.69	239.25
PFOS_2	499.0 / 99.0	3.03	13C8-PFOS	507.0 / 99.0	29010.69	239.25
PFDA_1	513.0 / 469.0	3.39	13C6-PFDA	519.0 / 474.0	97130.90	250.00
PFDA_2	513.0 / 219.0	3.38	13C6-PFDA	519.0 / 474.0	97130.90	250.00
PFUnA_1	563.0 / 519.0	3.70	13C7-PFUnA	570.0 / 525.0	96855.98	250.00
PFUnA_2	563.0 / 269.0	3.70	13C7-PFUnA	570.0 / 525.0	96855.98	250.00
PFDaA_1	613.0 / 569.0	3.98	13C2-PFDaA	615.0 / 570.0	100531.81	250.00
PFDaA_2	613.0 / 319.0	3.98	13C2-PFDaA	615.0 / 570.0	100531.81	250.00
PFTeDA_1	663.0 / 619.0	4.23	13C2-PFTeDA	715.0 / 670.0	88113.88	250.00
PFTeDA_2	663.0 / 169.0	4.22	13C2-PFTeDA	715.0 / 670.0	88113.88	250.00
PFTeDA_1	713.0 / 669.0	4.44	13C2-PFTeDA	715.0 / 670.0	88113.88	250.00
PFTeDA_2	713.0 / 169.0	4.44	13C2-PFTeDA	715.0 / 670.0	88113.88	250.00
NMeFOSAA_1	570.0 / 419.0	3.54	d3-MeFOSAA	573.0 / 419.0	16863.81	250.00
NMeFOSAA_2	570.0 / 512.0	3.54	d3-MeFOSAA	573.0 / 419.0	16863.81	250.00
NEtFOSAA_1	584.0 / 419.0	3.70	d5-EtFOSAA	589.0 / 419.0	18490.87	250.00
NEtFOSAA_2	584.0 / 483.0	3.70	d5-EtFOSAA	589.0 / 419.0	18490.87	250.00
PFBA	213.0 / 169.0	1.14	13C4-PFBA	217.0 / 172.0	83834.32	250.00

Sample Name	JY45 ICC	Injection Vial	24
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.15	13C3-PFBA	216.0 / 172.0	50669.86	250.00
13C2-PFDoA	615.0 / 570.0	3.98	13C2-PFDA	515.0 / 470.0	85834.11	250.00
d3-MeFOSAA	573.0 / 419.0	3.54	13C4-PFOS	503.0 / 99.0	27304.48	239.25
d5-EtFOSAA	589.0 / 419.0	3.70	13C4-PFOS	503.0 / 99.0	27304.48	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	75529.88	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	75529.88	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	75529.88	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	75529.88	250.00
13C6-PFDA	519.0 / 474.0	3.38	13C2-PFDA	515.0 / 470.0	85834.11	250.00
13C7-PFUnA	570.0 / 525.0	3.70	13C2-PFDA	515.0 / 470.0	85834.11	250.00
13C2-PFTeDA	715.0 / 670.0	4.45	13C2-PFDA	515.0 / 470.0	85834.11	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	27304.48	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	27304.48	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	27304.48	239.25

Sample Name	JY41 CCV	Injection Vial	19
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.15	13C3-PFBA	216.0 / 172.0	51658.25	250.00
13C2-PFDoA	615.0 / 570.0	3.98	13C2-PFDA	515.0 / 470.0	87991.97	250.00
d3-MeFOSAA	573.0 / 419.0	3.54	13C4-PFOS	503.0 / 99.0	23956.70	239.25
d5-EtFOSAA	589.0 / 419.0	3.70	13C4-PFOS	503.0 / 99.0	23956.70	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	74719.91	250.00
13C4-PFHpA	367.0 / 322.0	2.23	13C2-PFOA	415.0 / 370.0	74719.91	250.00
13C8-PFOA	421.0 / 376.0	2.64	13C2-PFOA	415.0 / 370.0	74719.91	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	74719.91	250.00
13C6-PFDA	519.0 / 474.0	3.38	13C2-PFDA	515.0 / 470.0	87991.97	250.00
13C7-PFUnA	570.0 / 525.0	3.69	13C2-PFDA	515.0 / 470.0	87991.97	250.00
13C2-PFTeDA	715.0 / 670.0	4.44	13C2-PFDA	515.0 / 470.0	87991.97	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	23956.70	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	23956.70	239.25
13C8-PFOS	507.0 / 99.0	3.02	13C4-PFOS	503.0 / 99.0	23956.70	239.25

Sample Name	JY42 CCV	Injection Vial	20
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:46:39	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.15	13C3-PFBA	216.0 / 172.0	50774.45	250.00
13C2-PFDoA	615.0 / 570.0	3.97	13C2-PFDA	515.0 / 470.0	89429.45	250.00
d3-MeFOSAA	573.0 / 419.0	3.53	13C4-PFOS	503.0 / 99.0	27975.91	239.25
d5-EtFOSAA	589.0 / 419.0	3.69	13C4-PFOS	503.0 / 99.0	27975.91	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	83329.18	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	83329.18	250.00
13C8-PFOA	421.0 / 376.0	2.64	13C2-PFOA	415.0 / 370.0	83329.18	250.00
13C9-PFNA	472.0 / 427.0	3.02	13C2-PFOA	415.0 / 370.0	83329.18	250.00
13C6-PFDA	519.0 / 474.0	3.37	13C2-PFDA	515.0 / 470.0	89429.45	250.00
13C7-PFUnA	570.0 / 525.0	3.69	13C2-PFDA	515.0 / 470.0	89429.45	250.00
13C2-PFTeDA	715.0 / 670.0	4.44	13C2-PFDA	515.0 / 470.0	89429.45	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	27975.91	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	27975.91	239.25
13C8-PFOS	507.0 / 99.0	3.02	13C4-PFOS	503.0 / 99.0	27975.91	239.25

Raw Analytical Data

Sample Name	JY46 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:53:03	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	N/A	N/A	N/A	N/A	true
PFHxA_2	313.0 / 119.0	N/A	N/A	N/A	N/A	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	N/A	N/A	N/A	N/A	true
PFOA_2	413.0 / 169.0	N/A	N/A	N/A	N/A	true
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	N/A	N/A	N/A	N/A	true
PFOS_2	499.0 / 99.0	N/A	N/A	N/A	N/A	true
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	4.01	4402.13	12.800877	21.8	false
PFDoA_2	613.0 / 319.0	4.01	514.85	14.389925	11.8	false
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.47	3264.21	8.592483	61.2	false
PFTeDA_2	713.0 / 169.0	4.45	221.52	15.214296	16.2	false
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true
PFBA	213.0 / 169.0	N/A	N/A	N/A	N/A	true

Sample Name	CR552PB-FS(3)	Injection Vial	32
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T04:46:41	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	1.88	151285.84	472.485120	34.0	true
PFHxA_2	313.0 / 119.0	1.87	13174.44	563.802993	33.6	true
PFHpA_1	363.0 / 319.0	N/A	N/A	N/A	N/A	true
PFHpA_2	363.0 / 169.0	N/A	N/A	N/A	N/A	true
PFHxS_1	399.0 / 80.0	N/A	N/A	N/A	N/A	true
PFHxS_2	399.0 / 99.0	N/A	N/A	N/A	N/A	true
PFOA_1	413.0 / 369.0	2.66	111955.36	302.242096	111.2	true
PFOA_2	413.0 / 169.0	2.66	6884.22	283.014537	84.7	false
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.05	87356.38	149.103629	75.1	true
PFOS_2	499.0 / 99.0	3.04	16600.88	165.601904	145.7	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
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true
PFBA	213.0 / 169.0	1.18	165051.41	52.705252	171.3	true

Sample Name	CR553LCS-FS(3)	Injection Vial	33
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T04:57:34	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	986936.40	2566.184401	602.3	false
PFBS_2	298.9 / 99.0	1.55	298279.99	2623.336504	461.3	false
PFHxA_1	313.0 / 269.0	1.87	1000564.64	3152.160683	107.5	false
PFHxA_2	313.0 / 119.0	1.87	72154.84	3037.668885	90.4	false
PFHpA_1	363.0 / 319.0	2.26	772824.94	2750.570189	240.7	false
PFHpA_2	363.0 / 169.0	2.26	14646.19	2647.946292	195.6	false
PFHxS_1	399.0 / 80.0	2.28	1049886.88	2453.676699	476.1	false
PFHxS_2	399.0 / 99.0	2.28	288736.63	2402.607533	959.6	false
PFOA_1	413.0 / 369.0	2.66	1101988.76	3067.173469	452.4	false
PFOA_2	413.0 / 169.0	2.67	74424.62	3226.548910	344.8	false
PFNA_1	463.0 / 419.0	3.06	905058.48	2531.766515	415.5	true
PFNA_2	463.0 / 219.0	3.06	290641.41	2667.791432	456.2	false
PFOS_1	499.0 / 80.0	3.05	1548797.35	2420.047719	296.2	true
PFOS_2	499.0 / 99.0	3.05	280499.72	2495.979366	586.2	false
PFDA_1	513.0 / 469.0	3.40	1109553.18	2501.819633	382.7	false
PFDA_2	513.0 / 219.0	3.41	46422.30	2350.061548	224.5	false
PFUnA_1	563.0 / 519.0	3.72	1103793.23	2343.713288	365.6	false
PFUnA_2	563.0 / 269.0	3.72	58473.08	2445.073074	199.7	false
PFDoA_1	613.0 / 569.0	4.01	1033274.92	2564.419634	375.7	false
PFDoA_2	613.0 / 319.0	4.00	157548.95	2416.106125	320.9	false
PFTTrDA_1	663.0 / 619.0	4.25	911627.32	2570.450584	470.6	false
PFTTrDA_2	663.0 / 169.0	4.25	61238.13	2734.333094	359.2	false
PFTeDA_1	713.0 / 669.0	4.47	1052473.46	2648.657862	822.5	false
PFTeDA_2	713.0 / 169.0	4.47	51729.86	2711.472042	545.8	false
NMeFOSAA_1	570.0 / 419.0	3.56	184161.61	2762.044019	682.9	false
NMeFOSAA_2	570.0 / 512.0	3.56	97126.91	2608.295163	575.0	false
NEtFOSAA_1	584.0 / 419.0	3.72	195920.33	2691.698480	951.9	false
NEtFOSAA_2	584.0 / 483.0	3.72	12705.57	2788.311837	355.4	false
PFBA	213.0 / 169.0	1.16	1425462.28	2759.605942	289.5	true

Sample Name	J7402-FS(3)	Injection Vial	34
Sample ID	NASB-BLL15-GW-RB01-080918	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:08:27	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	N/A	N/A	N/A	N/A	true
PFBS_2	298.9 / 99.0	N/A	N/A	N/A	N/A	true
PFHxA_1	313.0 / 269.0	1.88	111052.01	368.478991	28.7	false
PFHxA_2	313.0 / 119.0	1.87	8095.22	378.774407	24.3	false
PFHpA_1	363.0 / 319.0	2.27	16819.25	160.560011	23.6	false
PFHpA_2	363.0 / 169.0	2.25	755.63	168.911328	13.4	false
PFHxS_1	399.0 / 80.0	2.28	9229.54	68.569922	26.9	false
PFHxS_2	399.0 / 99.0	2.27	3642.86	76.196882	29.8	false
PFOA_1	413.0 / 369.0	2.66	118304.74	352.745686	117.2	false
PFOA_2	413.0 / 169.0	2.66	8046.36	363.128186	102.7	false
PFNA_1	463.0 / 419.0	N/A	N/A	N/A	N/A	true
PFNA_2	463.0 / 219.0	N/A	N/A	N/A	N/A	true
PFOS_1	499.0 / 80.0	3.05	151667.62	263.038517	106.4	true
PFOS_2	499.0 / 99.0	3.05	27941.06	279.761163	154.5	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
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true
PFBA	213.0 / 169.0	N/A	N/A	N/A	N/A	true

Sample Name	J7394-FS(3)	Injection Vial	35
Sample ID	NASB-CCC-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:19:19	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.56	20779.99	279.648708	41.5	false
PFBS_2	298.9 / 99.0	1.56	6085.40	279.072940	35.6	true
PFHxA_1	313.0 / 269.0	1.88	112698.79	2329.300459	28.6	false
PFHxA_2	313.0 / 119.0	1.87	9977.80	2752.813780	28.7	false
PFHpA_1	363.0 / 319.0	2.27	22336.54	542.766408	23.7	false
PFHpA_2	363.0 / 169.0	2.30	395.74	443.454672	9.5	false
PFHxS_1	399.0 / 80.0	2.28	82261.27	874.566081	151.3	false
PFHxS_2	399.0 / 99.0	2.29	20981.35	797.532714	152.8	false
PFOA_1	413.0 / 369.0	2.66	116865.77	1876.861183	106.0	false
PFOA_2	413.0 / 169.0	2.66	9141.49	2276.184169	76.9	false
PFNA_1	463.0 / 419.0	3.05	10426.35	187.407125	28.4	false
PFNA_2	463.0 / 219.0	3.05	4438.27	238.285930	28.1	false
PFOS_1	499.0 / 80.0	3.04	103189.78	1016.433660	67.5	true
PFOS_2	499.0 / 99.0	3.04	14571.19	818.419905	90.7	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
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true
PFBA	213.0 / 169.0	N/A	N/A	N/A	N/A	true

Sample Name	J7395-FS(3)	Injection Vial	36
Sample ID	NASB-CCC-GW-02-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:30:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	68430.36	198.060194	76.2	false
PFBS_2	298.9 / 99.0	1.54	20463.53	201.802665	66.7	false
PFHxA_1	313.0 / 269.0	1.86	597843.81	2119.118638	55.3	false
PFHxA_2	313.0 / 119.0	1.86	40694.83	1937.190045	53.6	false
PFHpA_1	363.0 / 319.0	2.25	235839.99	1059.267938	81.7	false
PFHpA_2	363.0 / 169.0	2.24	4354.10	956.404889	77.4	false
PFHxS_1	399.0 / 80.0	2.27	508697.80	1429.330174	198.9	false
PFHxS_2	399.0 / 99.0	2.27	147520.73	1473.277183	247.6	false
PFOA_1	413.0 / 369.0	2.65	632829.65	2094.858685	229.3	false
PFOA_2	413.0 / 169.0	2.62	56507.37	2897.820956	152.2	false
PFNA_1	463.0 / 419.0	3.05	15713.54	79.384850	34.9	true
PFNA_2	463.0 / 219.0	3.04	4827.51	66.579620	32.7	false
PFOS_1	499.0 / 80.0	3.04	818644.86	1710.154505	132.5	true
PFOS_2	499.0 / 99.0	3.04	127137.03	1512.998051	260.2	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
PFBA	213.0 / 169.0	1.16	220494.69	563.984408	116.9	true

Sample Name	J7396-FS(3)	Injection Vial	37
Sample ID	NASB-BLL15-GW-02-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:41:02	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	185560.27	609.686357	108.1	false
PFBS_2	298.9 / 99.0	1.55	45271.57	510.123847	84.8	false
PFHxA_1	313.0 / 269.0	1.86	251407.79	1036.179458	35.6	false
PFHxA_2	313.0 / 119.0	1.86	17247.31	966.668197	34.9	false
PFHpA_1	363.0 / 319.0	2.26	90065.18	537.071421	32.1	false
PFHpA_2	363.0 / 169.0	2.24	1165.79	331.093464	16.7	false
PFHxS_1	399.0 / 80.0	2.28	1133409.39	3040.916264	256.5	false
PFHxS_2	399.0 / 99.0	2.28	322577.59	3079.872733	332.9	false
PFOA_1	413.0 / 369.0	2.66	541286.63	2122.051639	168.6	false
PFOA_2	413.0 / 169.0	2.64	46535.95	2827.875975	155.8	false
PFNA_1	463.0 / 419.0	3.05	24194.45	122.361390	32.8	true
PFNA_2	463.0 / 219.0	3.04	5831.92	89.613016	31.1	false
PFOS_1	499.0 / 80.0	2.92	651767.23	1581.992744	190.2	true
PFOS_2	499.0 / 99.0	2.98	66572.96	919.416992	142.4	false
PFDA_1	513.0 / 469.0	N/A	N/A	N/A	N/A	true
PFDA_2	513.0 / 219.0	N/A	N/A	N/A	N/A	true
PFUnA_1	563.0 / 519.0	N/A	N/A	N/A	N/A	true
PFUnA_2	563.0 / 269.0	N/A	N/A	N/A	N/A	true
PFDoA_1	613.0 / 569.0	N/A	N/A	N/A	N/A	true
PFDoA_2	613.0 / 319.0	N/A	N/A	N/A	N/A	true
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true
PFBA	213.0 / 169.0	N/A	N/A	N/A	N/A	true

Sample Name	J7397-FS(3)	Injection Vial	39
Sample ID	NASB-BLL15-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:24:32	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	215391.41	805.899058	103.1	false
PFBS_2	298.9 / 99.0	1.55	51726.43	661.948742	90.1	false
PFHxA_1	313.0 / 269.0	1.86	237204.49	902.625804	32.7	false
PFHxA_2	313.0 / 119.0	1.86	19598.05	1008.586388	37.5	false
PFHpA_1	363.0 / 319.0	2.26	95578.93	493.815495	31.7	false
PFHpA_2	363.0 / 169.0	2.25	2815.44	635.364124	35.1	false
PFHxS_1	399.0 / 80.0	2.28	1230678.11	3282.986749	236.8	false
PFHxS_2	399.0 / 99.0	2.28	331959.59	3153.845554	317.6	false
PFOA_1	413.0 / 369.0	2.66	530731.98	1771.335165	136.3	false
PFOA_2	413.0 / 169.0	2.63	49450.76	2551.091580	147.7	false
PFNA_1	463.0 / 419.0	3.05	21828.73	105.973949	32.8	false
PFNA_2	463.0 / 219.0	3.05	7114.10	98.324855	35.1	false
PFOS_1	499.0 / 80.0	2.95	307740.61	858.840921	80.7	false
PFOS_2	499.0 / 99.0	3.04	39405.57	627.077468	97.0	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
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true
PFBA	213.0 / 169.0	1.23	2037704.13	15011.278920	167.5	false

Sample Name	J7397MS-FS(3)	Injection Vial	40
Sample ID	Matrix Spike Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:35:25	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	2402414.42	8092.965344	317.4	false
PFBS_2	298.9 / 99.0	1.55	671220.45	7648.137477	313.5	false
PFHxA_1	313.0 / 269.0	1.85	2312400.86	8021.535088	113.4	false
PFHxA_2	313.0 / 119.0	1.85	177378.89	8182.288018	151.0	false
PFHpA_1	363.0 / 319.0	2.26	2089145.54	7928.876467	177.8	false
PFHpA_2	363.0 / 169.0	2.25	37393.78	7324.390808	201.4	false
PFHxS_1	399.0 / 80.0	2.28	4289538.04	11208.571019	404.0	false
PFHxS_2	399.0 / 99.0	2.28	1173078.86	10914.168513	550.7	false
PFOA_1	413.0 / 369.0	2.66	2737174.29	8261.740016	300.7	false
PFOA_2	413.0 / 169.0	2.66	197396.10	9299.083375	387.1	false
PFNA_1	463.0 / 419.0	3.05	2143933.12	7440.438873	398.0	false
PFNA_2	463.0 / 219.0	3.05	640861.47	7326.377206	440.6	false
PFOS_1	499.0 / 80.0	3.04	3479550.33	9025.037460	262.1	true
PFOS_2	499.0 / 99.0	3.04	588181.14	8677.184989	620.4	false
PFDA_1	513.0 / 469.0	3.40	2365495.87	7419.825219	377.8	false
PFDA_2	513.0 / 219.0	3.40	103927.34	7441.464529	311.1	false
PFUnA_1	563.0 / 519.0	3.72	2238834.54	6766.555487	451.9	false
PFUnA_2	563.0 / 269.0	3.72	120778.57	7290.600566	248.3	false
PFDoA_1	613.0 / 569.0	4.00	1887194.05	7299.512897	395.1	false
PFDoA_2	613.0 / 319.0	4.00	302089.25	7211.169486	413.4	false
PFTTrDA_1	663.0 / 619.0	4.24	1441387.67	8950.414853	591.8	false
PFTTrDA_2	663.0 / 169.0	4.24	96785.16	9535.735356	442.3	false
PFTeDA_1	713.0 / 669.0	4.46	1360381.98	7548.059239	951.4	false
PFTeDA_2	713.0 / 169.0	4.46	67159.13	7754.243256	704.6	false
NMeFOSAA_1	570.0 / 419.0	3.55	365816.43	8097.619239	680.2	false
NMeFOSAA_2	570.0 / 512.0	3.55	194340.67	7704.092754	517.2	false
NEtFOSAA_1	584.0 / 419.0	3.71	346098.36	8063.543245	1002.7	false
NEtFOSAA_2	584.0 / 483.0	3.71	21641.88	7894.313735	382.4	false
PFBA	213.0 / 169.0	1.18	3048547.49	22349.575808	180.3	false

Sample Name	J7397MSD-FS(3)	Injection Vial	41
Sample ID	Matrix Spike Duplicate Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:46:18	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	2546935.13	8427.022285	311.1	false
PFBS_2	298.9 / 99.0	1.54	746887.70	8357.008746	308.6	false
PFHxA_1	313.0 / 269.0	1.85	2520575.44	8687.681613	104.4	false
PFHxA_2	313.0 / 119.0	1.85	186625.91	8553.577043	135.9	false
PFHpA_1	363.0 / 319.0	2.25	2241156.66	7844.856913	182.7	false
PFHpA_2	363.0 / 169.0	2.25	39100.78	7064.052717	186.2	false
PFHxS_1	399.0 / 80.0	2.27	4514398.10	9525.651230	417.5	false
PFHxS_2	399.0 / 99.0	2.27	1301206.18	9773.618911	776.4	false
PFOA_1	413.0 / 369.0	2.65	3107152.86	8646.438463	349.9	false
PFOA_2	413.0 / 169.0	2.65	222466.55	9663.030028	415.3	false
PFNA_1	463.0 / 419.0	3.05	2426376.39	7580.899022	378.9	false
PFNA_2	463.0 / 219.0	3.04	733767.88	7552.026374	438.8	false
PFOS_1	499.0 / 80.0	3.04	3921954.97	8463.000367	241.9	true
PFOS_2	499.0 / 99.0	3.04	699240.37	8582.469484	511.1	false
PFDA_1	513.0 / 469.0	3.40	2718571.27	6971.615659	460.0	false
PFDA_2	513.0 / 219.0	3.40	119426.40	6987.571107	346.4	false
PFUnA_1	563.0 / 519.0	3.72	2704096.57	6281.073082	514.9	false
PFUnA_2	563.0 / 269.0	3.72	145026.27	6724.137293	335.5	false
PFDoA_1	613.0 / 569.0	4.00	2420496.29	8040.213648	442.7	false
PFDoA_2	613.0 / 319.0	4.00	379102.48	7771.392000	391.0	false
PFTTrDA_1	663.0 / 619.0	4.24	1769605.81	8580.697596	645.2	false
PFTTrDA_2	663.0 / 169.0	4.24	118182.88	9092.192902	439.6	false
PFTeDA_1	713.0 / 669.0	4.46	1732764.83	7507.351201	1205.7	false
PFTeDA_2	713.0 / 169.0	4.46	84363.80	7606.214482	973.2	false
NMeFOSAA_1	570.0 / 419.0	3.55	442913.50	8712.940961	732.7	false
NMeFOSAA_2	570.0 / 512.0	3.55	244359.92	8609.203133	524.4	false
NEtFOSAA_1	584.0 / 419.0	3.71	420197.34	8080.971500	922.6	false
NEtFOSAA_2	584.0 / 483.0	3.71	24009.51	7239.917333	495.8	false
PFBA	213.0 / 169.0	1.18	3289031.94	23402.752931	197.2	false

Sample Name	J7398-FS(3)	Injection Vial	42
Sample ID	NASB-BLL15-DUP-080918	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:57:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	215849.74	836.212678	106.7	false
PFBS_2	298.9 / 99.0	1.55	53428.47	706.652210	97.3	false
PFHxA_1	313.0 / 269.0	1.86	247502.69	1143.412239	34.0	false
PFHxA_2	313.0 / 119.0	1.86	21736.77	1349.728146	37.8	false
PFHpA_1	363.0 / 319.0	2.26	100949.80	573.605146	35.9	false
PFHpA_2	363.0 / 169.0	2.25	1790.84	472.428888	36.7	true
PFHxS_1	399.0 / 80.0	2.28	1182952.60	3909.251638	226.5	false
PFHxS_2	399.0 / 99.0	2.27	330232.69	3884.885253	341.9	false
PFOA_1	413.0 / 369.0	2.66	536880.71	2038.595775	139.7	false
PFOA_2	413.0 / 169.0	2.64	45876.09	2699.385837	135.1	false
PFNA_1	463.0 / 419.0	3.04	20387.55	105.694181	34.2	false
PFNA_2	463.0 / 219.0	3.05	7240.98	105.495747	35.1	false
PFOS_1	499.0 / 80.0	2.95	283143.89	734.539230	81.1	false
PFOS_2	499.0 / 99.0	3.05	32814.02	485.295344	85.2	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
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true
PFBA	213.0 / 169.0	1.23	1375028.33	12029.096629	125.0	true

Sample Name	J7399-FS(3)	Injection Vial	43
Sample ID	NASB-BLL15-GW-03-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:08:02	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.54	124196.01	475.995087	73.9	false
PFBS_2	298.9 / 99.0	1.54	29017.43	384.290494	65.9	false
PFHxA_1	313.0 / 269.0	1.85	243871.48	997.950813	30.9	false
PFHxA_2	313.0 / 119.0	1.86	17211.85	957.403204	34.5	false
PFHpA_1	363.0 / 319.0	2.25	133576.60	663.638547	36.0	false
PFHpA_2	363.0 / 169.0	2.25	1786.53	428.810780	22.3	false
PFHxS_1	399.0 / 80.0	2.27	1013780.49	2842.755473	194.8	false
PFHxS_2	399.0 / 99.0	2.27	277912.45	2774.815790	286.1	false
PFOA_1	413.0 / 369.0	2.66	660886.68	2256.692164	155.1	false
PFOA_2	413.0 / 169.0	2.62	56235.61	2978.315645	139.5	false
PFNA_1	463.0 / 419.0	3.05	45630.28	184.178939	42.8	false
PFNA_2	463.0 / 219.0	3.05	11930.57	149.287495	44.3	false
PFOS_1	499.0 / 80.0	2.95	1336092.72	3075.576420	162.0	false
PFOS_2	499.0 / 99.0	3.03	163789.63	2145.173210	204.5	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
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true
PFBA	213.0 / 169.0	N/A	N/A	N/A	N/A	true

Sample Name	J7400-FS(3)	Injection Vial	44
Sample ID	NASB-BLL15-GW-04-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:18:54	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	227458.94	823.508979	96.5	false
PFBS_2	298.9 / 99.0	1.55	43381.77	543.723543	85.0	false
PFHxA_1	313.0 / 269.0	1.86	377590.93	1960.488002	39.4	false
PFHxA_2	313.0 / 119.0	1.86	27009.57	1882.913515	38.1	false
PFHpA_1	363.0 / 319.0	2.25	205632.48	1163.910785	48.7	false
PFHpA_2	363.0 / 169.0	2.24	6793.42	1859.169713	85.8	false
PFHxS_1	399.0 / 80.0	2.28	876601.73	3197.824204	170.6	false
PFHxS_2	399.0 / 99.0	2.28	242247.16	3146.215038	281.9	false
PFOA_1	413.0 / 369.0	2.65	1071218.75	4463.440314	206.8	false
PFOA_2	413.0 / 169.0	2.59	113133.74	7331.598085	200.4	false
PFNA_1	463.0 / 419.0	3.04	42223.07	222.501847	45.0	false
PFNA_2	463.0 / 219.0	3.04	13405.29	218.255256	41.4	false
PFOS_1	499.0 / 80.0	3.00	7180995.49	22738.670956	303.5	false
PFOS_2	499.0 / 99.0	3.04	1060472.07	19094.234006	578.0	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
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true
PFBA	213.0 / 169.0	1.20	677131.47	5053.793115	104.2	true

Sample Name	JY46 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:53:03	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.17	93246.92	257.713508	1725.4	false
13C2-PFDoA	615.0 / 570.0	4.00	122579.14	269.854612	884.9	false
d3-MeFOSAA	573.0 / 419.0	3.55	18110.41	252.052341	183.4	false
d5-EtFOSAA	589.0 / 419.0	3.71	25161.81	308.047467	199.4	false
13C5-PFHxA	318.0 / 273.0	1.85	77701.35	252.343368	483.2	false
13C4-PFHpA	367.0 / 322.0	2.25	85516.54	250.601124	902.2	false
13C8-PFOA	421.0 / 376.0	2.66	100353.03	266.175126	1461.8	false
13C9-PFNA	472.0 / 427.0	3.04	94097.76	247.963358	786.8	false
13C6-PFDA	519.0 / 474.0	3.40	109158.14	277.903479	1054.4	false
13C7-PFUnA	570.0 / 525.0	3.71	107435.59	258.669262	697.4	false
13C2-PFTeDA	715.0 / 670.0	4.47	100055.30	247.722984	1339.7	false
13C3-PFBS	302.0 / 99.0	1.54	34261.46	233.156299	571.8	false
13C3-PFHxS	402.0 / 99.0	2.27	27581.07	235.174701	372.3	false
13C8-PFOS	507.0 / 99.0	3.04	32015.05	245.530775	241.4	false

Sample Name	CR552PB-FS(3)	Injection Vial	32
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T04:46:41	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.16	84916.33	330.213966	1184.4	false
13C2-PFDoA	615.0 / 570.0	3.99	98222.40	306.175088	929.6	false
d3-MeFOSAA	573.0 / 419.0	3.55	14057.46	305.823341	153.3	false
d5-EtFOSAA	589.0 / 419.0	3.71	19015.34	363.899247	207.1	false
13C5-PFHxA	318.0 / 273.0	1.85	71609.22	328.209817	572.2	false
13C4-PFHpA	367.0 / 322.0	2.25	80556.07	333.158152	618.9	false
13C8-PFOA	421.0 / 376.0	2.65	91351.21	341.956286	1376.4	false
13C9-PFNA	472.0 / 427.0	3.04	91309.45	339.580880	1544.9	false
13C6-PFDA	519.0 / 474.0	3.39	96269.78	347.035475	777.0	false
13C7-PFUnA	570.0 / 525.0	3.71	101665.62	346.590623	990.0	false
13C2-PFTeDA	715.0 / 670.0	4.46	80154.41	280.995704	1316.3	false
13C3-PFBS	302.0 / 99.0	1.53	29407.04	312.819677	397.3	false
13C3-PFHxS	402.0 / 99.0	2.27	24599.37	327.872309	265.3	false
13C8-PFOS	507.0 / 99.0	3.03	25464.56	305.273577	218.5	false

Sample Name	CR553LCS-FS(3)	Injection Vial	33
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T04:57:34	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.16	79837.95	220.296389	1338.5	false
13C2-PFDoA	615.0 / 570.0	3.99	104048.93	287.100364	1464.4	false
d3-MeFOSAA	573.0 / 419.0	3.55	16109.51	270.762236	170.8	false
d5-EtFOSAA	589.0 / 419.0	3.71	17054.79	252.153803	157.2	false
13C5-PFHxA	318.0 / 273.0	1.85	68722.42	262.408352	547.3	false
13C4-PFHpA	367.0 / 322.0	2.25	74313.91	256.046534	691.9	false
13C8-PFOA	421.0 / 376.0	2.66	77037.29	240.244744	1054.0	false
13C9-PFNA	472.0 / 427.0	3.04	85519.63	264.965888	826.7	false
13C6-PFDA	519.0 / 474.0	3.39	96443.37	307.746449	668.4	false
13C7-PFUnA	570.0 / 525.0	3.71	98958.43	298.629202	472.2	false
13C2-PFTeDA	715.0 / 670.0	4.46	84606.47	262.550352	1304.6	false
13C3-PFBS	302.0 / 99.0	1.53	28671.21	235.630075	407.3	false
13C3-PFHxS	402.0 / 99.0	2.27	24361.37	250.856020	295.5	false
13C8-PFOS	507.0 / 99.0	3.04	29973.67	277.609969	225.6	false

Sample Name	J7402-FS(3)	Injection Vial	34
Sample ID	NASB-BLL15-GW-RB01-080918	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:08:27	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.16	72422.89	202.027461	1231.1	false
13C2-PFDoA	615.0 / 570.0	3.99	92911.27	217.179334	889.5	false
d3-MeFOSAA	573.0 / 419.0	3.55	15516.77	231.334711	157.8	false
d5-EtFOSAA	589.0 / 419.0	3.71	15683.10	205.676598	168.0	false
13C5-PFHxA	318.0 / 273.0	1.84	69185.48	245.654265	563.9	false
13C4-PFHpA	367.0 / 322.0	2.25	79676.64	255.275969	608.0	false
13C8-PFOA	421.0 / 376.0	2.65	80784.54	234.267085	1084.6	false
13C9-PFNA	472.0 / 427.0	3.04	81510.63	234.838070	762.8	false
13C6-PFDA	519.0 / 474.0	3.39	94953.06	256.675055	2326.7	false
13C7-PFUnA	570.0 / 525.0	3.71	95937.34	245.256854	782.0	false
13C2-PFTeDA	715.0 / 670.0	4.46	81210.89	213.489894	1461.4	false
13C3-PFBS	302.0 / 99.0	1.53	30832.86	224.766812	378.9	false
13C3-PFHxS	402.0 / 99.0	2.27	24121.25	220.321267	252.3	false
13C8-PFOS	507.0 / 99.0	3.03	26138.02	214.734399	204.6	false

Sample Name	J7394-FS(3)	Injection Vial	35
Sample ID	NASB-CCC-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:19:19	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.18	15626.93	234.002676	495.5	false
13C2-PFDoA	615.0 / 570.0	4.00	16591.25	205.083400	503.6	false
d3-MeFOSAA	573.0 / 419.0	3.56	3412.82	247.555166	83.3	false
d5-EtFOSAA	589.0 / 419.0	3.71	2354.12	150.210270	40.1	false
13C5-PFHxA	318.0 / 273.0	1.86	10502.98	183.408352	169.3	false
13C4-PFHpA	367.0 / 322.0	2.26	12142.17	191.325403	422.2	false
13C8-PFOA	421.0 / 376.0	2.65	13473.06	192.152797	520.1	false
13C9-PFNA	472.0 / 427.0	3.04	15503.12	219.670060	420.7	false
13C6-PFDA	519.0 / 474.0	3.39	13420.11	191.836827	306.1	false
13C7-PFUnA	570.0 / 525.0	3.71	14587.64	197.205764	275.7	false
13C2-PFTeDA	715.0 / 670.0	4.46	14303.16	198.836511	658.4	false
13C3-PFBS	302.0 / 99.0	1.54	6143.06	217.882501	257.2	false
13C3-PFHxS	402.0 / 99.0	2.27	5551.88	246.726242	129.6	false
13C8-PFOS	507.0 / 99.0	3.04	5236.09	209.293130	84.9	false

Sample Name	J7395-FS(3)	Injection Vial	36
Sample ID	NASB-CCC-GW-02-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:30:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.16	44554.14	144.290907	649.0	false
13C2-PFDoA	615.0 / 570.0	3.99	75945.04	191.470082	600.4	false
d3-MeFOSAA	573.0 / 419.0	3.55	11050.93	178.903857	155.1	false
d5-EtFOSAA	589.0 / 419.0	3.71	11639.35	165.753635	149.5	false
13C5-PFHxA	318.0 / 273.0	1.84	61304.37	219.528393	269.1	false
13C4-PFHpA	367.0 / 322.0	2.24	72825.47	235.316344	483.4	false
13C8-PFOA	421.0 / 376.0	2.65	65204.98	190.701304	733.7	false
13C9-PFNA	472.0 / 427.0	3.04	72788.15	211.497324	468.8	false
13C6-PFDA	519.0 / 474.0	3.39	71341.47	208.002291	575.8	false
13C7-PFUnA	570.0 / 525.0	3.70	68017.80	187.545859	545.7	false
13C2-PFTeDA	715.0 / 670.0	4.46	59200.96	167.858445	955.1	false
13C3-PFBS	302.0 / 99.0	1.53	30077.90	238.093416	340.6	false
13C3-PFHxS	402.0 / 99.0	2.26	20551.92	203.840451	193.1	false
13C8-PFOS	507.0 / 99.0	3.03	22151.41	197.611259	155.2	false

Sample Name	J7396-FS(3)	Injection Vial	37
Sample ID	NASB-BLL15-GW-02-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:41:02	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.16	30752.85	125.445422	577.4	true
13C2-PFDoA	615.0 / 570.0	3.99	60668.76	169.467668	605.1	false
d3-MeFOSAA	573.0 / 419.0	3.55	10716.57	238.951252	134.2	false
d5-EtFOSAA	589.0 / 419.0	3.71	11715.56	229.789313	129.3	false
13C5-PFHxA	318.0 / 273.0	1.84	53350.25	243.070569	210.8	false
13C4-PFHpA	367.0 / 322.0	2.25	67575.64	277.814994	465.9	false
13C8-PFOA	421.0 / 376.0	2.65	55043.11	204.820095	527.5	false
13C9-PFNA	472.0 / 427.0	3.03	60857.52	224.985787	603.4	false
13C6-PFDA	519.0 / 474.0	3.39	67334.66	217.512881	705.3	false
13C7-PFUnA	570.0 / 525.0	3.71	61658.07	188.362744	471.9	false
13C2-PFTeDA	715.0 / 670.0	4.46	44024.54	138.302335	835.9	false
13C3-PFBS	302.0 / 99.0	1.53	23599.29	257.295075	225.9	false
13C3-PFHxS	402.0 / 99.0	2.27	21140.58	288.793558	222.3	false
13C8-PFOS	507.0 / 99.0	3.03	19289.63	237.010069	139.2	false

Sample Name	J7397-FS(3)	Injection Vial	39
Sample ID	NASB-BLL15-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:24:32	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.16	22674.43	20.133286	485.7	false
13C2-PFDoA	615.0 / 570.0	3.99	57815.06	182.481208	524.3	false
d3-MeFOSAA	573.0 / 419.0	3.55	10237.10	237.350111	122.6	false
d5-EtFOSAA	589.0 / 419.0	3.71	9594.22	195.675116	114.3	false
13C5-PFHxA	318.0 / 273.0	1.84	57983.66	279.192982	160.1	false
13C4-PFHpA	367.0 / 322.0	2.25	72538.76	315.165442	427.1	false
13C8-PFOA	421.0 / 376.0	2.65	64922.46	255.309825	532.5	false
13C9-PFNA	472.0 / 427.0	3.04	66493.66	259.790971	563.0	false
13C6-PFDA	519.0 / 474.0	3.39	68030.10	248.314960	727.5	false
13C7-PFUnA	570.0 / 525.0	3.70	65858.13	227.336910	551.2	false
13C2-PFTeDA	715.0 / 670.0	4.46	30344.32	107.712854	1106.8	false
13C3-PFBS	302.0 / 99.0	1.53	20461.71	231.970900	230.5	false
13C3-PFHxS	402.0 / 99.0	2.27	21237.59	301.671994	165.6	false
13C8-PFOS	507.0 / 99.0	3.03	17738.32	226.628552	113.8	false

Sample Name	J7397MS-FS(3)	Injection Vial	40
Sample ID	Matrix Spike Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:35:25	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.16	22921.18	18.300541	489.9	false
13C2-PFDoA	615.0 / 570.0	3.99	66702.83	167.996646	709.8	false
d3-MeFOSAA	573.0 / 419.0	3.55	10942.96	234.356672	111.0	false
d5-EtFOSAA	589.0 / 419.0	3.71	9953.45	187.512084	114.0	false
13C5-PFHxA	318.0 / 273.0	1.84	62127.85	236.981921	155.9	false
13C4-PFHpA	367.0 / 322.0	2.25	78083.60	268.756102	409.0	false
13C8-PFOA	421.0 / 376.0	2.65	70406.58	219.338983	526.6	false
13C9-PFNA	472.0 / 427.0	3.03	68422.13	211.772919	388.4	false
13C6-PFDA	519.0 / 474.0	3.39	68902.86	200.686505	485.7	false
13C7-PFUnA	570.0 / 525.0	3.70	68627.11	189.032028	518.3	false
13C2-PFTeDA	715.0 / 670.0	4.46	38359.07	108.651914	914.8	false
13C3-PFBS	302.0 / 99.0	1.53	21950.08	229.856843	226.2	false
13C3-PFHxS	402.0 / 99.0	2.27	21460.17	281.574093	180.6	false
13C8-PFOS	507.0 / 99.0	3.03	17886.12	211.080339	107.3	false

Sample Name	J7397MSD-FS(3)	Injection Vial	41
Sample ID	Matrix Spike Duplicate Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:46:18	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.15	23629.51	18.579855	411.9	false
13C2-PFDoA	615.0 / 570.0	3.99	77667.44	168.771312	685.2	false
d3-MeFOSAA	573.0 / 419.0	3.55	12314.71	199.784596	120.4	false
d5-EtFOSAA	589.0 / 419.0	3.71	12058.27	172.082253	132.1	false
13C5-PFHxA	318.0 / 273.0	1.84	62514.16	202.623417	178.3	false
13C4-PFHpA	367.0 / 322.0	2.24	81759.05	239.120428	379.9	false
13C8-PFOA	421.0 / 376.0	2.65	76349.50	202.111555	507.7	false
13C9-PFNA	472.0 / 427.0	3.03	75995.98	199.869626	470.2	false
13C6-PFDA	519.0 / 474.0	3.38	84295.26	211.829930	744.4	false
13C7-PFUnA	570.0 / 525.0	3.70	89342.64	212.325308	810.6	false
13C2-PFTeDA	715.0 / 670.0	4.45	49124.25	120.051748	978.6	false
13C3-PFBS	302.0 / 99.0	1.52	22344.70	177.252120	267.6	false
13C3-PFHxS	402.0 / 99.0	2.26	26595.17	264.336886	215.8	false
13C8-PFOS	507.0 / 99.0	3.03	21764.83	194.572998	160.4	false

Sample Name	J7398-FS(3)	Injection Vial	42
Sample ID	NASB-BLL15-DUP-080918	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:57:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.16	19008.09	17.359700	382.2	false
13C2-PFDoA	615.0 / 570.0	3.99	50622.21	135.034061	479.9	false
d3-MeFOSAA	573.0 / 419.0	3.55	8954.70	172.876117	120.9	false
d5-EtFOSAA	589.0 / 419.0	3.71	9844.24	167.178132	104.8	false
13C5-PFHxA	318.0 / 273.0	1.84	47492.29	198.082217	178.2	false
13C4-PFHpA	367.0 / 322.0	2.25	64311.35	242.035782	369.1	false
13C8-PFOA	421.0 / 376.0	2.65	56878.42	193.750852	631.9	false
13C9-PFNA	472.0 / 427.0	3.04	62328.15	210.936410	527.3	false
13C6-PFDA	519.0 / 474.0	3.39	63733.12	196.603819	569.9	false
13C7-PFUnA	570.0 / 525.0	3.70	57520.92	167.807498	511.3	false
13C2-PFTeDA	715.0 / 670.0	4.46	30314.87	90.943314	737.3	false
13C3-PFBS	302.0 / 99.0	1.53	19733.81	186.283178	238.8	false
13C3-PFHxS	402.0 / 99.0	2.27	17103.69	202.297619	153.9	false
13C8-PFOS	507.0 / 99.0	3.03	17831.38	189.695953	140.1	false

Sample Name	J7399-FS(3)	Injection Vial	43
Sample ID	NASB-BLL15-GW-03-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:08:02	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.16	22042.83	33.250344	482.3	false
13C2-PFDoA	615.0 / 570.0	3.99	64844.16	172.921686	558.1	false
d3-MeFOSAA	573.0 / 419.0	3.55	11854.50	266.134156	133.9	false
d5-EtFOSAA	589.0 / 419.0	3.70	11490.56	226.919656	119.4	false
13C5-PFHxA	318.0 / 273.0	1.84	53781.37	232.766190	173.6	false
13C4-PFHpA	367.0 / 322.0	2.24	64500.73	251.896563	401.9	false
13C8-PFOA	421.0 / 376.0	2.65	63117.34	223.105563	471.8	false
13C9-PFNA	472.0 / 427.0	3.03	69253.71	243.206961	418.9	false
13C6-PFDA	519.0 / 474.0	3.39	65913.95	203.273388	552.5	false
13C7-PFUnA	570.0 / 525.0	3.70	70439.12	205.435696	391.2	false
13C2-PFTeDA	715.0 / 670.0	4.45	31776.44	95.300841	796.7	false
13C3-PFBS	302.0 / 99.0	1.53	20534.75	225.416548	228.3	false
13C3-PFHxS	402.0 / 99.0	2.26	20249.61	278.516621	143.7	false
13C8-PFOS	507.0 / 99.0	3.03	20616.28	255.045226	139.2	false

Sample Name	J7400-FS(3)	Injection Vial	44
Sample ID	NASB-BLL15-GW-04-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:18:54	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.16	21606.44	48.613395	489.0	false
13C2-PFDoA	615.0 / 570.0	3.99	46851.47	123.947119	498.8	false
d3-MeFOSAA	573.0 / 419.0	3.54	7659.15	172.117036	110.4	false
d5-EtFOSAA	589.0 / 419.0	3.71	11045.88	218.351962	126.8	false
13C5-PFHxA	318.0 / 273.0	1.84	41890.12	178.776438	147.8	false
13C4-PFHpA	367.0 / 322.0	2.24	58905.61	226.842733	392.7	false
13C8-PFOA	421.0 / 376.0	2.65	51231.36	178.569889	404.5	false
13C9-PFNA	472.0 / 427.0	3.03	51435.62	178.117900	353.7	false
13C6-PFDA	519.0 / 474.0	3.38	57183.72	174.948482	592.1	false
13C7-PFUnA	570.0 / 525.0	3.70	50662.45	146.582730	518.9	false
13C2-PFTeDA	715.0 / 670.0	4.45	31764.86	94.508996	704.7	false
13C3-PFBS	302.0 / 99.0	1.53	21128.28	232.159447	193.1	false
13C3-PFHxS	402.0 / 99.0	2.27	15536.26	213.898020	133.9	false
13C8-PFOS	507.0 / 99.0	3.03	14703.33	182.074147	119.1	false

Sample Name	JY46 IB	Injection Vial	23
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:20:49	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	4.45	3281.86	11.200796	59.2	false
PFTeDA_2	713.0 / 169.0	4.45	193.36	< 0	15.1	false
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true
PFBA	213.0 / 169.0	1.09	152448.35	49.517026	64.0	true

Sample Name	J7394-FS(3)	Injection Vial	38
Sample ID	NASB-CCC-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T01:19:47	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.53	102796.90	362.603623	99.6	false
PFBS_2	298.9 / 99.0	1.53	25117.82	309.140875	88.2	false
PFHxA_1	313.0 / 269.0	1.84	59792.20	338.711944	12.2	false
PFHxA_2	313.0 / 119.0	1.84	4221.30	329.815826	11.7	false
PFHpA_1	363.0 / 319.0	2.25	38154.43	272.260364	21.1	false
PFHpA_2	363.0 / 169.0	2.21	1030.06	310.000550	12.7	true
PFHxS_1	399.0 / 80.0	2.27	264146.54	1138.651039	175.7	false
PFHxS_2	399.0 / 99.0	2.27	71553.72	1070.797902	221.8	false
PFOA_1	413.0 / 369.0	2.65	368489.32	1790.237989	139.7	false
PFOA_2	413.0 / 169.0	2.65	33686.92	2470.162838	116.4	true
PFNA_1	463.0 / 419.0	3.05	35115.22	222.454668	46.3	false
PFNA_2	463.0 / 219.0	3.05	9523.07	255.083917	49.2	false
PFOS_1	499.0 / 80.0	3.04	303719.55	958.241806	123.6	false
PFOS_2	499.0 / 99.0	3.04	52959.25	954.584924	208.8	false
PFDA_1	513.0 / 469.0	3.40	25079.59	143.374789	43.1	false
PFDA_2	513.0 / 219.0	3.39	1133.33	92.157874	21.1	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
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true
PFBA	213.0 / 169.0	1.13	340695.18	1098.937904	141.1	true

Sample Name	JY46 IB	Injection Vial	23
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:20:49	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.15	80933.26	235.883045	1189.0	false
13C2-PFDoA	615.0 / 570.0	3.98	95292.58	243.320851	903.3	false
d3-MeFOSAA	573.0 / 419.0	3.54	12882.64	222.073827	141.7	false
d5-EtFOSAA	589.0 / 419.0	3.70	18153.75	277.145735	170.1	false
13C5-PFHxA	318.0 / 273.0	1.84	67329.27	249.772690	458.5	false
13C4-PFHpA	367.0 / 322.0	2.24	73961.12	246.994844	865.1	false
13C8-PFOA	421.0 / 376.0	2.65	84277.70	267.554625	960.2	false
13C9-PFNA	472.0 / 427.0	3.04	85206.10	259.258119	842.9	false
13C6-PFDA	519.0 / 474.0	3.39	91039.70	267.077510	859.2	false
13C7-PFUnA	570.0 / 525.0	3.70	94746.90	264.909668	765.1	false
13C2-PFTeDA	715.0 / 670.0	4.44	81478.47	242.483569	1997.0	false
13C3-PFBS	302.0 / 99.0	1.52	26510.06	202.238330	426.2	false
13C3-PFHxS	402.0 / 99.0	2.26	24160.18	235.333604	250.4	false
13C8-PFOS	507.0 / 99.0	3.03	27859.72	259.407033	183.2	false

Sample Name	J7394-FS(3)	Injection Vial	38
Sample ID	NASB-CCC-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T01:19:47	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.14	40781.50	163.892610	812.5	false
13C2-PFDoA	615.0 / 570.0	3.99	50525.14	191.311632	983.3	false
d3-MeFOSAA	573.0 / 419.0	3.54	7862.08	198.955460	117.3	false
d5-EtFOSAA	589.0 / 419.0	3.70	6839.67	153.286083	145.9	false
13C5-PFHxA	318.0 / 273.0	1.83	41871.52	237.689356	219.7	false
13C4-PFHpA	367.0 / 322.0	2.24	48360.92	247.132022	490.4	false
13C8-PFOA	421.0 / 376.0	2.65	44242.03	214.923973	1232.1	false
13C9-PFNA	472.0 / 427.0	3.03	45490.01	211.800864	612.8	false
13C6-PFDA	519.0 / 474.0	3.39	49491.11	215.301597	773.3	false
13C7-PFUnA	570.0 / 525.0	3.70	51983.45	215.531857	677.3	false
13C2-PFTeDA	715.0 / 670.0	4.45	45410.77	200.406542	917.2	false
13C3-PFBS	302.0 / 99.0	1.52	22605.17	253.154929	299.6	false
13C3-PFHxS	402.0 / 99.0	2.26	14416.97	206.150175	257.7	false
13C8-PFOS	507.0 / 99.0	3.03	13743.02	187.850809	153.5	false

Sample Name	JY46 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:53:03	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.294	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.071	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.020	ü
PFHxS_1	399.0 / 80.0	N/A	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	PFHxS	N/A	0.282	ü
PFOA_1	413.0 / 369.0	N/A	PFOA			
PFOA_2	413.0 / 169.0	N/A	PFOA	N/A	0.066	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.316	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	0.051	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDaA_1	613.0 / 569.0	4.01	PFDaA			
PFDaA_2	613.0 / 319.0	4.01	PFDaA	0.117	0.161	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.45	PFTeDA	0.068	0.048	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.560	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.060	ü
PFBA	213.0 / 169.0	N/A				

Sample Name	CR552PB-FS(3)	Injection Vial	32
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T04:46:41	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.294	ü
PFHxA_1	313.0 / 269.0	1.88	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.087	0.071	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.020	ü
PFHxS_1	399.0 / 80.0	N/A	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	PFHxS	N/A	0.282	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.062	0.066	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.316	ü
PFOS_1	499.0 / 80.0	3.05	PFOS			
PFOS_2	499.0 / 99.0	3.04	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	0.051	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.161	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.048	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.560	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.060	ü
PFBA	213.0 / 169.0	1.18				

Sample Name	CR553LCS-FS(3)	Injection Vial	33
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T04:57:34	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.302	0.294	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.072	0.071	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.019	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.275	0.282	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.068	0.066	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.321	0.316	ü
PFOS_1	499.0 / 80.0	3.05	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.181	0.174	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.042	0.051	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	PFUnA	0.053	0.058	ü
PFDaA_1	613.0 / 569.0	4.01	PFDaA			
PFDaA_2	613.0 / 319.0	4.00	PFDaA	0.153	0.161	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.067	0.064	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.049	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.56	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.56	NMeFOSAA	0.527	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.72	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.72	NEtFOSAA	0.065	0.060	ü
PFBA	213.0 / 169.0	1.16				

Sample Name	J7402-FS(3)	Injection Vial	34
Sample ID	NASB-BLL15-GW-RB01-080918	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:08:27	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	N/A	PFBS			
PFBS_2	298.9 / 99.0	N/A	PFBS	N/A	0.294	ü
PFHxA_1	313.0 / 269.0	1.88	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.073	0.071	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.045	0.020	
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.395	0.282	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.068	0.066	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.316	ü
PFOS_1	499.0 / 80.0	3.05	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.184	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.051	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.161	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.048	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.560	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.060	ü
PFBA	213.0 / 169.0	N/A				

Sample Name	J7394-FS(3)	Injection Vial	35
Sample ID	NASB-CCC-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:19:19	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.56	PFBS	0.293	0.294	ü
PFHxA_1	313.0 / 269.0	1.88	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.089	0.071	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.30	PFHpA	0.018	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.255	0.282	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.078	0.066	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.426	0.316	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.141	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.051	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.161	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.048	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.560	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.060	ü
PFBA	213.0 / 169.0	N/A				

Sample Name	J7395-FS(3)	Injection Vial	36
Sample ID	NASB-CCC-GW-02-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:30:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.299	0.294	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.068	0.071	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	PFHpA	0.019	0.020	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.290	0.282	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.62	PFOA	0.089	0.066	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.307	0.316	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.155	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.051	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.161	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.048	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.560	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.060	ü
PFBA	213.0 / 169.0	1.16				

Sample Name	J7396-FS(3)	Injection Vial	37
Sample ID	NASB-BLL15-GW-02-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:41:02	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.244	0.294	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.069	0.071	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	PFHpA	0.013	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.285	0.282	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.086	0.066	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.241	0.316	ü
PFOS_1	499.0 / 80.0	2.92	PFOS			
PFOS_2	499.0 / 99.0	2.98	PFOS	0.102	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.051	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.161	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.048	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.560	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.060	ü
PFBA	213.0 / 169.0	N/A				

Sample Name	J7397-FS(3)	Injection Vial	39
Sample ID	NASB-BLL15-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:24:32	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.240	0.294	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.083	0.071	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.030	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.270	0.282	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.63	PFOA	0.093	0.066	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.326	0.316	ü
PFOS_1	499.0 / 80.0	2.95	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.128	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.051	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.161	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.048	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.560	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.060	ü
PFBA	213.0 / 169.0	1.23				

Sample Name	J7397MS-FS(3)	Injection Vial	40
Sample ID	Matrix Spike Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:35:25	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.279	0.294	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.077	0.071	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.018	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.274	0.282	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.072	0.066	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.299	0.316	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.169	0.174	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.044	0.051	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	PFUnA	0.054	0.058	ü
PFDaA_1	613.0 / 569.0	4.00	PFDaA			
PFDaA_2	613.0 / 319.0	4.00	PFDaA	0.160	0.161	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.24	PFTrDA	0.067	0.064	ü
PFTeDA_1	713.0 / 669.0	4.46	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.46	PFTeDA	0.049	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.531	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.71	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	NEtFOSAA	0.063	0.060	ü
PFBA	213.0 / 169.0	1.18				

Sample Name	J7397MSD-FS(3)	Injection Vial	41
Sample ID	Matrix Spike Duplicate Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:46:18	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.293	0.294	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.074	0.071	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.017	0.020	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.288	0.282	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.072	0.066	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.302	0.316	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.178	0.174	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.044	0.051	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	PFUnA	0.054	0.058	ü
PFDaA_1	613.0 / 569.0	4.00	PFDaA			
PFDaA_2	613.0 / 319.0	4.00	PFDaA	0.157	0.161	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.24	PFTrDA	0.067	0.064	ü
PFTeDA_1	713.0 / 669.0	4.46	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.46	PFTeDA	0.049	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.552	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.71	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	NEtFOSAA	0.057	0.060	ü
PFBA	213.0 / 169.0	1.18				

Sample Name	J7398-FS(3)	Injection Vial	42
Sample ID	NASB-BLL15-DUP-080918	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:57:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.248	0.294	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.088	0.071	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.018	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.279	0.282	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.085	0.066	ü
PFNA_1	463.0 / 419.0	3.04	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.355	0.316	ü
PFOS_1	499.0 / 80.0	2.95	PFOS			
PFOS_2	499.0 / 99.0	3.05	PFOS	0.116	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.051	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.161	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.048	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.560	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.060	ü
PFBA	213.0 / 169.0	1.23				

Sample Name	J7399-FS(3)	Injection Vial	43
Sample ID	NASB-BLL15-GW-03-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:08:02	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.54	PFBS			
PFBS_2	298.9 / 99.0	1.54	PFBS	0.234	0.294	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.071	0.071	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.013	0.020	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.274	0.282	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.62	PFOA	0.085	0.066	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.262	0.316	ü
PFOS_1	499.0 / 80.0	2.95	PFOS			
PFOS_2	499.0 / 99.0	3.03	PFOS	0.123	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.051	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.161	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.048	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.560	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.060	ü
PFBA	213.0 / 169.0	N/A				

Sample Name	J7400-FS(3)	Injection Vial	44
Sample ID	NASB-BLL15-GW-04-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:18:54	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.191	0.294	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.072	0.071	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	PFHpA	0.033	0.020	
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.276	0.282	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.59	PFOA	0.106	0.066	
PFNA_1	463.0 / 419.0	3.04	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.318	0.316	ü
PFOS_1	499.0 / 80.0	3.00	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.148	0.174	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.051	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.161	ü
PFTTrDA_1	663.0 / 619.0	N/A	PFTTrDA			
PFTTrDA_2	663.0 / 169.0	N/A	PFTTrDA	N/A	0.064	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.048	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.560	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.060	ü
PFBA	213.0 / 169.0	1.20				

Sample Name	JY46 IB	Injection Vial	23
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:20:49	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.291	ü
PFHxA_1	313.0 / 269.0	N/A	PFHxA			
PFHxA_2	313.0 / 119.0	N/A	PFHxA	N/A	0.073	ü
PFHpA_1	363.0 / 319.0	N/A	PFHpA			
PFHpA_2	363.0 / 169.0	N/A	PFHpA	N/A	0.023	ü
PFHxS_1	399.0 / 80.0	N/A	PFHxS			
PFHxS_2	399.0 / 99.0	N/A	PFHxS	N/A	0.291	ü
PFOA_1	413.0 / 369.0	N/A	PFOA			
PFOA_2	413.0 / 169.0	N/A	PFOA	N/A	0.069	ü
PFNA_1	463.0 / 419.0	N/A	PFNA			
PFNA_2	463.0 / 219.0	N/A	PFNA	N/A	0.297	ü
PFOS_1	499.0 / 80.0	N/A	PFOS			
PFOS_2	499.0 / 99.0	N/A	PFOS	N/A	0.181	ü
PFDA_1	513.0 / 469.0	N/A	PFDA			
PFDA_2	513.0 / 219.0	N/A	PFDA	N/A	0.050	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	ü
PFTeDA_1	713.0 / 669.0	4.45	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.45	PFTeDA	0.059	0.050	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.583	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.057	ü
PFBA	213.0 / 169.0	1.09				

Sample Name	J7394-FS(3)	Injection Vial	38
Sample ID	NASB-CCC-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T01:19:47	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.244	0.291	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.071	0.073	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.21	PFHpA	0.027	0.023	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.271	0.291	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.091	0.069	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.271	0.297	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.174	0.181	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.39	PFDA	0.045	0.050	ü
PFUnA_1	563.0 / 519.0	N/A	PFUnA			
PFUnA_2	563.0 / 269.0	N/A	PFUnA	N/A	0.058	ü
PFDaA_1	613.0 / 569.0	N/A	PFDaA			
PFDaA_2	613.0 / 319.0	N/A	PFDaA	N/A	0.162	ü
PFTrDA_1	663.0 / 619.0	N/A	PFTrDA			
PFTrDA_2	663.0 / 169.0	N/A	PFTrDA	N/A	0.067	ü
PFTeDA_1	713.0 / 669.0	N/A	PFTeDA			
PFTeDA_2	713.0 / 169.0	N/A	PFTeDA	N/A	0.050	ü
NMeFOSAA_1	570.0 / 419.0	N/A	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	N/A	NMeFOSAA	N/A	0.583	ü
NEtFOSAA_1	584.0 / 419.0	N/A	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	N/A	NEtFOSAA	N/A	0.057	ü
PFBA	213.0 / 169.0	1.13				

Sample Name	JY46 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:53:03	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	34261.46	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	34261.46	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	77701.35	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	77701.35	250.00
PFHpA_1	363.0 / 319.0	N/A	13C8-PFOA	421.0 / 376.0	100353.03	250.00
PFHpA_2	363.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	100353.03	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	27581.07	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	27581.07	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	100353.03	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	100353.03	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	94097.76	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	94097.76	250.00
PFOS_1	499.0 / 80.0	N/A	13C8-PFOS	507.0 / 99.0	33043.44	239.25
PFOS_2	499.0 / 99.0	N/A	13C8-PFOS	507.0 / 99.0	33043.44	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	109158.14	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	109158.14	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	107435.59	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	107435.59	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	122579.14	250.00
PFDoA_2	613.0 / 319.0	4.01	13C2-PFDoA	615.0 / 570.0	122579.14	250.00
PFTeDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	100055.30	250.00
PFTeDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	100055.30	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	100055.30	250.00
PFTeDA_2	713.0 / 169.0	4.45	13C2-PFTeDA	715.0 / 670.0	100055.30	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	18110.41	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	18110.41	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	25161.81	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	25161.81	250.00
PFBA	213.0 / 169.0	N/A	13C4-PFBA	217.0 / 172.0	93246.92	250.00

Sample Name	CR552PB-FS(3)	Injection Vial	32
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T04:46:41	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	29407.04	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	29407.04	232.25
PFHxA_1	313.0 / 269.0	1.88	13C5-PFHxA	318.0 / 273.0	72415.15	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	72415.15	250.00
PFHpA_1	363.0 / 319.0	N/A	13C8-PFOA	421.0 / 376.0	91351.21	250.00
PFHpA_2	363.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	91351.21	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	24599.37	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	24599.37	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	91351.21	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	91351.21	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	91309.45	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	91309.45	250.00
PFOS_1	499.0 / 80.0	3.05	13C8-PFOS	507.0 / 99.0	26973.50	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	26973.50	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	96269.78	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	96269.78	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	101665.62	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	101665.62	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	98222.40	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	98222.40	250.00
PFTeDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	80154.41	250.00
PFTeDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	80154.41	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	80154.41	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	80154.41	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	14057.46	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	14057.46	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	19015.34	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	19015.34	250.00
PFBA	213.0 / 169.0	1.18	13C4-PFBA	217.0 / 172.0	84916.33	250.00

Sample Name	CR553LCS-FS(3)	Injection Vial	33
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T04:57:34	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	28671.21	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	28671.21	232.25
PFHxA_1	313.0 / 269.0	1.87	13C5-PFHxA	318.0 / 273.0	68722.42	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	68722.42	250.00
PFHpA_1	363.0 / 319.0	2.26	13C8-PFOA	421.0 / 376.0	77037.29	250.00
PFHpA_2	363.0 / 169.0	2.26	13C8-PFOA	421.0 / 376.0	77037.29	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	24361.37	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	24361.37	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	77037.29	250.00
PFOA_2	413.0 / 169.0	2.67	13C8-PFOA	421.0 / 376.0	77037.29	250.00
PFNA_1	463.0 / 419.0	3.06	13C9-PFNA	472.0 / 427.0	85519.63	250.00
PFNA_2	463.0 / 219.0	3.06	13C9-PFNA	472.0 / 427.0	85519.63	250.00
PFOS_1	499.0 / 80.0	3.05	13C8-PFOS	507.0 / 99.0	30864.27	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	30864.27	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	96443.37	250.00
PFDA_2	513.0 / 219.0	3.41	13C6-PFDA	519.0 / 474.0	96443.37	250.00
PFUnA_1	563.0 / 519.0	3.72	13C7-PFUnA	570.0 / 525.0	98958.43	250.00
PFUnA_2	563.0 / 269.0	3.72	13C7-PFUnA	570.0 / 525.0	98958.43	250.00
PFDoA_1	613.0 / 569.0	4.01	13C2-PFDoA	615.0 / 570.0	104048.93	250.00
PFDoA_2	613.0 / 319.0	4.00	13C2-PFDoA	615.0 / 570.0	104048.93	250.00
PFTeDA_1	663.0 / 619.0	4.25	13C2-PFTeDA	715.0 / 670.0	84606.47	250.00
PFTeDA_2	663.0 / 169.0	4.25	13C2-PFTeDA	715.0 / 670.0	84606.47	250.00
PFTeDA_1	713.0 / 669.0	4.47	13C2-PFTeDA	715.0 / 670.0	84606.47	250.00
PFTeDA_2	713.0 / 169.0	4.47	13C2-PFTeDA	715.0 / 670.0	84606.47	250.00
NMeFOSAA_1	570.0 / 419.0	3.56	d3-MeFOSAA	573.0 / 419.0	16109.51	250.00
NMeFOSAA_2	570.0 / 512.0	3.56	d3-MeFOSAA	573.0 / 419.0	16109.51	250.00
NEtFOSAA_1	584.0 / 419.0	3.72	d5-EtFOSAA	589.0 / 419.0	17054.79	250.00
NEtFOSAA_2	584.0 / 483.0	3.72	d5-EtFOSAA	589.0 / 419.0	17054.79	250.00
PFBA	213.0 / 169.0	1.16	13C4-PFBA	217.0 / 172.0	79837.95	250.00

Sample Name	J7402-FS(3)	Injection Vial	34
Sample ID	NASB-BLL15-GW-RB01-080918	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:08:27	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	N/A	13C3-PFBS	302.0 / 99.0	30832.86	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	30832.86	232.25
PFHxA_1	313.0 / 269.0	1.88	13C5-PFHxA	318.0 / 273.0	69185.48	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	69185.48	250.00
PFHpA_1	363.0 / 319.0	2.27	13C8-PFOA	421.0 / 376.0	80784.54	250.00
PFHpA_2	363.0 / 169.0	2.25	13C8-PFOA	421.0 / 376.0	80784.54	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	24121.25	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	24121.25	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	80784.54	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	80784.54	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	81510.63	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	81510.63	250.00
PFOS_1	499.0 / 80.0	3.05	13C8-PFOS	507.0 / 99.0	27113.86	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	27113.86	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	94953.06	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	94953.06	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	95937.34	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	95937.34	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	92911.27	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	92911.27	250.00
PFTeDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	81210.89	250.00
PFTeDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	81210.89	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	81210.89	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	81210.89	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	15516.77	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	15516.77	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	15683.10	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	15683.10	250.00
PFBA	213.0 / 169.0	N/A	13C4-PFBA	217.0 / 172.0	72422.89	250.00

Sample Name	J7394-FS(3)	Injection Vial	35
Sample ID	NASB-CCC-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:19:19	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.56	13C3-PFBS	302.0 / 99.0	6143.06	232.25
PFBS_2	298.9 / 99.0	1.56	13C3-PFBS	302.0 / 99.0	6143.06	232.25
PFHxA_1	313.0 / 269.0	1.88	13C5-PFHxA	318.0 / 273.0	10502.98	250.00
PFHxA_2	313.0 / 119.0	1.87	13C5-PFHxA	318.0 / 273.0	10502.98	250.00
PFHpA_1	363.0 / 319.0	2.27	13C8-PFOA	421.0 / 376.0	13473.06	250.00
PFHpA_2	363.0 / 169.0	2.30	13C8-PFOA	421.0 / 376.0	13473.06	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	5551.88	236.50
PFHxS_2	399.0 / 99.0	2.29	13C3-PFHxS	402.0 / 99.0	5551.88	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	13473.06	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	13473.06	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	15503.12	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	15503.12	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	4875.02	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	4875.02	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	13420.11	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	13420.11	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	14587.64	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	14587.64	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	16591.25	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	16591.25	250.00
PFTeDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	14303.16	250.00
PFTeDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	14303.16	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	14303.16	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	14303.16	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	3412.82	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	3412.82	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	2354.12	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	2354.12	250.00
PFBA	213.0 / 169.0	N/A	13C4-PFBA	217.0 / 172.0	15626.93	250.00

Sample Name	J7395-FS(3)	Injection Vial	36
Sample ID	NASB-CCC-GW-02-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:30:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	30077.90	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	30077.90	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	61304.37	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	61304.37	250.00
PFHpA_1	363.0 / 319.0	2.25	13C8-PFOA	421.0 / 376.0	65204.98	250.00
PFHpA_2	363.0 / 169.0	2.24	13C8-PFOA	421.0 / 376.0	65204.98	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	20551.92	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	20551.92	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	65204.98	250.00
PFOA_2	413.0 / 169.0	2.62	13C8-PFOA	421.0 / 376.0	65204.98	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	72788.15	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	72788.15	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	23055.98	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	23055.98	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	71341.47	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	71341.47	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	68017.80	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	68017.80	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	75945.04	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	75945.04	250.00
PFTeDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	59200.96	250.00
PFTeDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	59200.96	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	59200.96	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	59200.96	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	11050.93	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	11050.93	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	11639.35	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	11639.35	250.00
PFBA	213.0 / 169.0	1.16	13C4-PFBA	217.0 / 172.0	44554.14	250.00

Sample Name	J7396-FS(3)	Injection Vial	37
Sample ID	NASB-BLL15-GW-02-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:41:02	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	23599.29	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	23599.29	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	53350.25	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	53350.25	250.00
PFHpA_1	363.0 / 319.0	2.26	13C8-PFOA	421.0 / 376.0	55043.11	250.00
PFHpA_2	363.0 / 169.0	2.24	13C8-PFOA	421.0 / 376.0	55043.11	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	21140.58	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	21140.58	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	55043.11	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	55043.11	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	60857.52	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	60857.52	250.00
PFOS_1	499.0 / 80.0	2.92	13C8-PFOS	507.0 / 99.0	19836.11	239.25
PFOS_2	499.0 / 99.0	2.98	13C8-PFOS	507.0 / 99.0	19836.11	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	67334.66	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	67334.66	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	61658.07	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	61658.07	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	60668.76	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	60668.76	250.00
PFTeDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	44024.54	250.00
PFTeDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	44024.54	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	44024.54	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	44024.54	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	10716.57	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	10716.57	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	11715.56	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	11715.56	250.00
PFBA	213.0 / 169.0	N/A	13C4-PFBA	217.0 / 172.0	29879.86	250.00

Sample Name	J7397-FS(3)	Injection Vial	39
Sample ID	NASB-BLL15-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:24:32	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	20461.71	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	20461.71	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	57983.66	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	57983.66	250.00
PFHpA_1	363.0 / 319.0	2.26	13C8-PFOA	421.0 / 376.0	64922.46	250.00
PFHpA_2	363.0 / 169.0	2.25	13C8-PFOA	421.0 / 376.0	64922.46	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	21237.59	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	21237.59	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	64922.46	250.00
PFOA_2	413.0 / 169.0	2.63	13C8-PFOA	421.0 / 376.0	64922.46	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	66493.66	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	66493.66	250.00
PFOS_1	499.0 / 80.0	2.95	13C8-PFOS	507.0 / 99.0	17183.13	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	17183.13	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	68030.10	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	68030.10	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	65858.13	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	65858.13	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	57815.06	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	57815.06	250.00
PFTeDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	30344.32	250.00
PFTeDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	30344.32	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	30344.32	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	30344.32	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	10237.10	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	10237.10	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	9594.22	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	9594.22	250.00
PFBA	213.0 / 169.0	1.23	13C4-PFBA	217.0 / 172.0	22674.43	250.00

Sample Name	J7397MS-FS(3)	Injection Vial	40
Sample ID	Matrix Spike Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:35:25	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	21950.08	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	21950.08	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	62127.85	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	62127.85	250.00
PFHpA_1	363.0 / 319.0	2.26	13C8-PFOA	421.0 / 376.0	70406.58	250.00
PFHpA_2	363.0 / 169.0	2.25	13C8-PFOA	421.0 / 376.0	70406.58	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	21460.17	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	21460.17	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	70406.58	250.00
PFOA_2	413.0 / 169.0	2.66	13C8-PFOA	421.0 / 376.0	70406.58	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	68422.13	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	68422.13	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	18635.96	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	18635.96	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	68902.86	250.00
PFDA_2	513.0 / 219.0	3.40	13C6-PFDA	519.0 / 474.0	68902.86	250.00
PFUnA_1	563.0 / 519.0	3.72	13C7-PFUnA	570.0 / 525.0	68627.11	250.00
PFUnA_2	563.0 / 269.0	3.72	13C7-PFUnA	570.0 / 525.0	68627.11	250.00
PFDoA_1	613.0 / 569.0	4.00	13C2-PFDoA	615.0 / 570.0	66702.83	250.00
PFDoA_2	613.0 / 319.0	4.00	13C2-PFDoA	615.0 / 570.0	66702.83	250.00
PFTeDA_1	663.0 / 619.0	4.24	13C2-PFTeDA	715.0 / 670.0	38359.07	250.00
PFTeDA_2	663.0 / 169.0	4.24	13C2-PFTeDA	715.0 / 670.0	38359.07	250.00
PFTeDA_1	713.0 / 669.0	4.46	13C2-PFTeDA	715.0 / 670.0	38359.07	250.00
PFTeDA_2	713.0 / 169.0	4.46	13C2-PFTeDA	715.0 / 670.0	38359.07	250.00
NMeFOSAA_1	570.0 / 419.0	3.55	d3-MeFOSAA	573.0 / 419.0	10942.96	250.00
NMeFOSAA_2	570.0 / 512.0	3.55	d3-MeFOSAA	573.0 / 419.0	10942.96	250.00
NEtFOSAA_1	584.0 / 419.0	3.71	d5-EtFOSAA	589.0 / 419.0	9953.45	250.00
NEtFOSAA_2	584.0 / 483.0	3.71	d5-EtFOSAA	589.0 / 419.0	9953.45	250.00
PFBA	213.0 / 169.0	1.18	13C4-PFBA	217.0 / 172.0	22921.18	250.00

Sample Name	J7397MSD-FS(3)	Injection Vial	41
Sample ID	Matrix Spike Duplicate Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:46:18	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	22344.70	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	22344.70	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	62514.16	250.00
PFHxA_2	313.0 / 119.0	1.85	13C5-PFHxA	318.0 / 273.0	62514.16	250.00
PFHpA_1	363.0 / 319.0	2.25	13C8-PFOA	421.0 / 376.0	76349.50	250.00
PFHpA_2	363.0 / 169.0	2.25	13C8-PFOA	421.0 / 376.0	76349.50	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	26595.17	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	26595.17	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	76349.50	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	76349.50	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	75995.98	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	75995.98	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	22399.16	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	22399.16	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	84295.26	250.00
PFDA_2	513.0 / 219.0	3.40	13C6-PFDA	519.0 / 474.0	84295.26	250.00
PFUnA_1	563.0 / 519.0	3.72	13C7-PFUnA	570.0 / 525.0	89342.64	250.00
PFUnA_2	563.0 / 269.0	3.72	13C7-PFUnA	570.0 / 525.0	89342.64	250.00
PFDoA_1	613.0 / 569.0	4.00	13C2-PFDoA	615.0 / 570.0	77667.44	250.00
PFDoA_2	613.0 / 319.0	4.00	13C2-PFDoA	615.0 / 570.0	77667.44	250.00
PFTeDA_1	663.0 / 619.0	4.24	13C2-PFTeDA	715.0 / 670.0	49124.25	250.00
PFTeDA_2	663.0 / 169.0	4.24	13C2-PFTeDA	715.0 / 670.0	49124.25	250.00
PFTeDA_1	713.0 / 669.0	4.46	13C2-PFTeDA	715.0 / 670.0	49124.25	250.00
PFTeDA_2	713.0 / 169.0	4.46	13C2-PFTeDA	715.0 / 670.0	49124.25	250.00
NMeFOSAA_1	570.0 / 419.0	3.55	d3-MeFOSAA	573.0 / 419.0	12314.71	250.00
NMeFOSAA_2	570.0 / 512.0	3.55	d3-MeFOSAA	573.0 / 419.0	12314.71	250.00
NEtFOSAA_1	584.0 / 419.0	3.71	d5-EtFOSAA	589.0 / 419.0	12058.27	250.00
NEtFOSAA_2	584.0 / 483.0	3.71	d5-EtFOSAA	589.0 / 419.0	12058.27	250.00
PFBA	213.0 / 169.0	1.18	13C4-PFBA	217.0 / 172.0	23629.51	250.00

Sample Name	J7398-FS(3)	Injection Vial	42
Sample ID	NASB-BLL15-DUP-080918	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:57:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	19733.81	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	19733.81	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	47492.29	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	47492.29	250.00
PFHpA_1	363.0 / 319.0	2.26	13C8-PFOA	421.0 / 376.0	56878.42	250.00
PFHpA_2	363.0 / 169.0	2.25	13C8-PFOA	421.0 / 376.0	56878.42	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	17103.69	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	17103.69	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	56878.42	250.00
PFOA_2	413.0 / 169.0	2.64	13C8-PFOA	421.0 / 376.0	56878.42	250.00
PFNA_1	463.0 / 419.0	3.04	13C9-PFNA	472.0 / 427.0	62328.15	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	62328.15	250.00
PFOS_1	499.0 / 80.0	2.95	13C8-PFOS	507.0 / 99.0	18457.83	239.25
PFOS_2	499.0 / 99.0	3.05	13C8-PFOS	507.0 / 99.0	18457.83	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	63733.12	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	63733.12	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	57520.92	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	57520.92	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	50622.21	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	50622.21	250.00
PFTeDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	30314.87	250.00
PFTeDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	30314.87	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	30314.87	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	30314.87	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	8954.70	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	8954.70	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	9844.24	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	9844.24	250.00
PFBA	213.0 / 169.0	1.23	13C4-PFBA	217.0 / 172.0	19008.09	250.00

Sample Name	J7399-FS(3)	Injection Vial	43
Sample ID	NASB-BLL15-GW-03-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:08:02	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.54	13C3-PFBS	302.0 / 99.0	20534.75	232.25
PFBS_2	298.9 / 99.0	1.54	13C3-PFBS	302.0 / 99.0	20534.75	232.25
PFHxA_1	313.0 / 269.0	1.85	13C5-PFHxA	318.0 / 273.0	53781.37	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	53781.37	250.00
PFHpA_1	363.0 / 319.0	2.25	13C8-PFOA	421.0 / 376.0	63117.34	250.00
PFHpA_2	363.0 / 169.0	2.25	13C8-PFOA	421.0 / 376.0	63117.34	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	20249.61	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	20249.61	236.50
PFOA_1	413.0 / 369.0	2.66	13C8-PFOA	421.0 / 376.0	63117.34	250.00
PFOA_2	413.0 / 169.0	2.62	13C8-PFOA	421.0 / 376.0	63117.34	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	69253.71	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	69253.71	250.00
PFOS_1	499.0 / 80.0	2.95	13C8-PFOS	507.0 / 99.0	20964.48	239.25
PFOS_2	499.0 / 99.0	3.03	13C8-PFOS	507.0 / 99.0	20964.48	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	65913.95	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	65913.95	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	70439.12	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	70439.12	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	64844.16	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	64844.16	250.00
PFTeDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	31776.44	250.00
PFTeDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	31776.44	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	31776.44	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	31776.44	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	11854.50	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	11854.50	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	11490.56	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	11490.56	250.00
PFBA	213.0 / 169.0	N/A	13C4-PFBA	217.0 / 172.0	22042.83	250.00

Sample Name	J7400-FS(3)	Injection Vial	44
Sample ID	NASB-BLL15-GW-04-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:18:54	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
PFBS_1	298.9 / 80.0	1.55	13C3-PFBS	302.0 / 99.0	21128.28	232.25
PFBS_2	298.9 / 99.0	1.55	13C3-PFBS	302.0 / 99.0	21128.28	232.25
PFHxA_1	313.0 / 269.0	1.86	13C5-PFHxA	318.0 / 273.0	41890.12	250.00
PFHxA_2	313.0 / 119.0	1.86	13C5-PFHxA	318.0 / 273.0	41890.12	250.00
PFHpA_1	363.0 / 319.0	2.25	13C8-PFOA	421.0 / 376.0	51231.36	250.00
PFHpA_2	363.0 / 169.0	2.24	13C8-PFOA	421.0 / 376.0	51231.36	250.00
PFHxS_1	399.0 / 80.0	2.28	13C3-PFHxS	402.0 / 99.0	15536.26	236.50
PFHxS_2	399.0 / 99.0	2.28	13C3-PFHxS	402.0 / 99.0	15536.26	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	51231.36	250.00
PFOA_2	413.0 / 169.0	2.59	13C8-PFOA	421.0 / 376.0	51231.36	250.00
PFNA_1	463.0 / 419.0	3.04	13C9-PFNA	472.0 / 427.0	51435.62	250.00
PFNA_2	463.0 / 219.0	3.04	13C9-PFNA	472.0 / 427.0	51435.62	250.00
PFOS_1	499.0 / 80.0	3.00	13C8-PFOS	507.0 / 99.0	15272.74	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	15272.74	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	57183.72	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	57183.72	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	50662.45	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	50662.45	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	46851.47	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	46851.47	250.00
PFTeDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	31764.86	250.00
PFTeDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	31764.86	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	31764.86	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	31764.86	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	7659.15	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	7659.15	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	11045.88	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	11045.88	250.00
PFBA	213.0 / 169.0	1.20	13C4-PFBA	217.0 / 172.0	21606.44	250.00

Sample Name	JY46 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:53:03	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.17	13C3-PFBA	216.0 / 172.0	55663.08	250.00
13C2-PFDoA	615.0 / 570.0	4.00	13C2-PFDA	515.0 / 470.0	98444.02	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	30847.94	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	30847.94	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	86993.18	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	86993.18	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	86993.18	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	86993.18	250.00
13C6-PFDA	519.0 / 474.0	3.40	13C2-PFDA	515.0 / 470.0	98444.02	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	98444.02	250.00
13C2-PFTeDA	715.0 / 670.0	4.47	13C2-PFDA	515.0 / 470.0	98444.02	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	30847.94	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	30847.94	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	30847.94	239.25

Sample Name	CR552PB-FS(3)	Injection Vial	32
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T04:46:41	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.16	13C3-PFBA	216.0 / 172.0	39560.86	250.00
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	69525.37	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	19734.44	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	19734.44	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	61640.47	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	61640.47	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	61640.47	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	61640.47	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	69525.37	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	69525.37	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	69525.37	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	19734.44	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	19734.44	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	19734.44	239.25

Sample Name	CR553LCS-FS(3)	Injection Vial	33
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T04:57:34	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.16	13C3-PFBA	216.0 / 172.0	55753.46	250.00
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	78542.82	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	25543.65	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	25543.65	239.25
13C5-PFHxA	318.0 / 273.0	1.85	13C2-PFOA	415.0 / 370.0	73989.36	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	73989.36	250.00
13C8-PFOA	421.0 / 376.0	2.66	13C2-PFOA	415.0 / 370.0	73989.36	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	73989.36	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	78542.82	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	78542.82	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	78542.82	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	25543.65	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	25543.65	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	25543.65	239.25

Sample Name	J7402-FS(3)	Injection Vial	34
Sample ID	NASB-BLL15-GW-RB01-080918	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:08:27	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.16	13C3-PFBA	216.0 / 172.0	55148.70	250.00
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	92715.53	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	28797.12	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	28797.12	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	79568.13	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	79568.13	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	79568.13	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	79568.13	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	92715.53	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	92715.53	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	92715.53	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	28797.12	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	28797.12	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	28797.12	239.25

Sample Name	J7394-FS(3)	Injection Vial	35
Sample ID	NASB-CCC-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:19:19	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.18	13C3-PFBA	216.0 / 172.0	10273.60	250.00
13C2-PFDoA	615.0 / 570.0	4.00	13C2-PFDA	515.0 / 470.0	17532.80	250.00
d3-MeFOSAA	573.0 / 419.0	3.56	13C4-PFOS	503.0 / 99.0	5918.75	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	5918.75	239.25
13C5-PFHxA	318.0 / 273.0	1.86	13C2-PFOA	415.0 / 370.0	16178.63	250.00
13C4-PFHpA	367.0 / 322.0	2.26	13C2-PFOA	415.0 / 370.0	16178.63	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	16178.63	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	16178.63	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	17532.80	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	17532.80	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	17532.80	250.00
13C3-PFBS	302.0 / 99.0	1.54	13C4-PFOS	503.0 / 99.0	5918.75	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	5918.75	239.25
13C8-PFOS	507.0 / 99.0	3.04	13C4-PFOS	503.0 / 99.0	5918.75	239.25

Sample Name	J7395-FS(3)	Injection Vial	36
Sample ID	NASB-CCC-GW-02-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:30:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.16	13C3-PFBA	216.0 / 172.0	47502.78	250.00
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	85960.93	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	26519.64	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	26519.64	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	78894.96	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	78894.96	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	78894.96	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	78894.96	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	85960.93	250.00
13C7-PFUnA	570.0 / 525.0	3.70	13C2-PFDA	515.0 / 470.0	85960.93	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	85960.93	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	26519.64	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	26519.64	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	26519.64	239.25

Sample Name	J7396-FS(3)	Injection Vial	37
Sample ID	NASB-BLL15-GW-02-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:41:02	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.16	13C3-PFBA	216.0 / 172.0	37713.82	250.00
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	77585.56	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	19254.63	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	19254.63	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	62008.69	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	62008.69	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	62008.69	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	62008.69	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	77585.56	250.00
13C7-PFUnA	570.0 / 525.0	3.71	13C2-PFDA	515.0 / 470.0	77585.56	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	77585.56	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	19254.63	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	19254.63	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	19254.63	239.25

Sample Name	J7397-FS(3)	Injection Vial	39
Sample ID	NASB-BLL15-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:24:32	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.16	13C3-PFBA	216.0 / 172.0	173257.35	250.00
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	68663.42	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	18517.23	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	18517.23	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	58674.53	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	58674.53	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	58674.53	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	58674.53	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	68663.42	250.00
13C7-PFUnA	570.0 / 525.0	3.70	13C2-PFDA	515.0 / 470.0	68663.42	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	68663.42	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	18517.23	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	18517.23	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	18517.23	239.25

Sample Name	J7397MS-FS(3)	Injection Vial	40
Sample ID	Matrix Spike Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:35:25	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.16	13C3-PFBA	216.0 / 172.0	192682.81	250.00
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	86049.09	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	20046.86	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	20046.86	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	74066.12	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	74066.12	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	74066.12	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	74066.12	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	86049.09	250.00
13C7-PFUnA	570.0 / 525.0	3.70	13C2-PFDA	515.0 / 470.0	86049.09	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	86049.09	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	20046.86	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	20046.86	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	20046.86	239.25

Sample Name	J7397MSD-FS(3)	Injection Vial	41
Sample ID	Matrix Spike Duplicate Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:46:18	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.15	13C3-PFBA	216.0 / 172.0	195651.07	250.00
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	99733.95	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	26463.71	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	26463.71	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	87164.02	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	87164.02	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	87164.02	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	87164.02	250.00
13C6-PFDA	519.0 / 474.0	3.38	13C2-PFDA	515.0 / 470.0	99733.95	250.00
13C7-PFUnA	570.0 / 525.0	3.70	13C2-PFDA	515.0 / 470.0	99733.95	250.00
13C2-PFTeDA	715.0 / 670.0	4.45	13C2-PFDA	515.0 / 470.0	99733.95	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	26463.71	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	26463.71	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	26463.71	239.25

Sample Name	J7398-FS(3)	Injection Vial	42
Sample ID	NASB-BLL15-DUP-080918	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:57:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.16	13C3-PFBA	216.0 / 172.0	168448.12	250.00
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	81245.71	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	22238.46	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	22238.46	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	67737.02	250.00
13C4-PFHpA	367.0 / 322.0	2.25	13C2-PFOA	415.0 / 370.0	67737.02	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	67737.02	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	67737.02	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	81245.71	250.00
13C7-PFUnA	570.0 / 525.0	3.70	13C2-PFDA	515.0 / 470.0	81245.71	250.00
13C2-PFTeDA	715.0 / 670.0	4.46	13C2-PFDA	515.0 / 470.0	81245.71	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	22238.46	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	22238.46	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	22238.46	239.25

Sample Name	J7399-FS(3)	Injection Vial	43
Sample ID	NASB-BLL15-GW-03-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:08:02	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.16	13C3-PFBA	216.0 / 172.0	101986.13	250.00
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	81268.83	250.00
d3-MeFOSAA	573.0 / 419.0	3.55	13C4-PFOS	503.0 / 99.0	19123.67	239.25
d5-EtFOSAA	589.0 / 419.0	3.70	13C4-PFOS	503.0 / 99.0	19123.67	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	65277.04	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	65277.04	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	65277.04	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	65277.04	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	81268.83	250.00
13C7-PFUnA	570.0 / 525.0	3.70	13C2-PFDA	515.0 / 470.0	81268.83	250.00
13C2-PFTeDA	715.0 / 670.0	4.45	13C2-PFDA	515.0 / 470.0	81268.83	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	19123.67	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	19123.67	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	19123.67	239.25

Sample Name	J7400-FS(3)	Injection Vial	44
Sample ID	NASB-BLL15-GW-04-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:18:54	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.16	13C3-PFBA	216.0 / 172.0	68374.98	250.00
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	81919.89	250.00
d3-MeFOSAA	573.0 / 419.0	3.54	13C4-PFOS	503.0 / 99.0	19104.92	239.25
d5-EtFOSAA	589.0 / 419.0	3.71	13C4-PFOS	503.0 / 99.0	19104.92	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	66198.76	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	66198.76	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	66198.76	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	66198.76	250.00
13C6-PFDA	519.0 / 474.0	3.38	13C2-PFDA	515.0 / 470.0	81919.89	250.00
13C7-PFUnA	570.0 / 525.0	3.70	13C2-PFDA	515.0 / 470.0	81919.89	250.00
13C2-PFTeDA	715.0 / 670.0	4.45	13C2-PFDA	515.0 / 470.0	81919.89	250.00
13C3-PFBS	302.0 / 99.0	1.53	13C4-PFOS	503.0 / 99.0	19104.92	239.25
13C3-PFHxS	402.0 / 99.0	2.27	13C4-PFOS	503.0 / 99.0	19104.92	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	19104.92	239.25

Sample Name	JY46 IB	Injection Vial	23
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:20:49	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	26510.06	232.25
PFBS_2	298.9 / 99.0	N/A	13C3-PFBS	302.0 / 99.0	26510.06	232.25
PFHxA_1	313.0 / 269.0	N/A	13C5-PFHxA	318.0 / 273.0	67329.27	250.00
PFHxA_2	313.0 / 119.0	N/A	13C5-PFHxA	318.0 / 273.0	67329.27	250.00
PFHpA_1	363.0 / 319.0	N/A	13C8-PFOA	421.0 / 376.0	85115.99	250.00
PFHpA_2	363.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	85115.99	250.00
PFHxS_1	399.0 / 80.0	N/A	13C3-PFHxS	402.0 / 99.0	24160.18	236.50
PFHxS_2	399.0 / 99.0	N/A	13C3-PFHxS	402.0 / 99.0	24160.18	236.50
PFOA_1	413.0 / 369.0	N/A	13C8-PFOA	421.0 / 376.0	85115.99	250.00
PFOA_2	413.0 / 169.0	N/A	13C8-PFOA	421.0 / 376.0	85115.99	250.00
PFNA_1	463.0 / 419.0	N/A	13C9-PFNA	472.0 / 427.0	85206.10	250.00
PFNA_2	463.0 / 219.0	N/A	13C9-PFNA	472.0 / 427.0	85206.10	250.00
PFOS_1	499.0 / 80.0	N/A	13C8-PFOS	507.0 / 99.0	27956.22	239.25
PFOS_2	499.0 / 99.0	N/A	13C8-PFOS	507.0 / 99.0	27956.22	239.25
PFDA_1	513.0 / 469.0	N/A	13C6-PFDA	519.0 / 474.0	91039.70	250.00
PFDA_2	513.0 / 219.0	N/A	13C6-PFDA	519.0 / 474.0	91039.70	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	94746.90	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	94746.90	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	95292.58	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	95292.58	250.00
PFTeDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	81478.47	250.00
PFTeDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	81478.47	250.00
PFTeDA_1	713.0 / 669.0	4.45	13C2-PFTeDA	715.0 / 670.0	81478.47	250.00
PFTeDA_2	713.0 / 169.0	4.45	13C2-PFTeDA	715.0 / 670.0	81478.47	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	12882.64	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	12882.64	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	18153.75	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	18153.75	250.00
PFBA	213.0 / 169.0	1.09	13C4-PFBA	217.0 / 172.0	80933.26	250.00

Sample Name	J7394-FS(3)	Injection Vial	38
Sample ID	NASB-CCC-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T01:19:47	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	22605.17	232.25
PFBS_2	298.9 / 99.0	1.53	13C3-PFBS	302.0 / 99.0	22605.17	232.25
PFHxA_1	313.0 / 269.0	1.84	13C5-PFHxA	318.0 / 273.0	41871.52	250.00
PFHxA_2	313.0 / 119.0	1.84	13C5-PFHxA	318.0 / 273.0	41871.52	250.00
PFHpA_1	363.0 / 319.0	2.25	13C8-PFOA	421.0 / 376.0	44608.78	250.00
PFHpA_2	363.0 / 169.0	2.21	13C8-PFOA	421.0 / 376.0	44608.78	250.00
PFHxS_1	399.0 / 80.0	2.27	13C3-PFHxS	402.0 / 99.0	14416.97	236.50
PFHxS_2	399.0 / 99.0	2.27	13C3-PFHxS	402.0 / 99.0	14416.97	236.50
PFOA_1	413.0 / 369.0	2.65	13C8-PFOA	421.0 / 376.0	44608.78	250.00
PFOA_2	413.0 / 169.0	2.65	13C8-PFOA	421.0 / 376.0	44608.78	250.00
PFNA_1	463.0 / 419.0	3.05	13C9-PFNA	472.0 / 427.0	45490.01	250.00
PFNA_2	463.0 / 219.0	3.05	13C9-PFNA	472.0 / 427.0	45490.01	250.00
PFOS_1	499.0 / 80.0	3.04	13C8-PFOS	507.0 / 99.0	14008.42	239.25
PFOS_2	499.0 / 99.0	3.04	13C8-PFOS	507.0 / 99.0	14008.42	239.25
PFDA_1	513.0 / 469.0	3.40	13C6-PFDA	519.0 / 474.0	49491.11	250.00
PFDA_2	513.0 / 219.0	3.39	13C6-PFDA	519.0 / 474.0	49491.11	250.00
PFUnA_1	563.0 / 519.0	N/A	13C7-PFUnA	570.0 / 525.0	51983.45	250.00
PFUnA_2	563.0 / 269.0	N/A	13C7-PFUnA	570.0 / 525.0	51983.45	250.00
PFDoA_1	613.0 / 569.0	N/A	13C2-PFDoA	615.0 / 570.0	50525.14	250.00
PFDoA_2	613.0 / 319.0	N/A	13C2-PFDoA	615.0 / 570.0	50525.14	250.00
PFTeDA_1	663.0 / 619.0	N/A	13C2-PFTeDA	715.0 / 670.0	45410.77	250.00
PFTeDA_2	663.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	45410.77	250.00
PFTeDA_1	713.0 / 669.0	N/A	13C2-PFTeDA	715.0 / 670.0	45410.77	250.00
PFTeDA_2	713.0 / 169.0	N/A	13C2-PFTeDA	715.0 / 670.0	45410.77	250.00
NMeFOSAA_1	570.0 / 419.0	N/A	d3-MeFOSAA	573.0 / 419.0	7862.08	250.00
NMeFOSAA_2	570.0 / 512.0	N/A	d3-MeFOSAA	573.0 / 419.0	7862.08	250.00
NEtFOSAA_1	584.0 / 419.0	N/A	d5-EtFOSAA	589.0 / 419.0	6839.67	250.00
NEtFOSAA_2	584.0 / 483.0	N/A	d5-EtFOSAA	589.0 / 419.0	6839.67	250.00
PFBA	213.0 / 169.0	1.13	13C4-PFBA	217.0 / 172.0	40781.50	250.00

Sample Name	JY46 IB	Injection Vial	23
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:20:49	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.15	13C3-PFBA	216.0 / 172.0	56562.61	250.00
13C2-PFDoA	615.0 / 570.0	3.98	13C2-PFDA	515.0 / 470.0	83546.56	250.00
d3-MeFOSAA	573.0 / 419.0	3.54	13C4-PFOS	503.0 / 99.0	27744.14	239.25
d5-EtFOSAA	589.0 / 419.0	3.70	13C4-PFOS	503.0 / 99.0	27744.14	239.25
13C5-PFHxA	318.0 / 273.0	1.84	13C2-PFOA	415.0 / 370.0	74344.26	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	74344.26	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	74344.26	250.00
13C9-PFNA	472.0 / 427.0	3.04	13C2-PFOA	415.0 / 370.0	74344.26	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	83546.56	250.00
13C7-PFUnA	570.0 / 525.0	3.70	13C2-PFDA	515.0 / 470.0	83546.56	250.00
13C2-PFTeDA	715.0 / 670.0	4.44	13C2-PFDA	515.0 / 470.0	83546.56	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	27744.14	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	27744.14	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	27744.14	239.25

Sample Name	J7394-FS(3)	Injection Vial	38
Sample ID	NASB-CCC-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T01:19:47	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

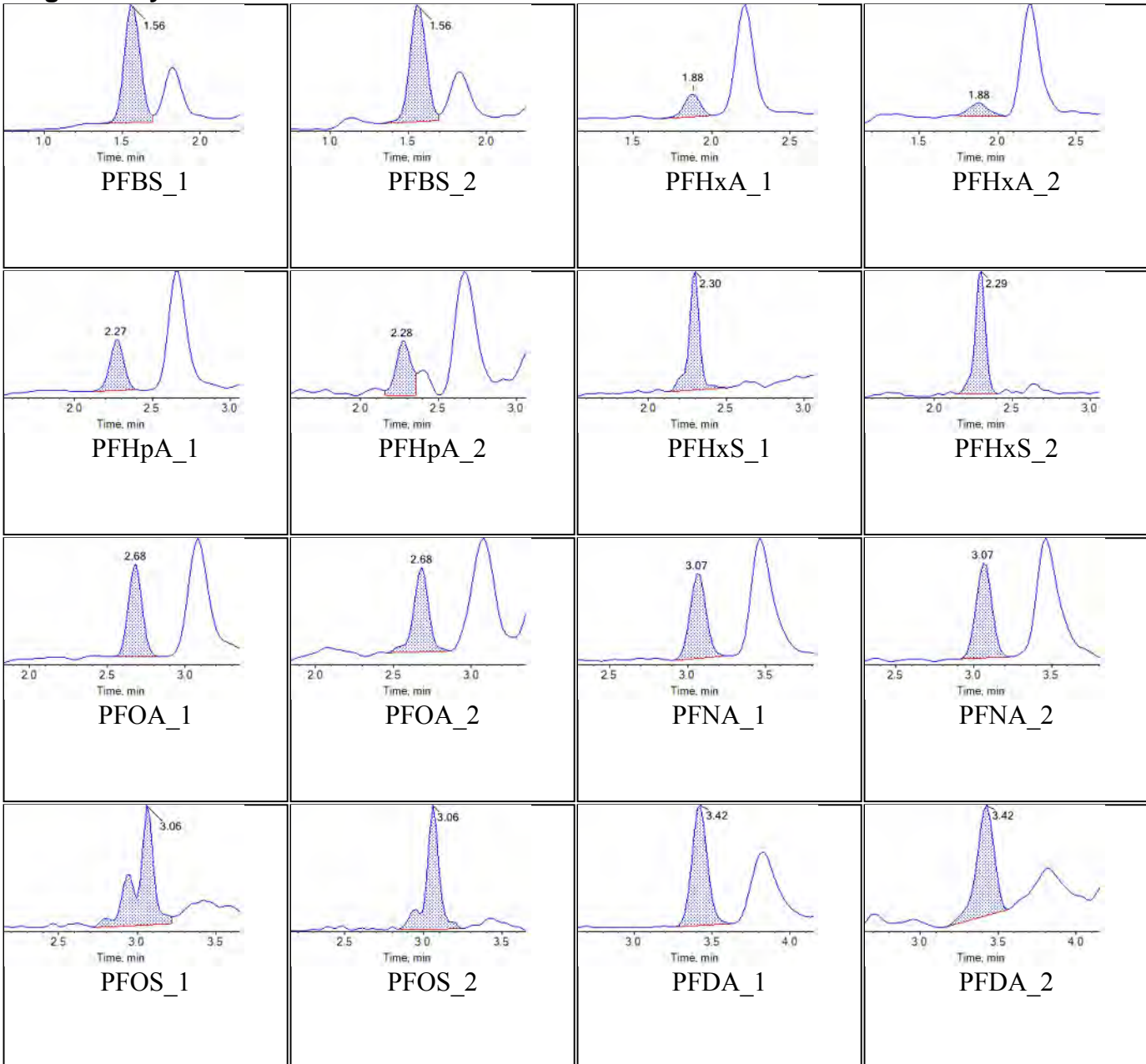
Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.14	13C3-PFBA	216.0 / 172.0	41020.69	250.00
13C2-PFDoA	615.0 / 570.0	3.99	13C2-PFDA	515.0 / 470.0	56339.76	250.00
d3-MeFOSAA	573.0 / 419.0	3.54	13C4-PFOS	503.0 / 99.0	18899.28	239.25
d5-EtFOSAA	589.0 / 419.0	3.70	13C4-PFOS	503.0 / 99.0	18899.28	239.25
13C5-PFHxA	318.0 / 273.0	1.83	13C2-PFOA	415.0 / 370.0	48584.46	250.00
13C4-PFHpA	367.0 / 322.0	2.24	13C2-PFOA	415.0 / 370.0	48584.46	250.00
13C8-PFOA	421.0 / 376.0	2.65	13C2-PFOA	415.0 / 370.0	48584.46	250.00
13C9-PFNA	472.0 / 427.0	3.03	13C2-PFOA	415.0 / 370.0	48584.46	250.00
13C6-PFDA	519.0 / 474.0	3.39	13C2-PFDA	515.0 / 470.0	56339.76	250.00
13C7-PFUnA	570.0 / 525.0	3.70	13C2-PFDA	515.0 / 470.0	56339.76	250.00
13C2-PFTeDA	715.0 / 670.0	4.45	13C2-PFDA	515.0 / 470.0	56339.76	250.00
13C3-PFBS	302.0 / 99.0	1.52	13C4-PFOS	503.0 / 99.0	18899.28	239.25
13C3-PFHxS	402.0 / 99.0	2.26	13C4-PFOS	503.0 / 99.0	18899.28	239.25
13C8-PFOS	507.0 / 99.0	3.03	13C4-PFOS	503.0 / 99.0	18899.28	239.25

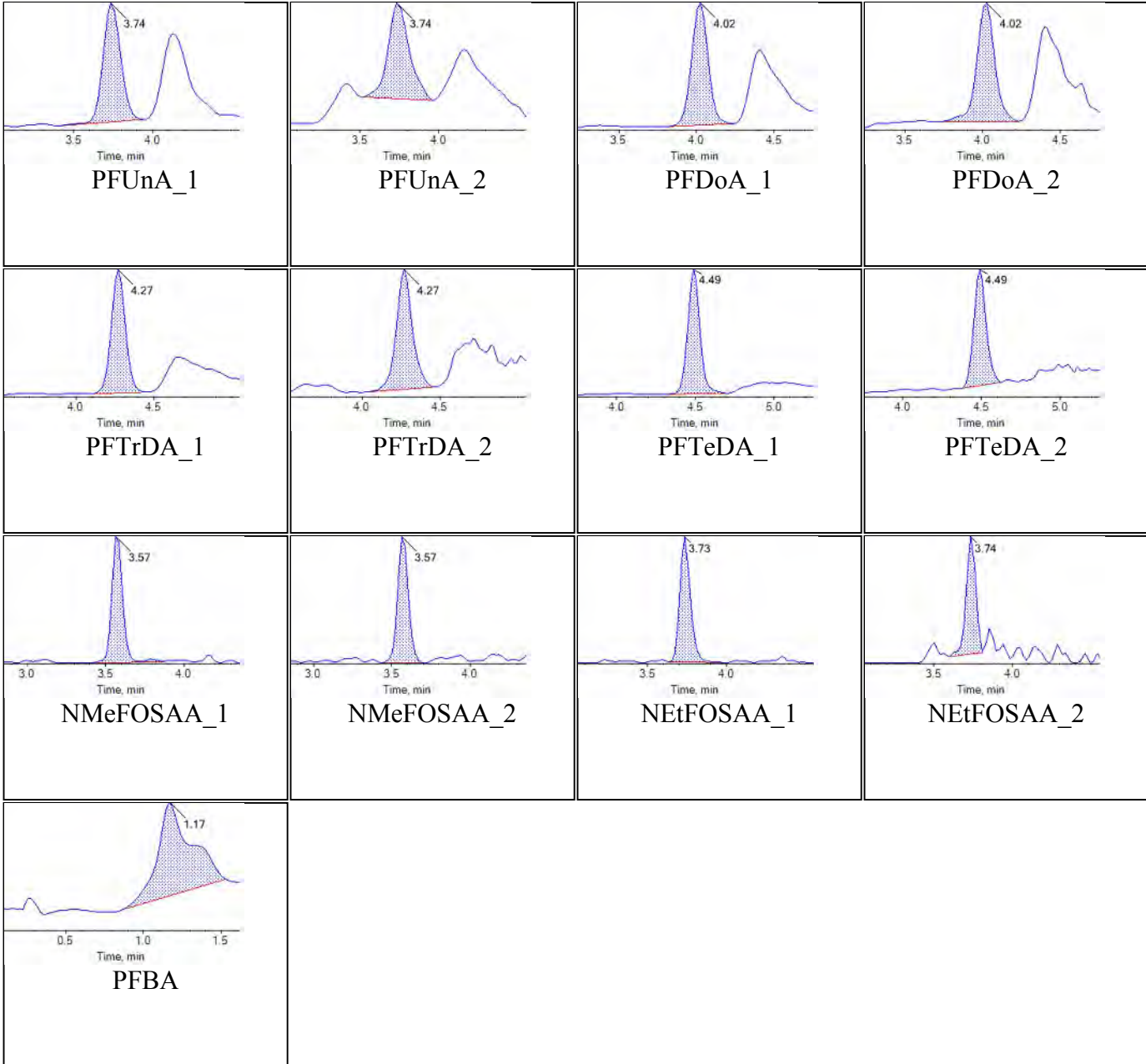
Chromatograms

Sample Name	JY38	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:36:54	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

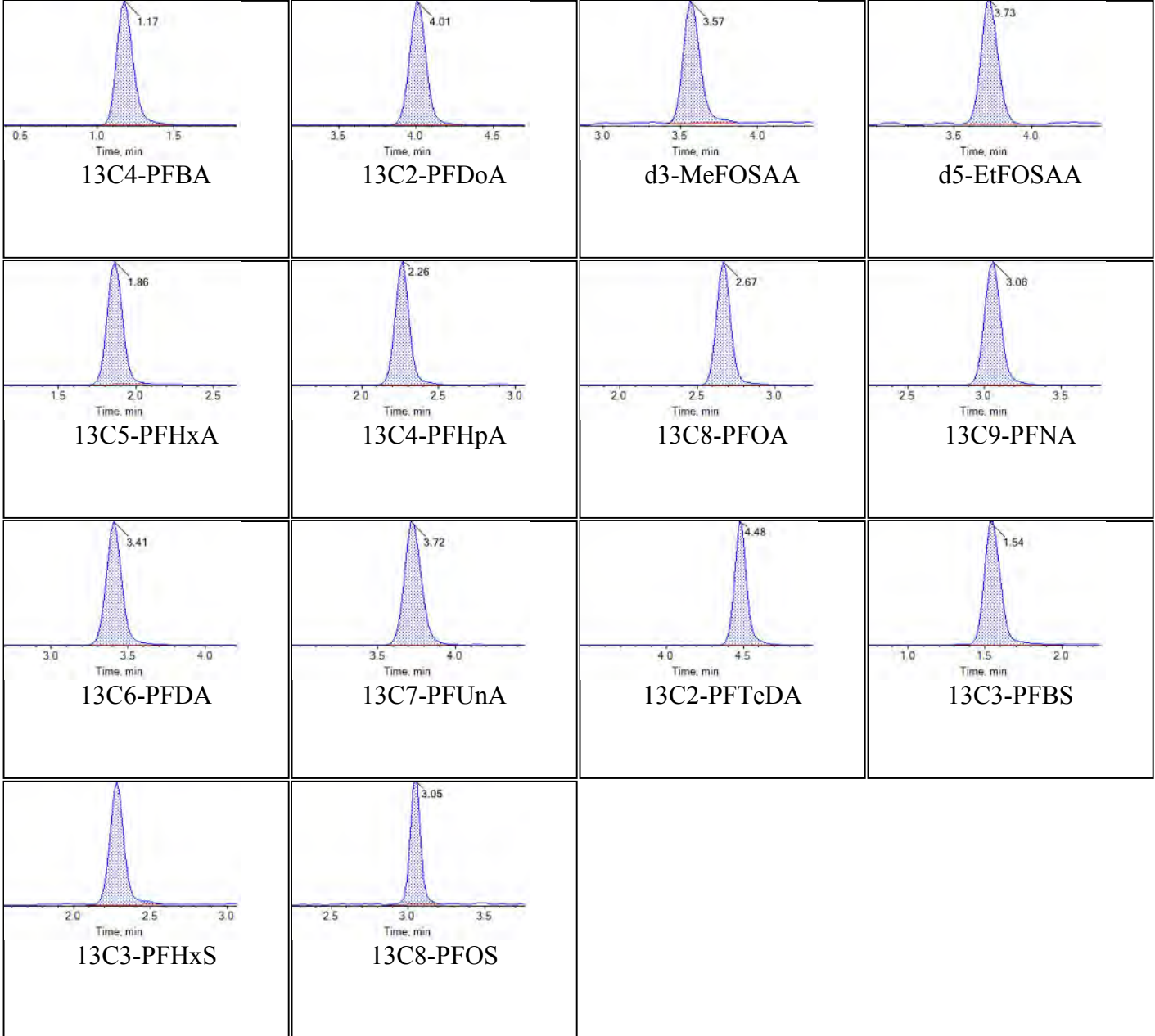
Chromatograms

Target Analytes:





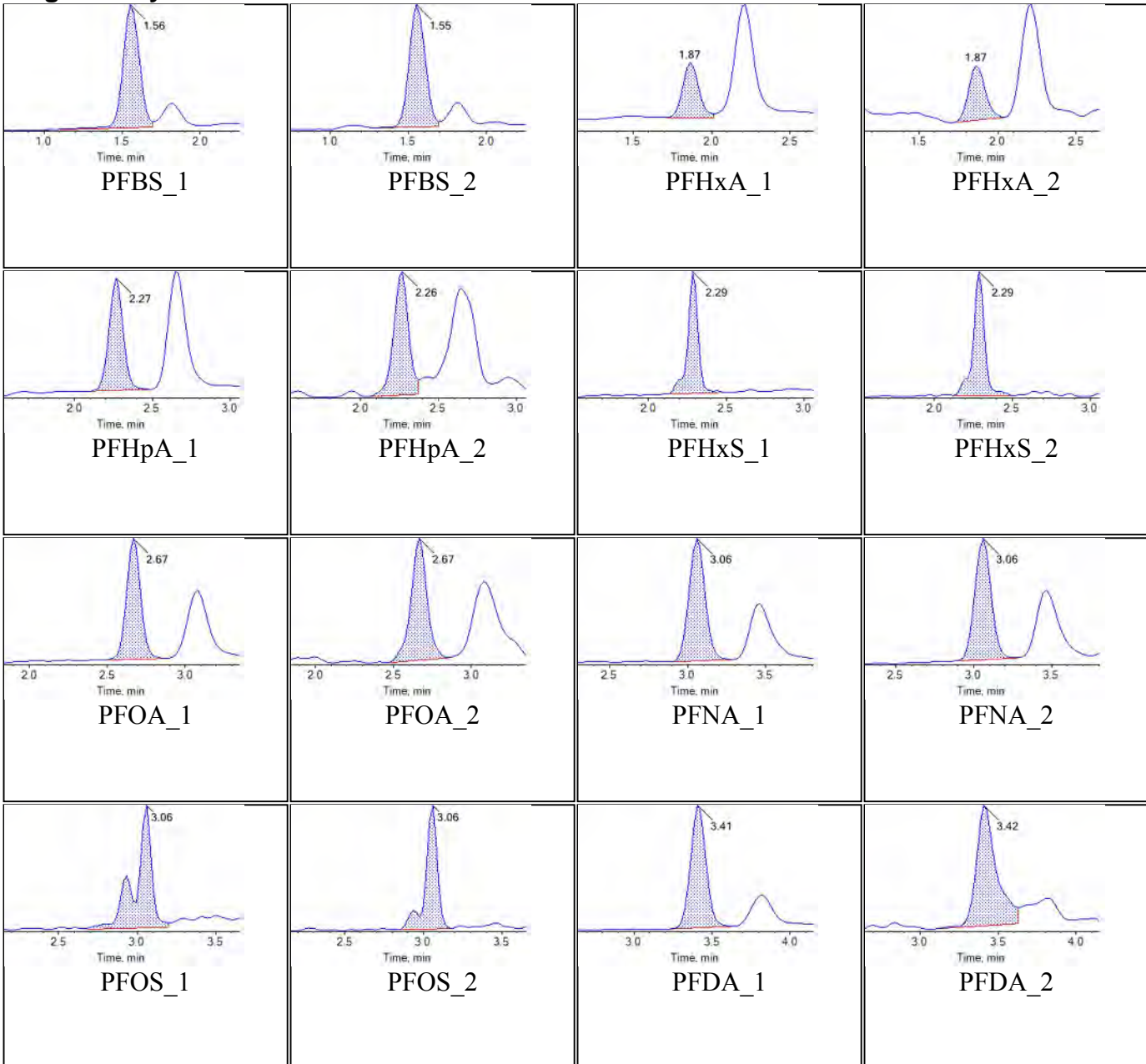
Internal Standards:

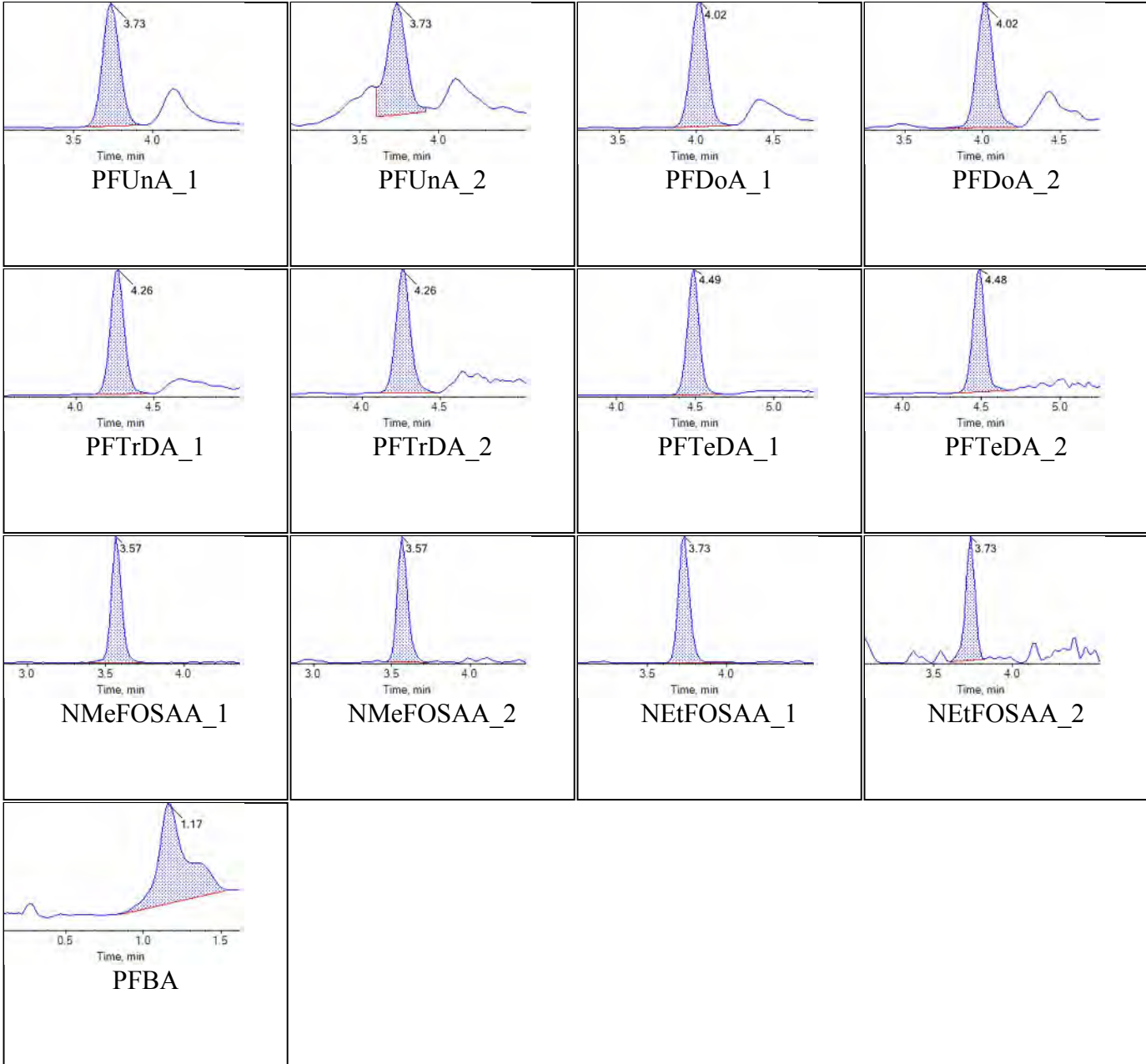


Sample Name	JY39	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:47:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

Target Analytes:



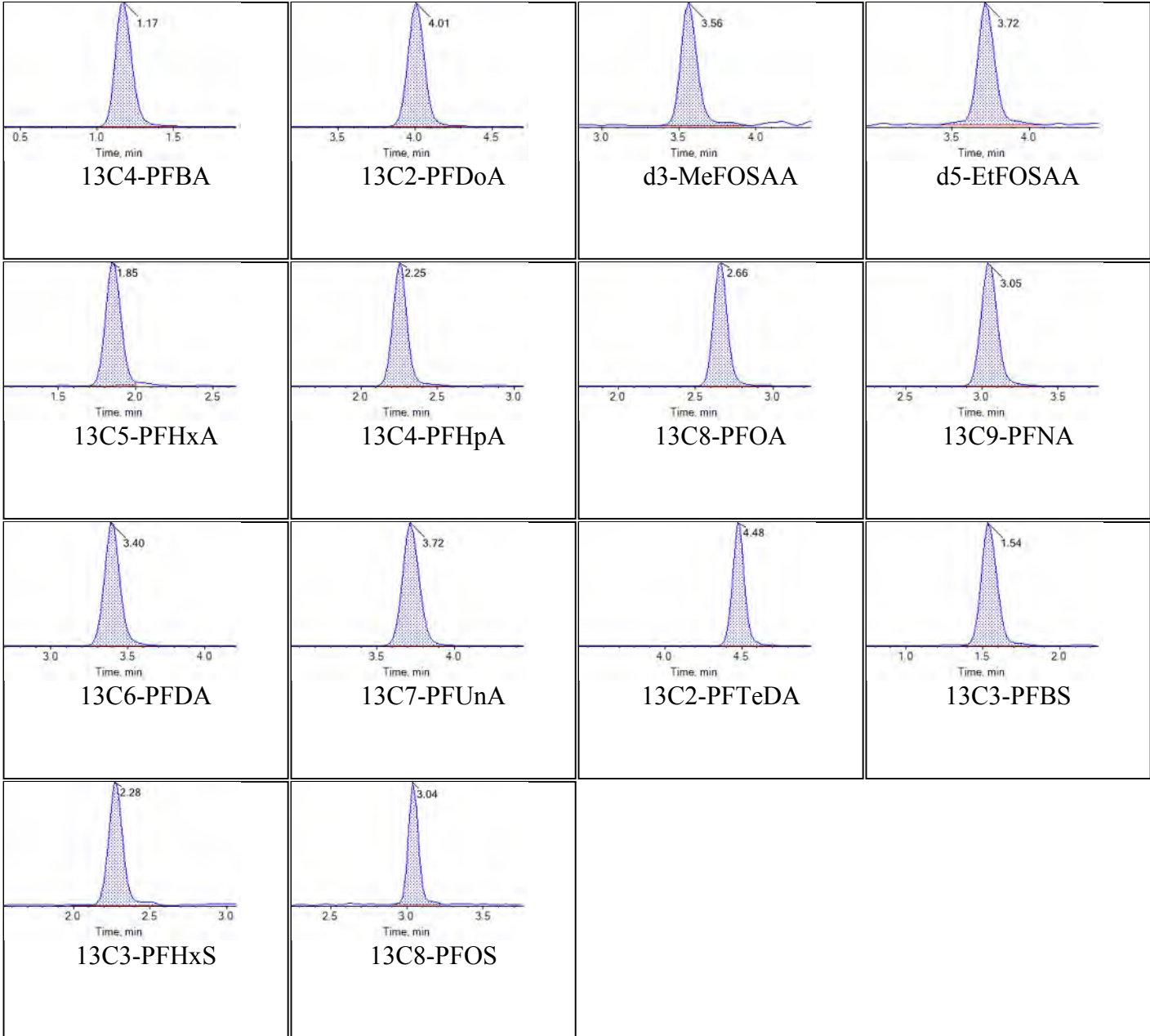


Internal Standards:



Chromatogram Report

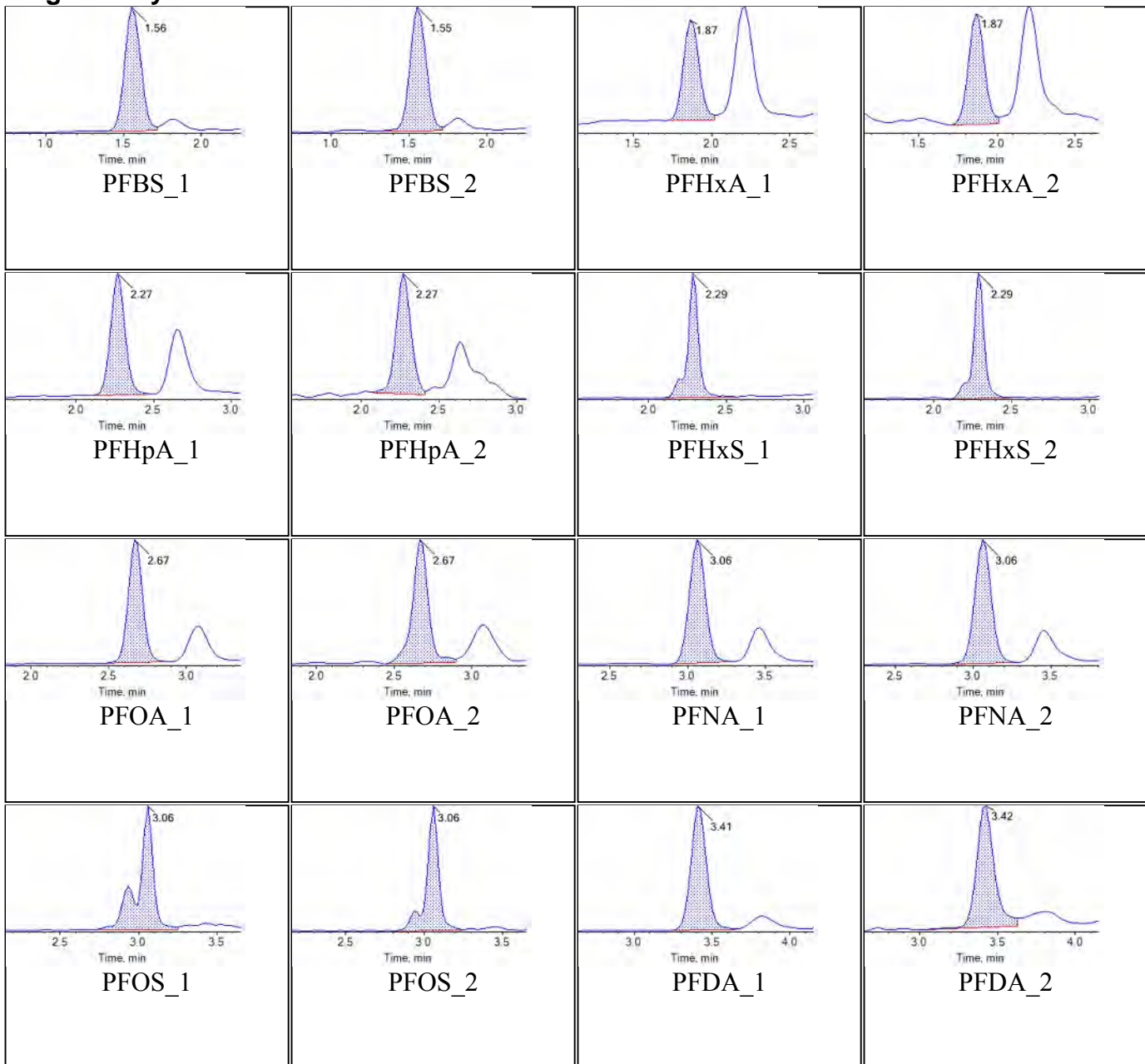
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Sample Name	JY40	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:58:41	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

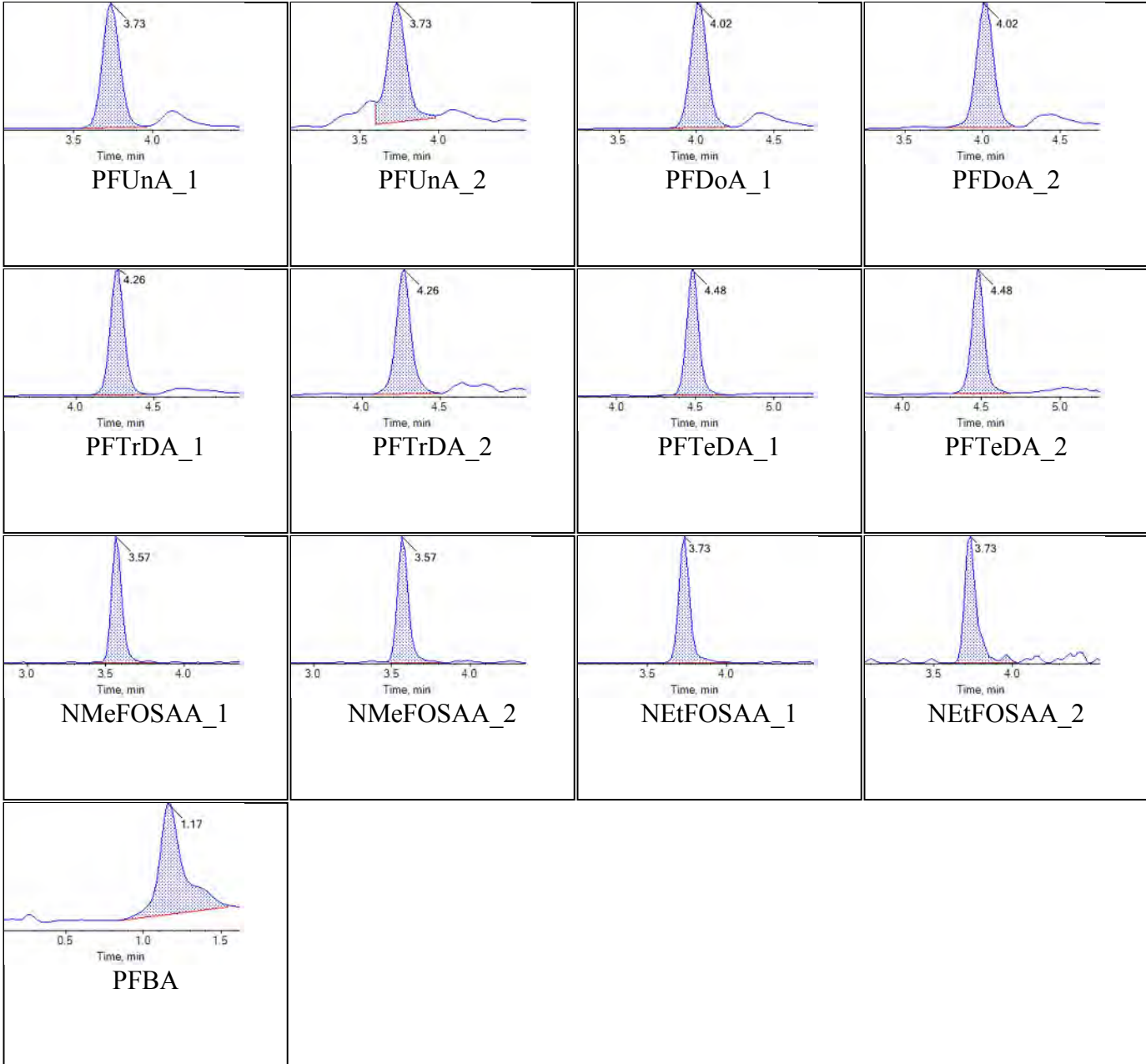
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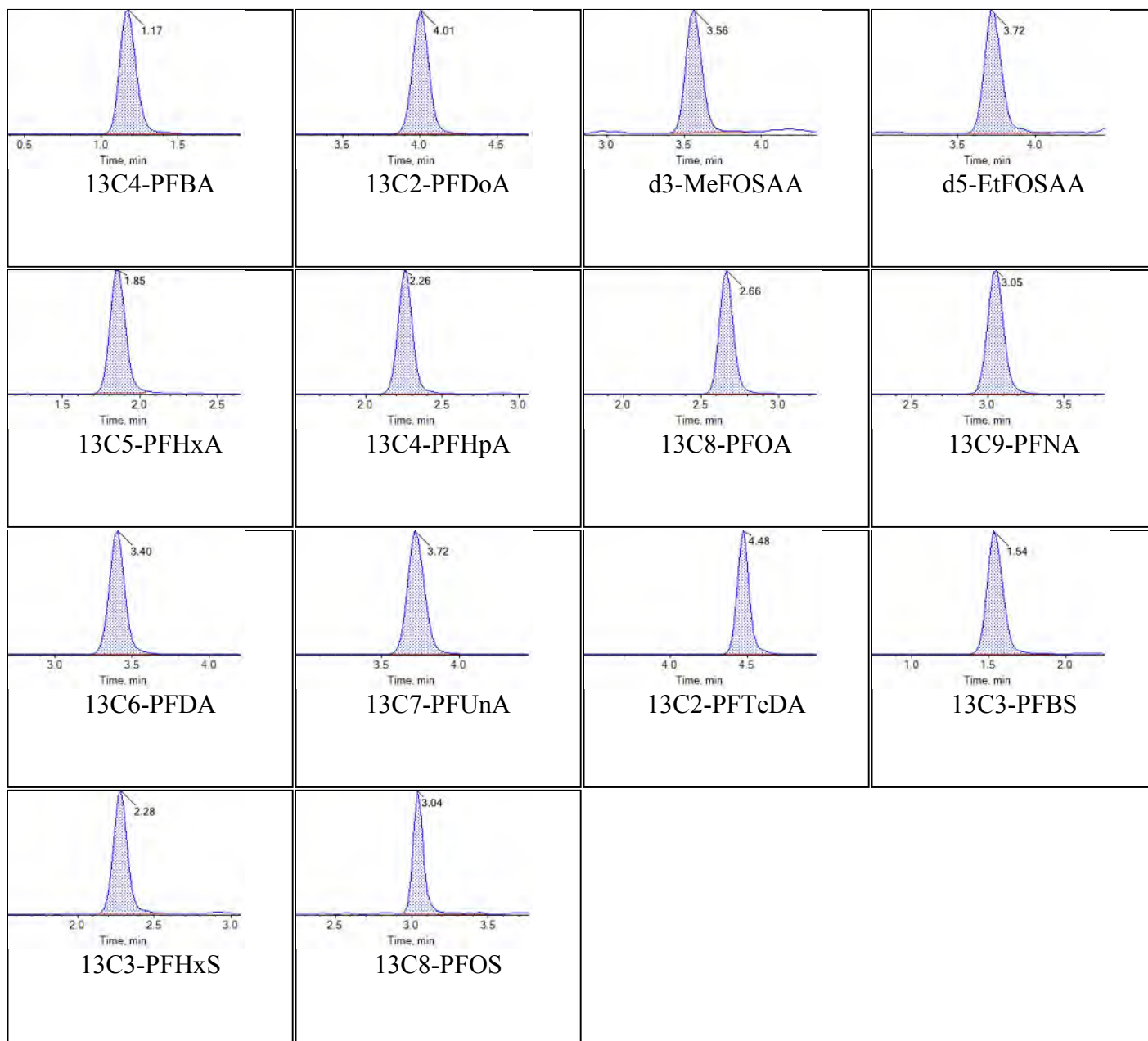


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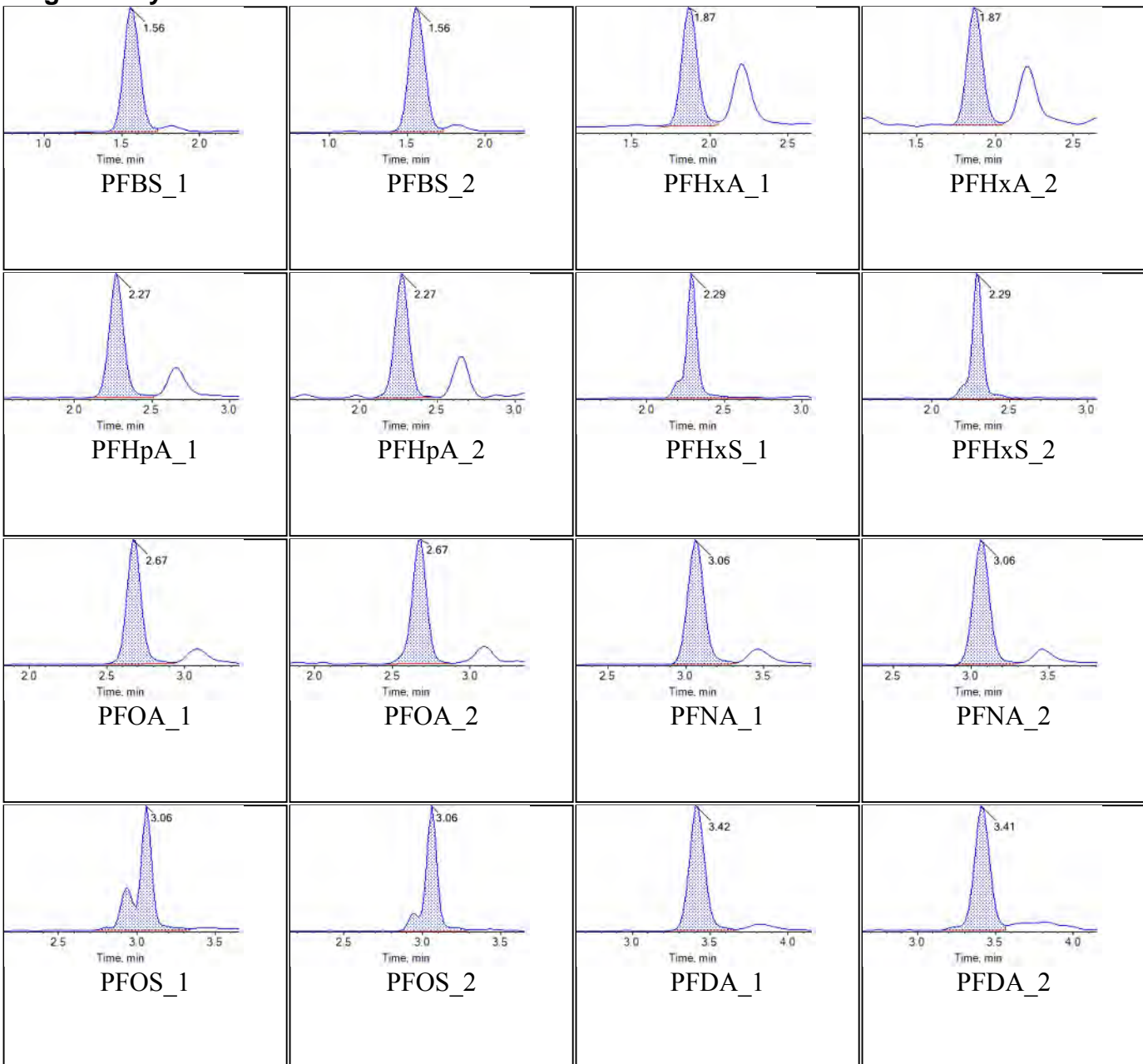
Internal Standards:



Sample Name	JY41	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:09:34	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

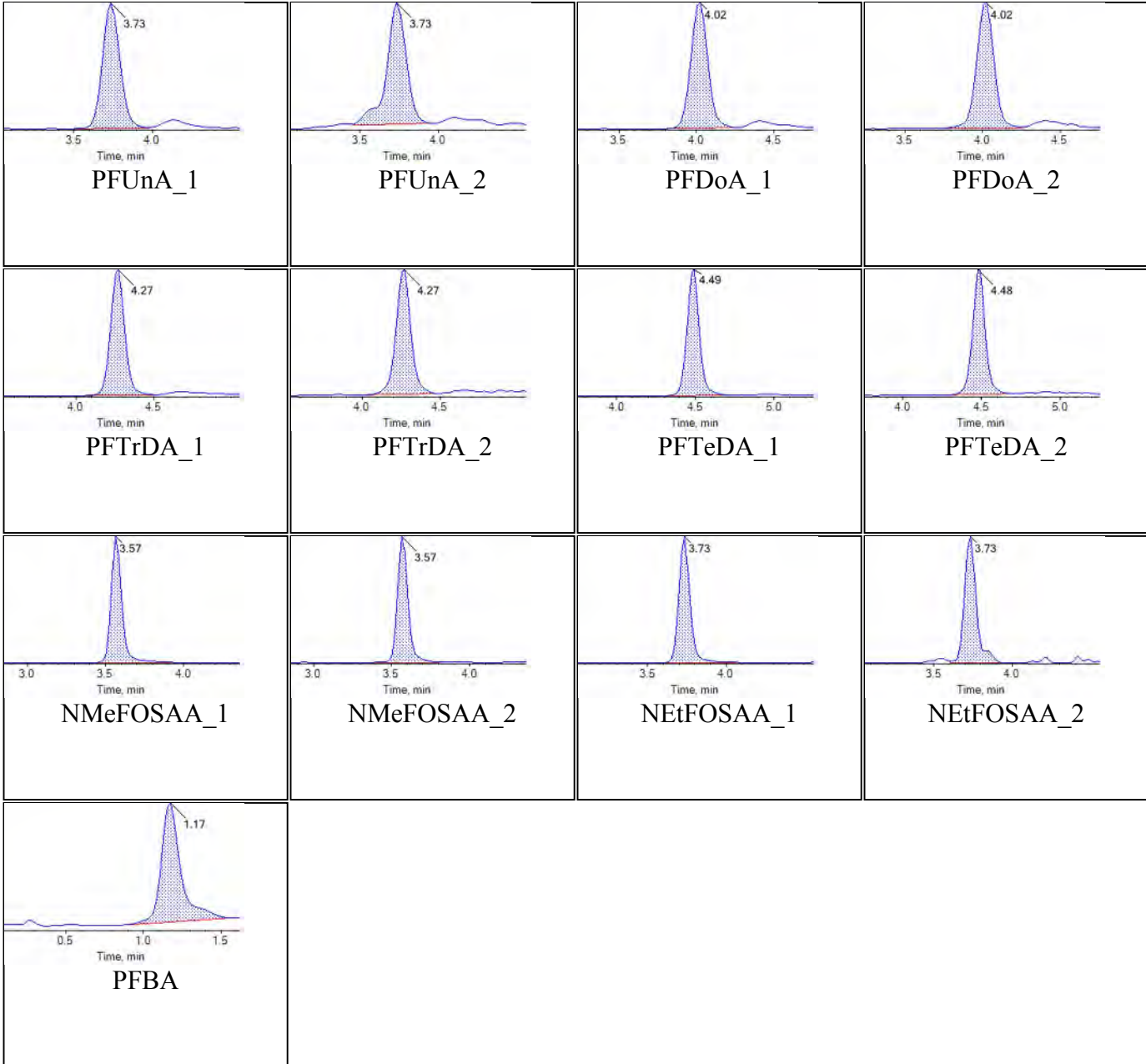
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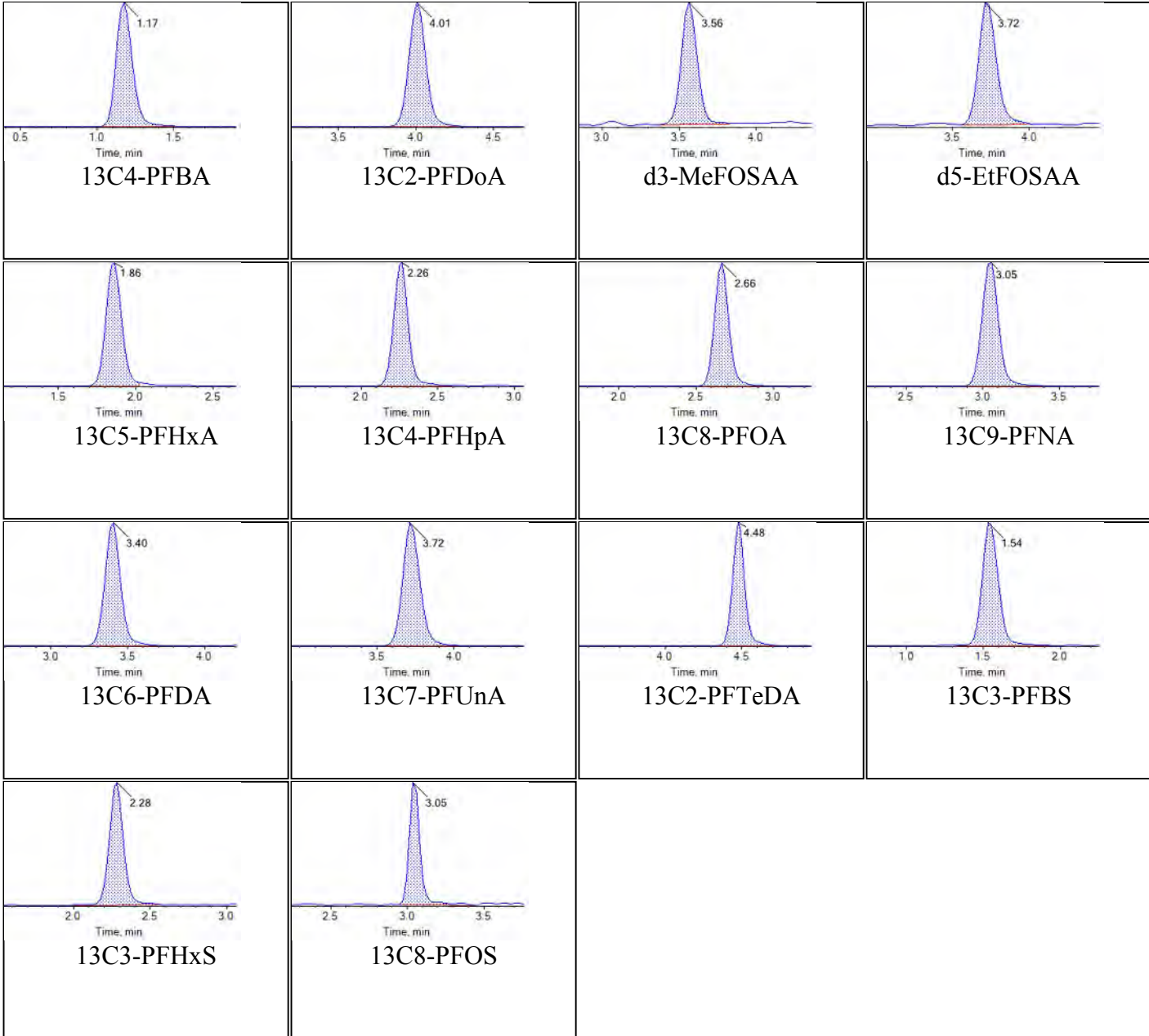


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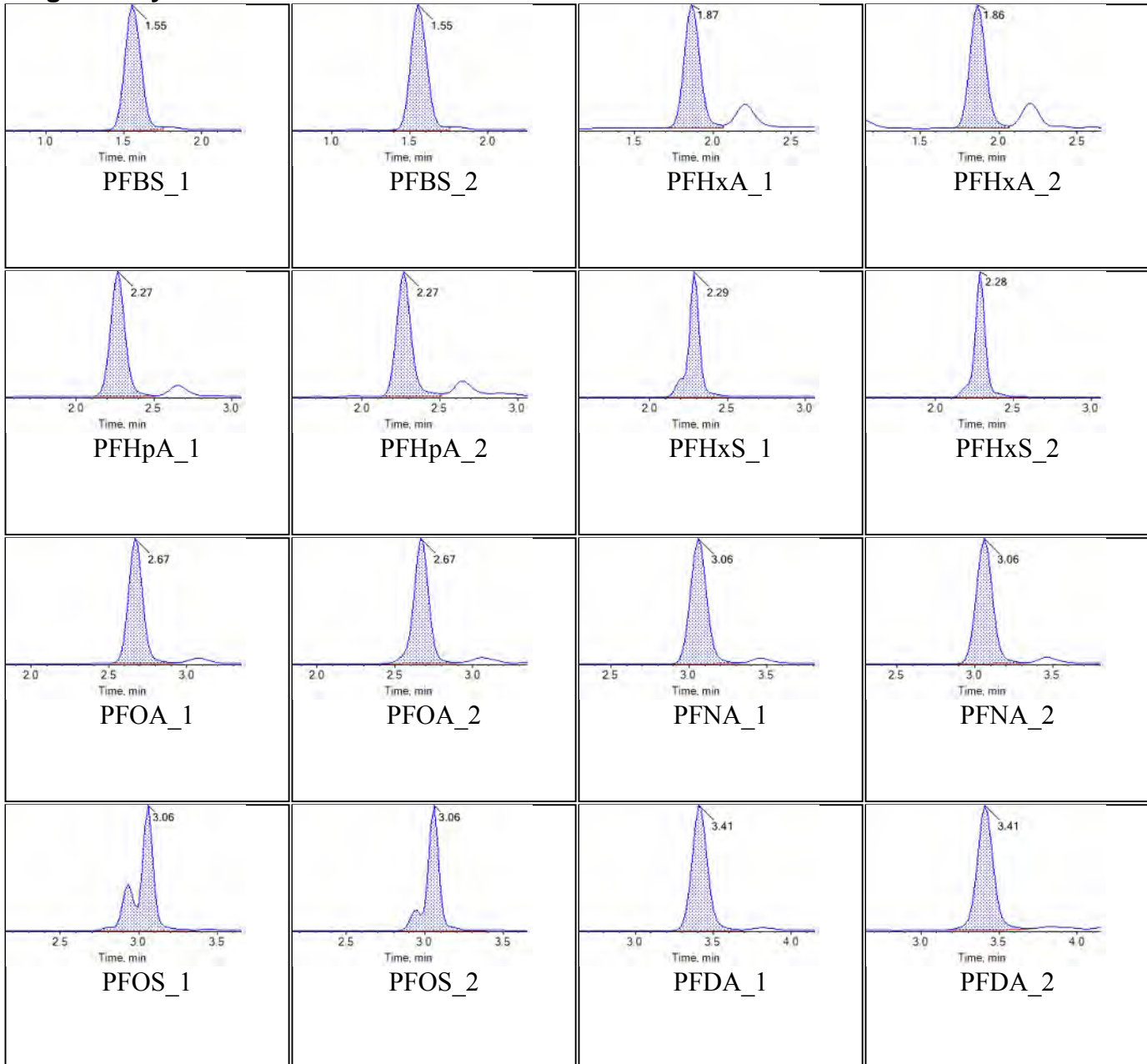
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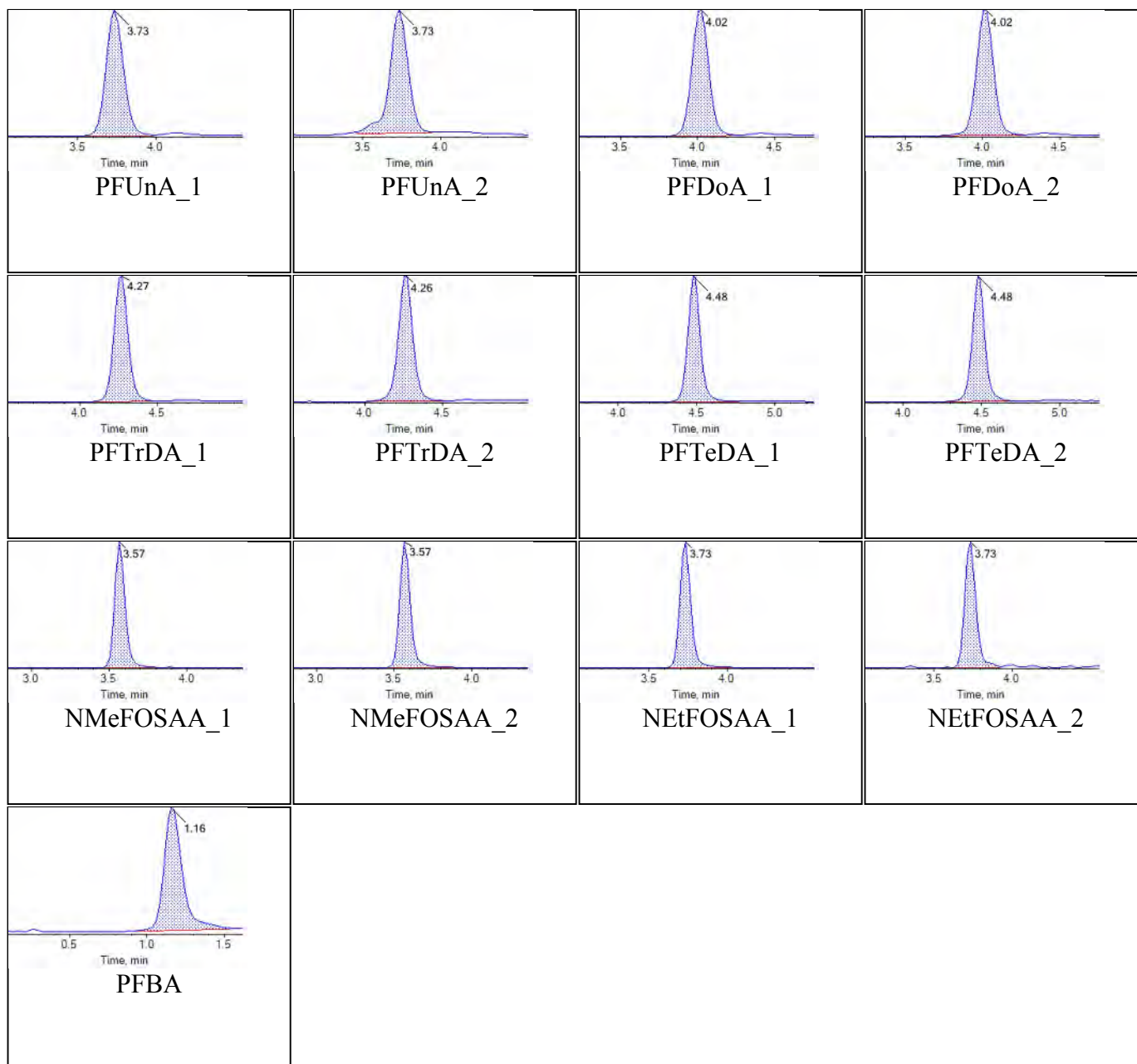


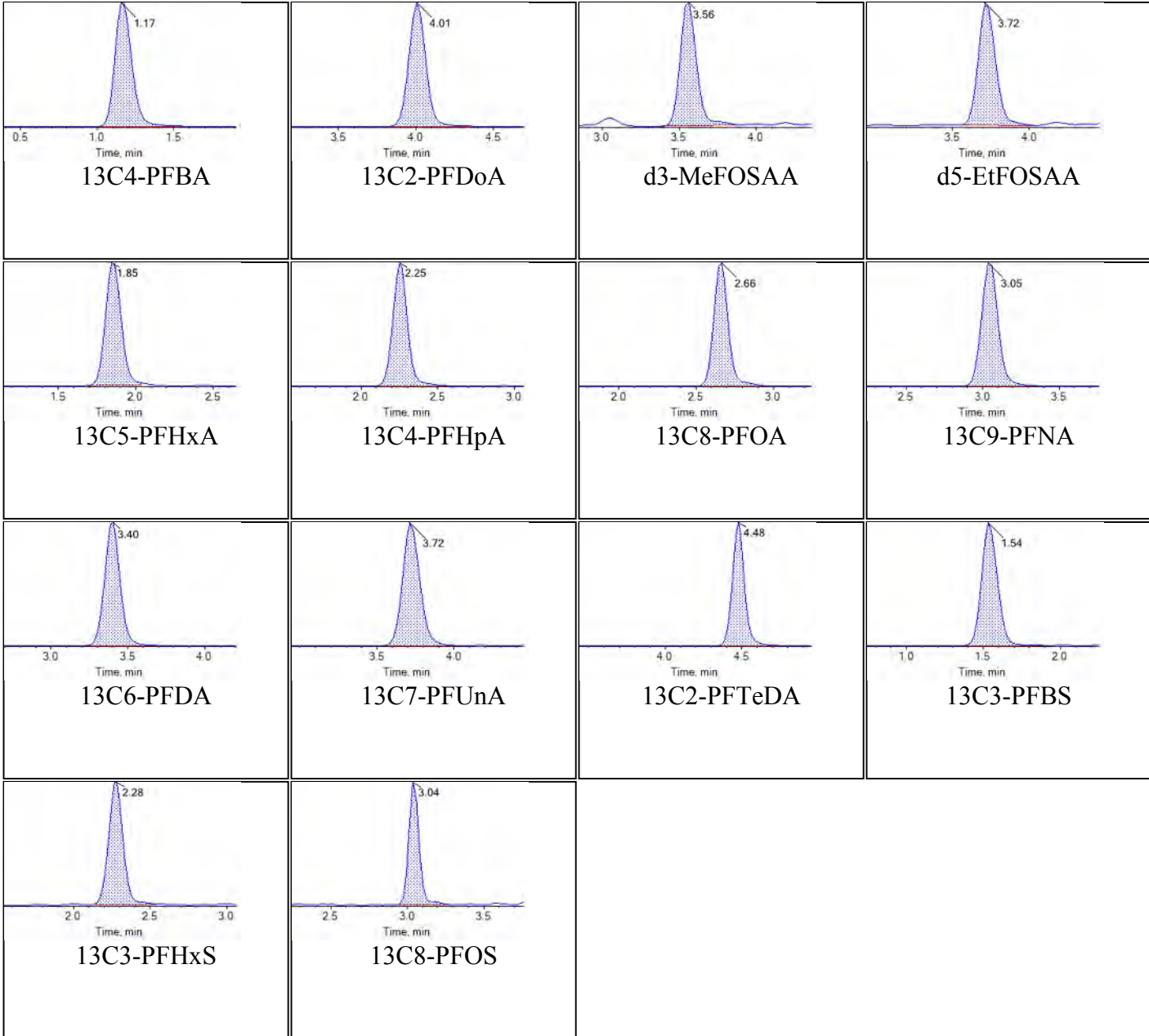
Sample Name	JY42	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:20:26	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

Target Analytes:



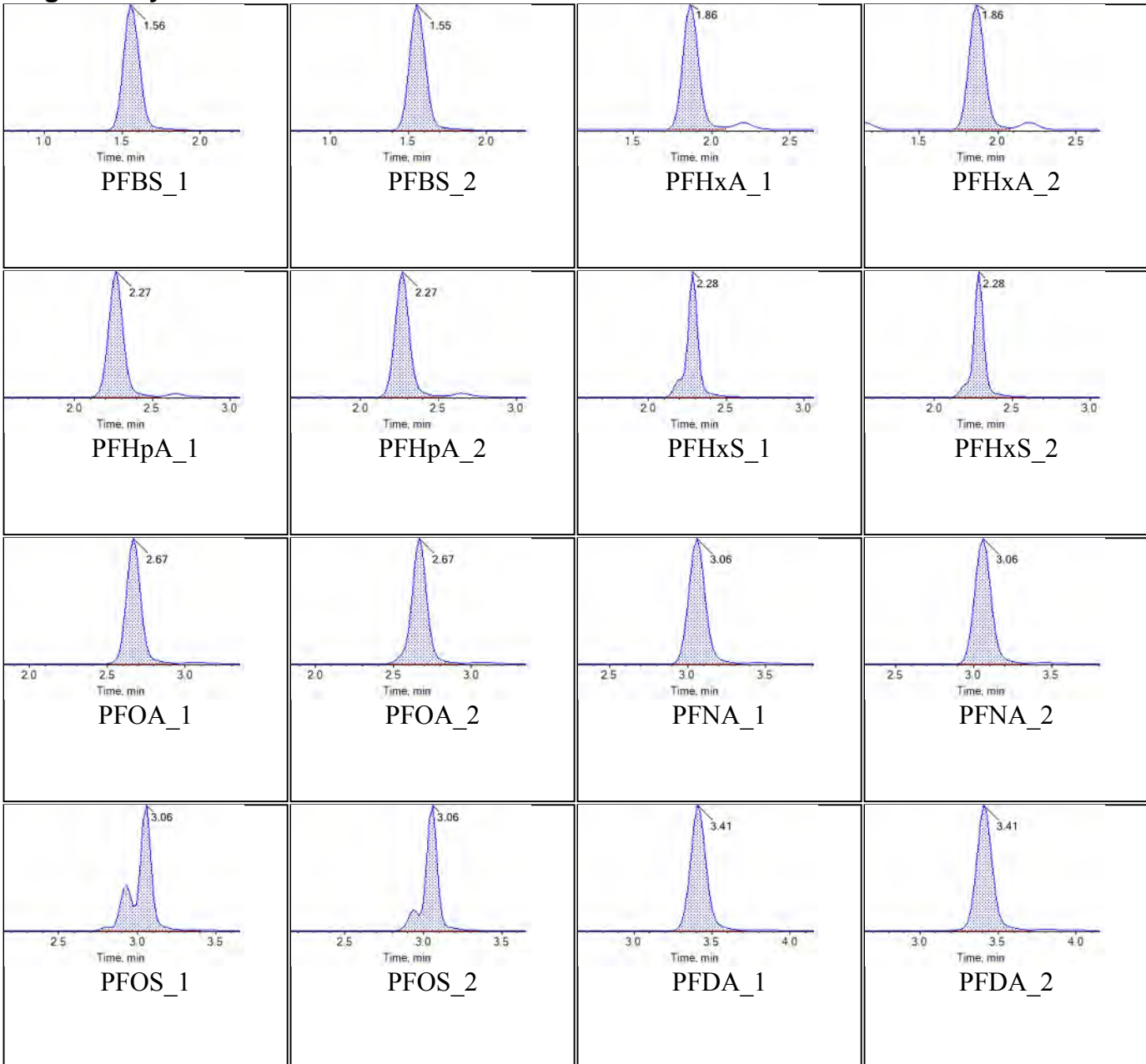
**Internal Standards:**



Sample Name	JY43	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:31:18	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

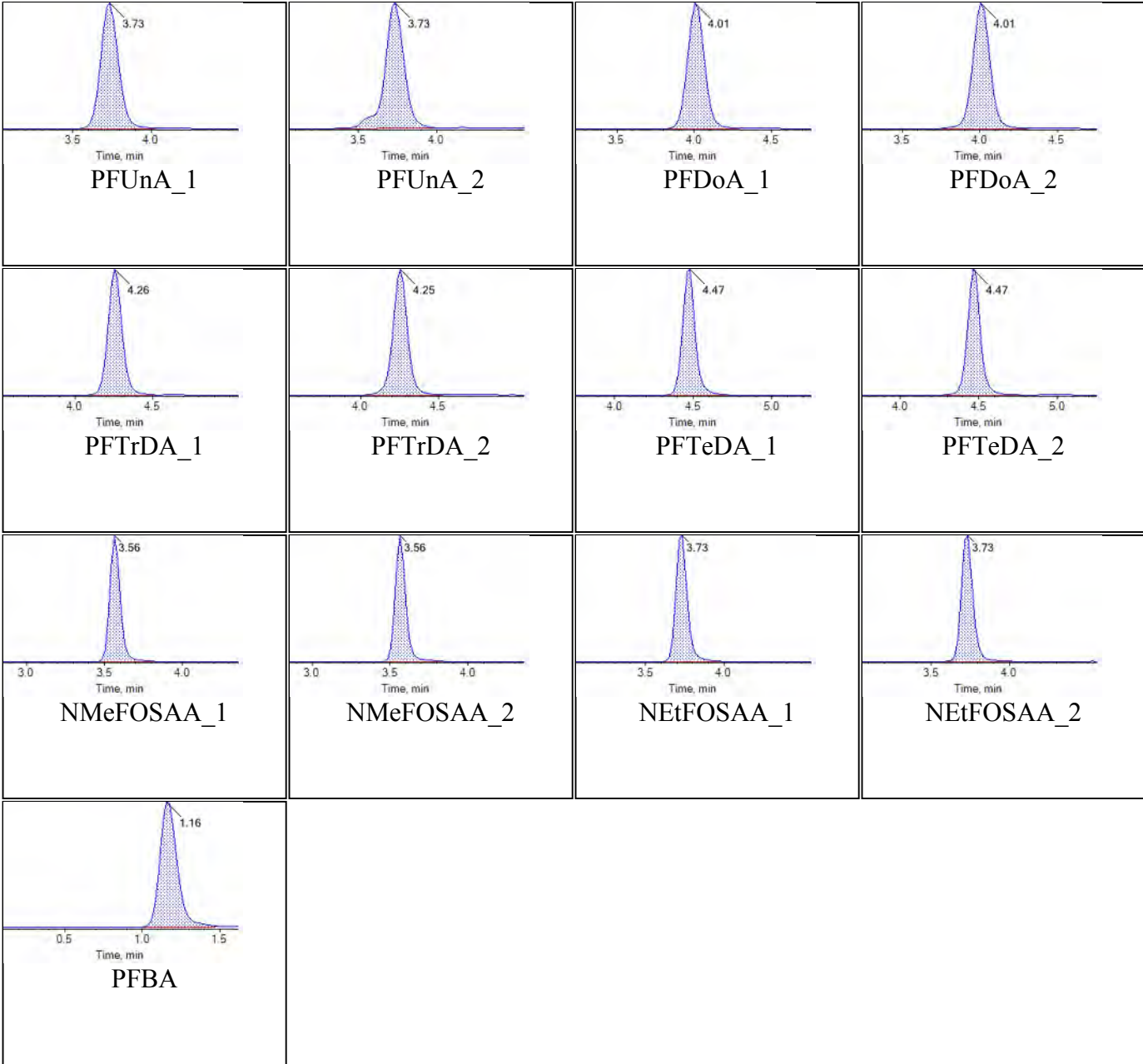
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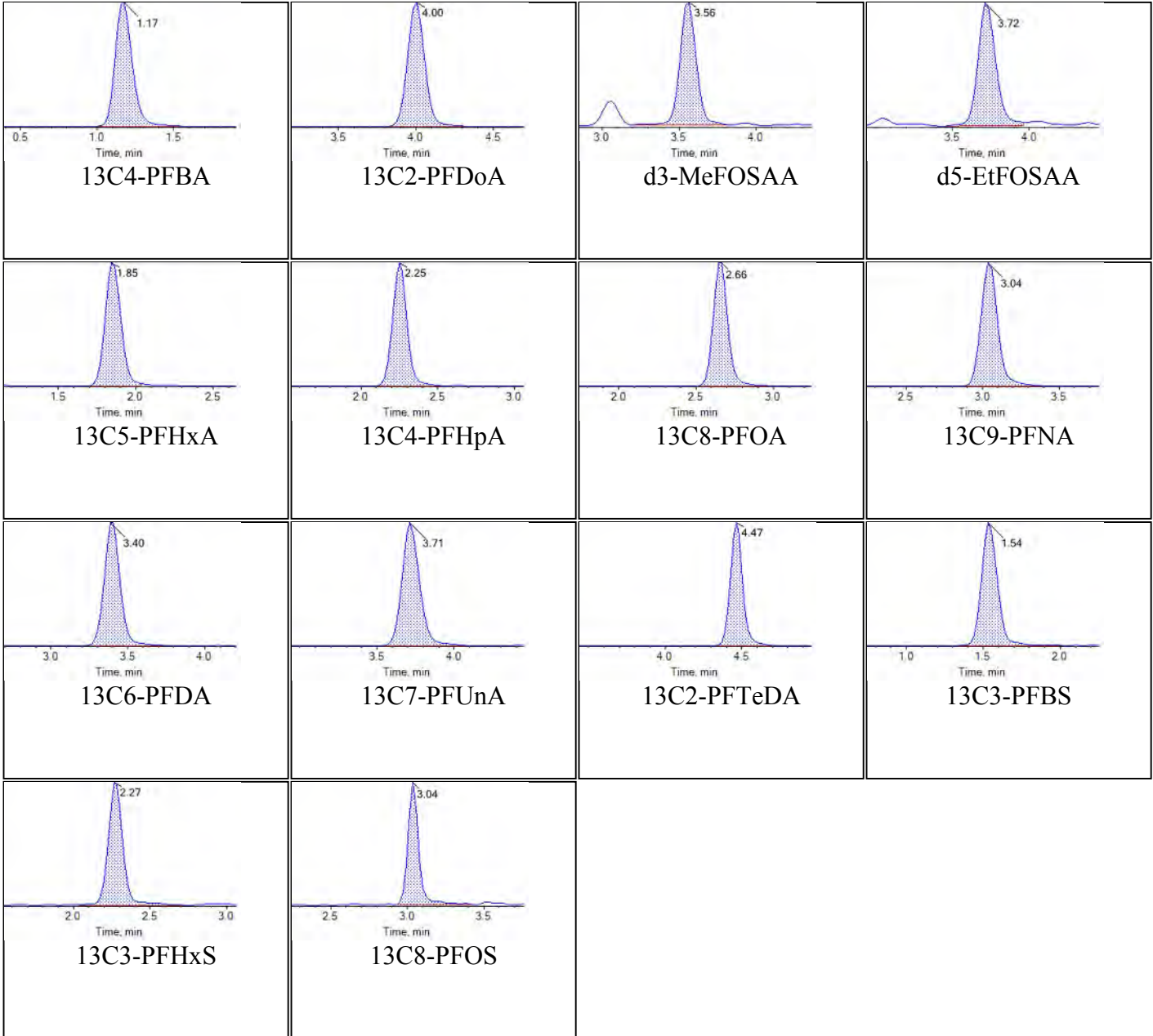


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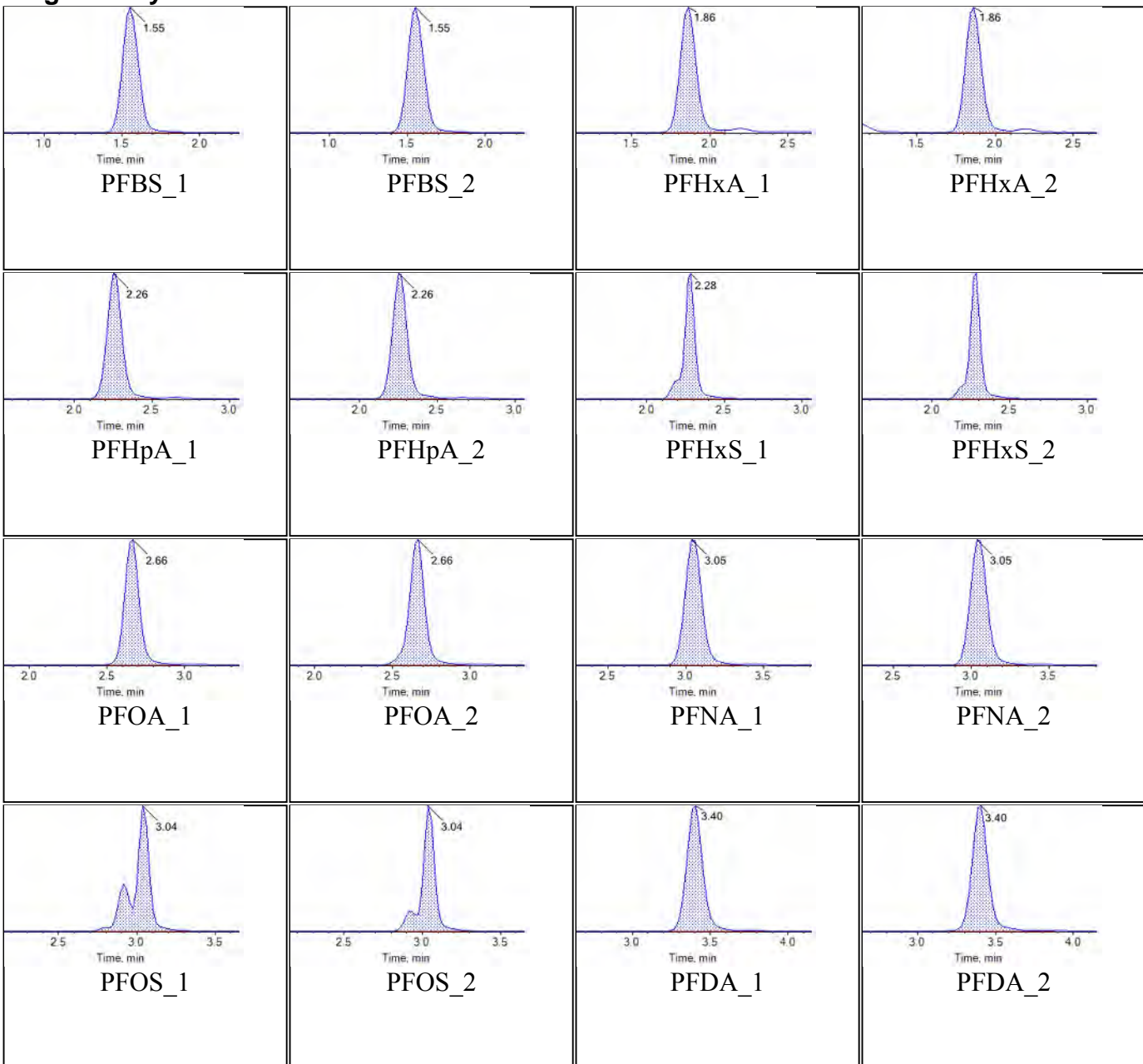
Internal Standards:



Sample Name	JY44	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:42:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

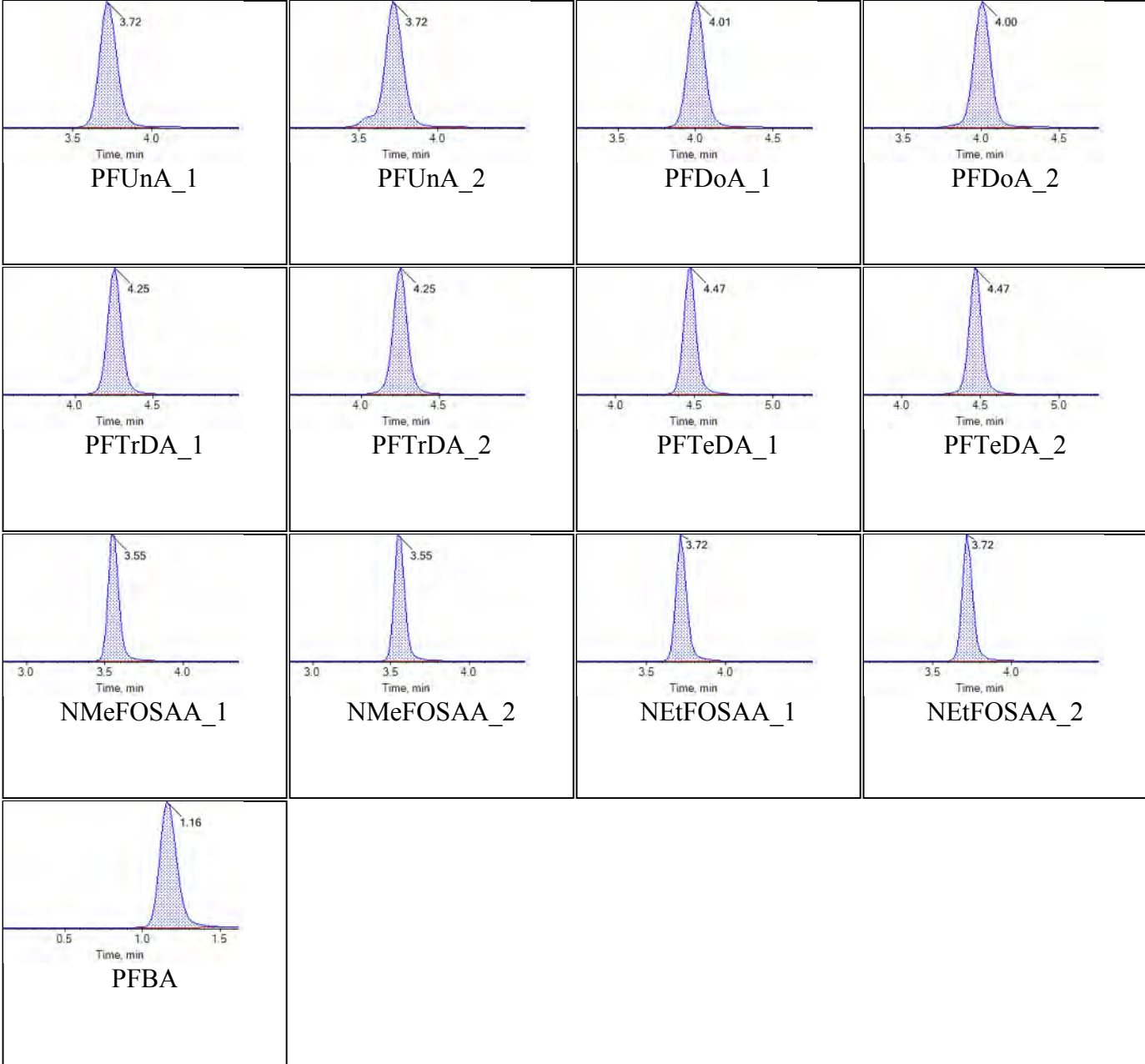
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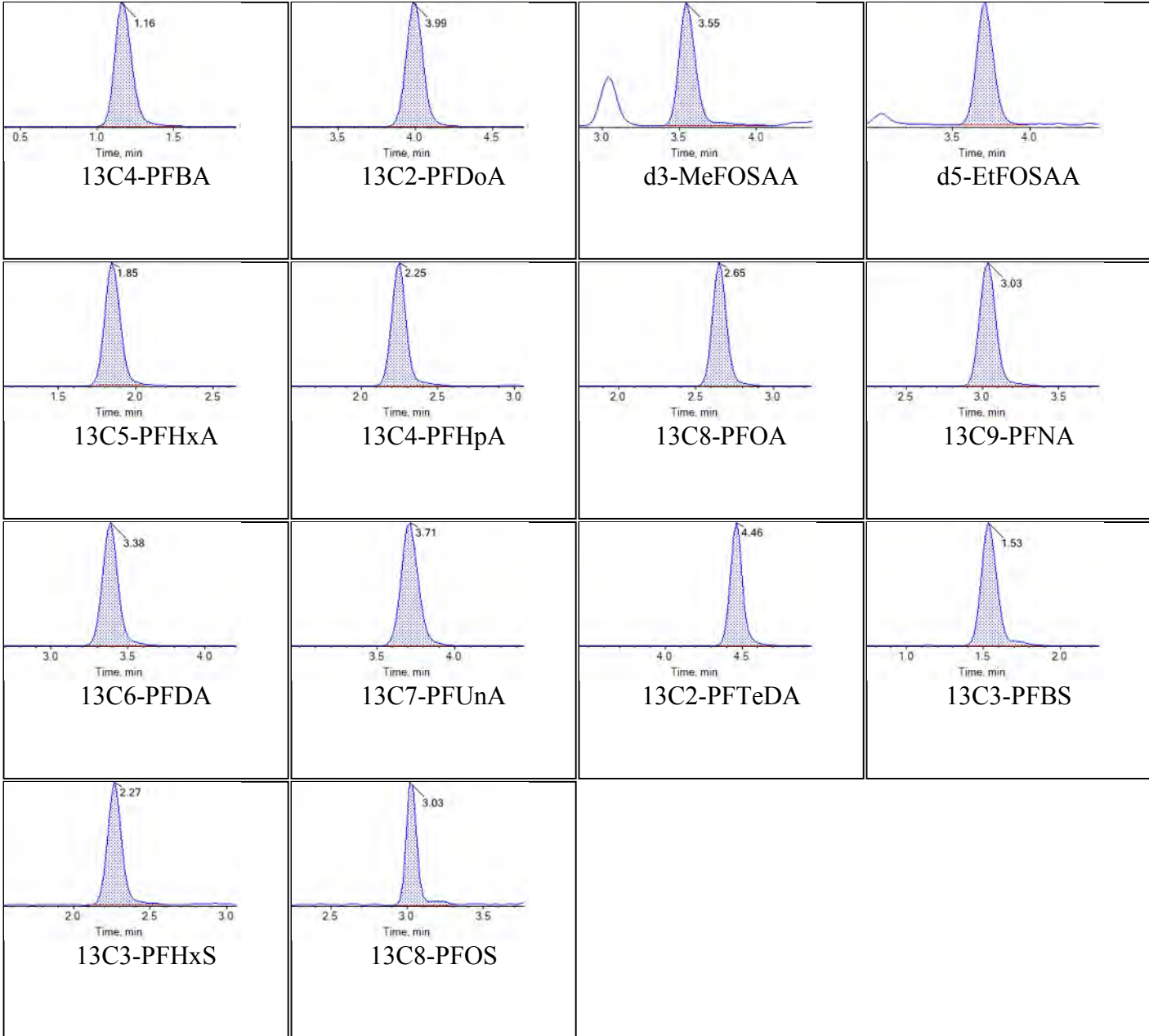


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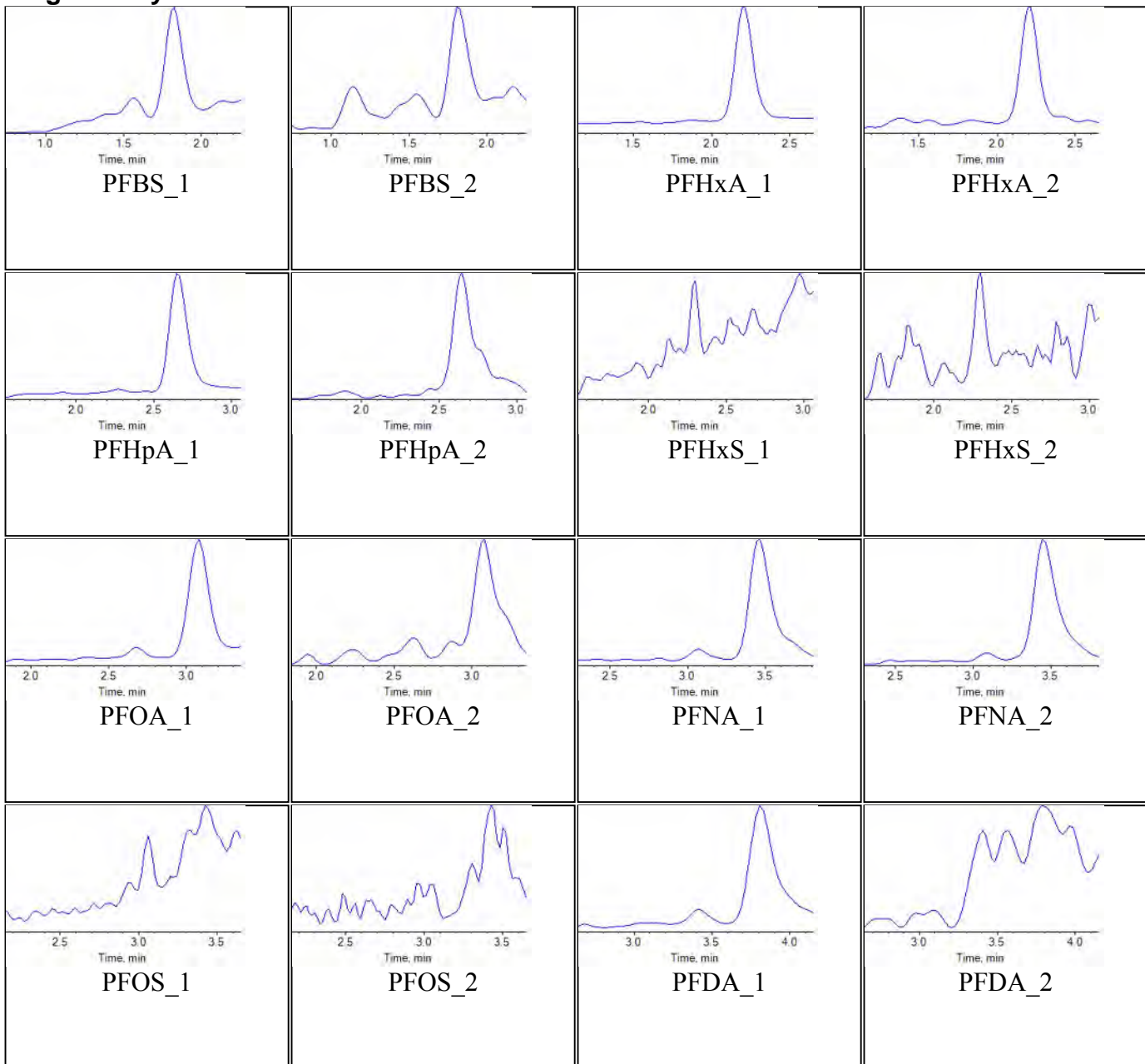
Internal Standards:



Sample Name	JY46 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:53:03	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

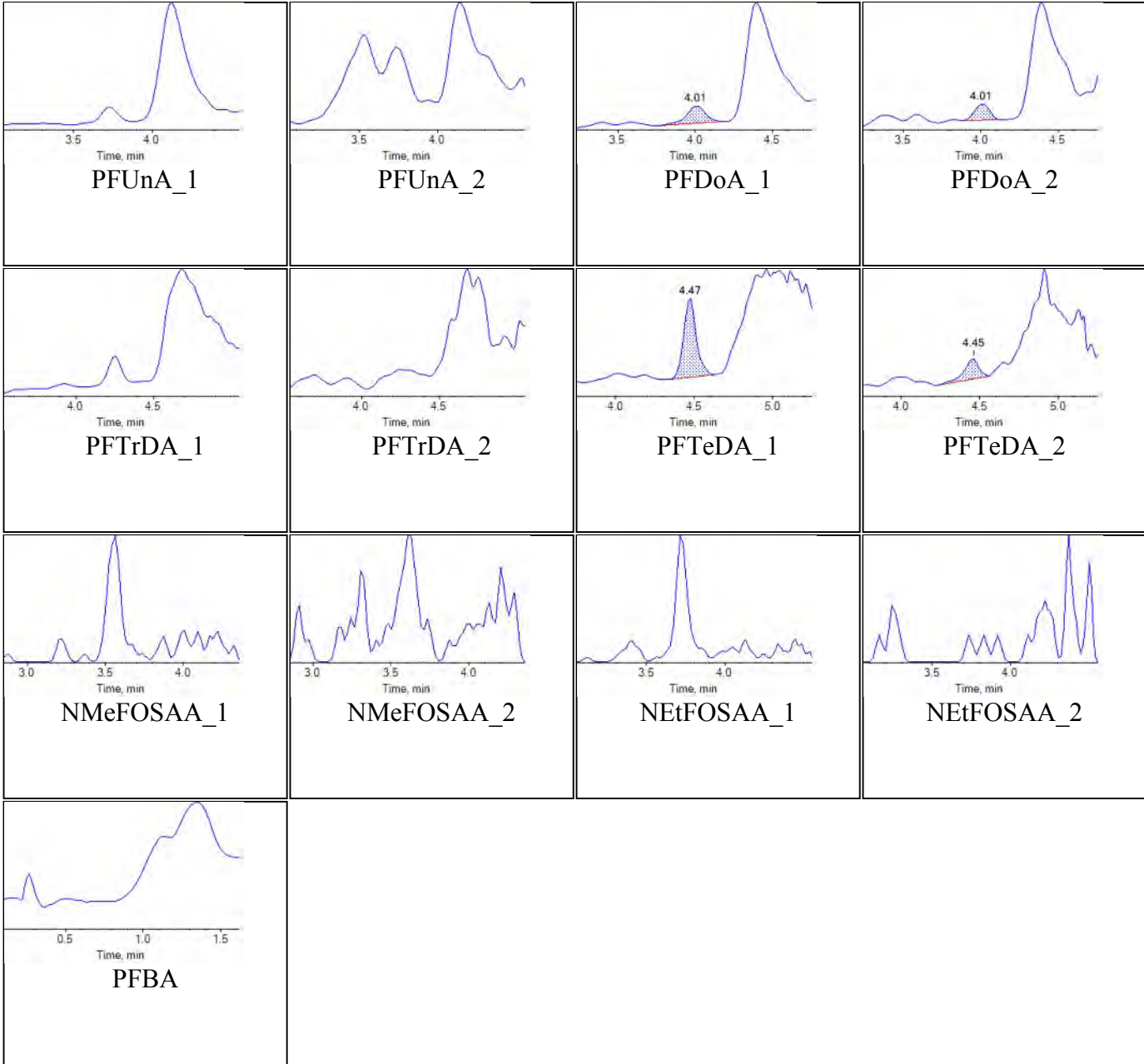
Target Analytes:



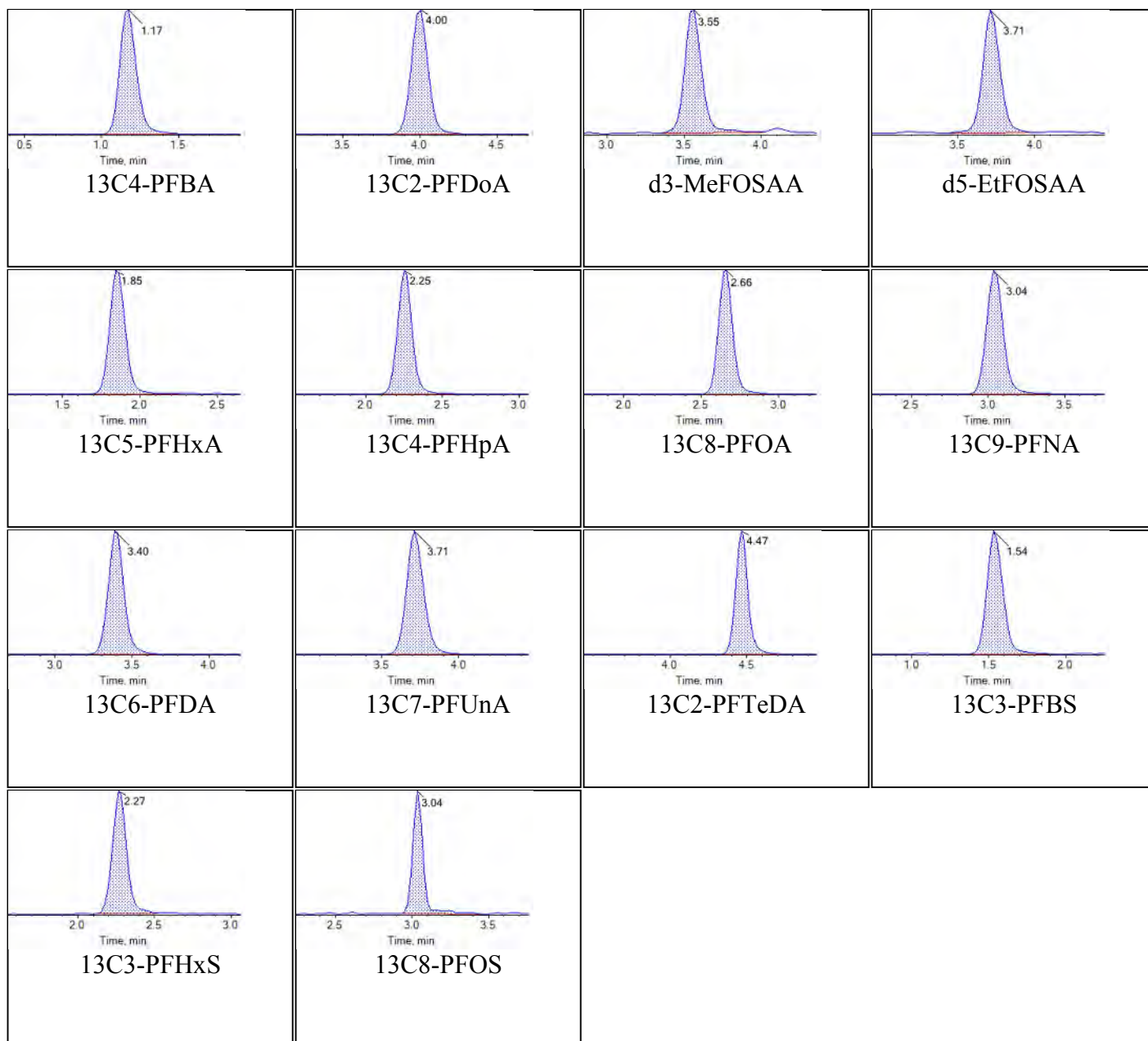


Chromatogram Report

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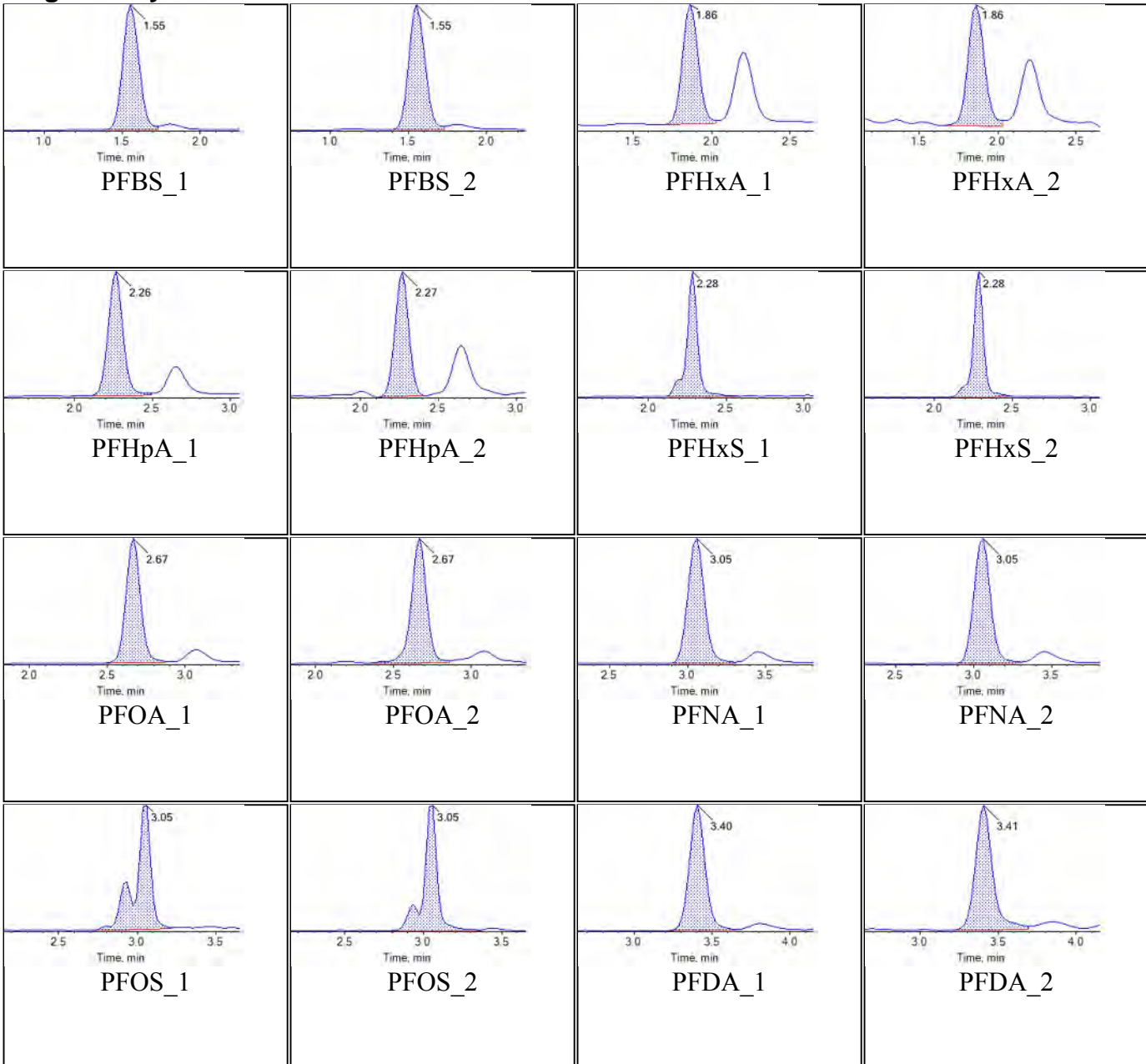
Internal Standards:



Sample Name	JY45 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T00:03:55	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

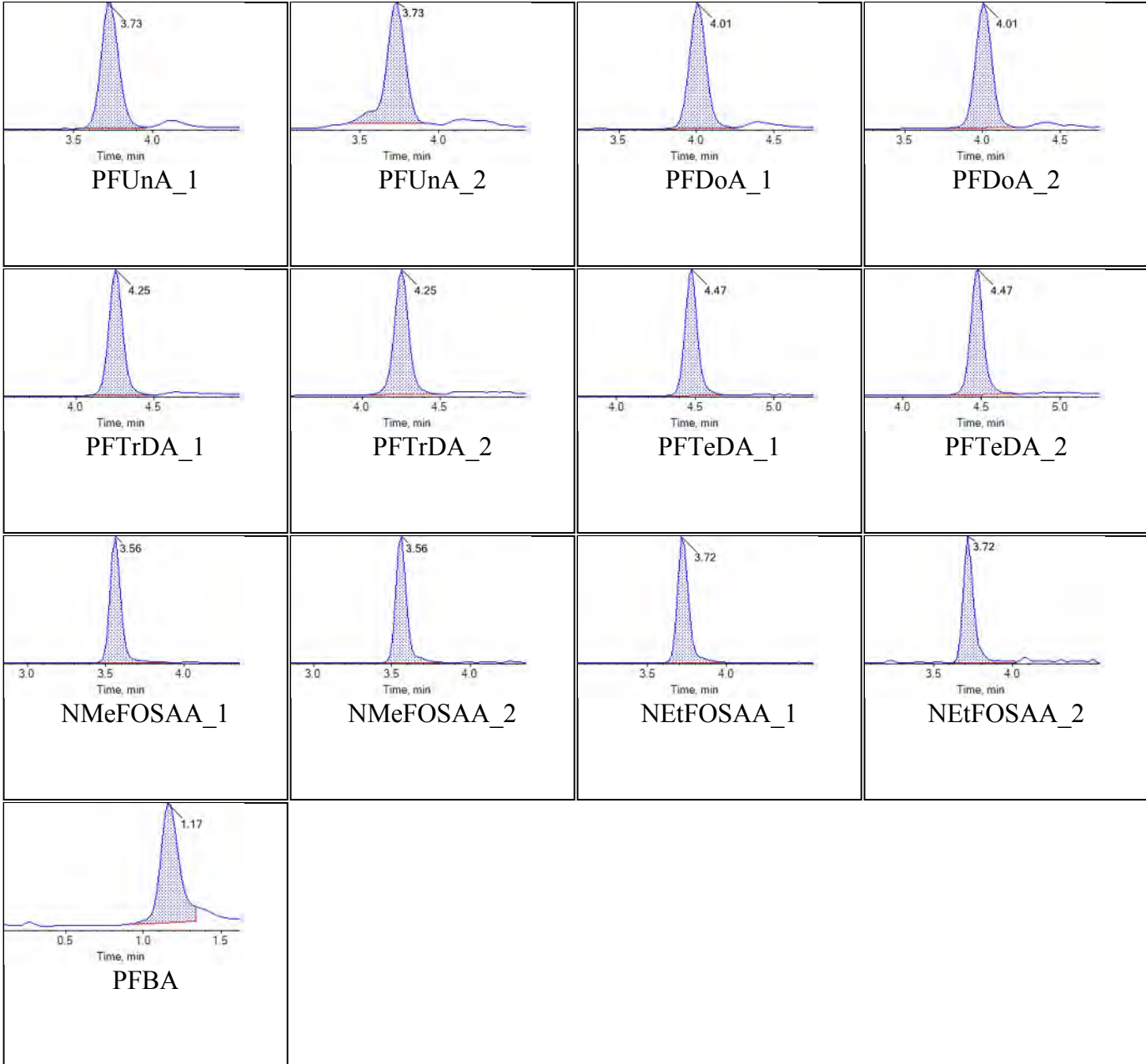
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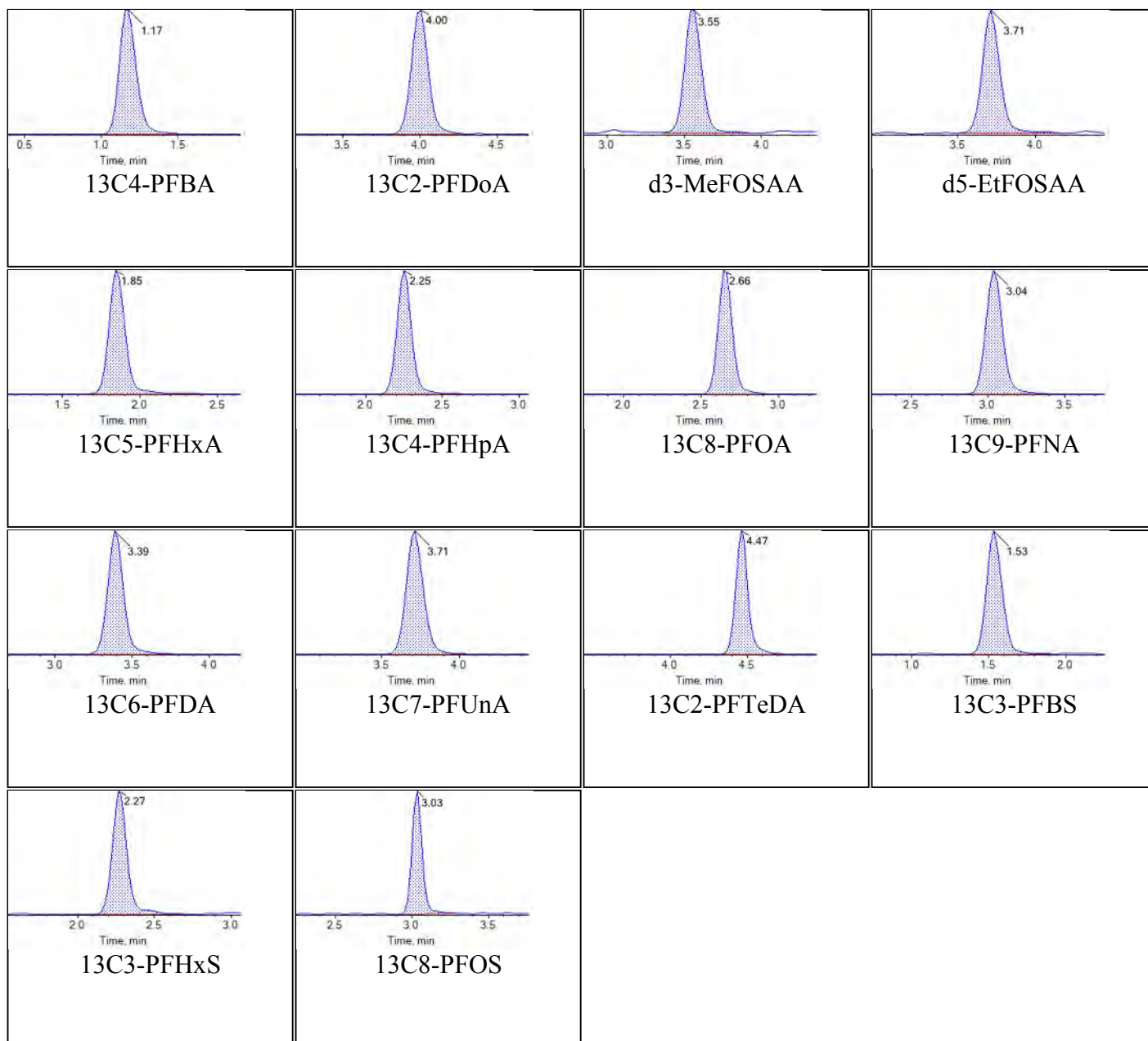


Chromatogram Report

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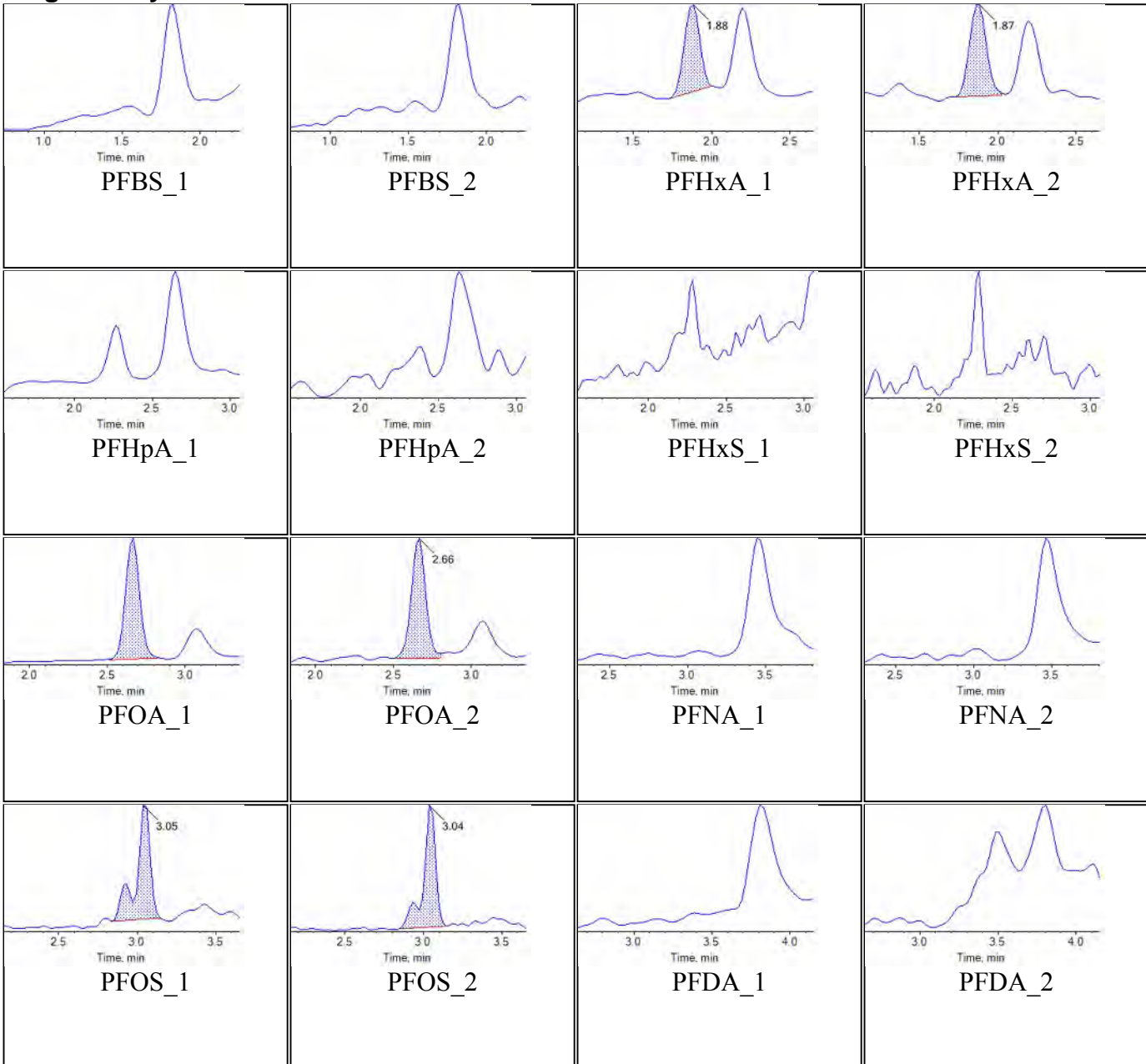
Internal Standards:



Sample Name	CR552PB-FS(3)	Injection Vial	32
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T04:46:41	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

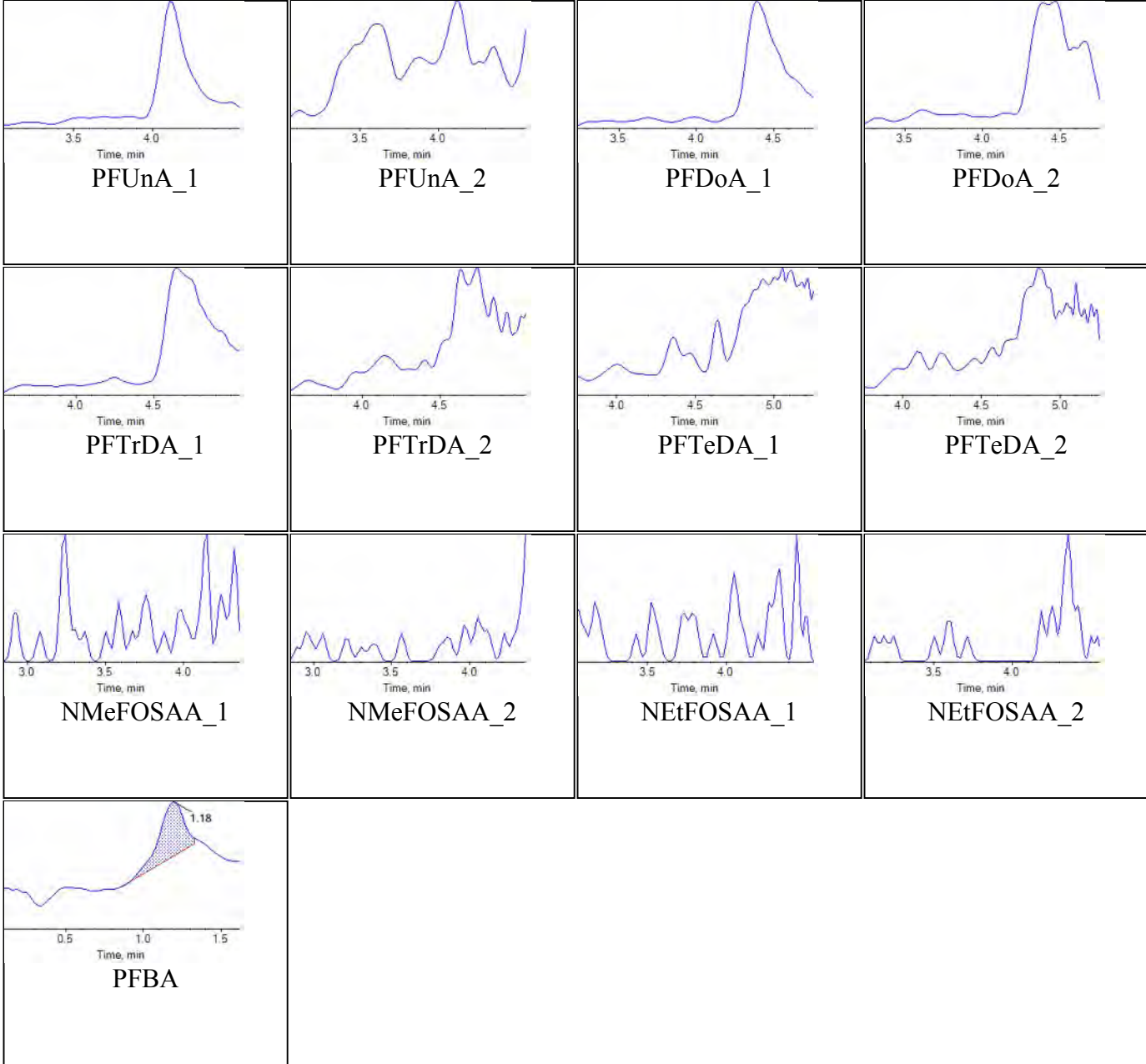
Target Analytes:



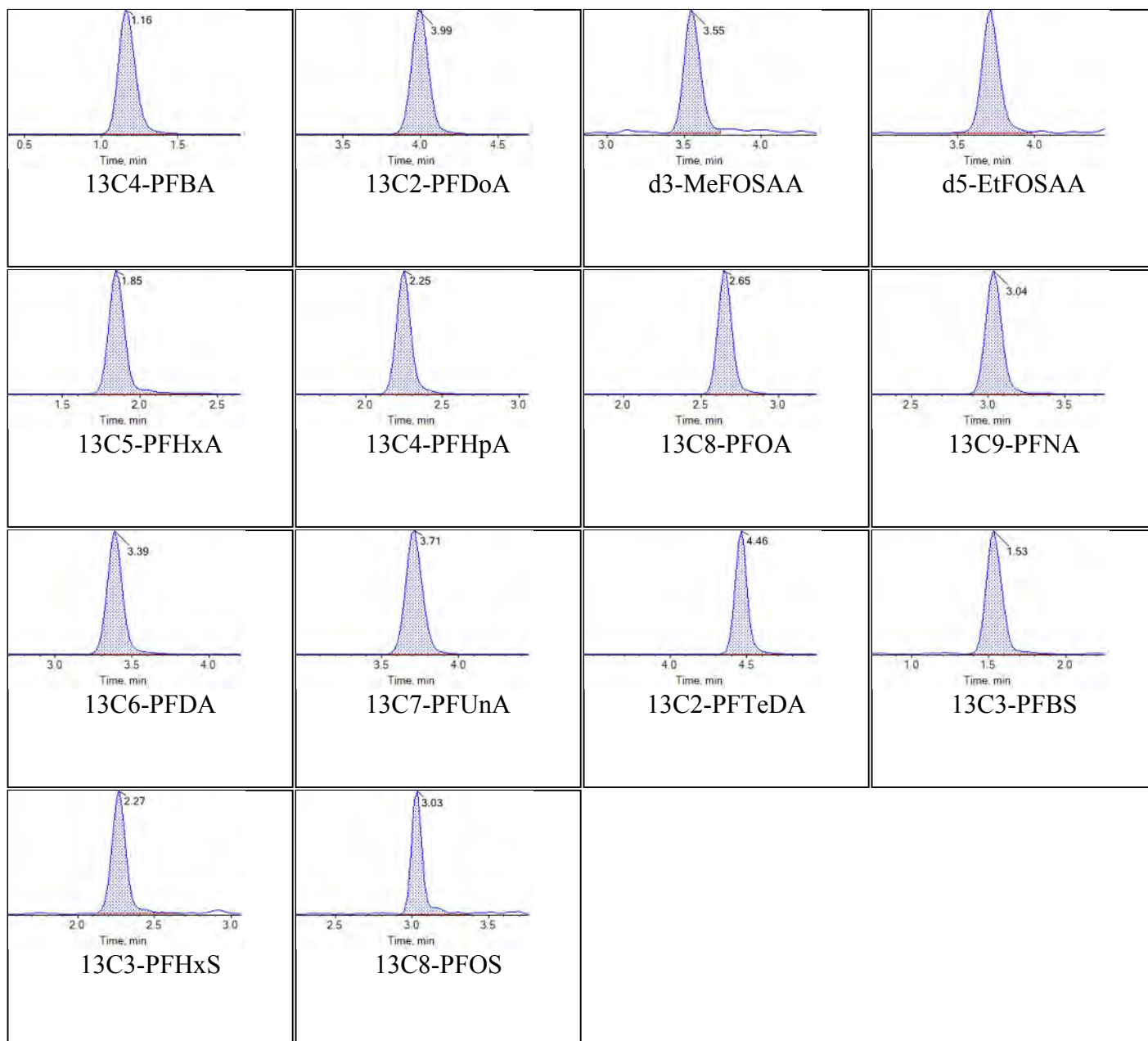


Chromatogram Report

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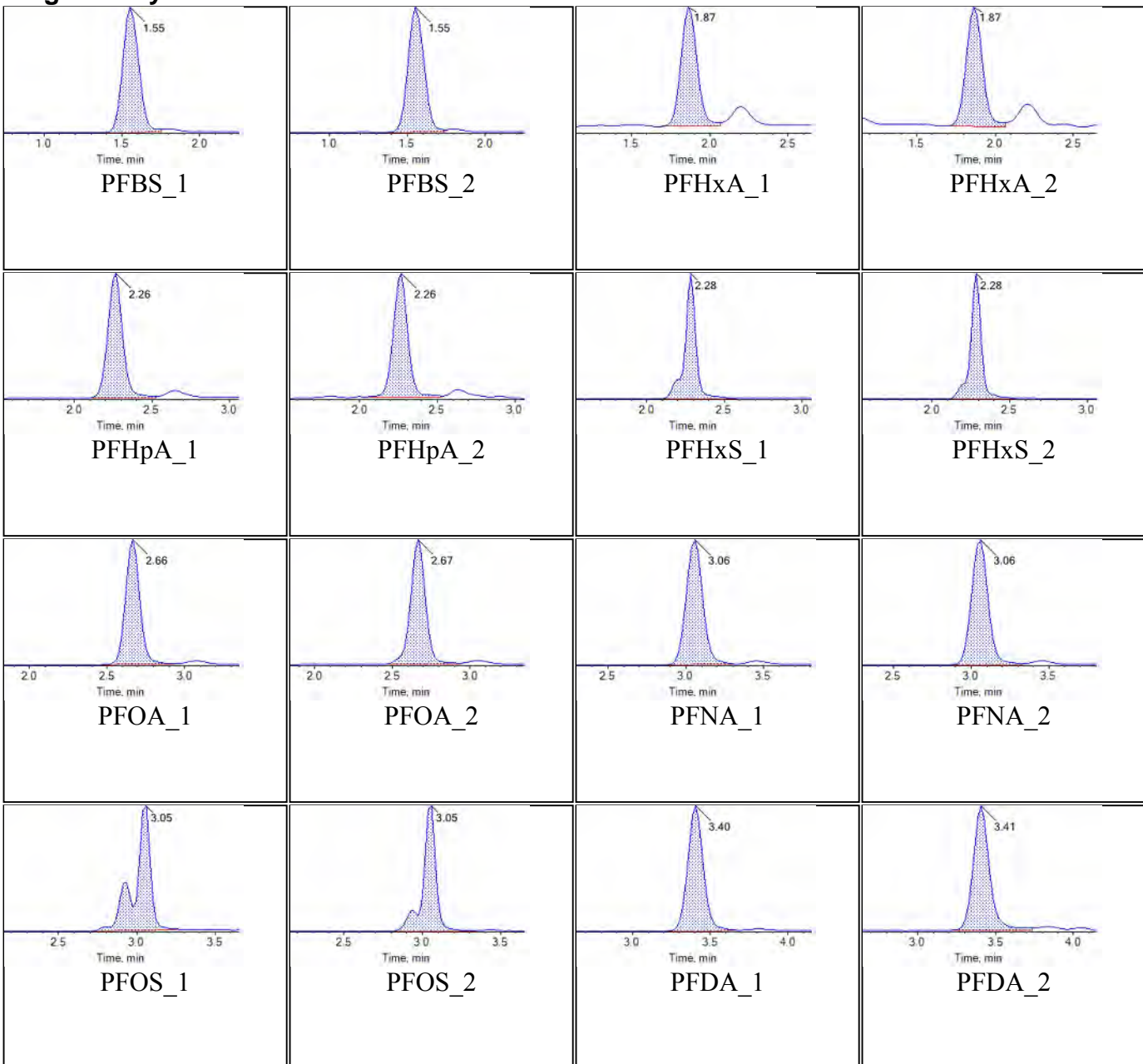
Internal Standards:

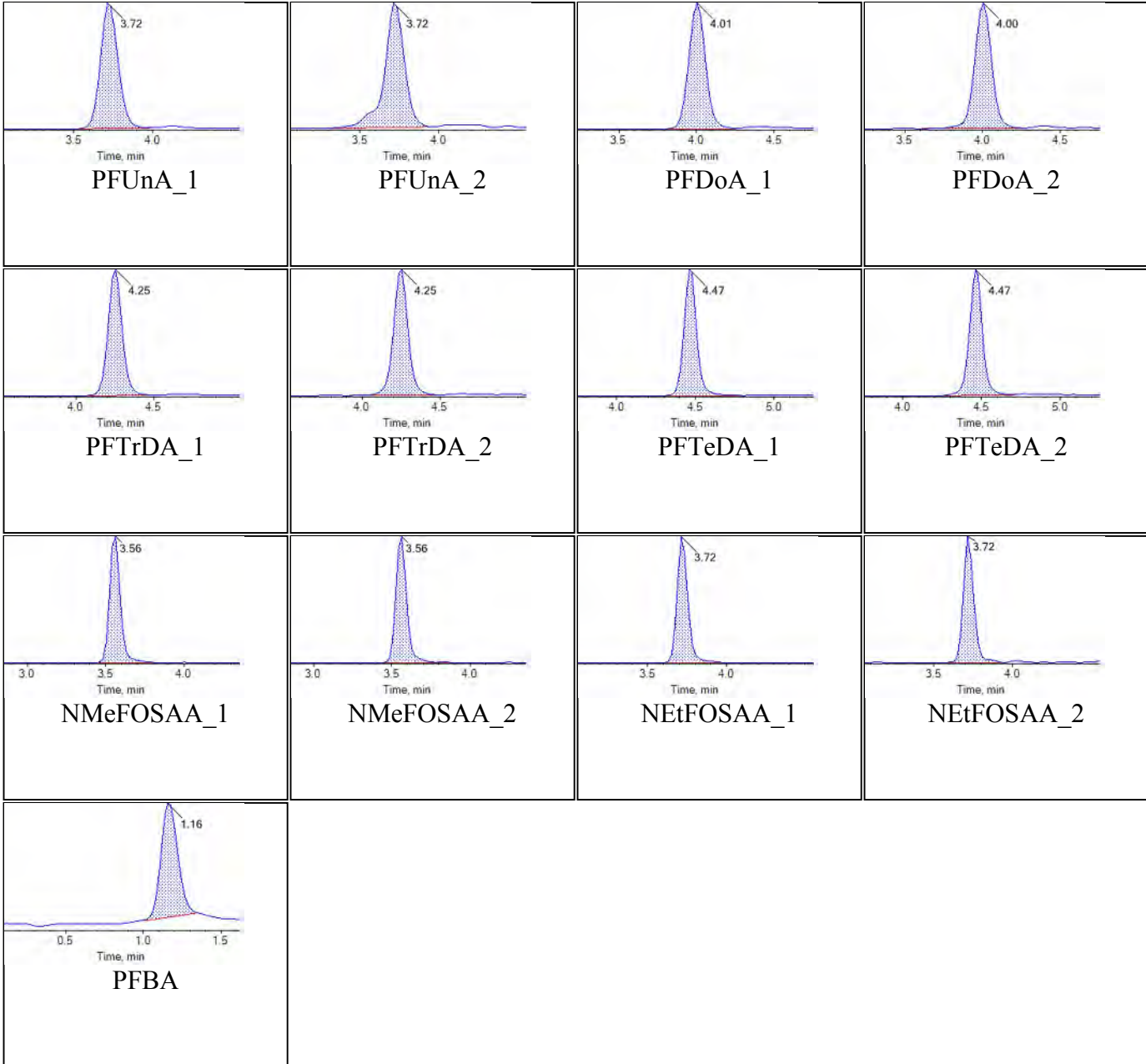


Sample Name	CR553LCS-FS(3)	Injection Vial	33
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T04:57:34	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

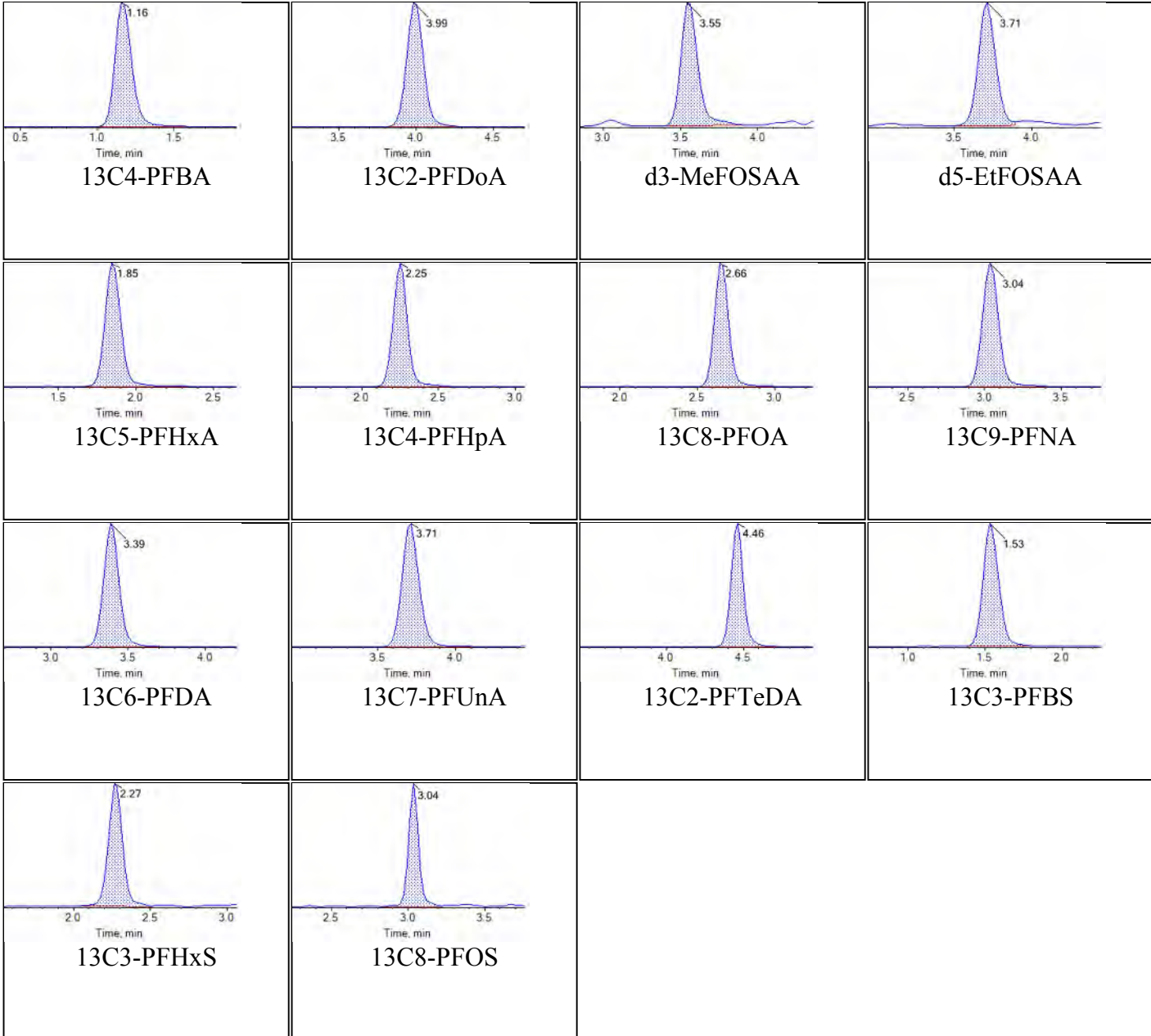
Chromatograms

Target Analytes:





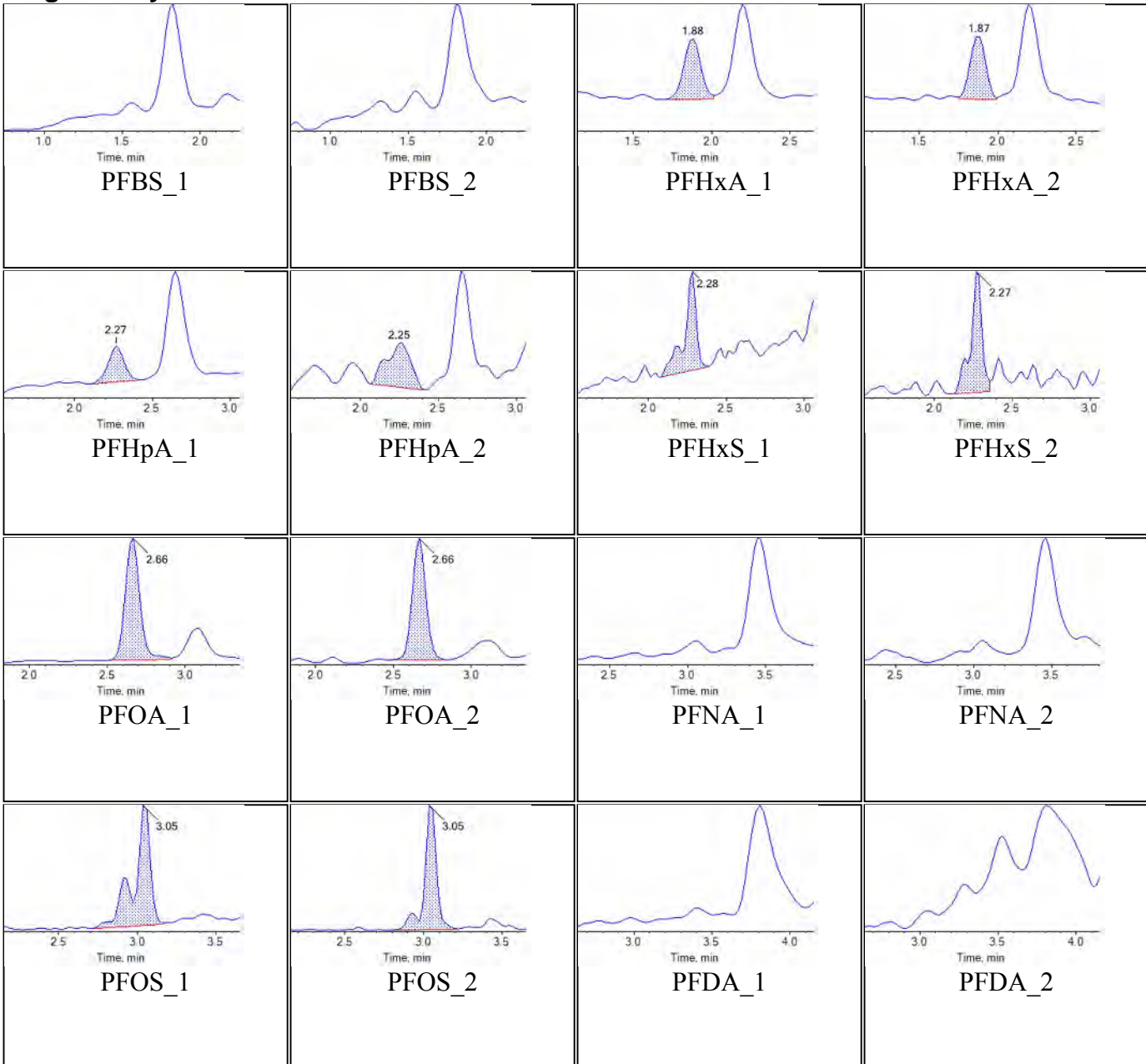
Internal Standards:



Sample Name	J7402-FS(3)	Injection Vial	34
Sample ID	NASB-BLL15-GW-RB01-080918	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:08:27	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

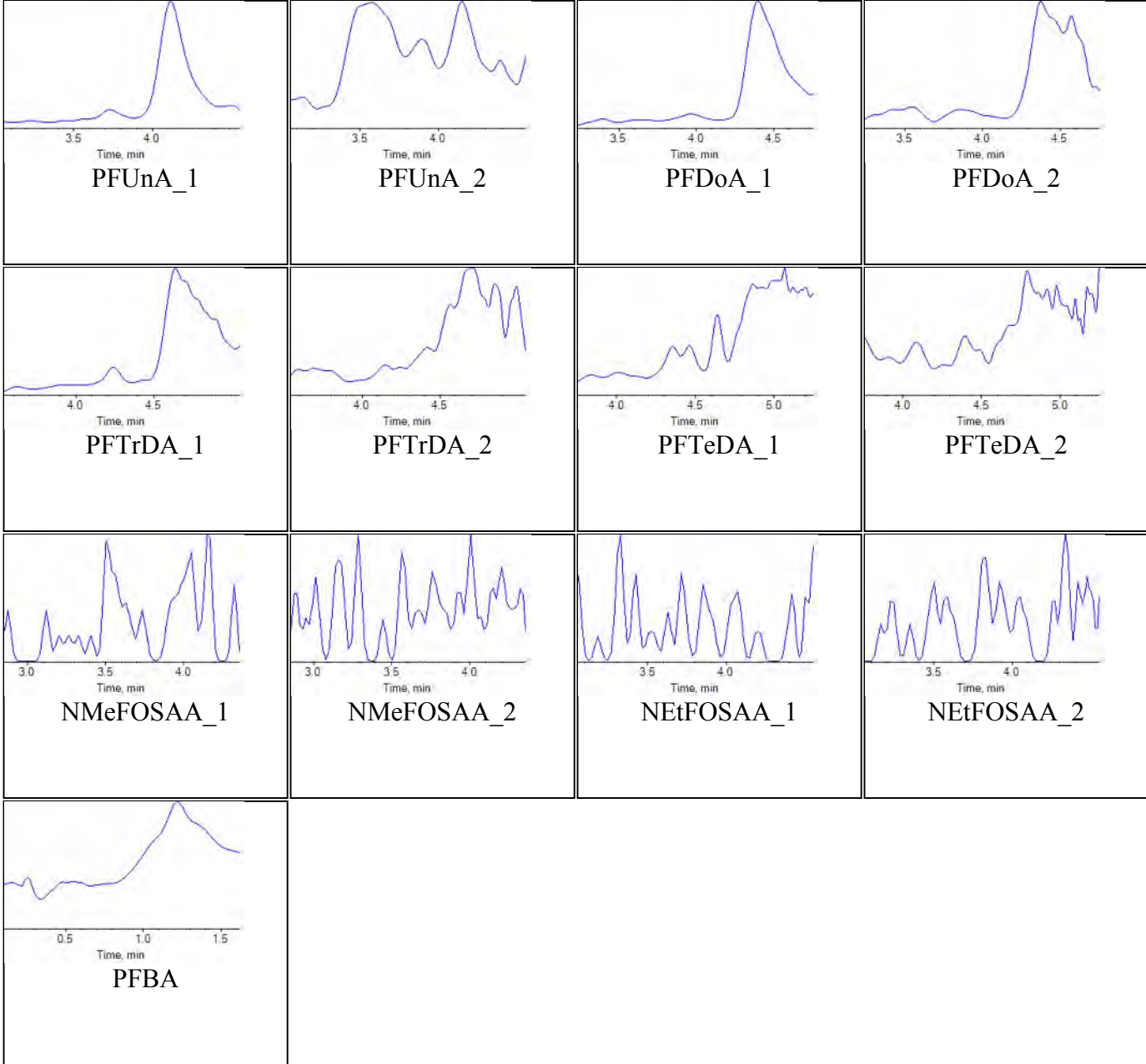
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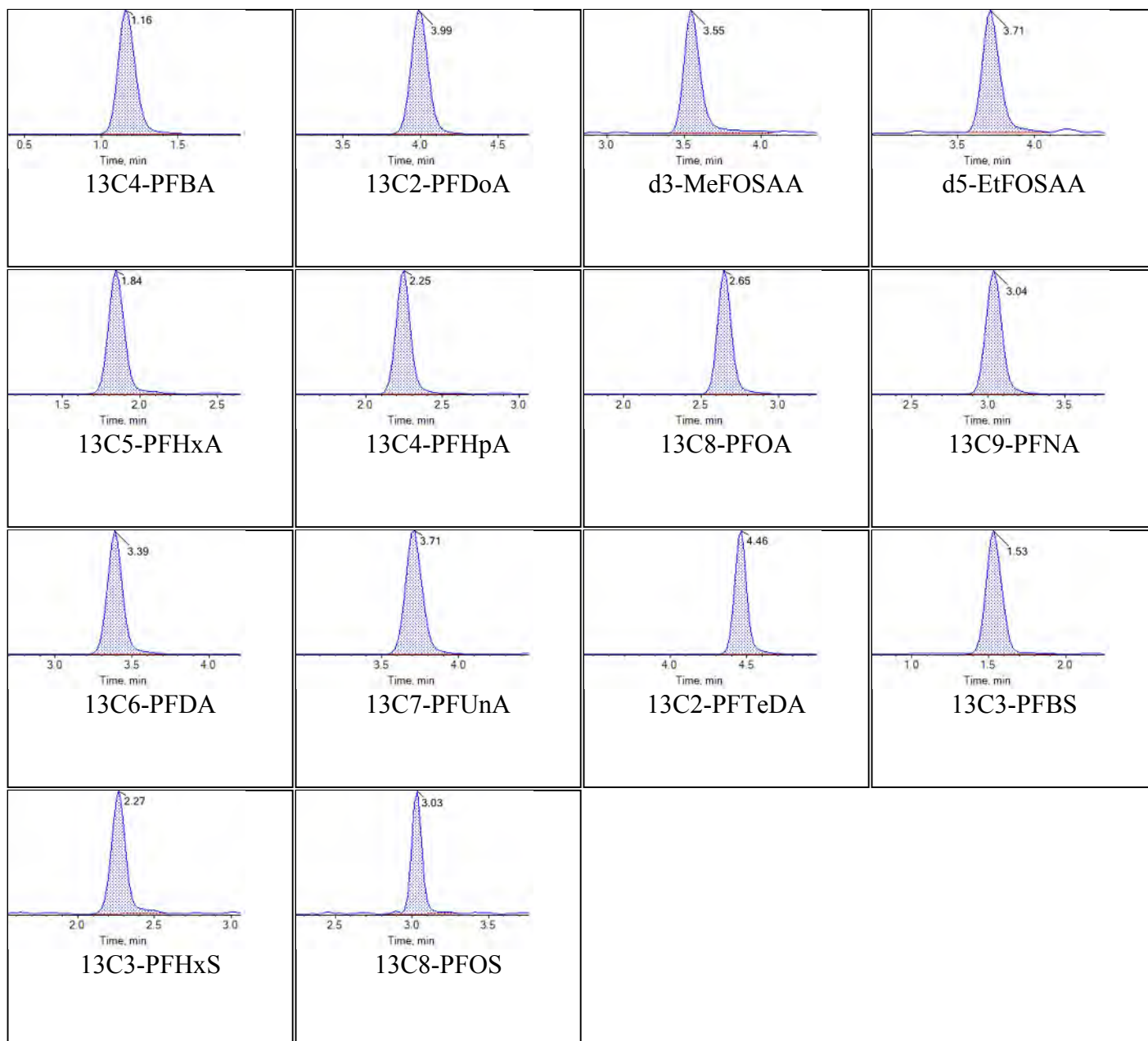


Chromatogram Report

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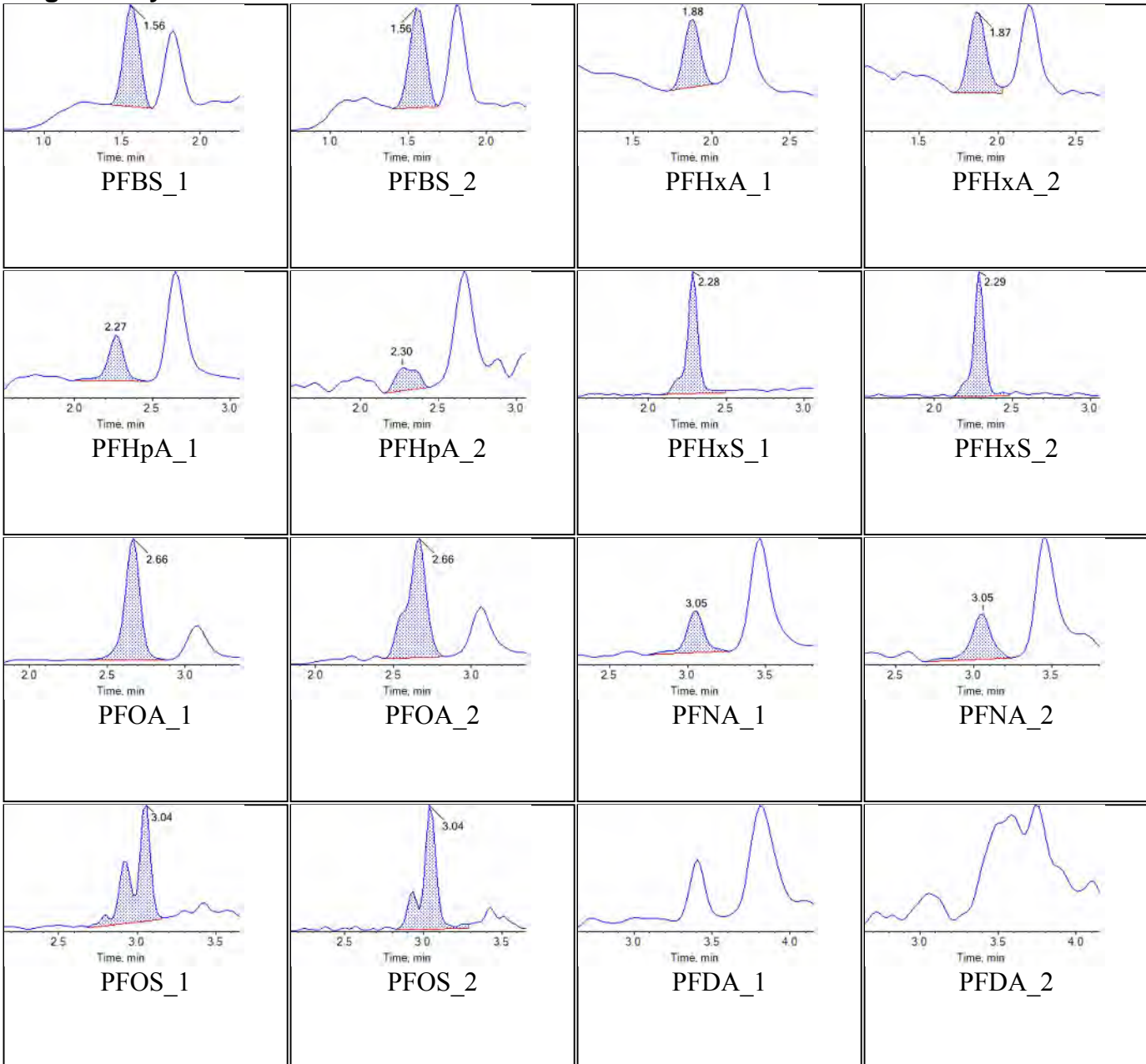
Internal Standards:



Sample Name	J7394-FS(3)	Injection Vial	35
Sample ID	NASB-CCC-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:19:19	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

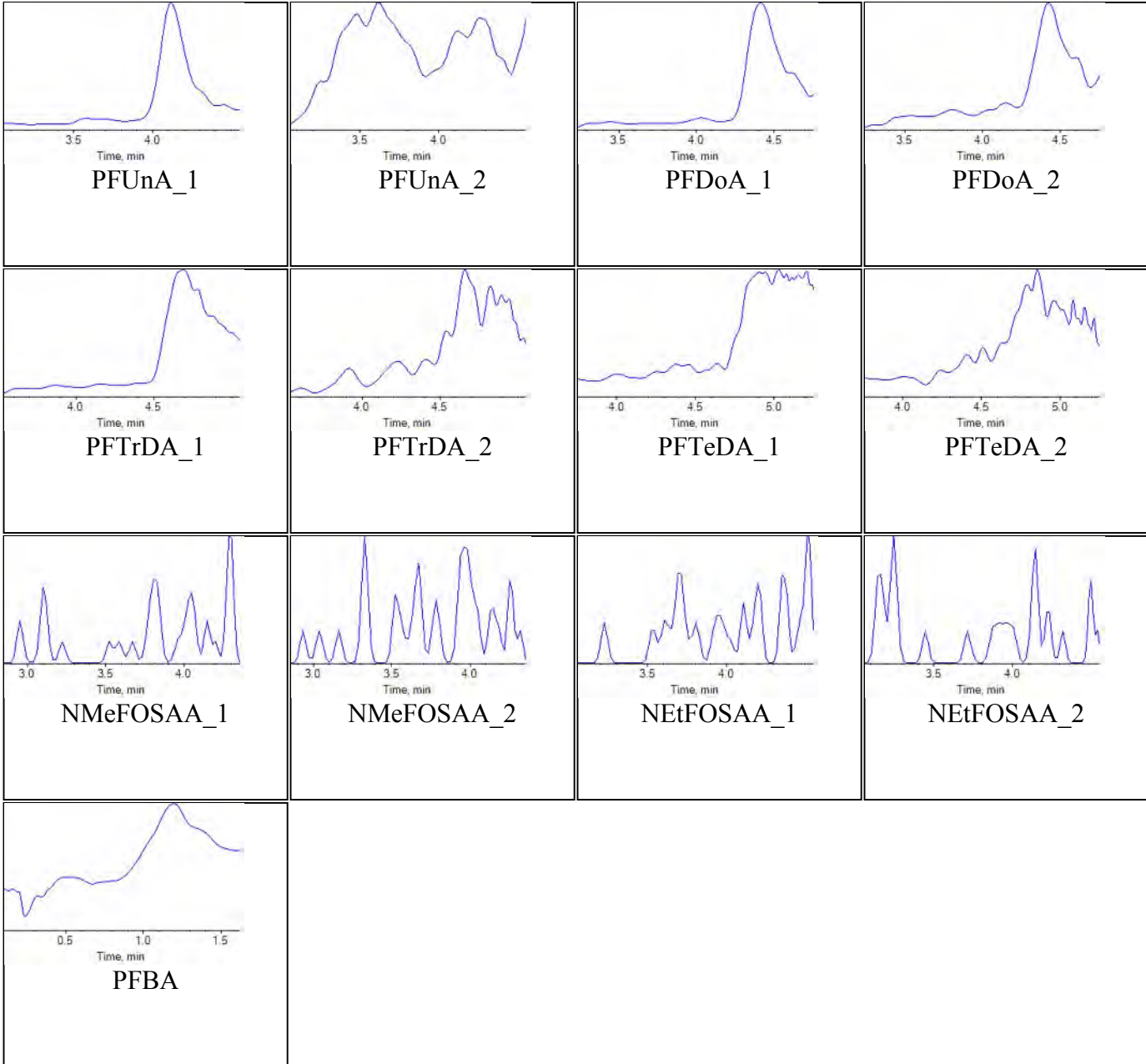
Target Analytes:



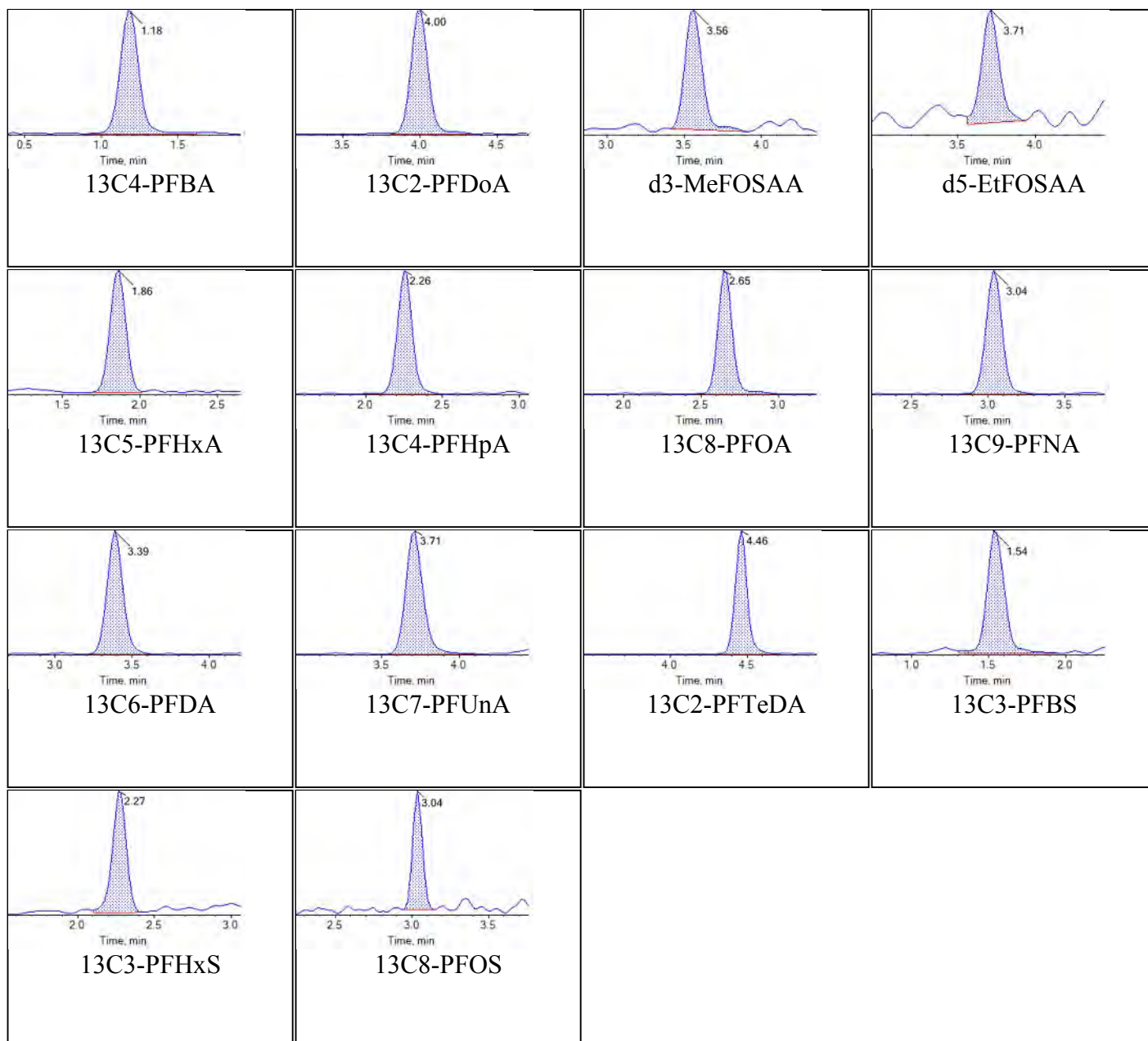


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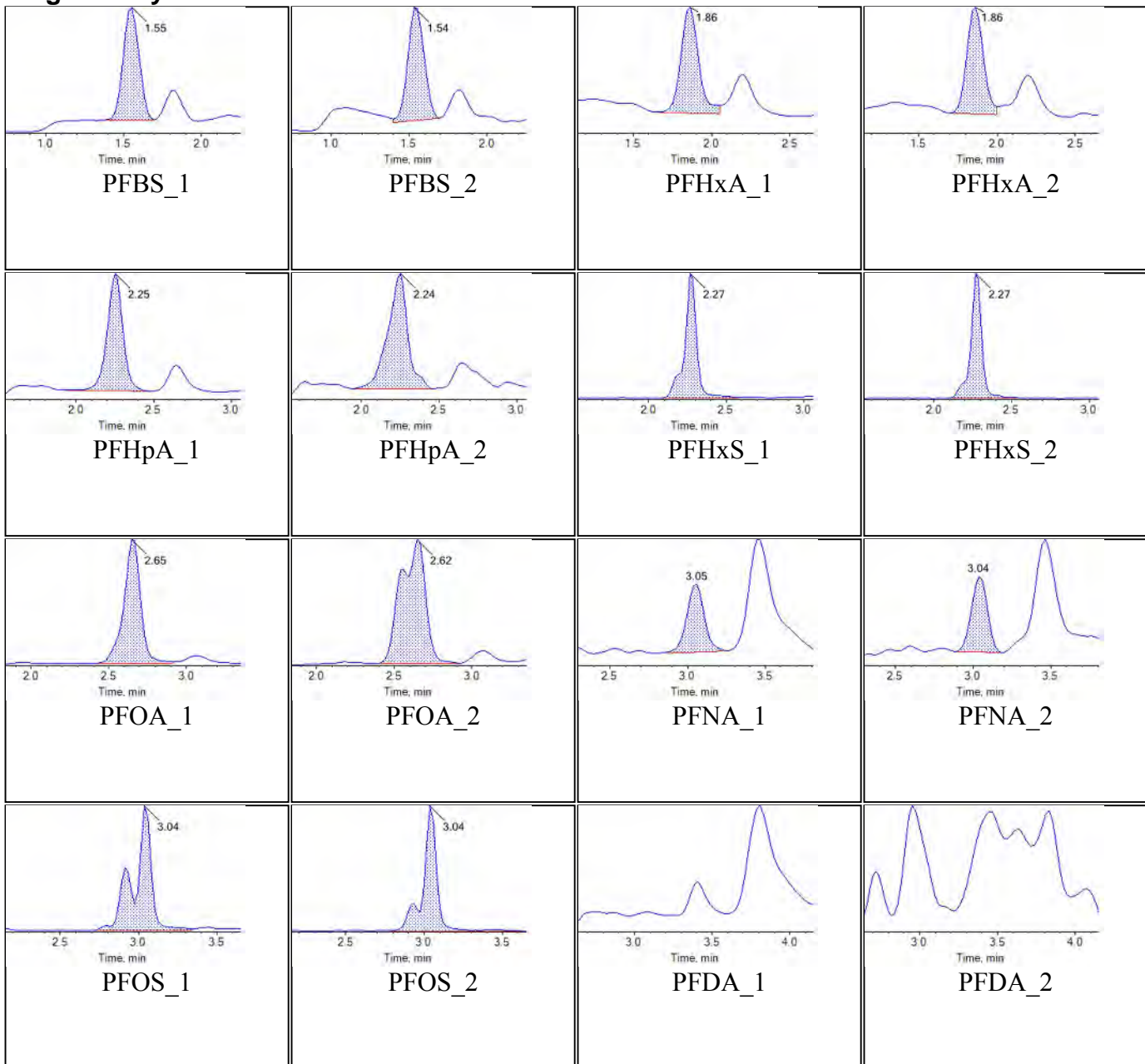
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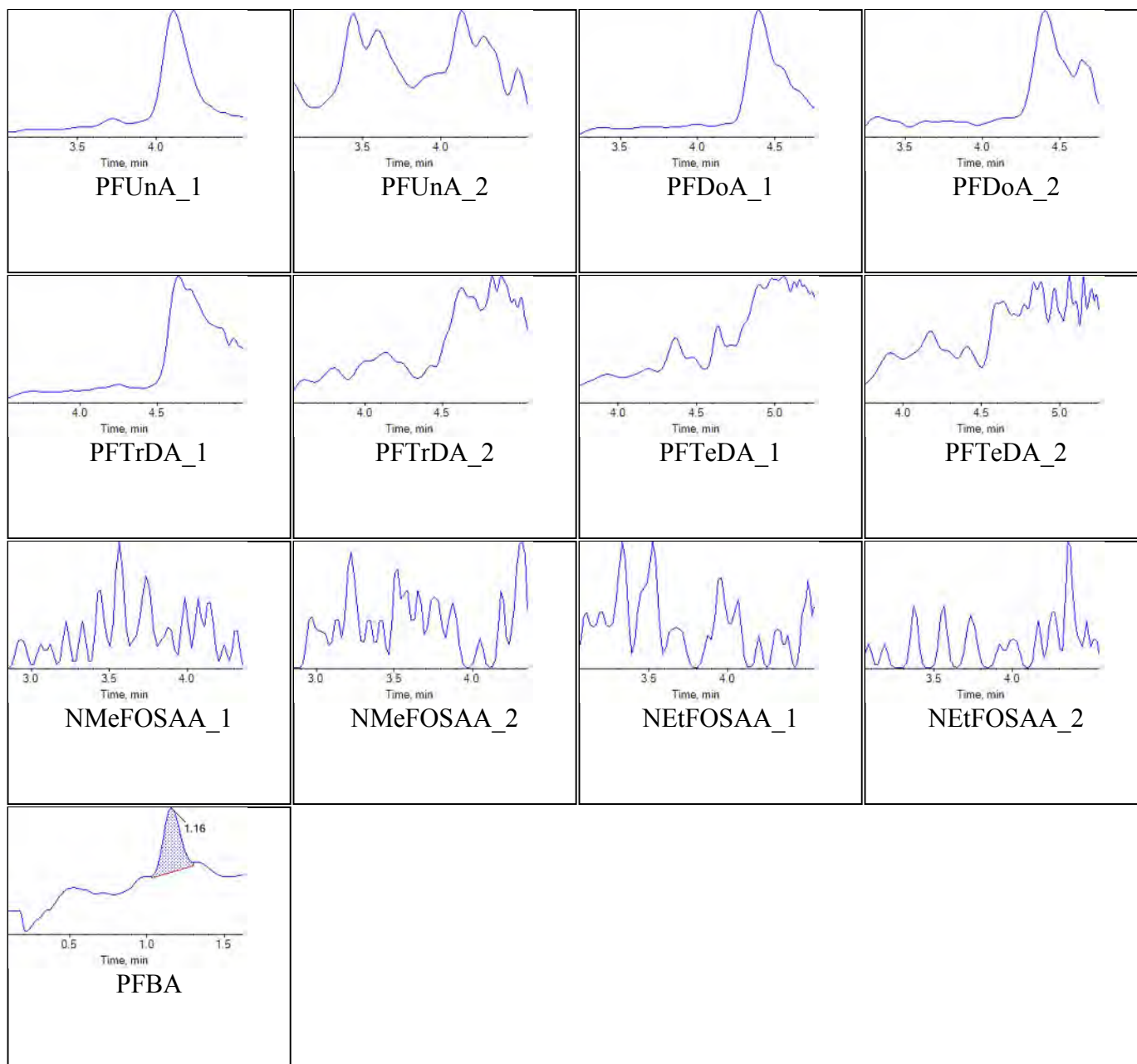


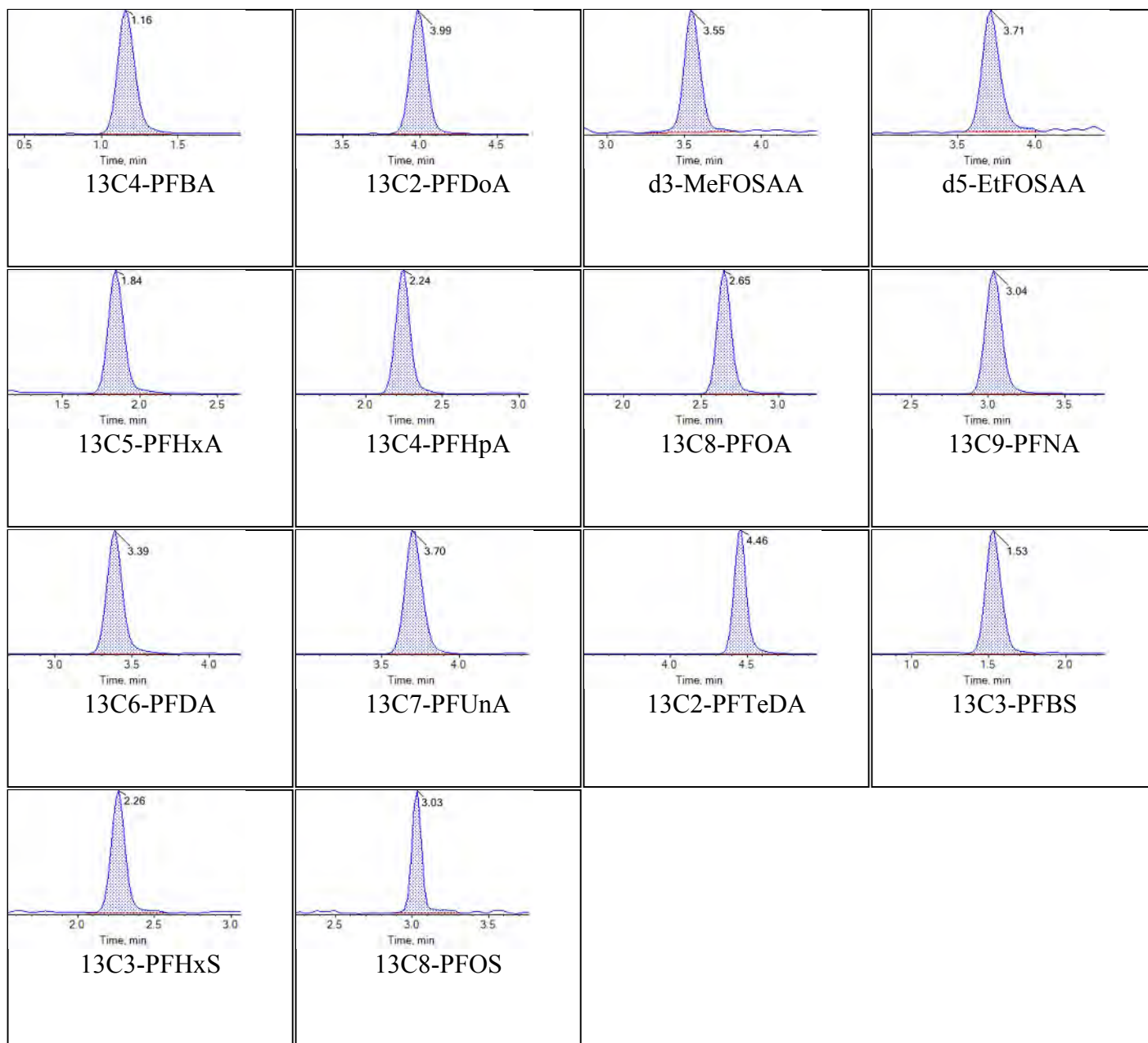
Sample Name	J7395-FS(3)	Injection Vial	36
Sample ID	NASB-CCC-GW-02-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:30:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

Target Analytes:



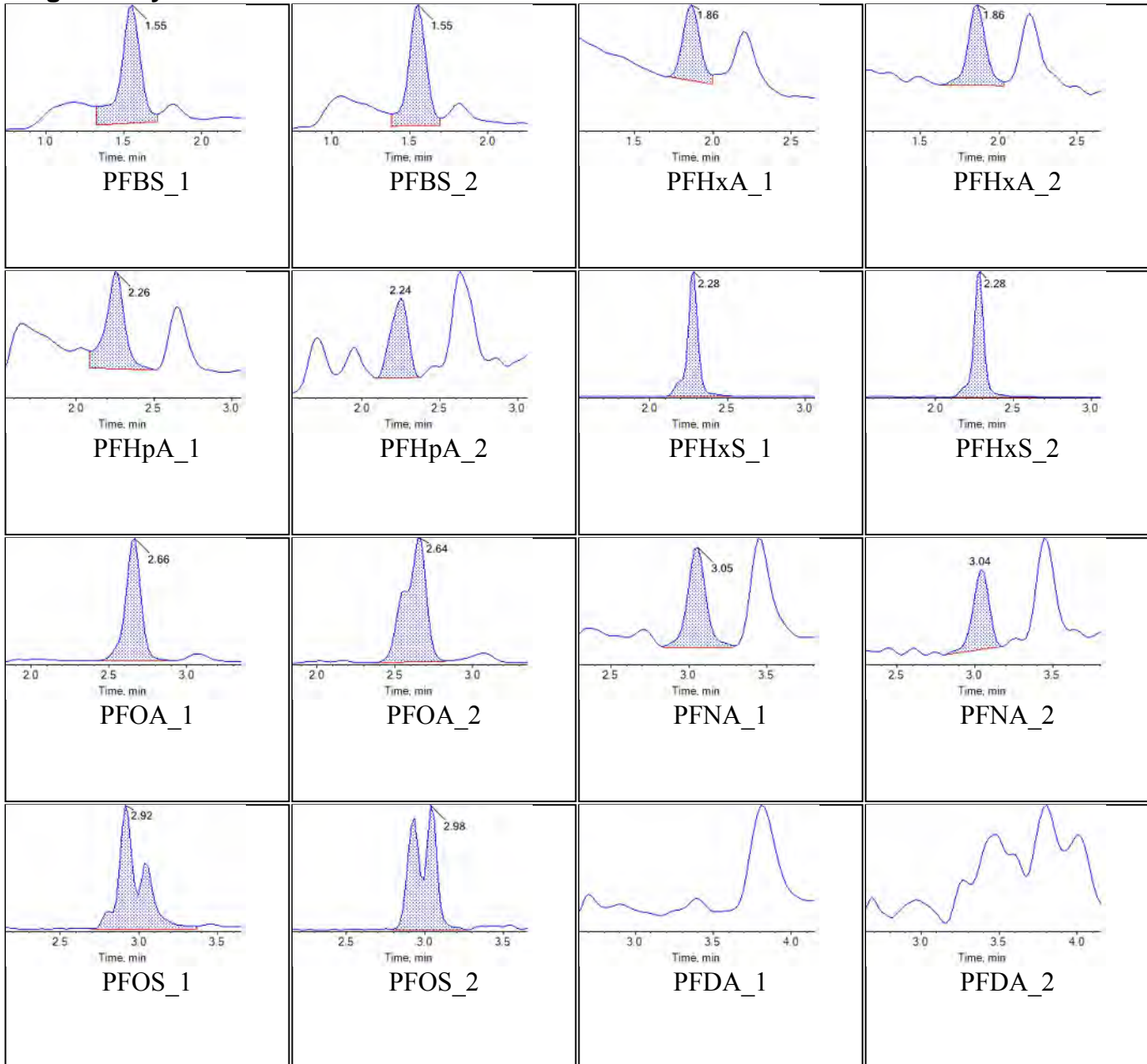
**Internal Standards:**



Sample Name	J7396-FS(3)	Injection Vial	37
Sample ID	NASB-BLL15-GW-02-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:41:02	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

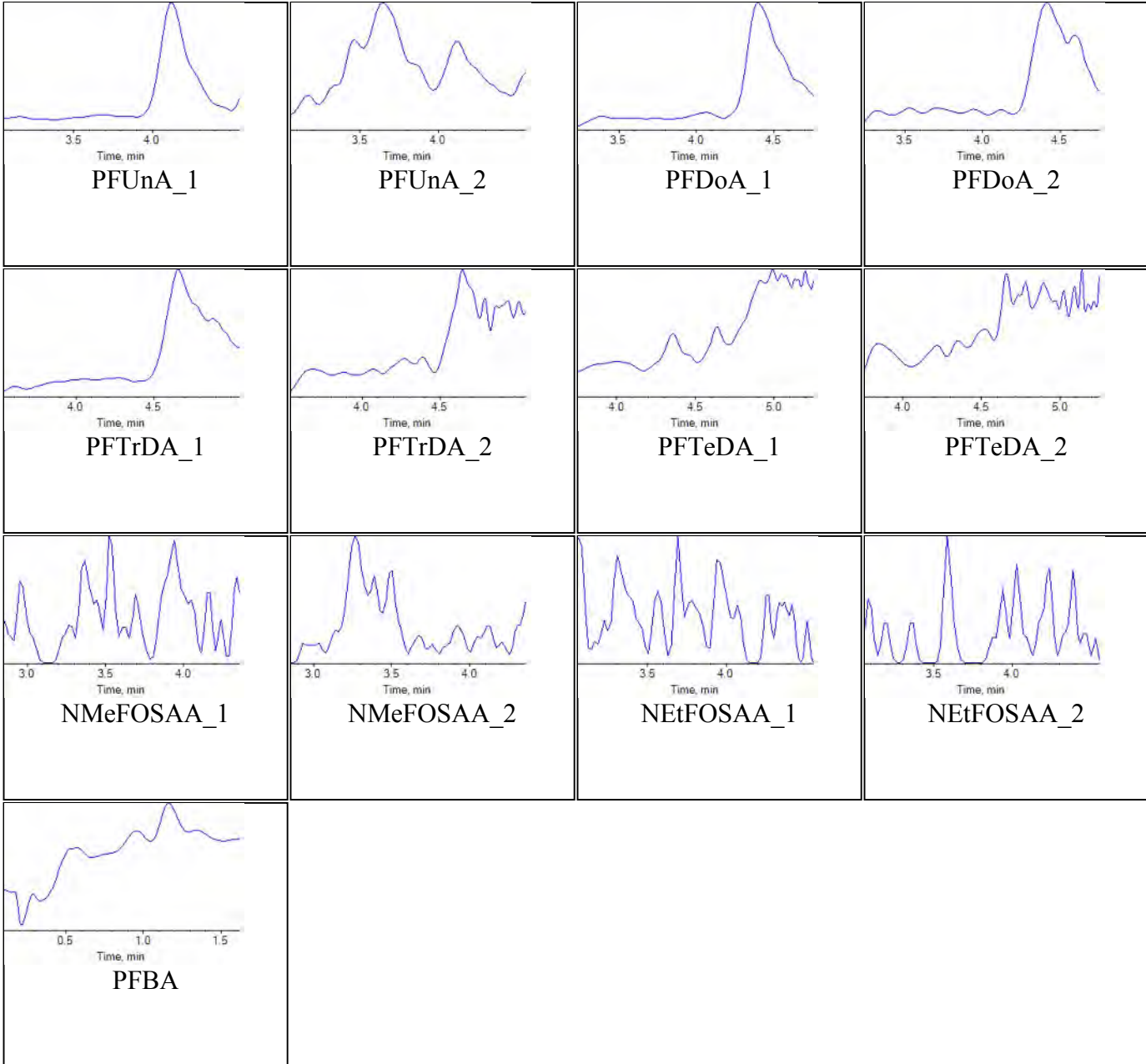
Target Analytes:





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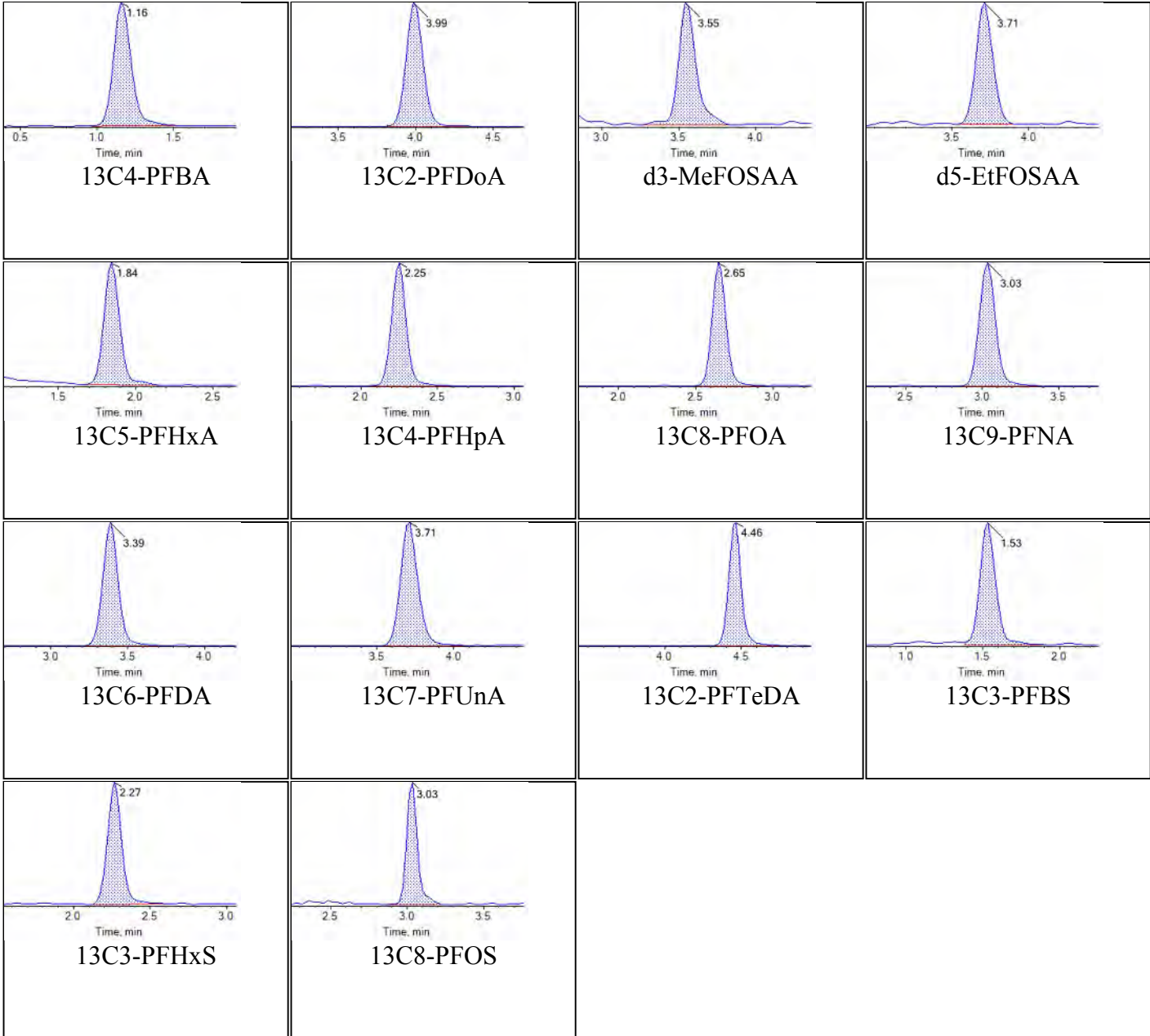


Internal Standards:



Chromatogram Report

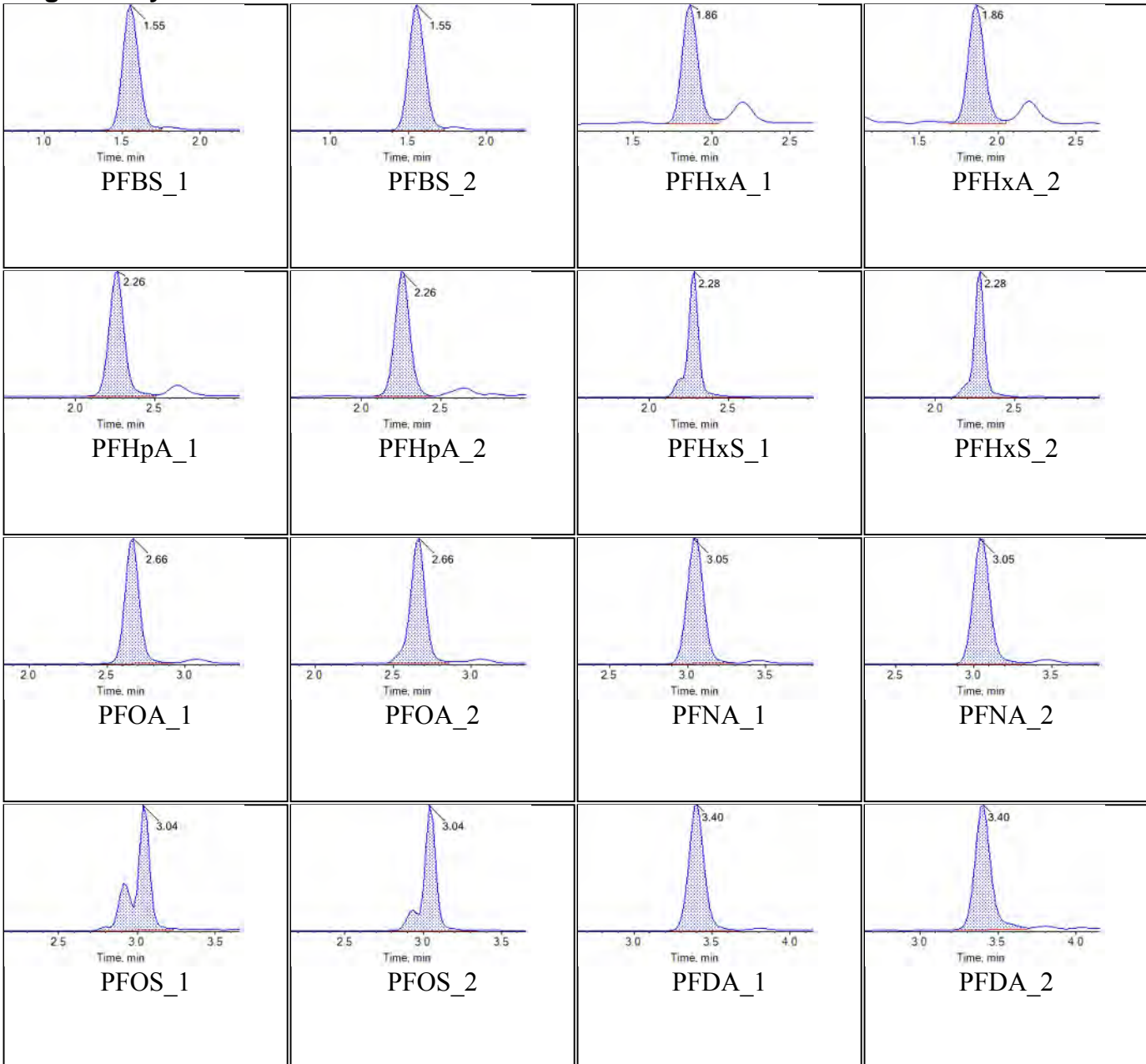
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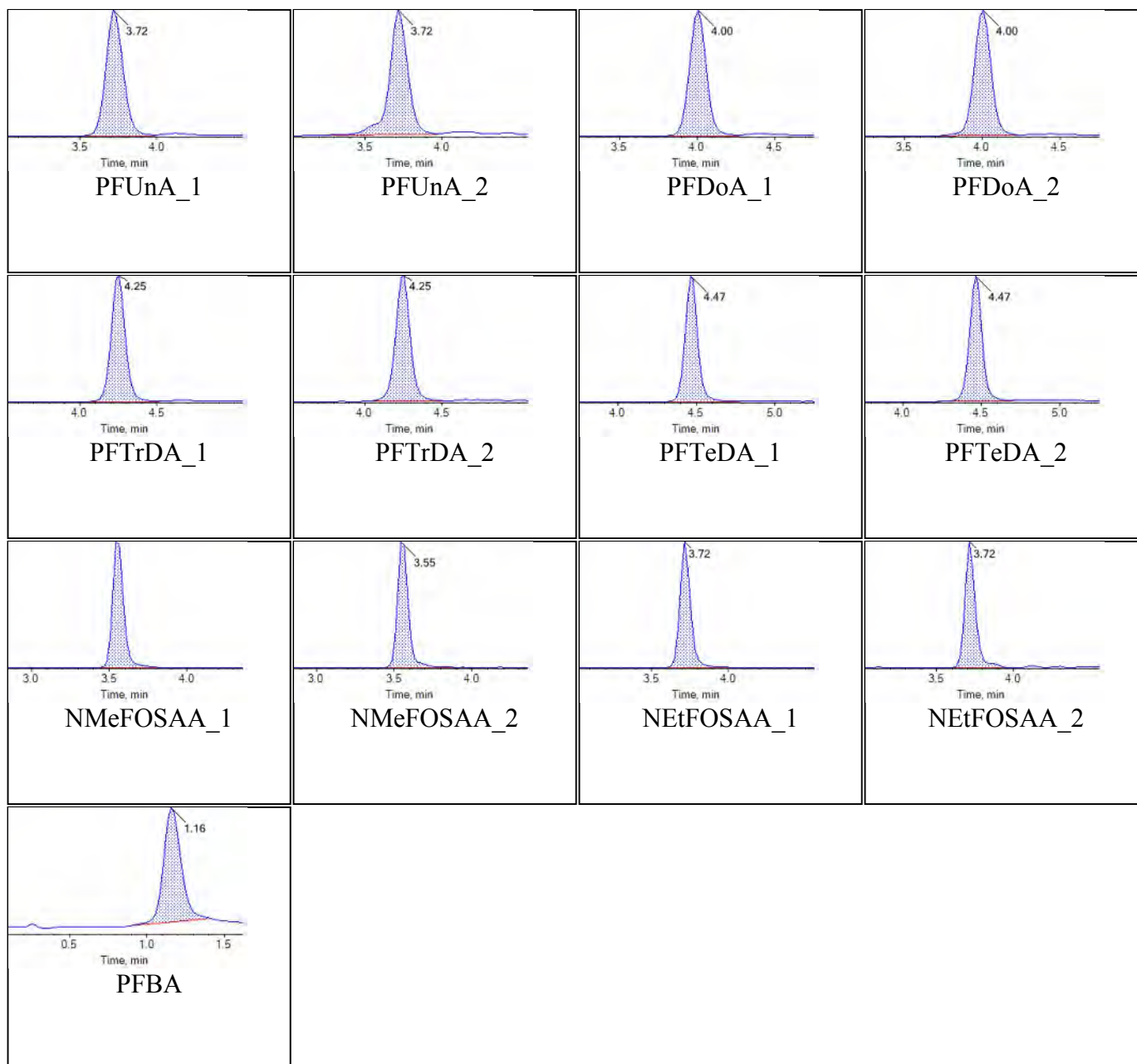


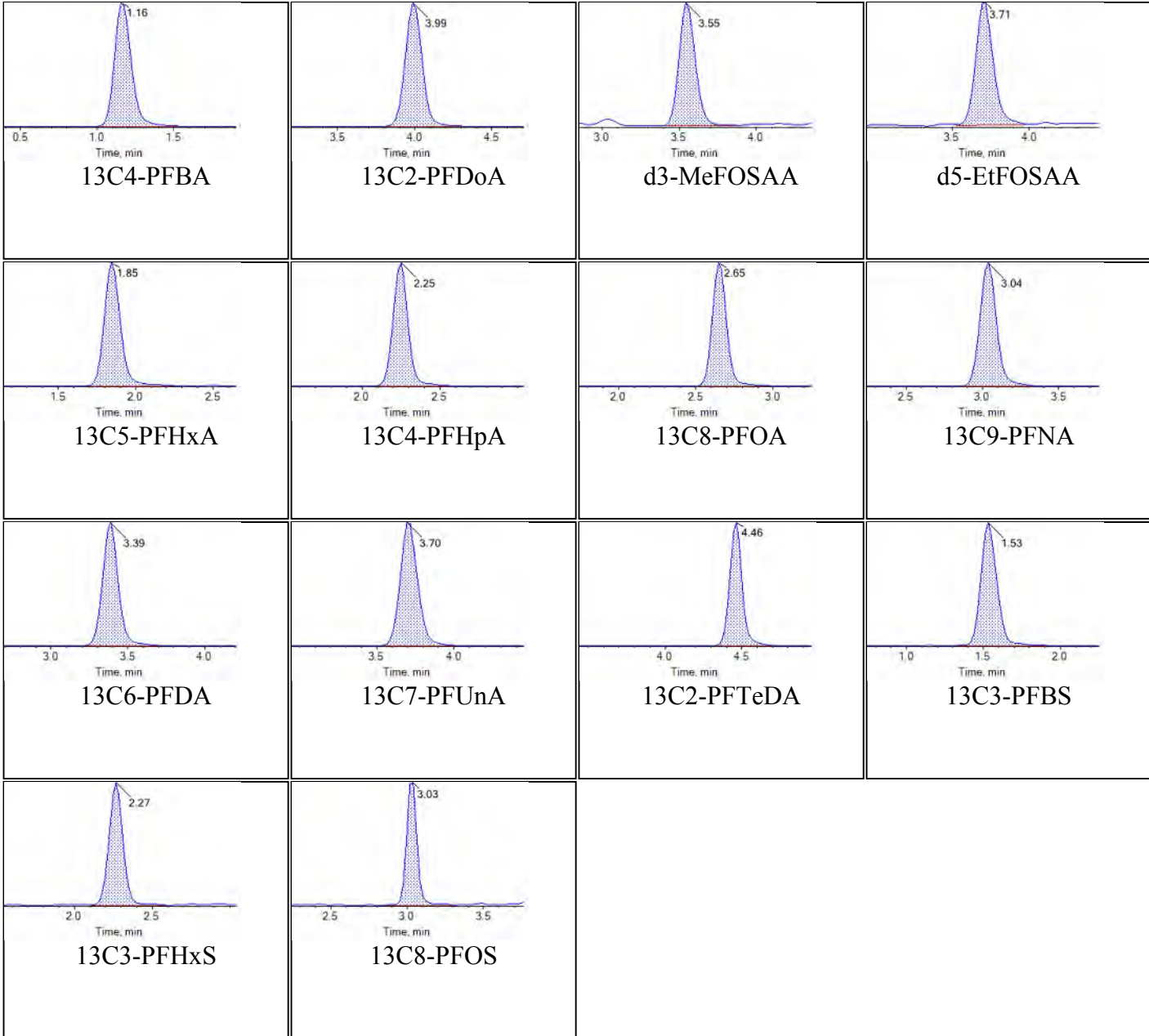
Sample Name	JY42 CCV	Injection Vial	38
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:02:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

Target Analytes:



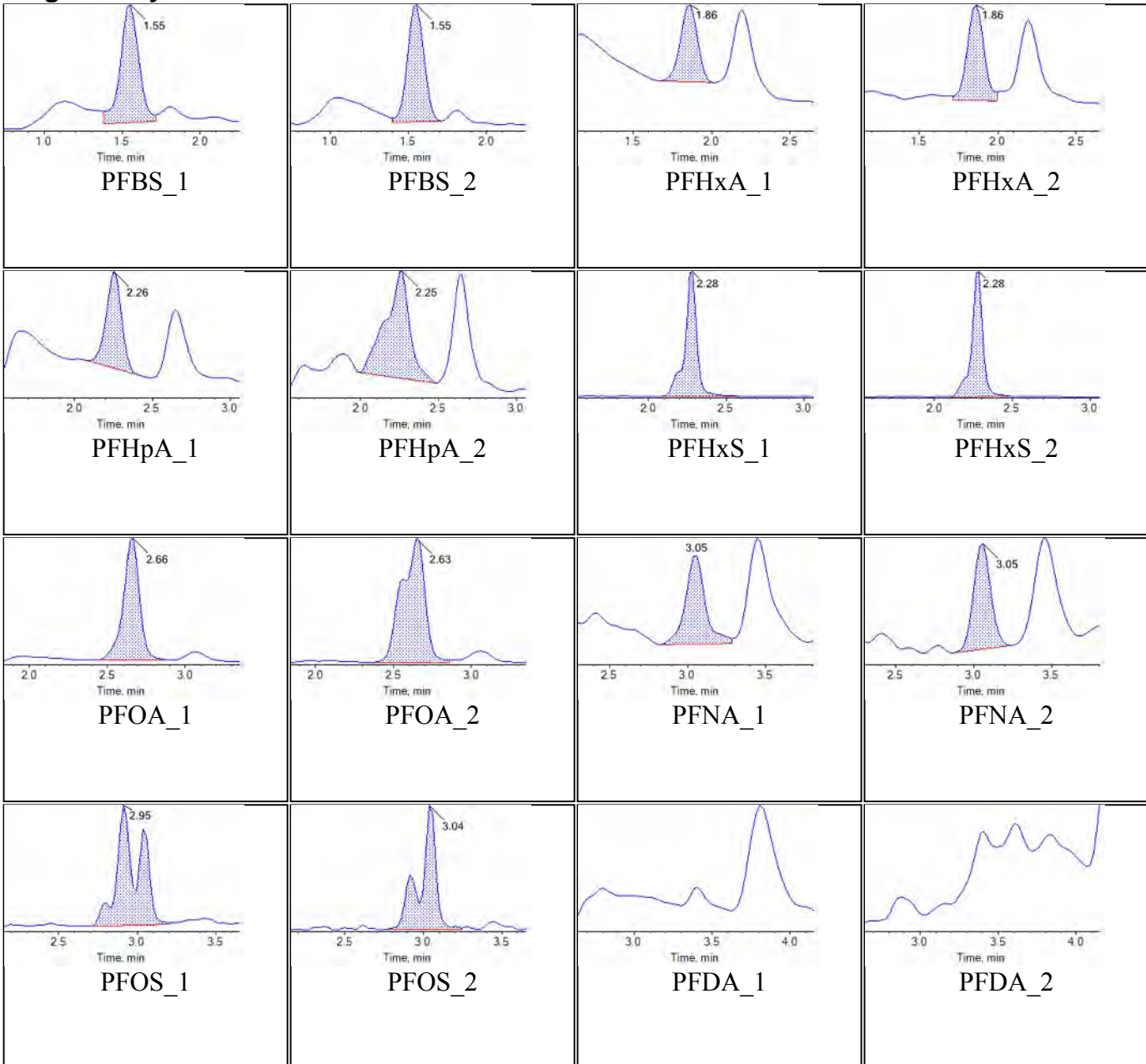
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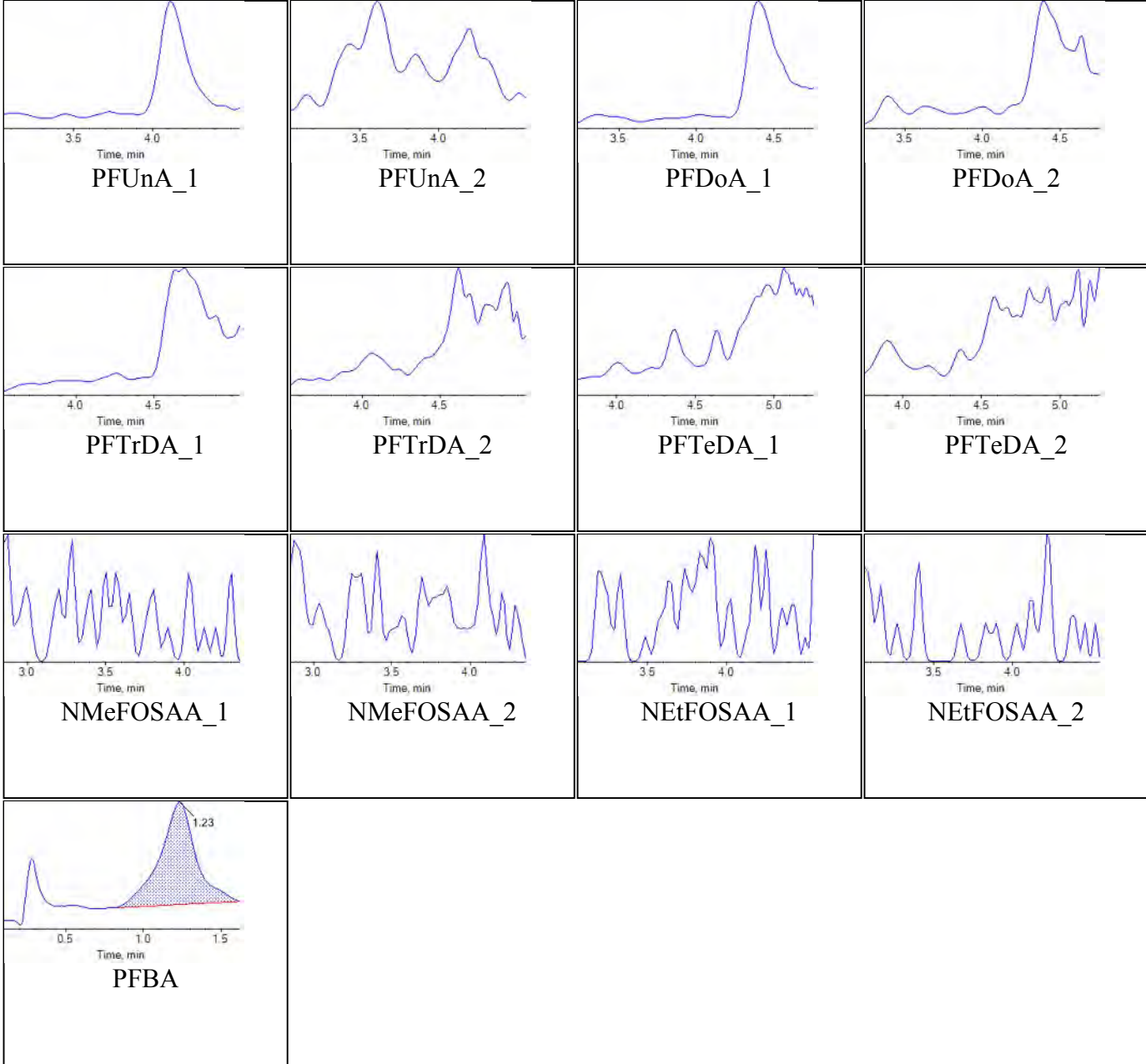


Sample Name	J7397-FS(3)	Injection Vial	39
Sample ID	NASB-BLL15-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:24:32	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

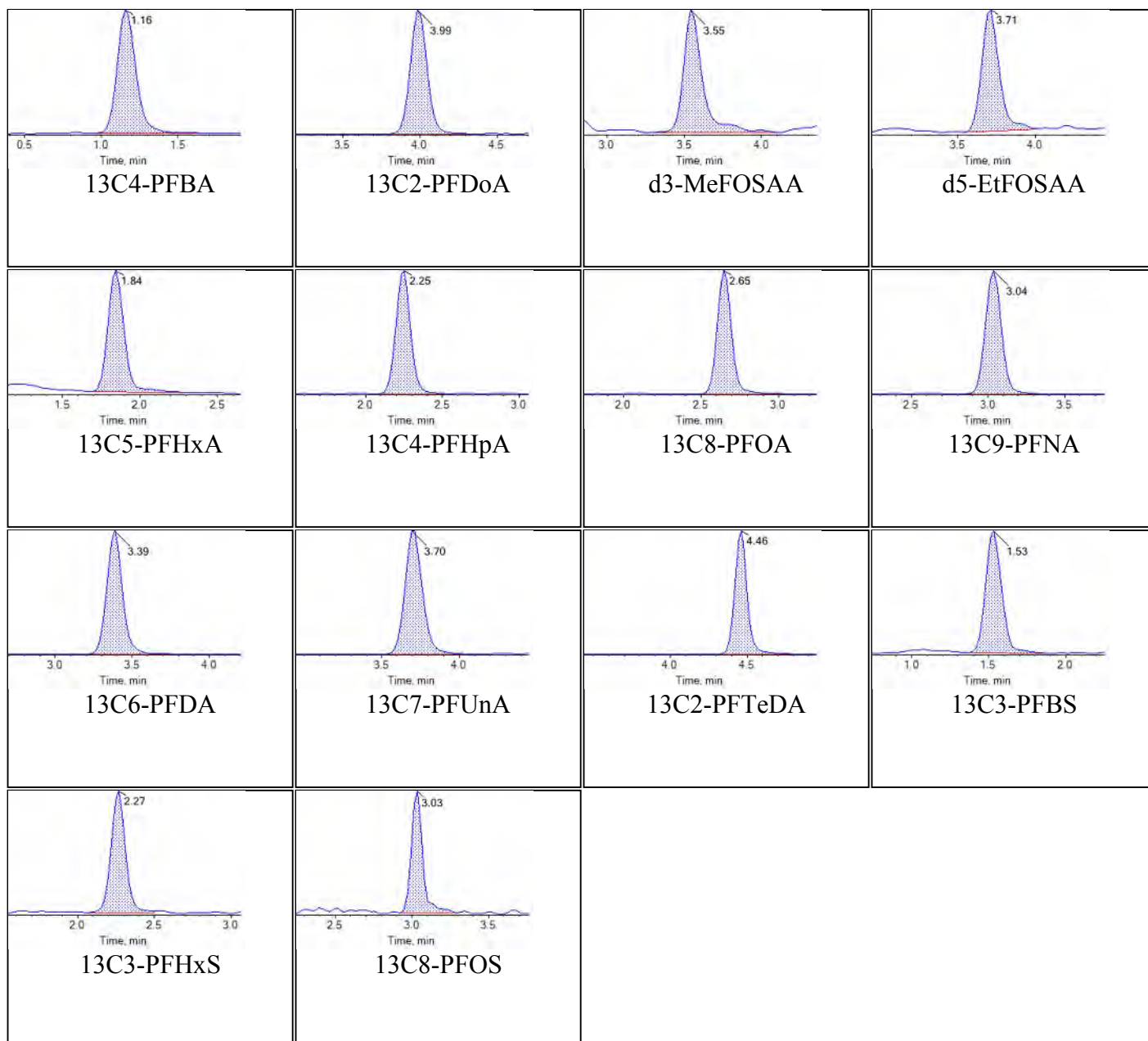
Chromatograms

Target Analytes:





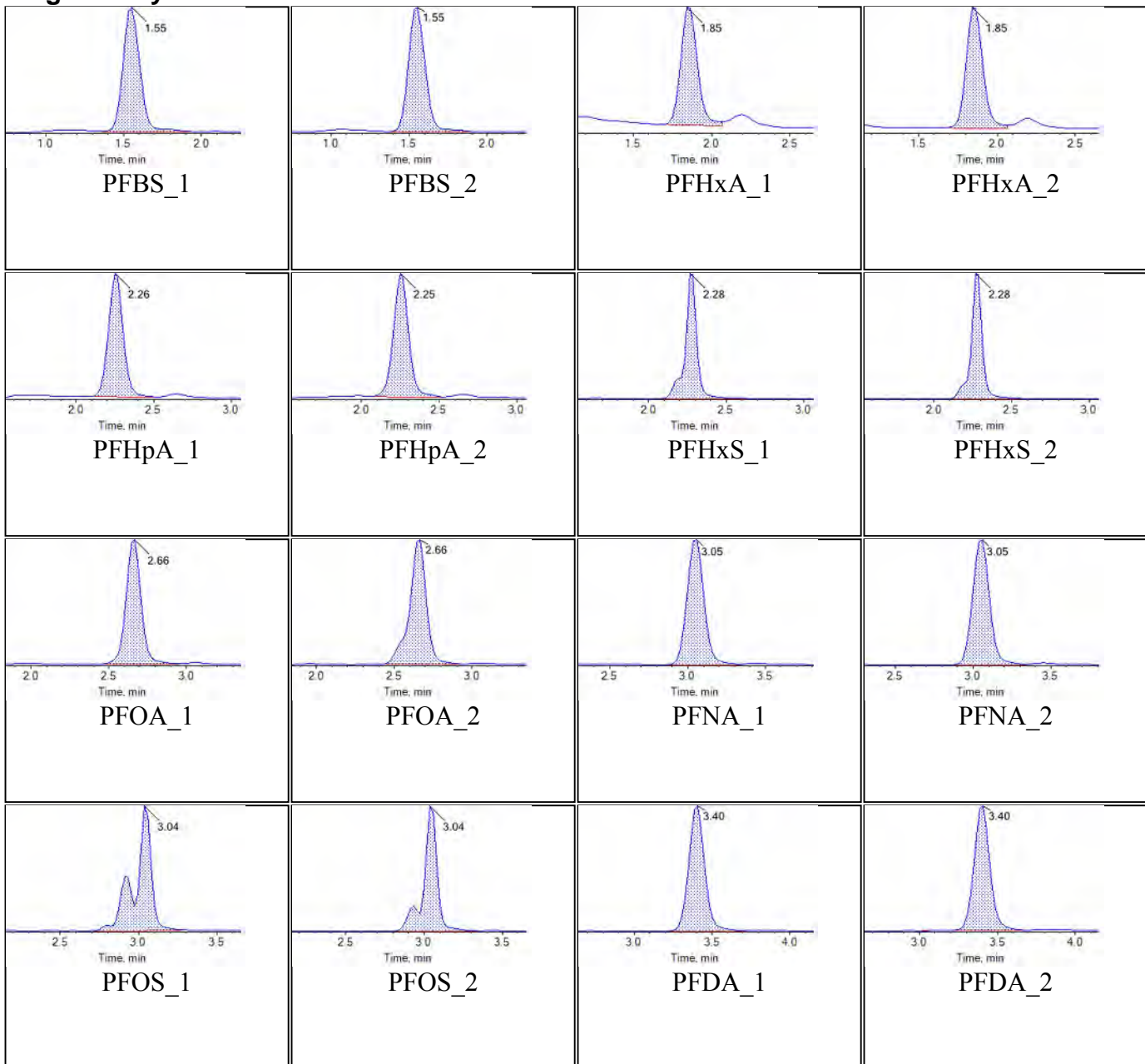
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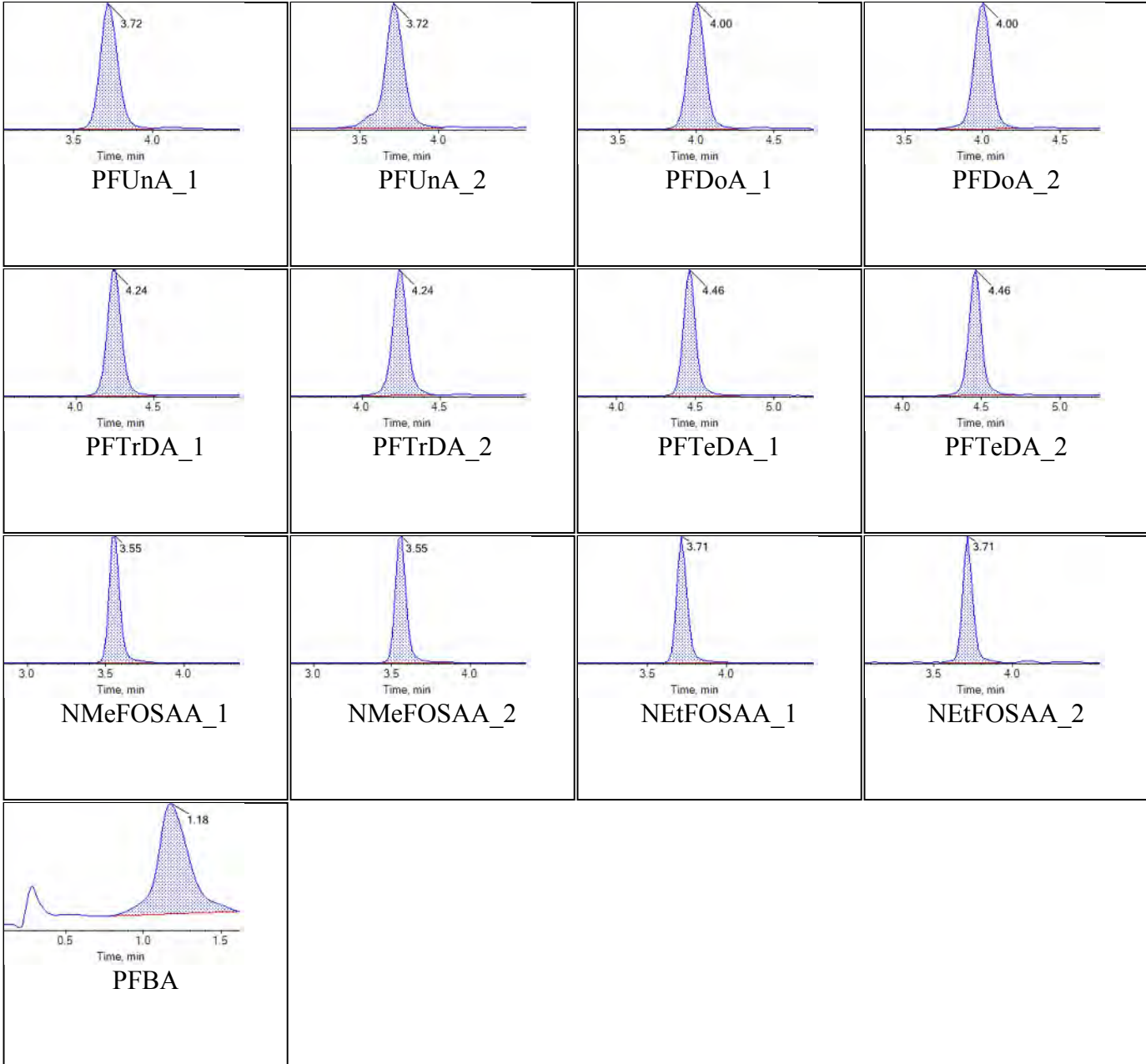


Sample Name	J7397MS-FS(3)	Injection Vial	40
Sample ID	Matrix Spike Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:35:25	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

Target Analytes:



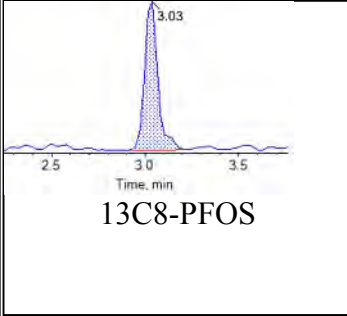
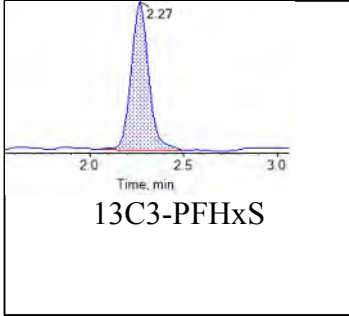
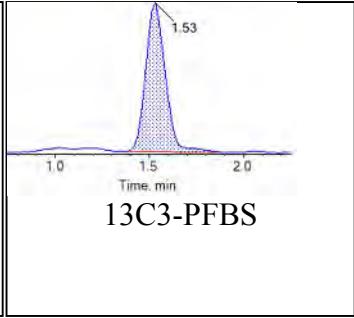
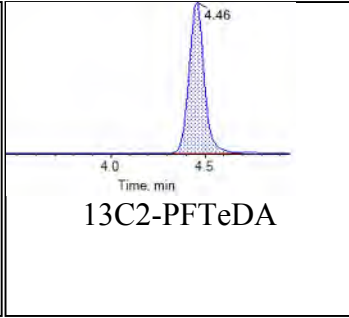
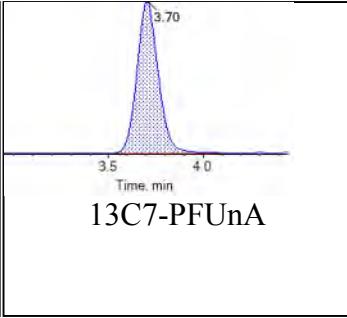
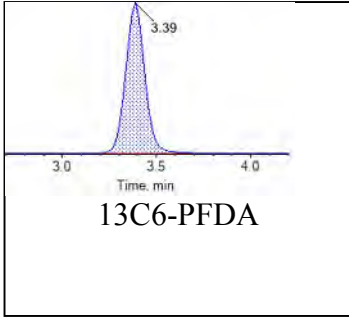
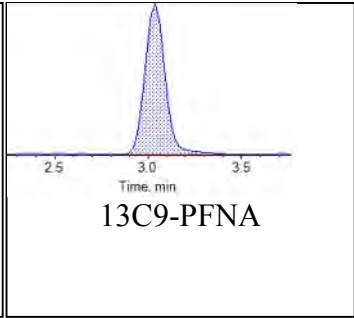
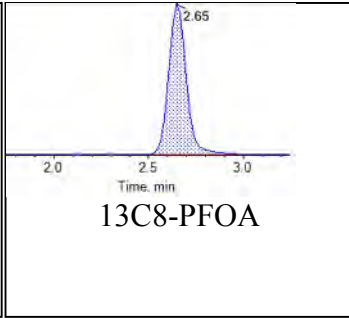
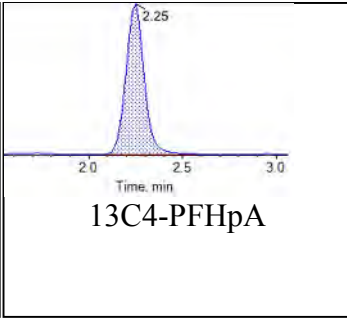
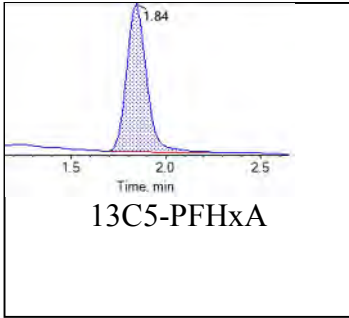
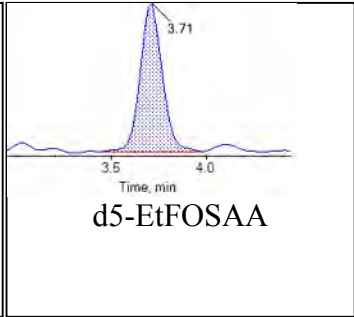
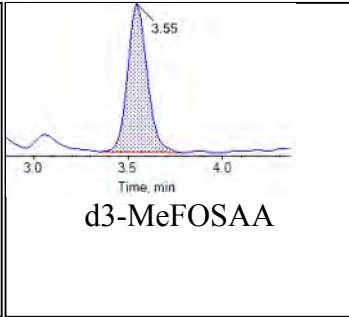
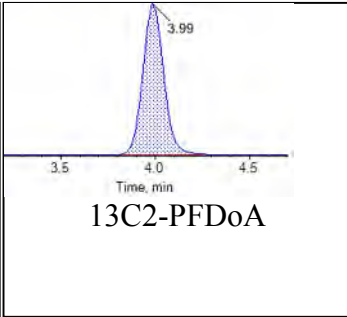
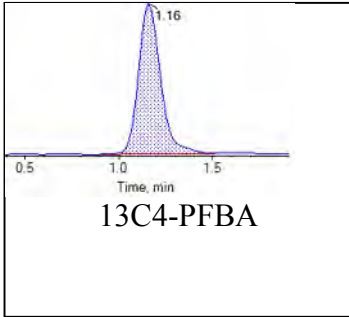


Internal Standards:



Chromatogram Report

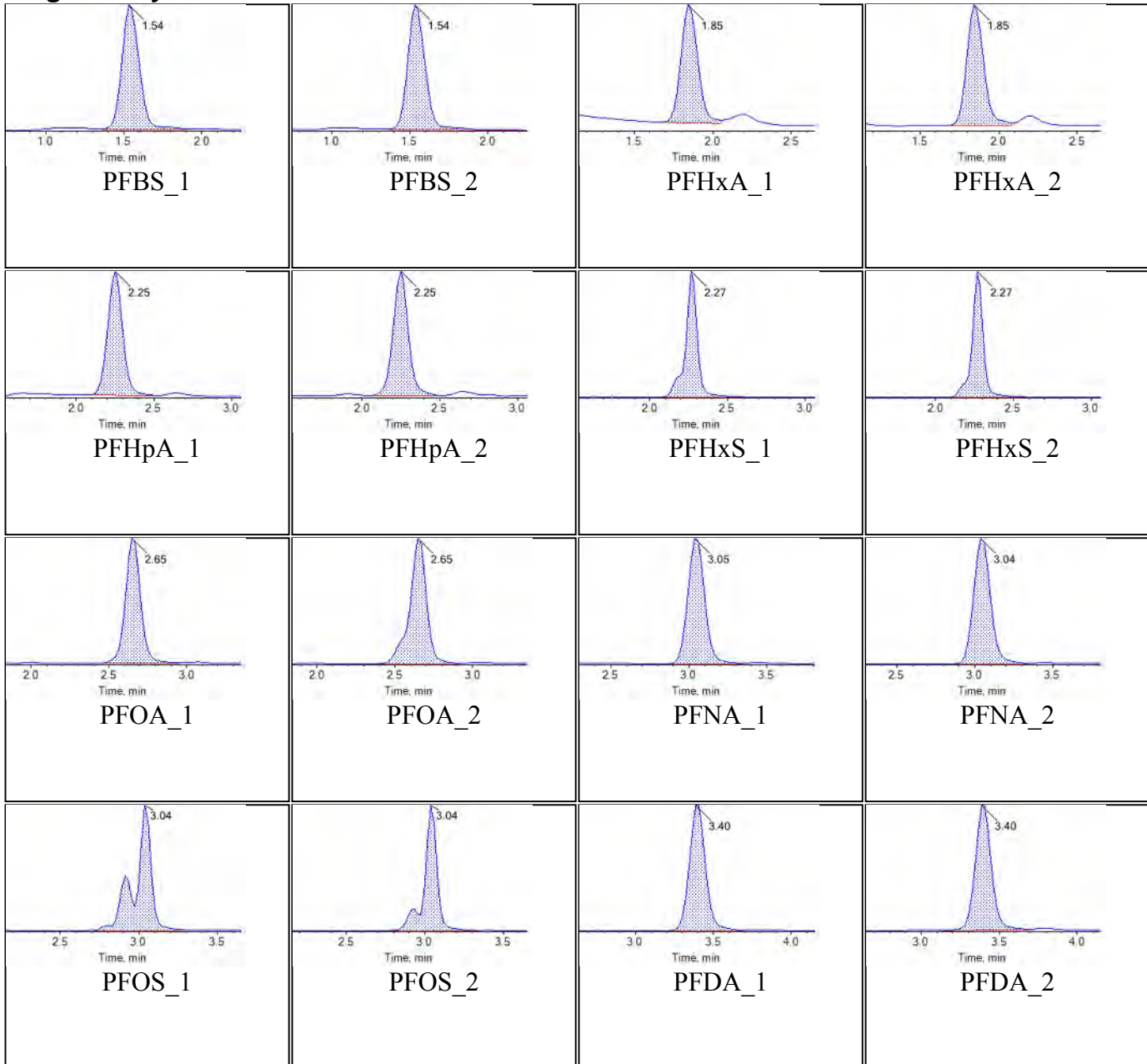
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Sample Name	J7397MSD-FS(3)	Injection Vial	41
Sample ID	Matrix Spike Duplicate Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:46:18	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

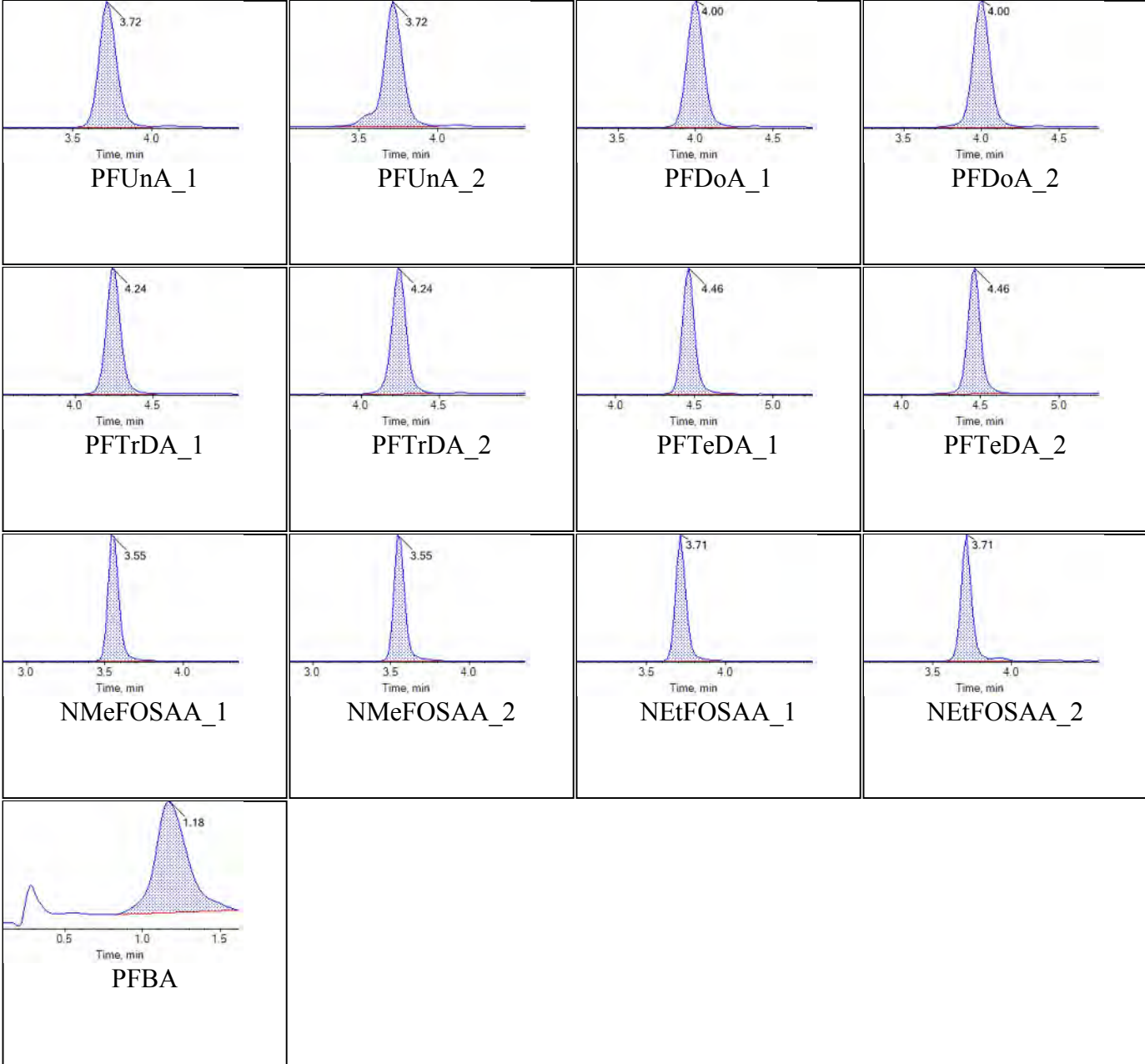
Target Analytes:



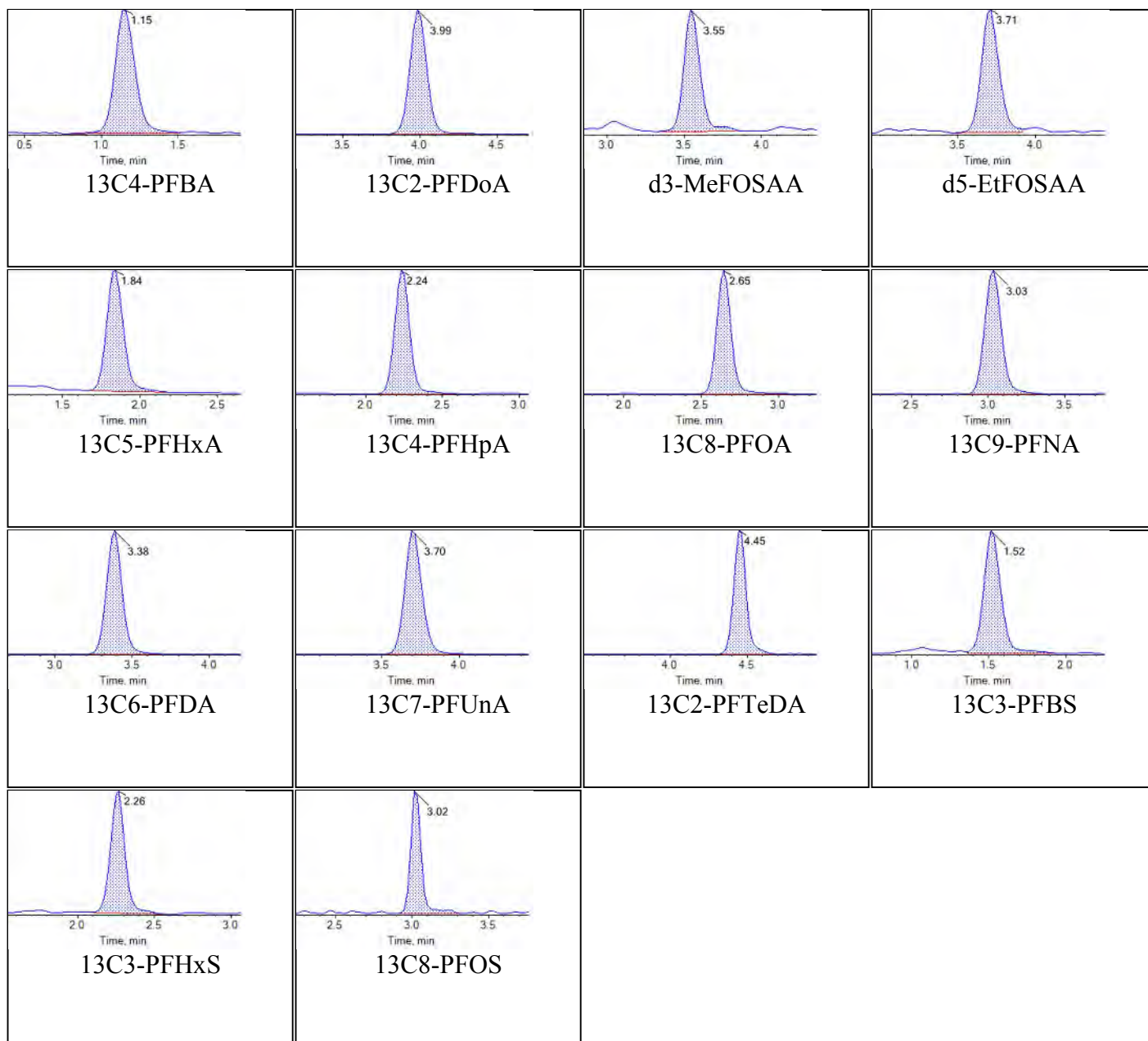


Chromatogram Report

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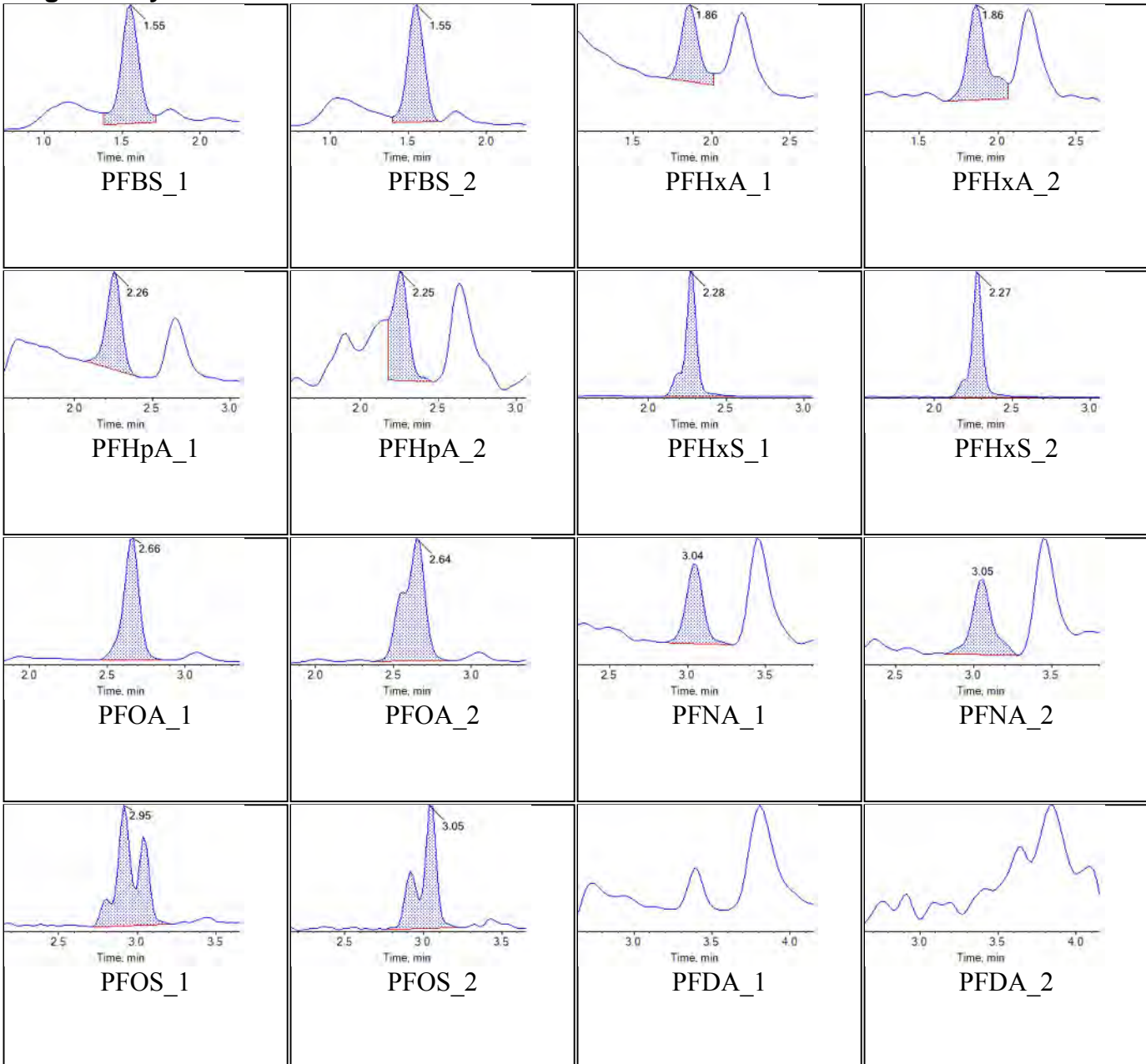
Internal Standards:



Sample Name	J7398-FS(3)	Injection Vial	42
Sample ID	NASB-BLL15-DUP-080918	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:57:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

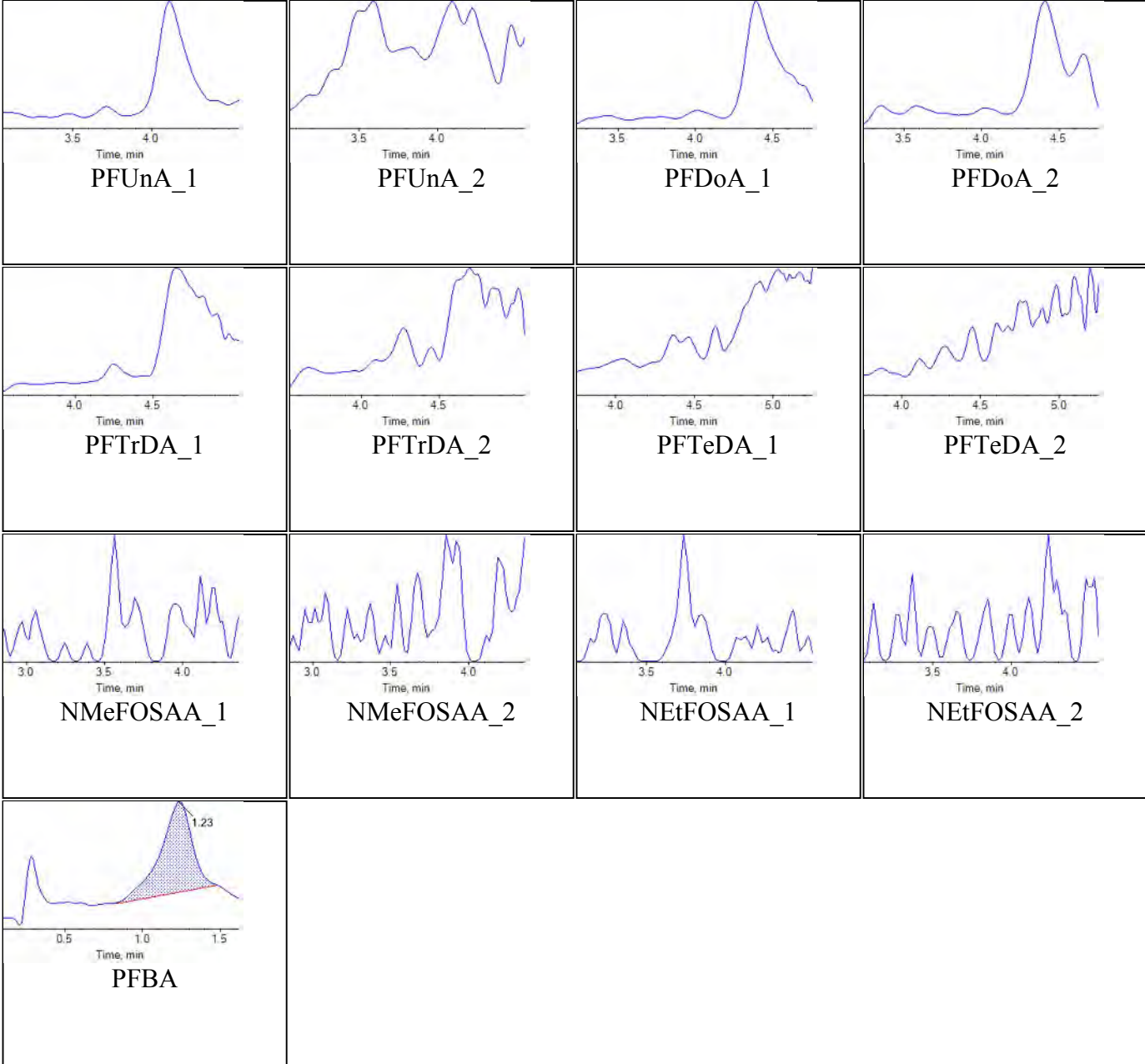
Target Analytes:



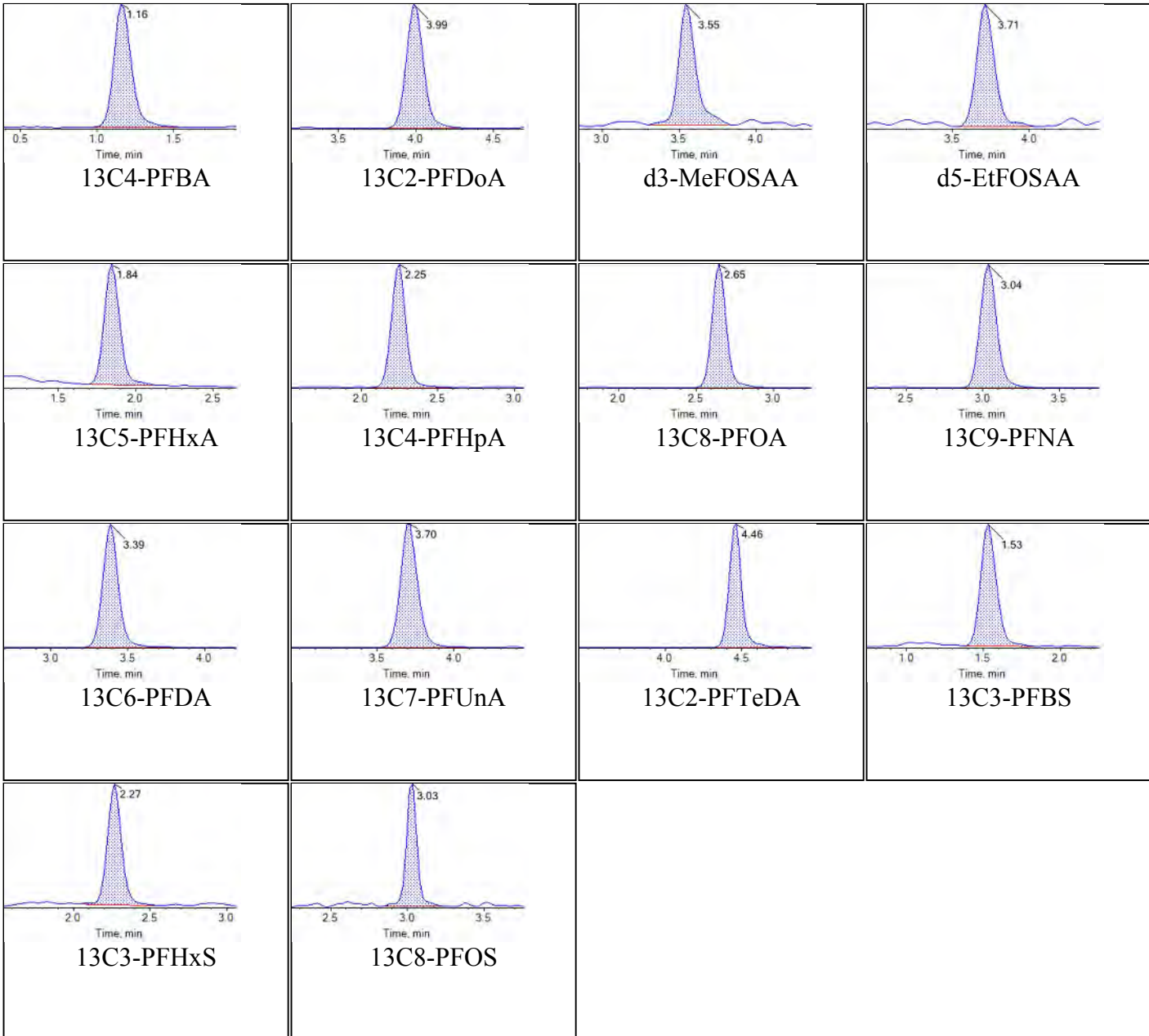


Chromatogram Report

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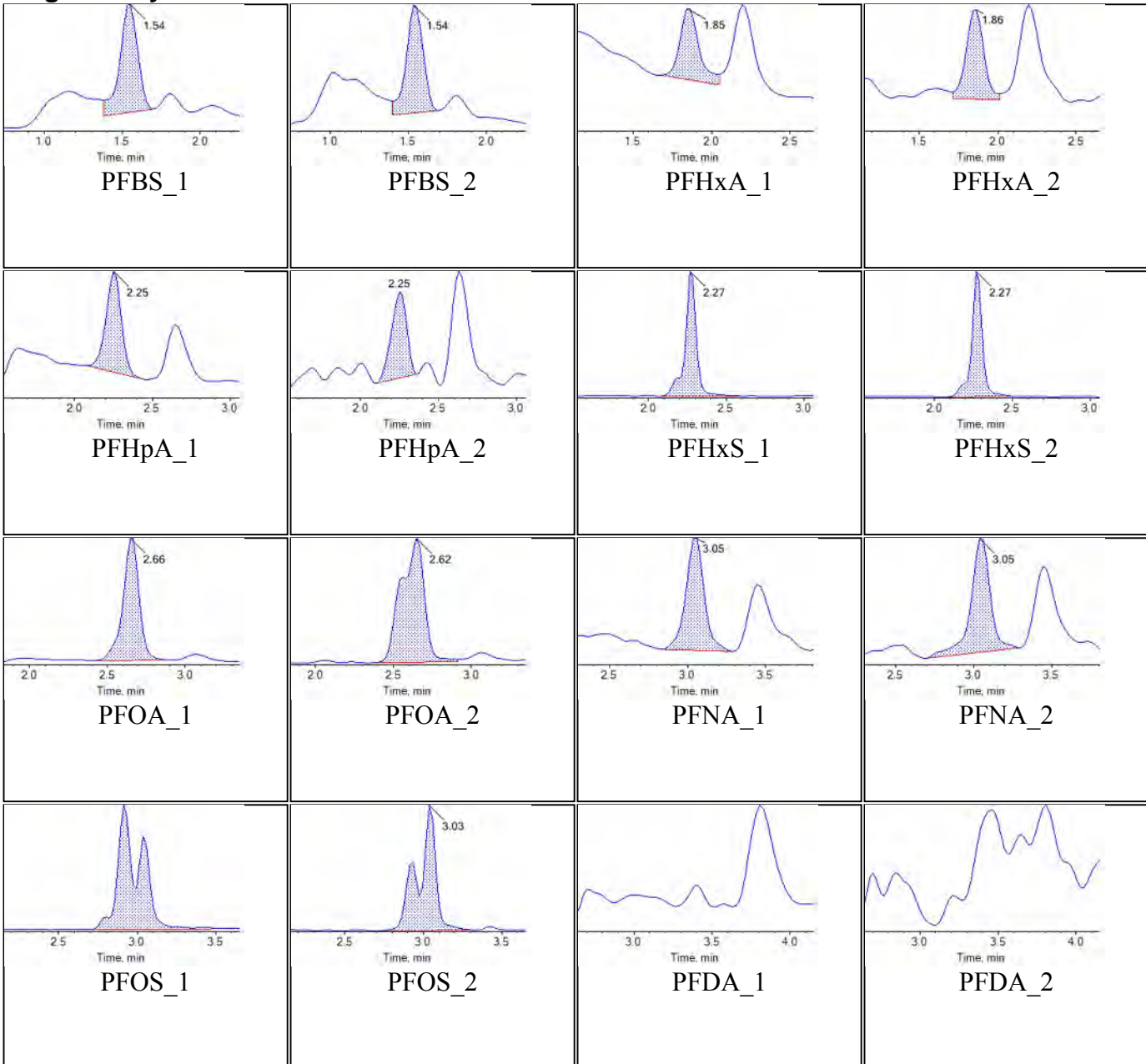
Internal Standards:



Sample Name	J7399-FS(3)	Injection Vial	43
Sample ID	NASB-BLL15-GW-03-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:08:02	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

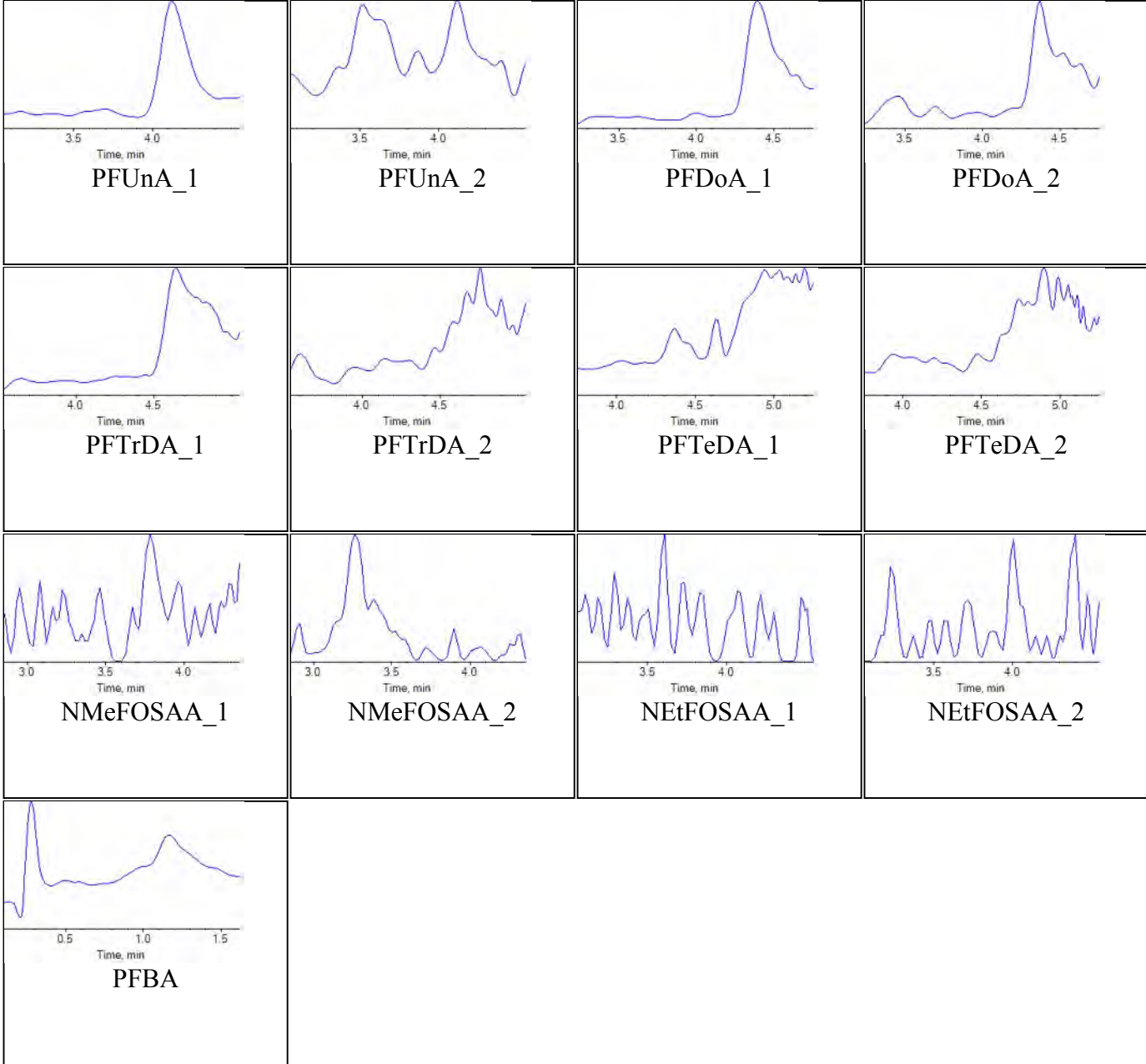
Target Analytes:



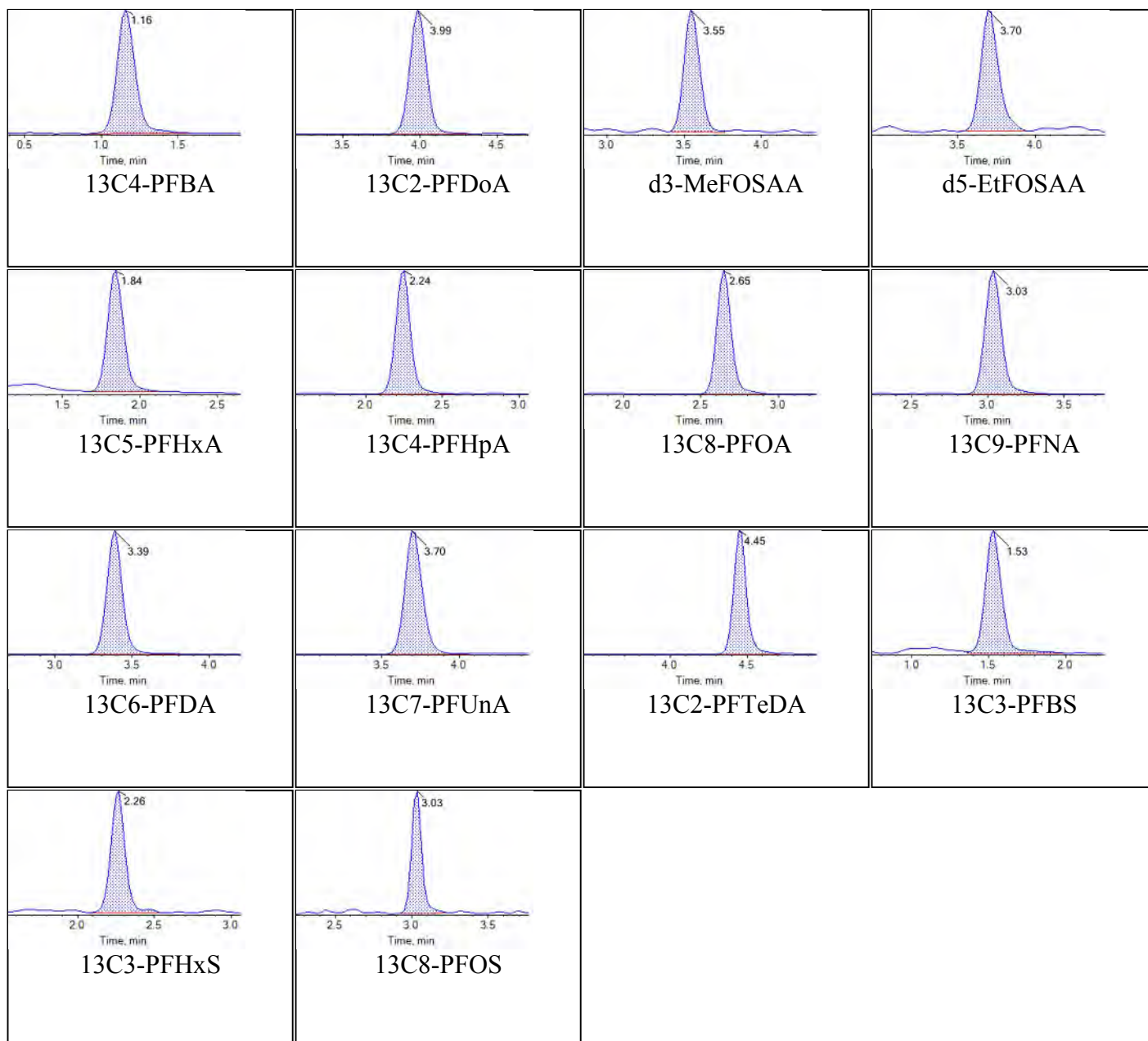


Chromatogram Report

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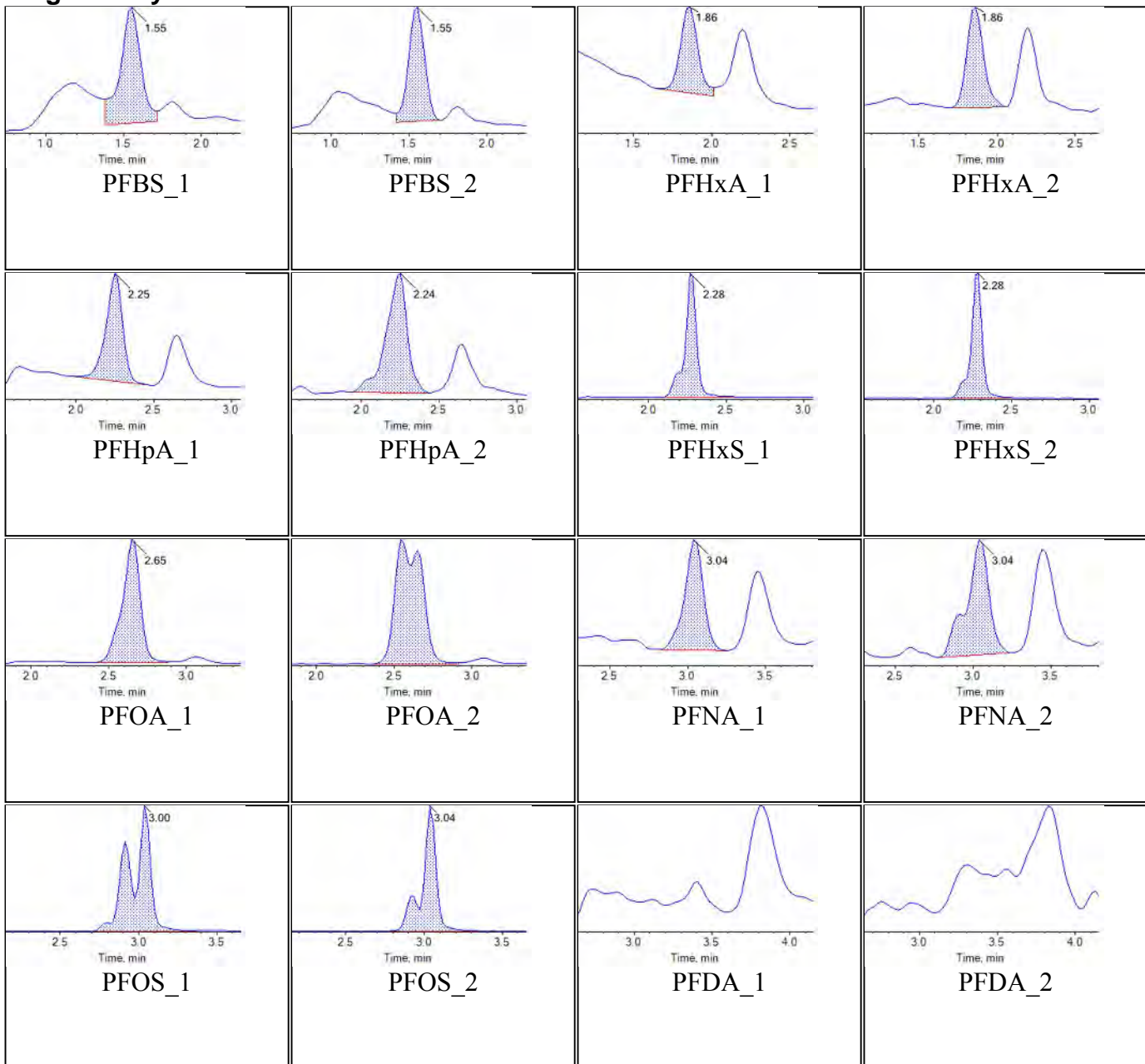
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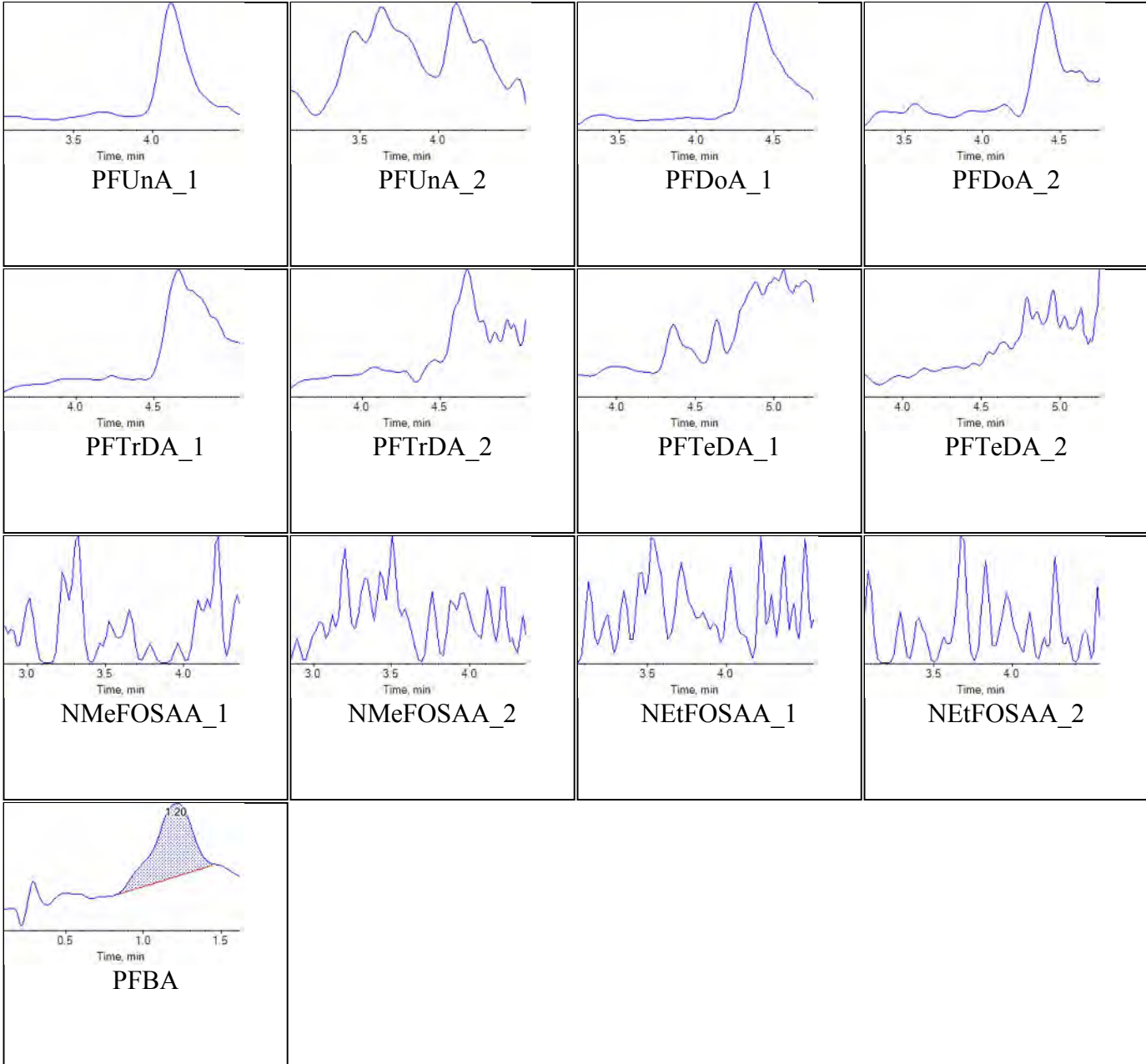


Sample Name	J7400-FS(3)	Injection Vial	44
Sample ID	NASB-BLL15-GW-04-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:18:54	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

Target Analytes:



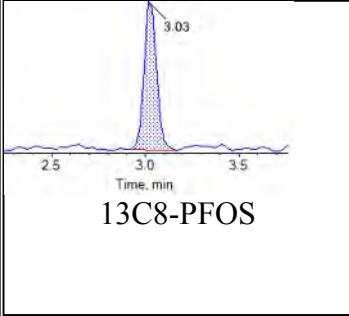
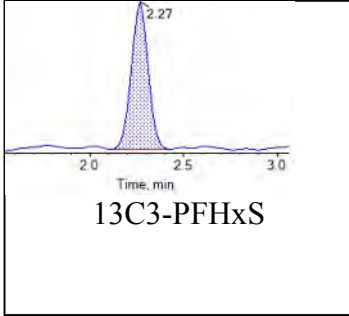
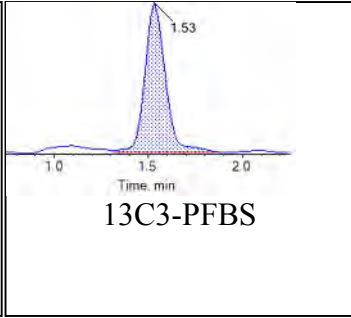
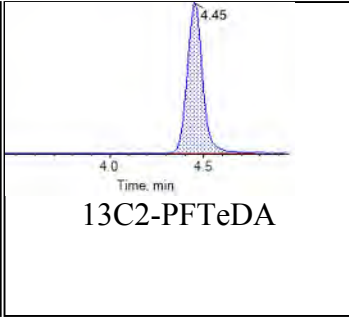
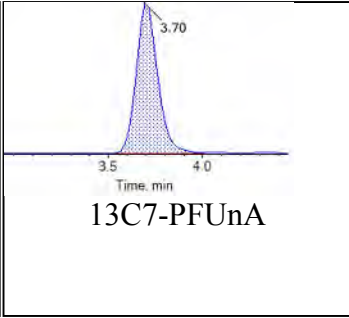
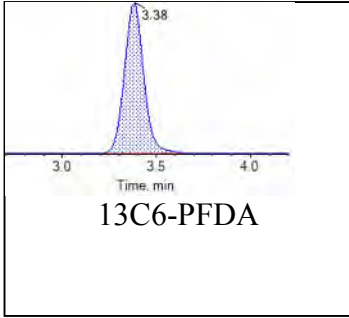
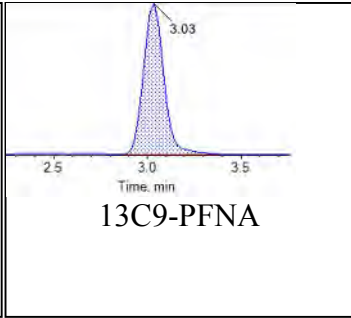
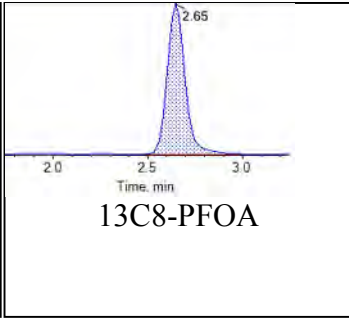
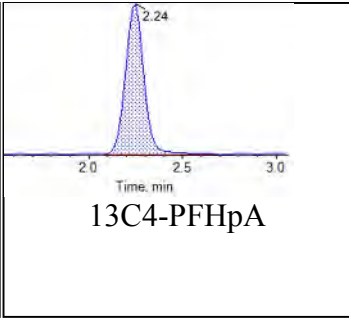
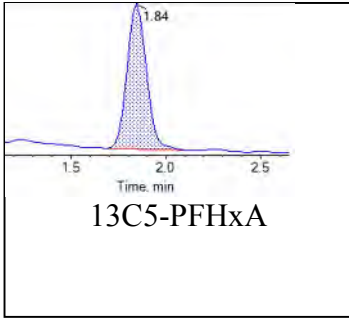
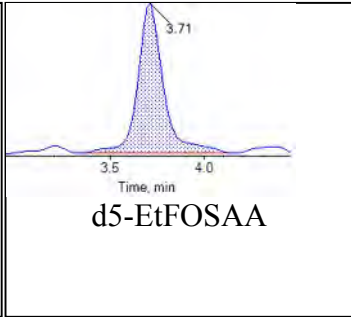
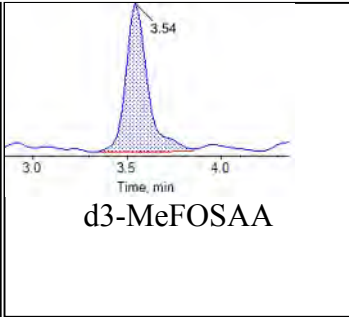
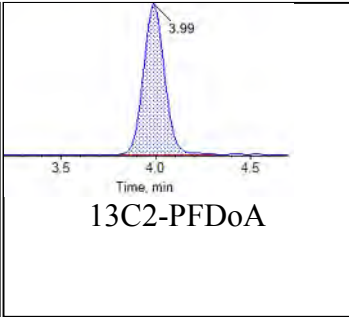
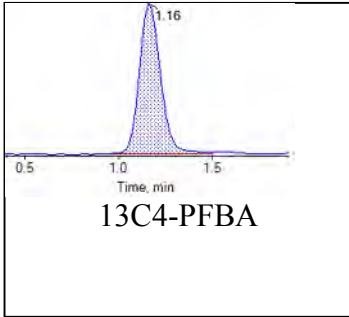


Internal Standards:



Chromatogram Report

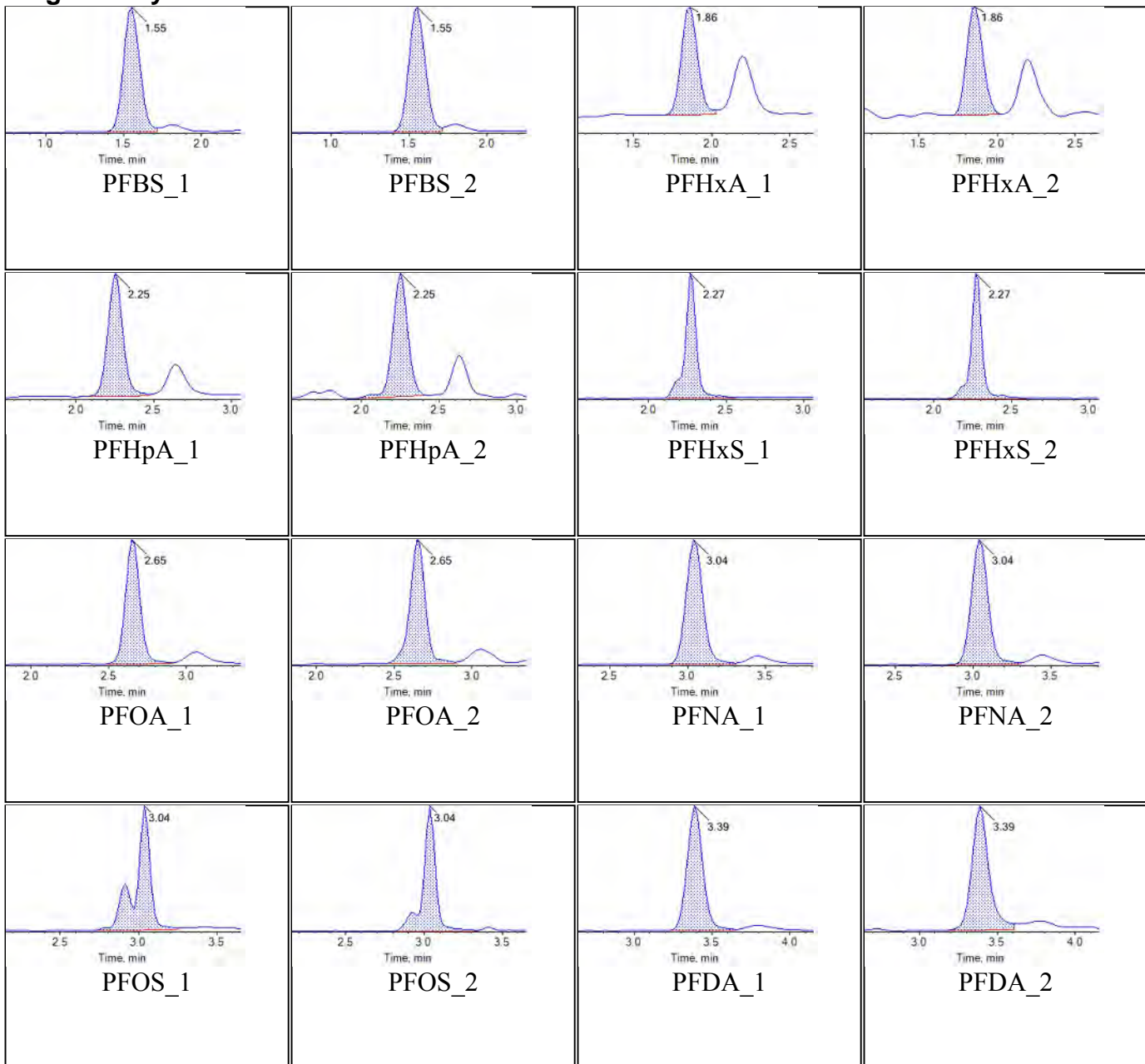
Created with Analyst Reporter
Printed: 30/08/2018 2:28:36 PM

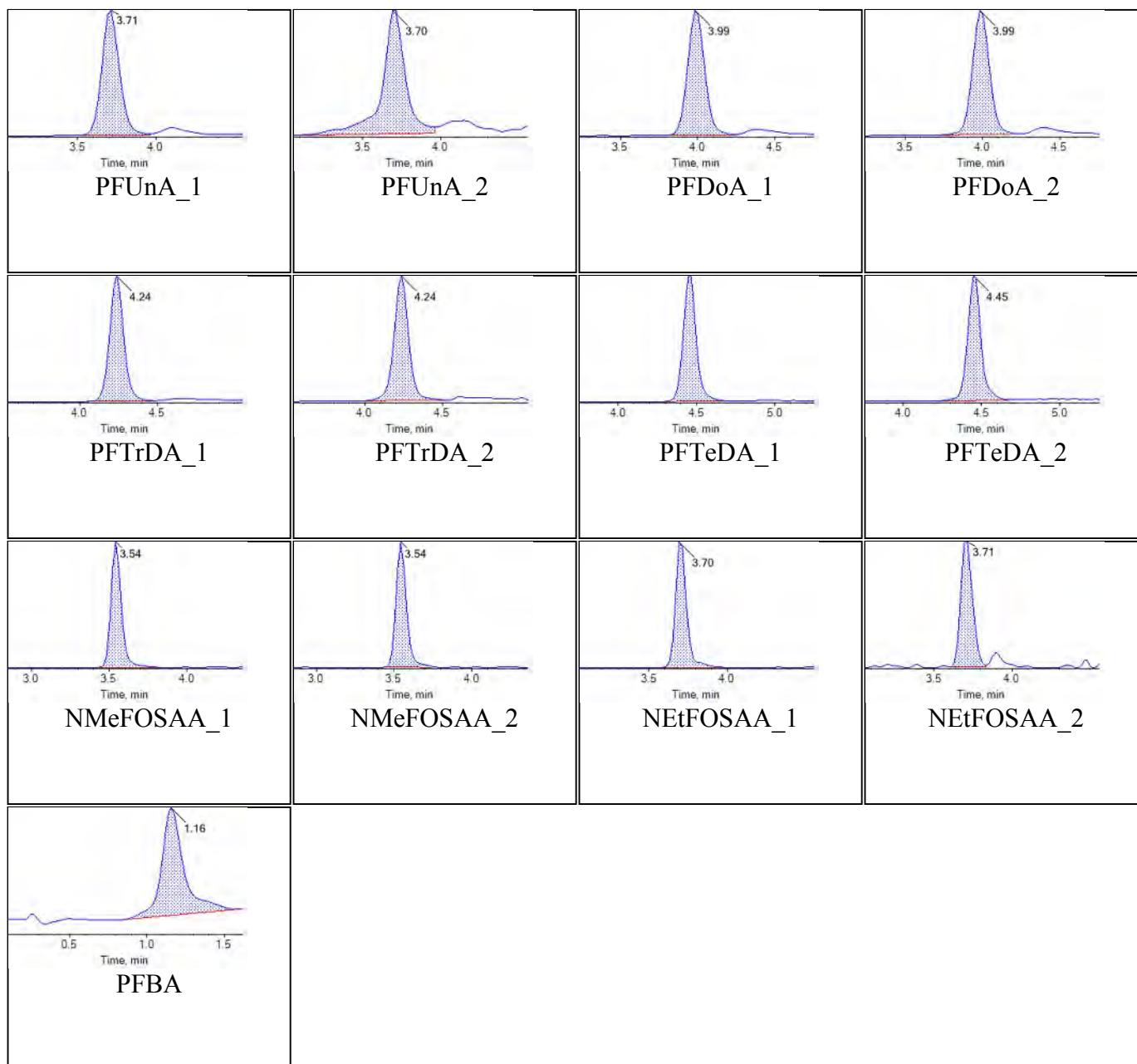


Sample Name	JY41 CCV	Injection Vial	46
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:40:38	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Chromatograms

Target Analytes:

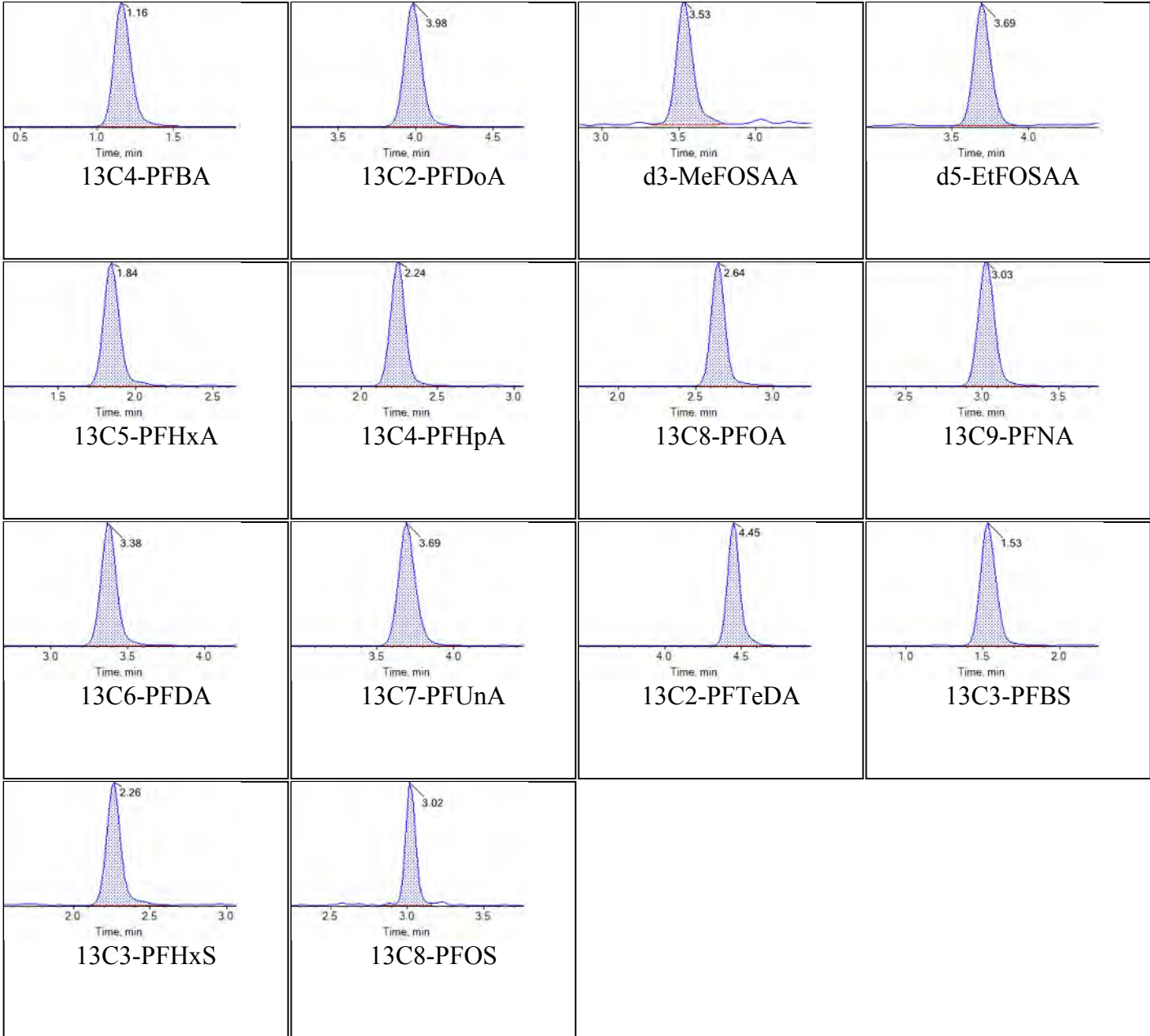


**Internal Standards:**



Chromatogram Report

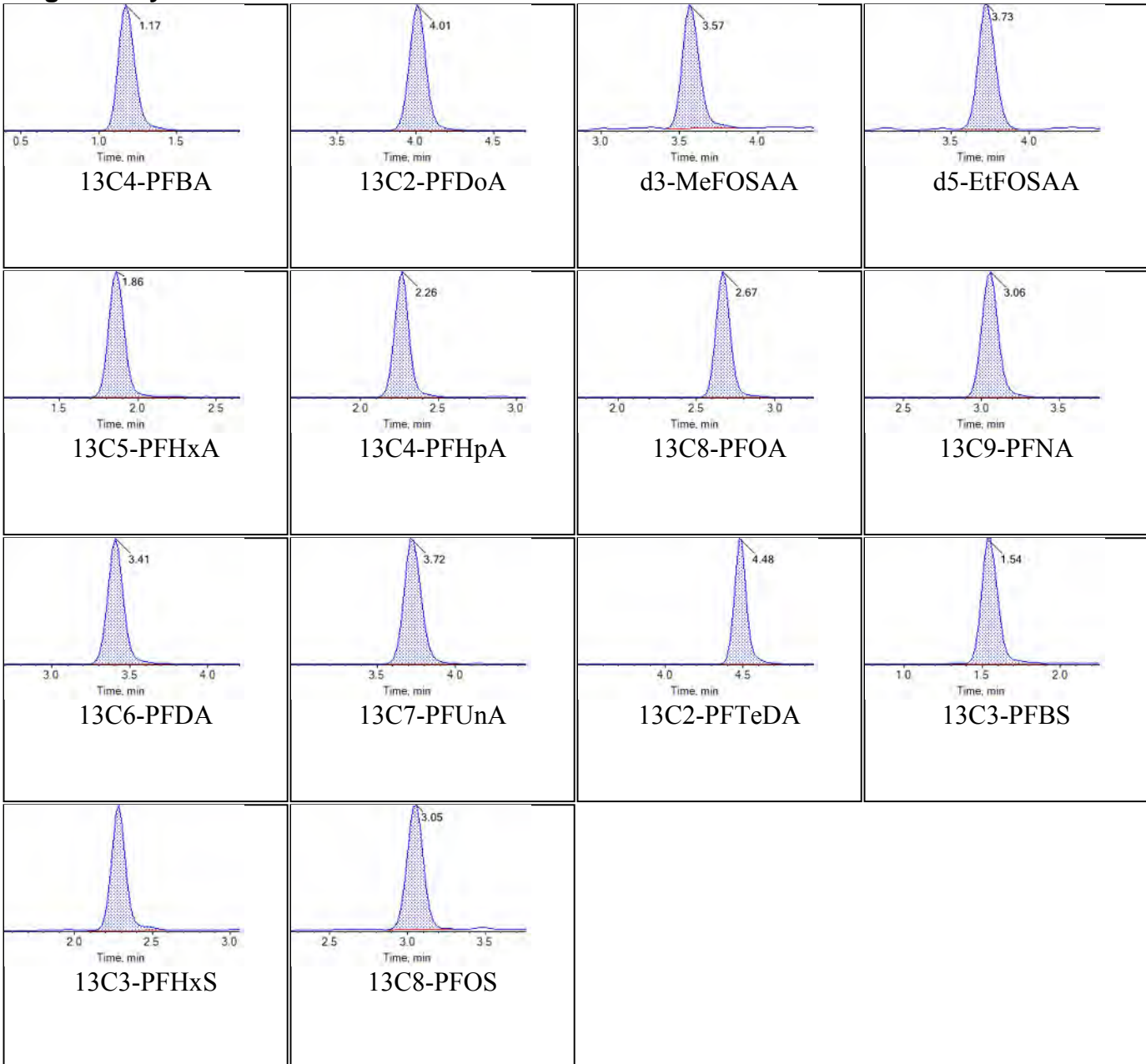
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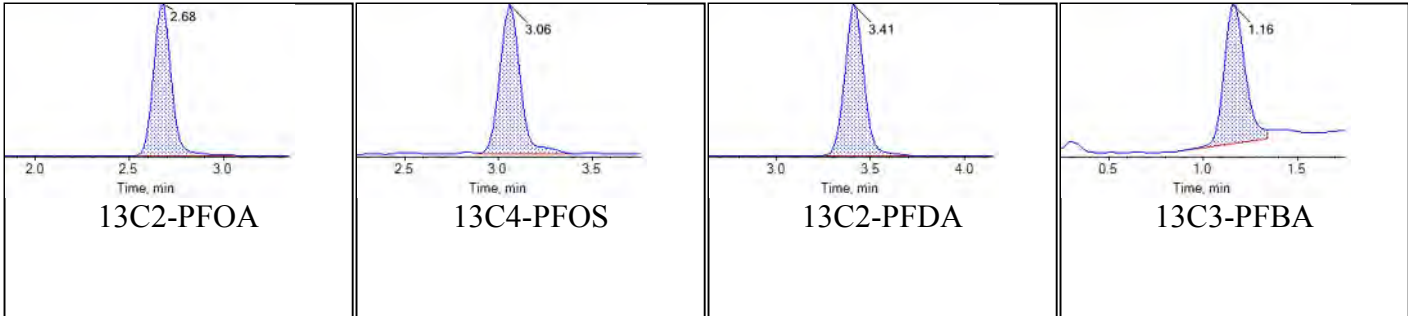
Sample Name	JY38	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:36:54	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



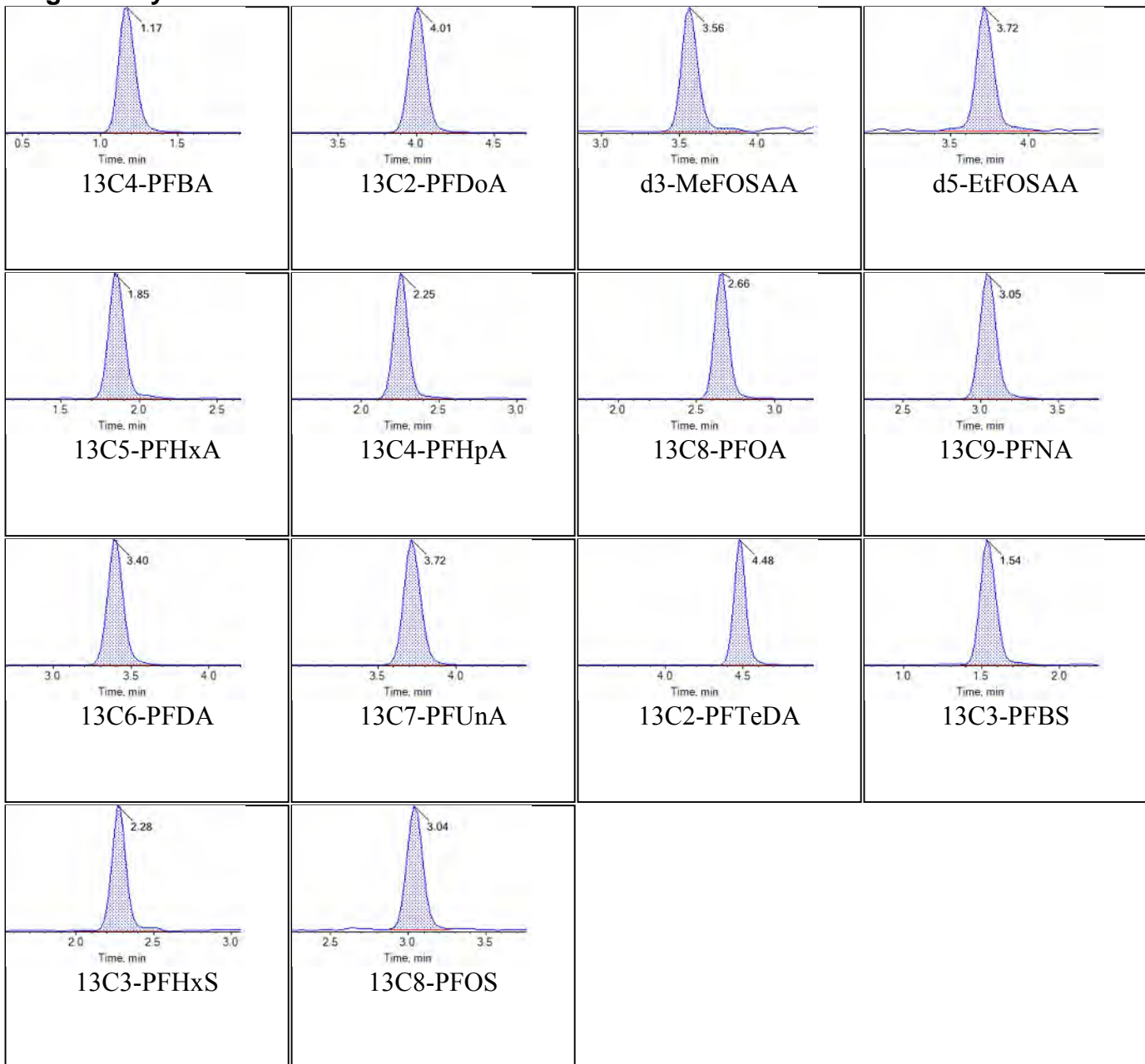
Internal Standards:



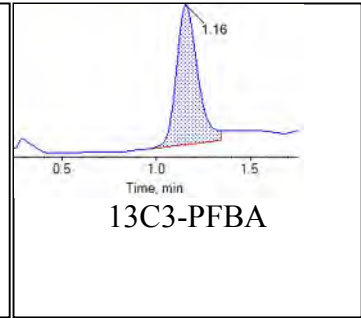
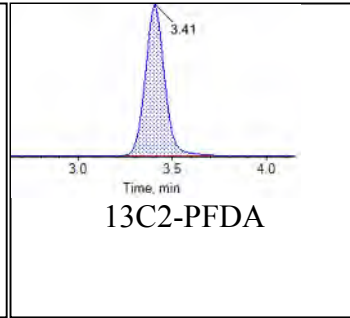
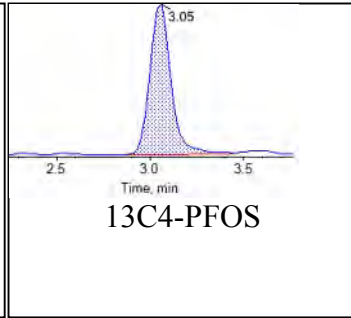
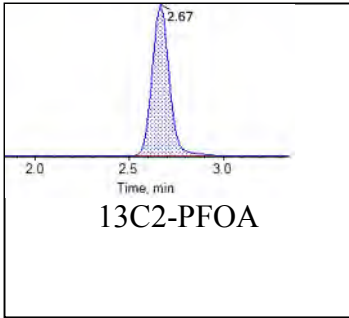
Sample Name	JY39	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:47:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



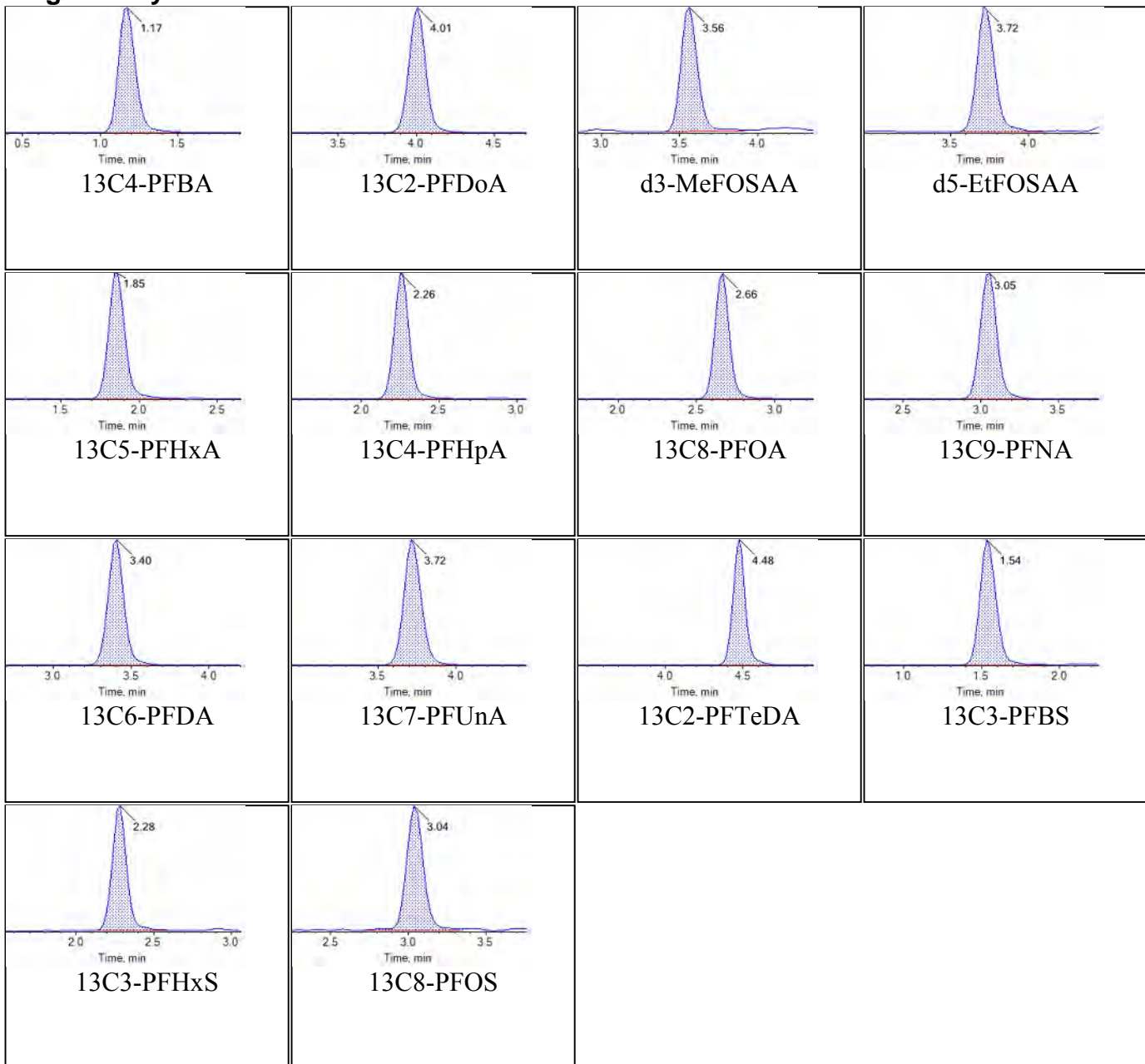
Internal Standards:



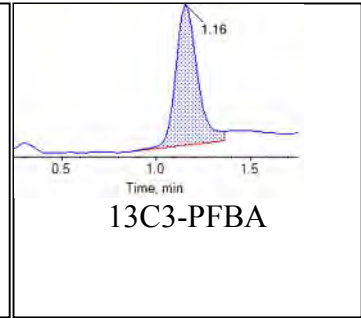
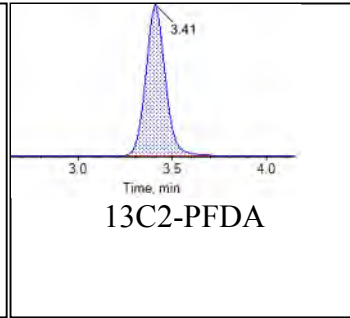
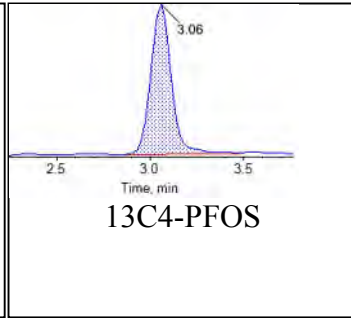
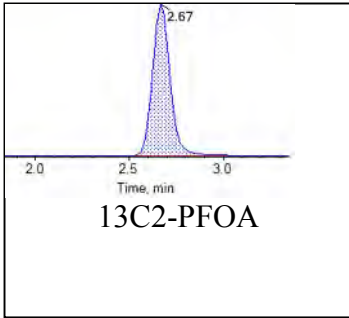
Sample Name	JY40	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:58:41	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



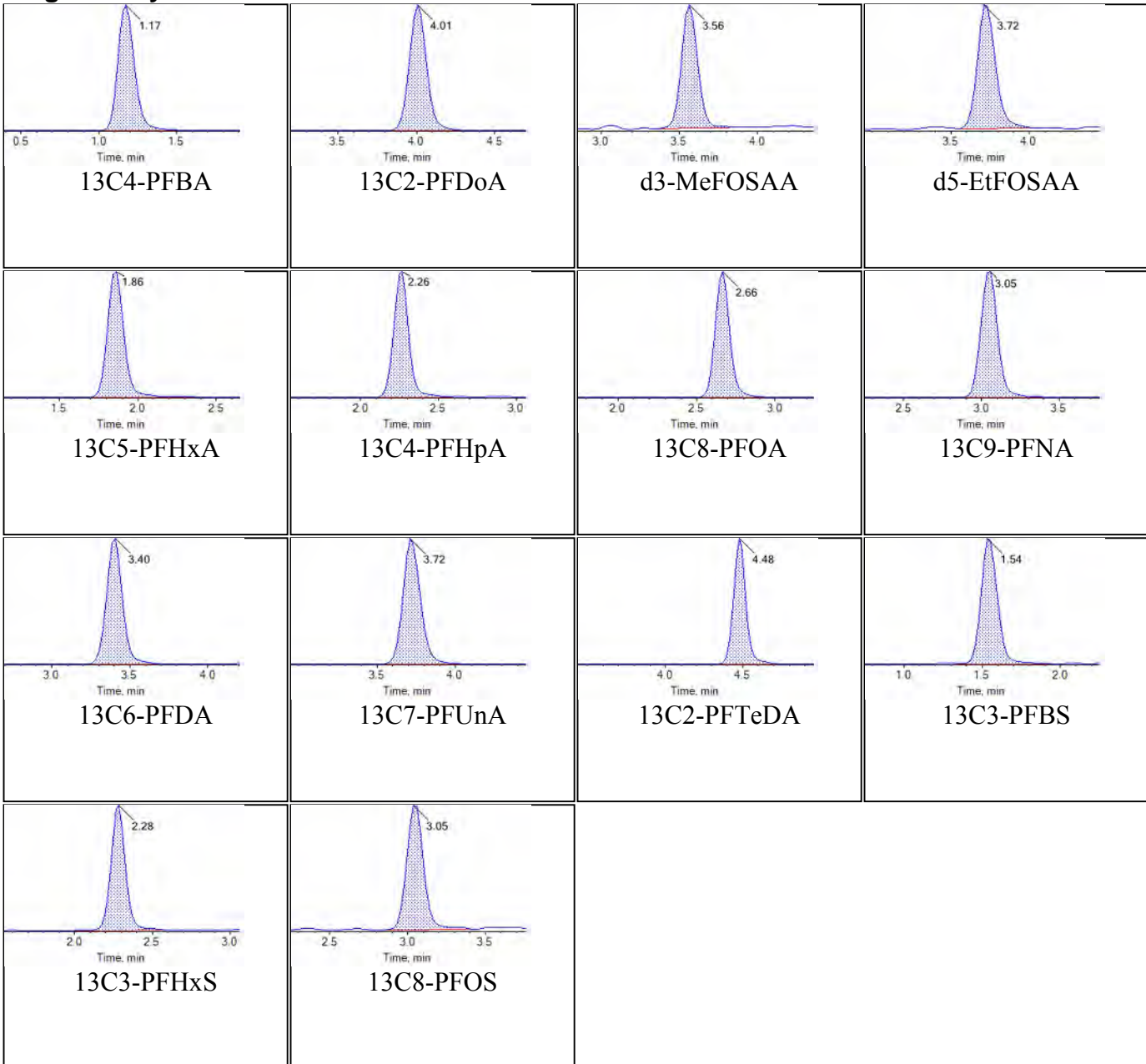
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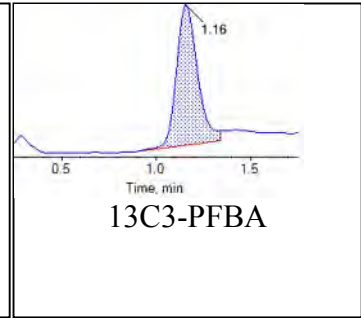
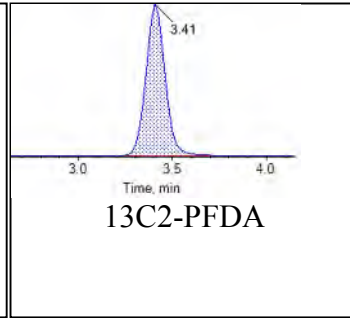
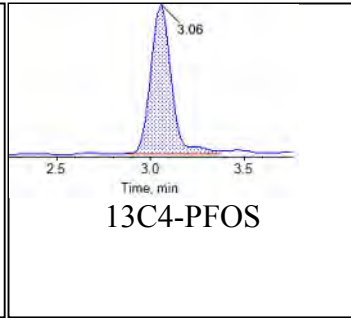
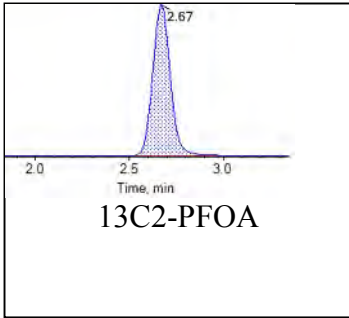
Sample Name	JY41	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:09:34	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



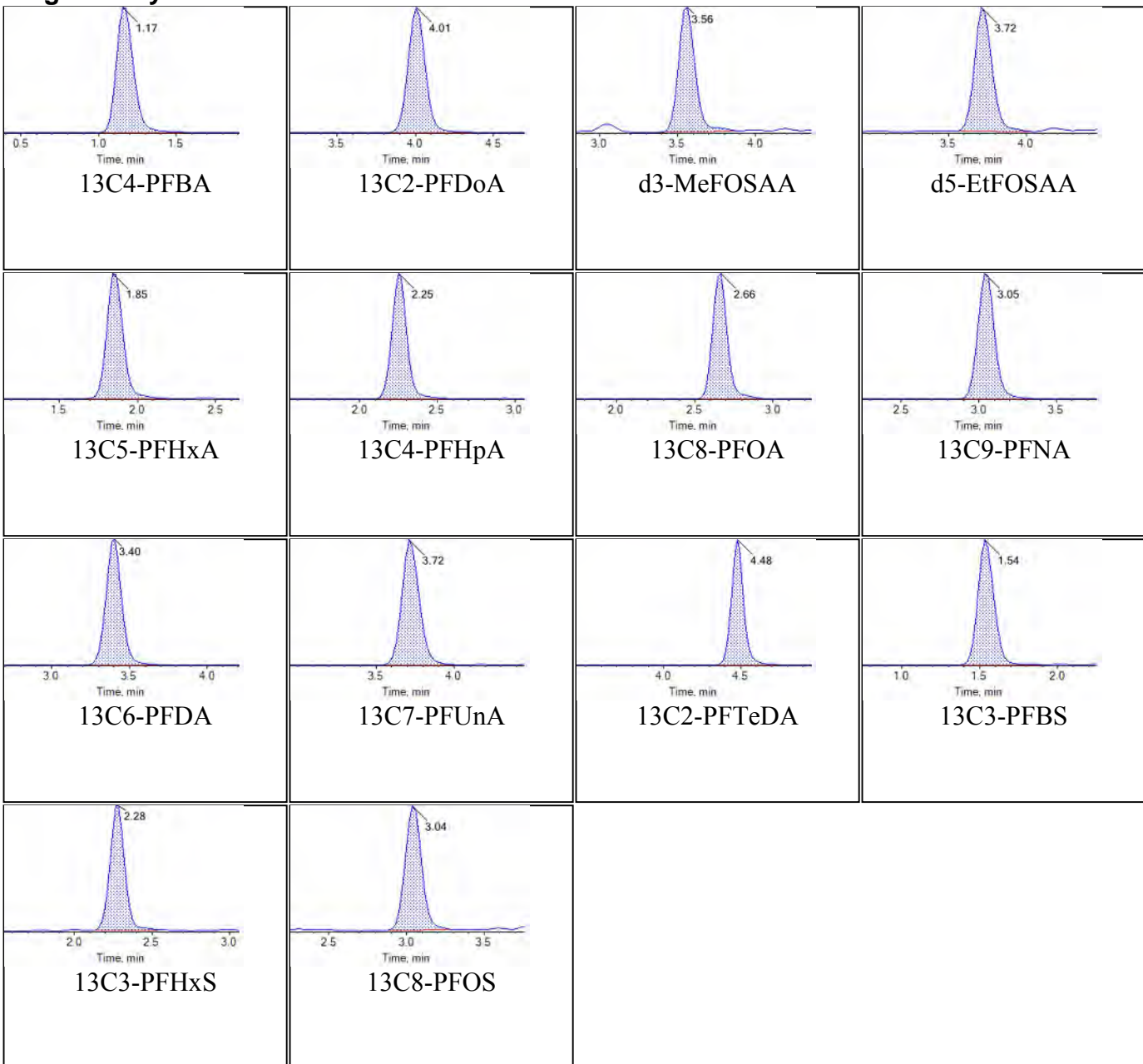
Internal Standards:



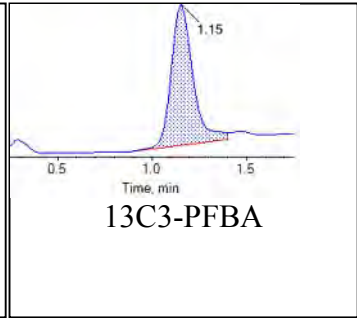
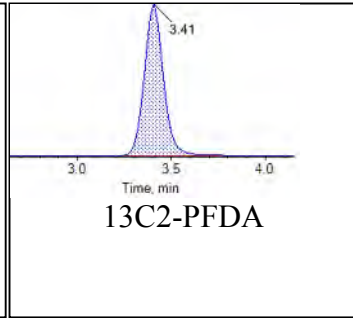
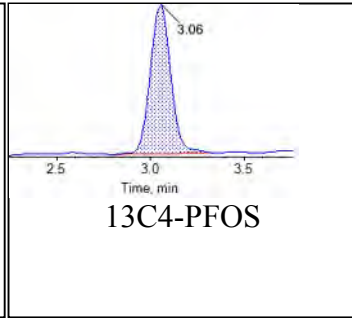
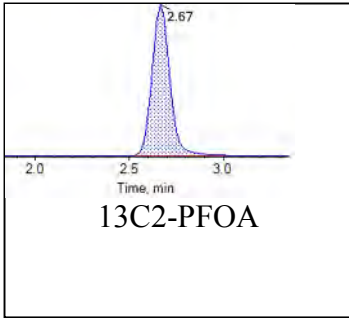
Sample Name	JY42	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:20:26	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



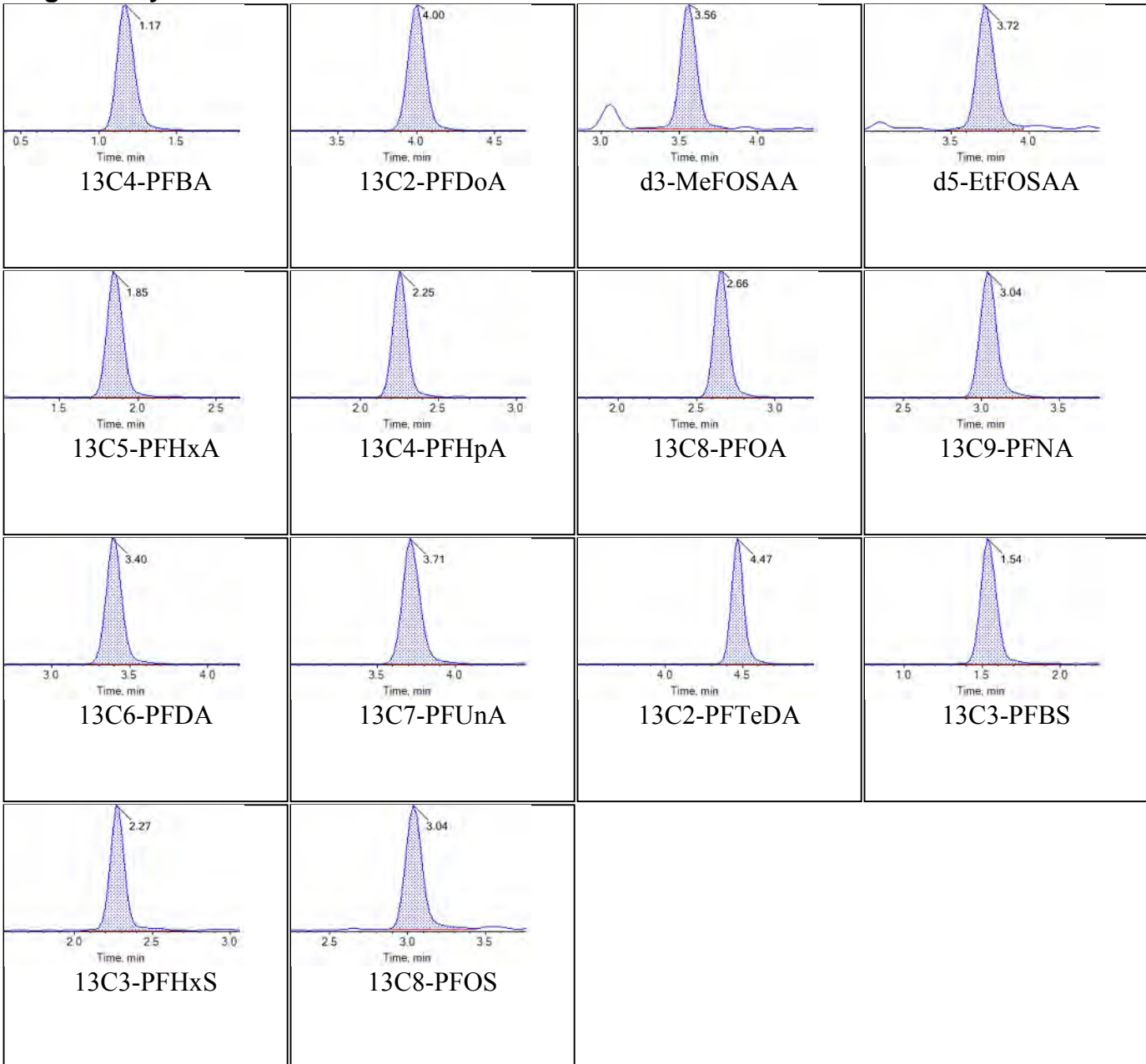
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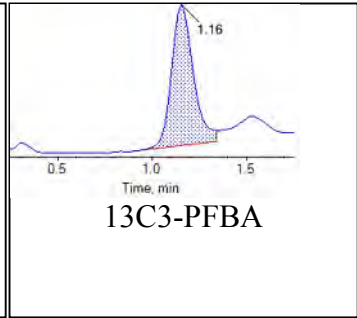
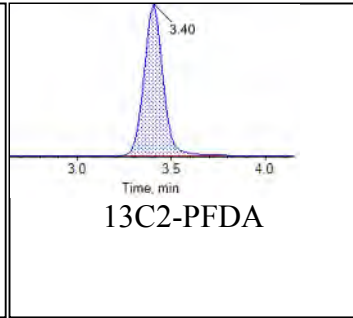
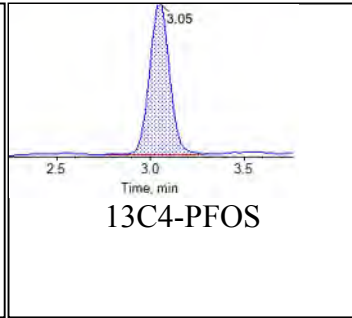
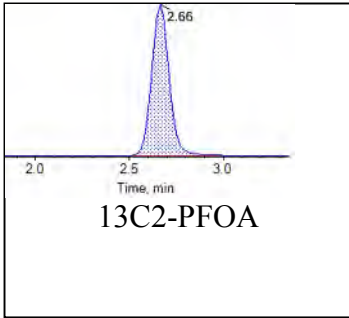
Sample Name	JY43	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:31:18	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



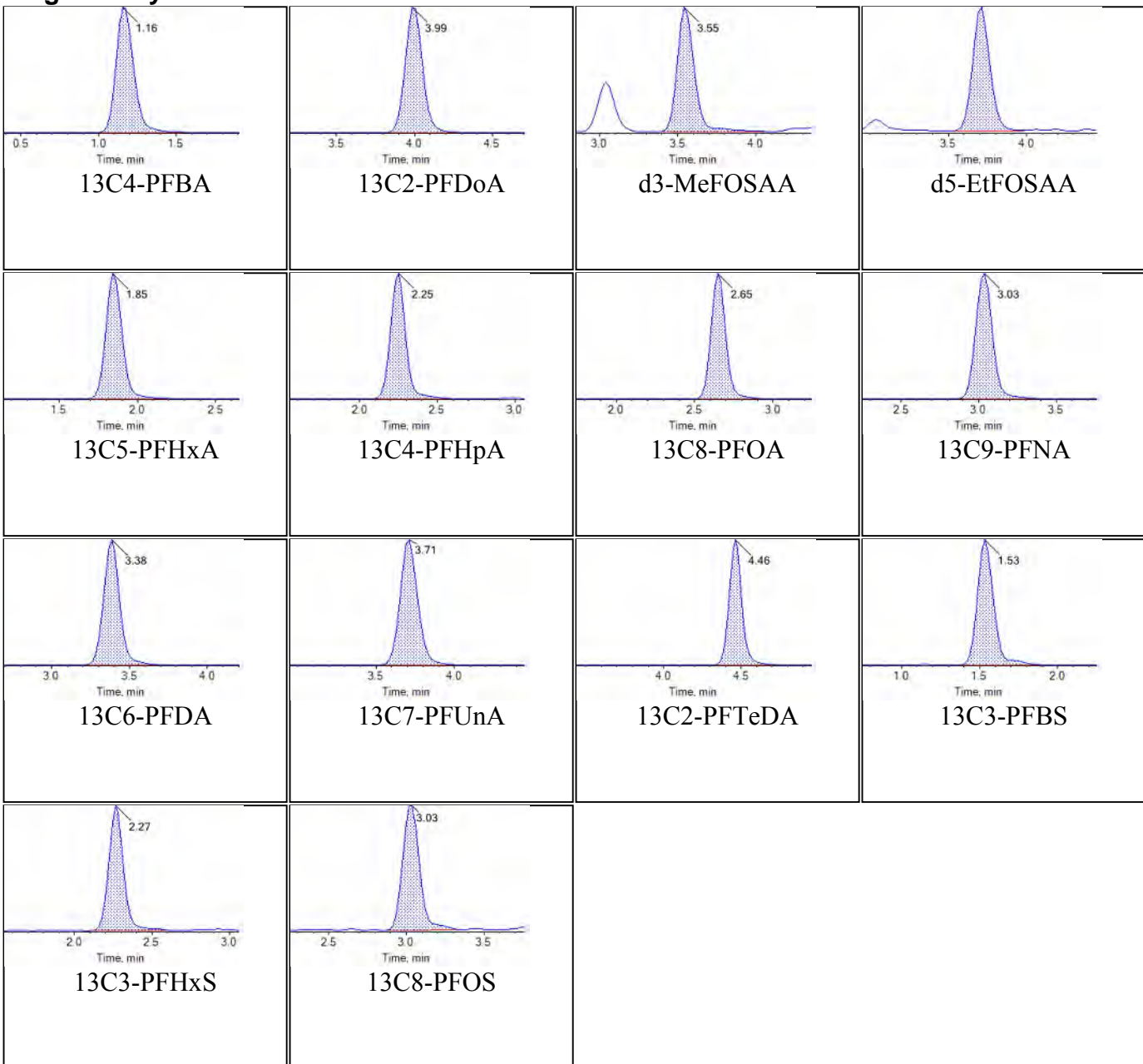
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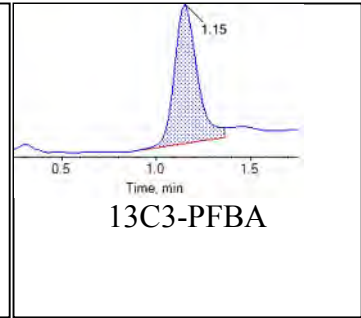
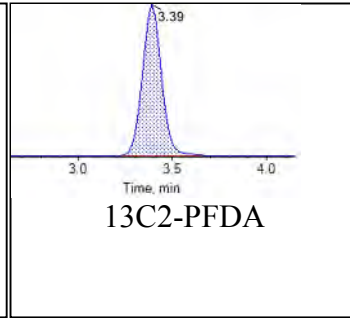
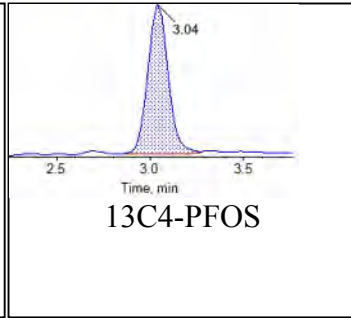
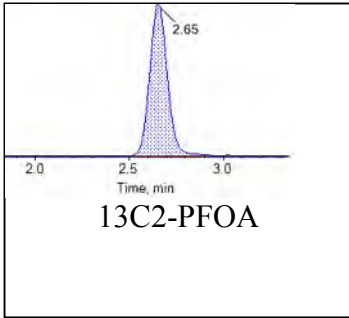
Sample Name	JY44	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:42:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



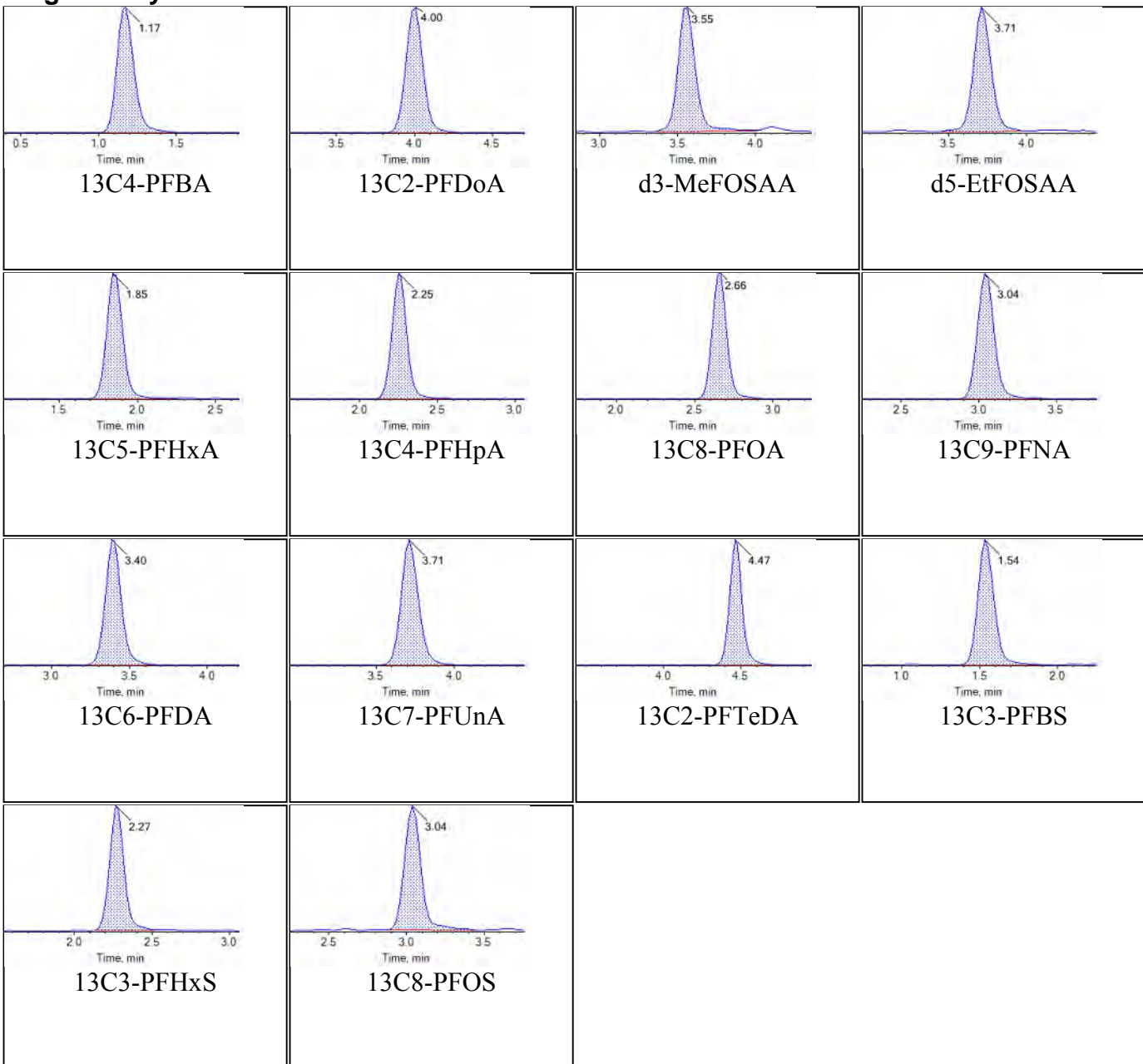
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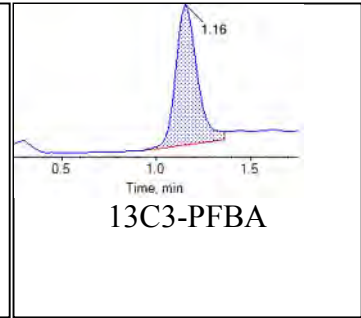
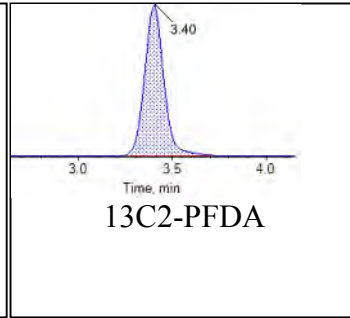
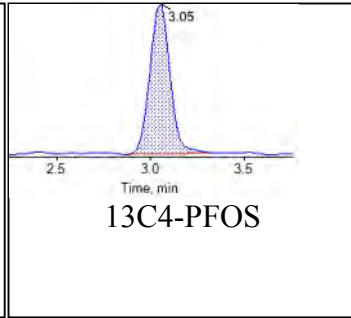
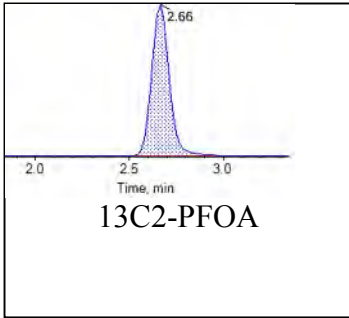
Sample Name	JY46 IB	Injection Vial	9
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:53:03	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



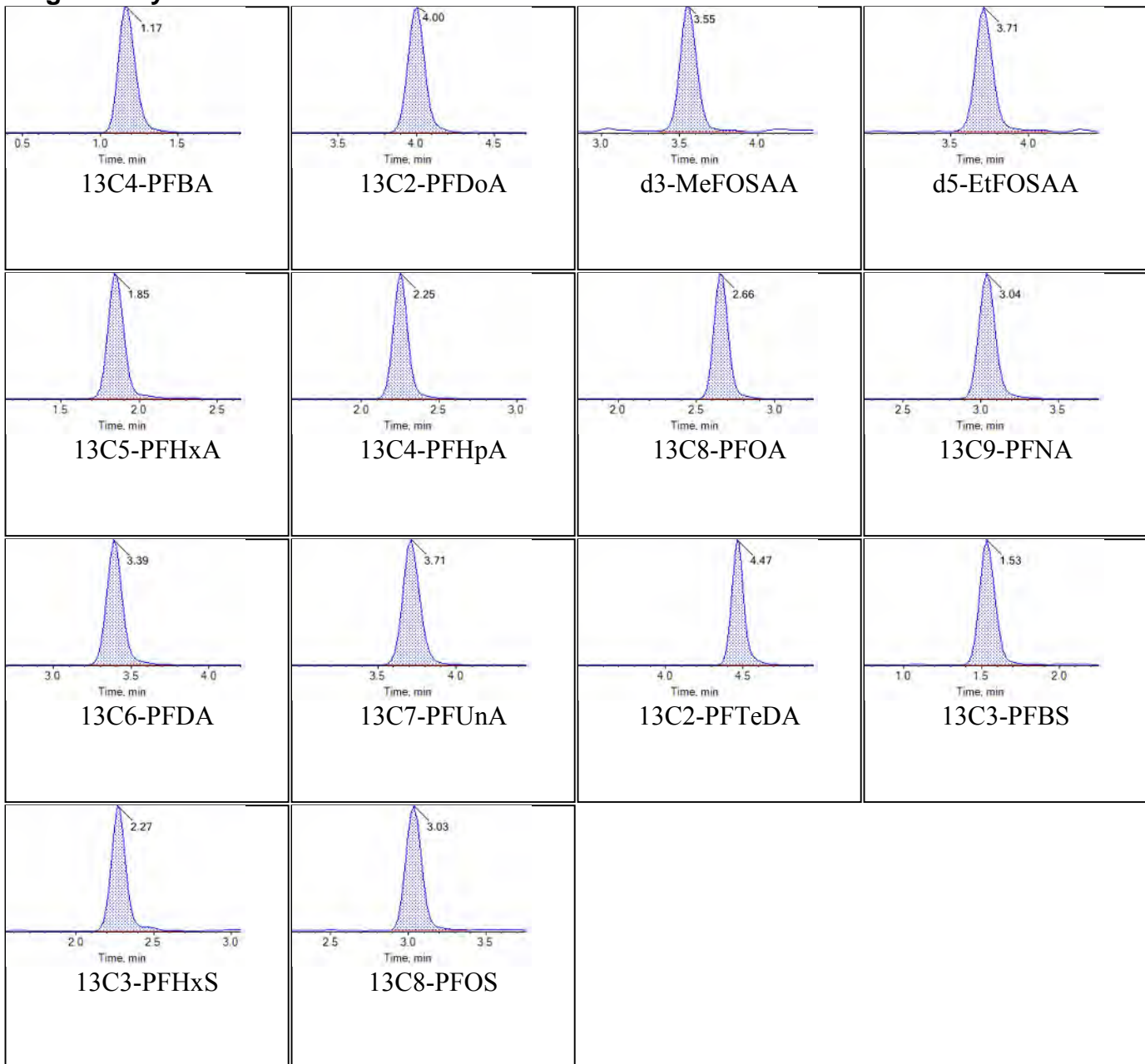
Internal Standards:



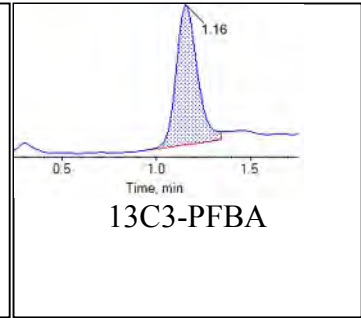
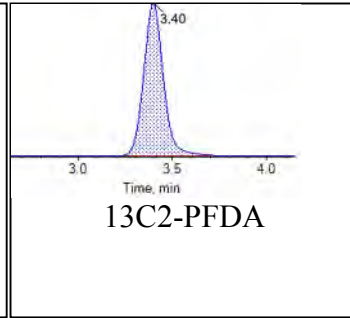
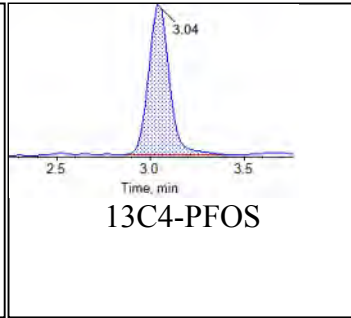
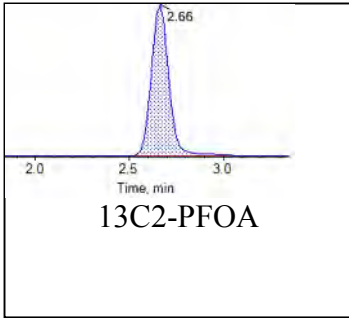
Sample Name	JY45 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T00:03:55	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



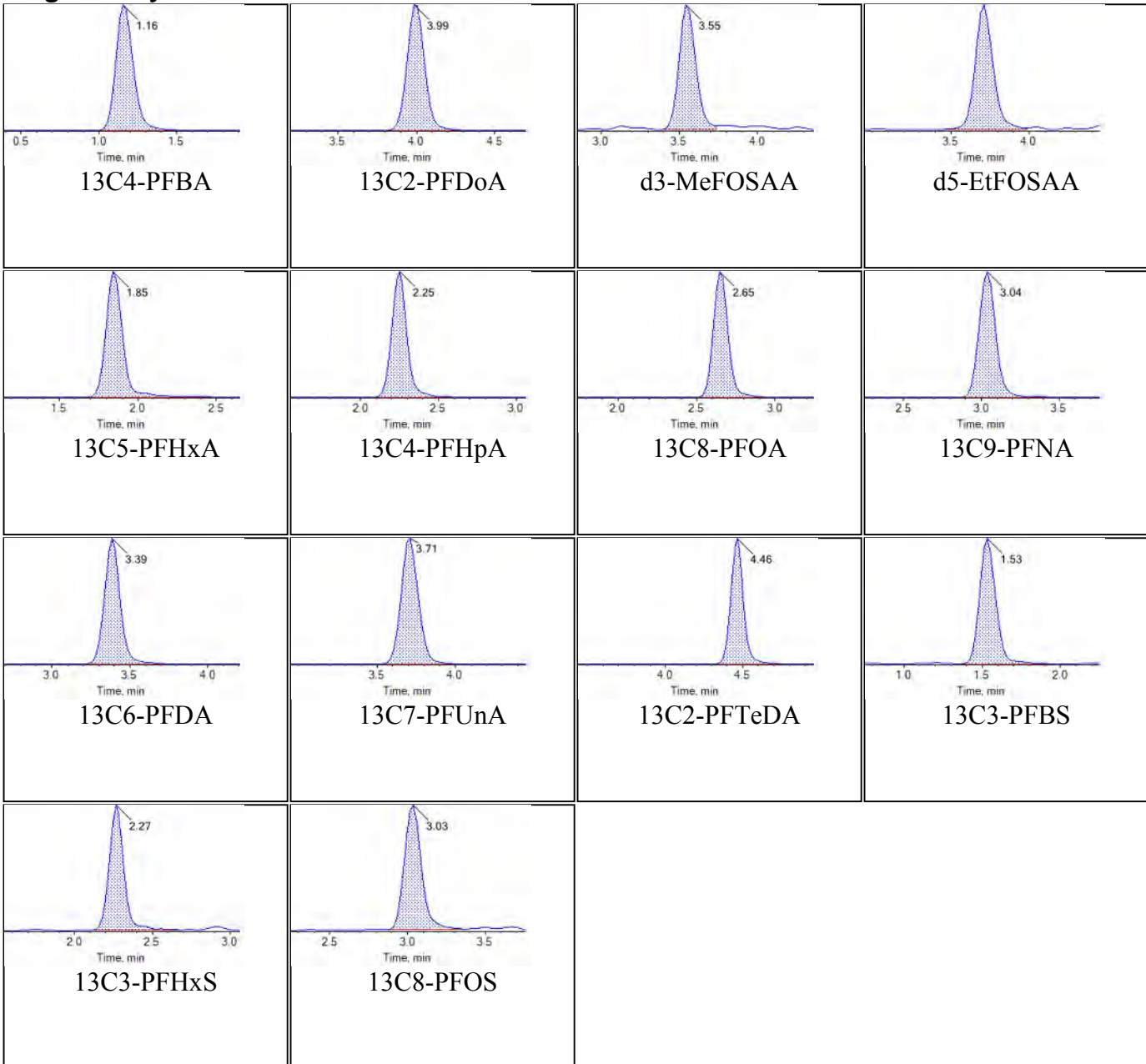
Internal Standards:



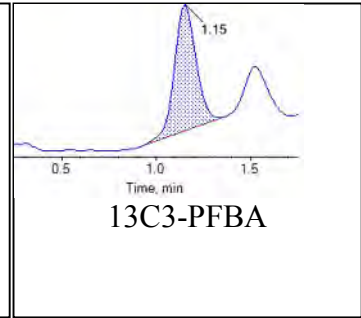
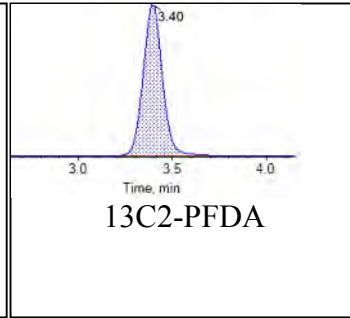
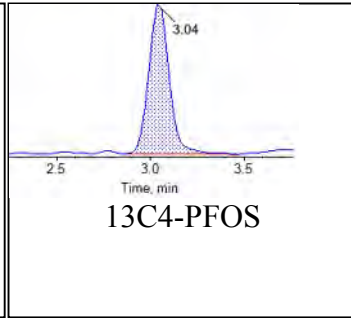
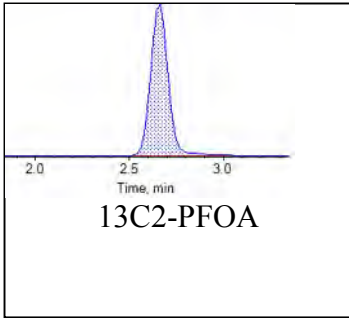
Sample Name	CR552PB-FS(3)	Injection Vial	32
Sample ID	Procedural Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T04:46:41	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



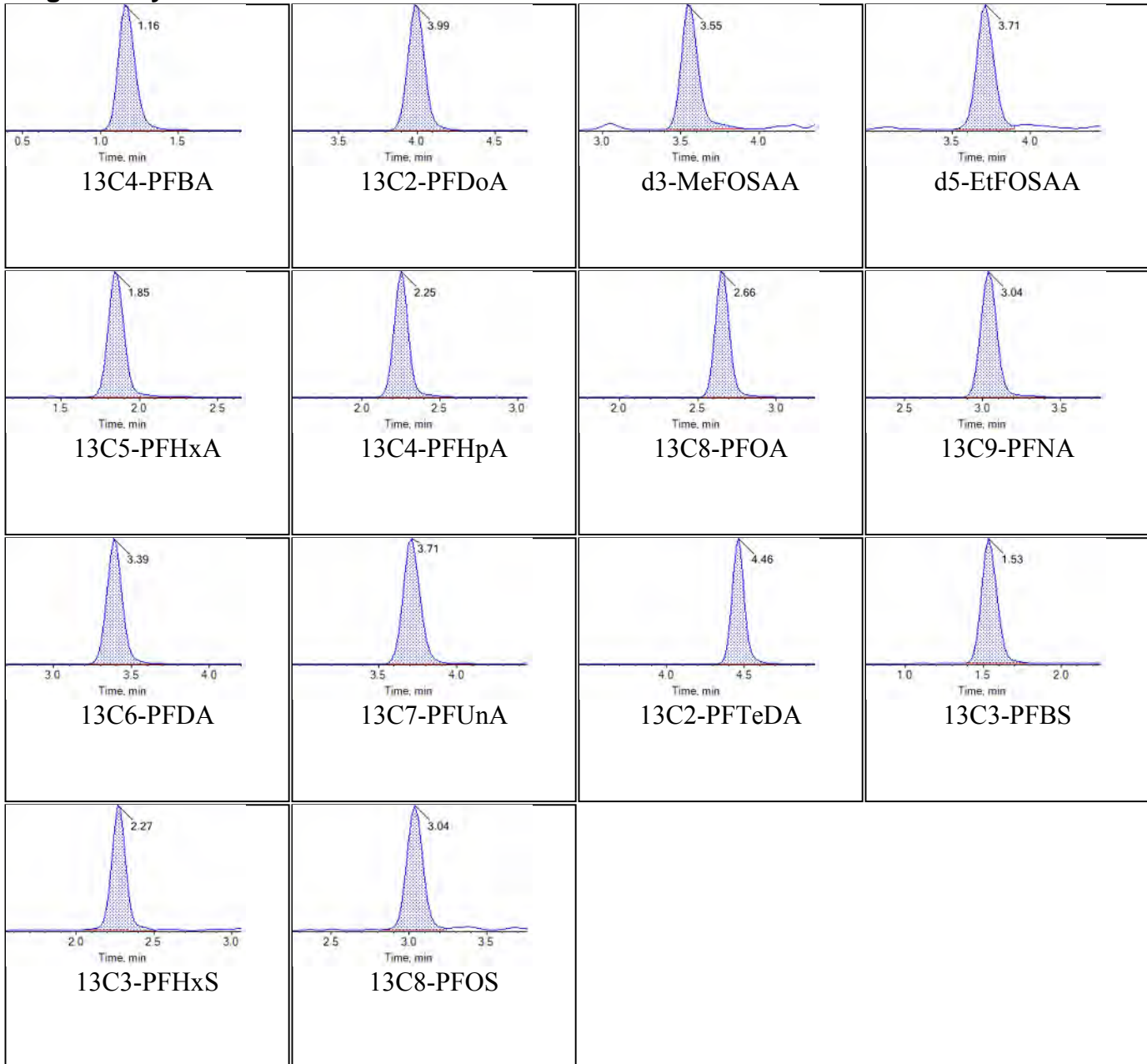
Internal Standards:



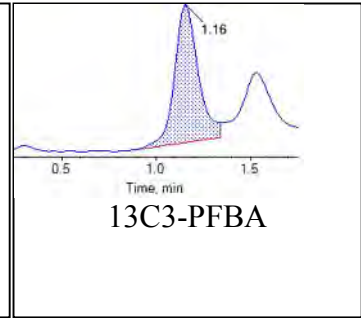
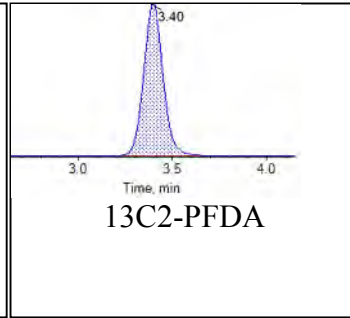
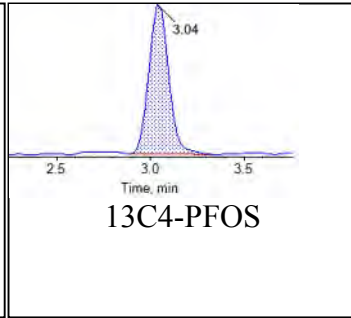
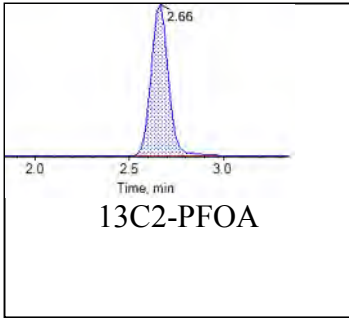
Sample Name	CR553LCS-FS(3)	Injection Vial	33
Sample ID	Laboratory Control Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T04:57:34	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



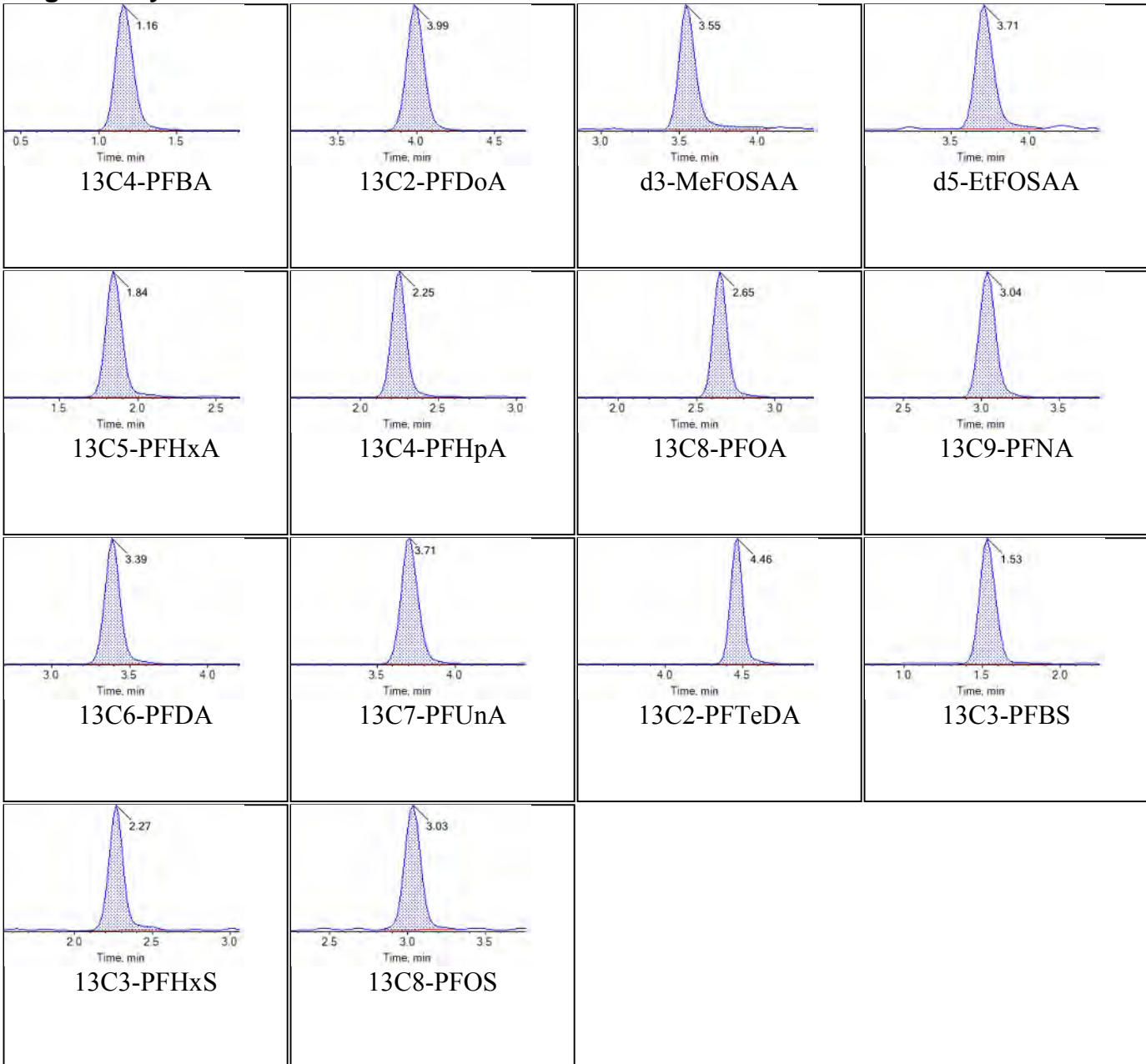
Internal Standards:



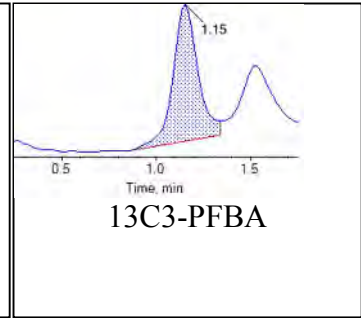
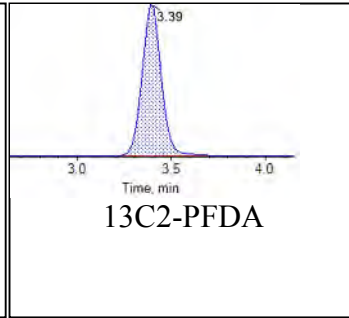
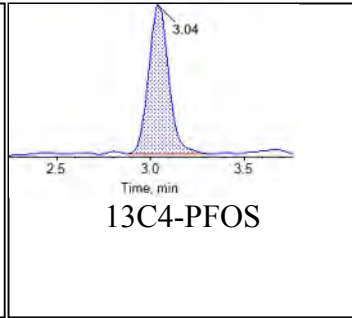
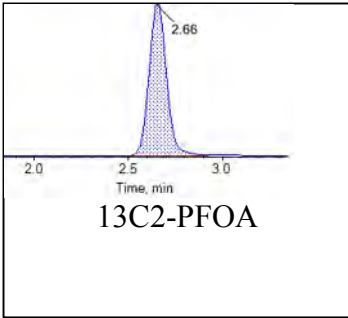
Sample Name	J7402-FS(3)	Injection Vial	34
Sample ID	NASB-BLL15-GW-RB01-080918	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:08:27	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



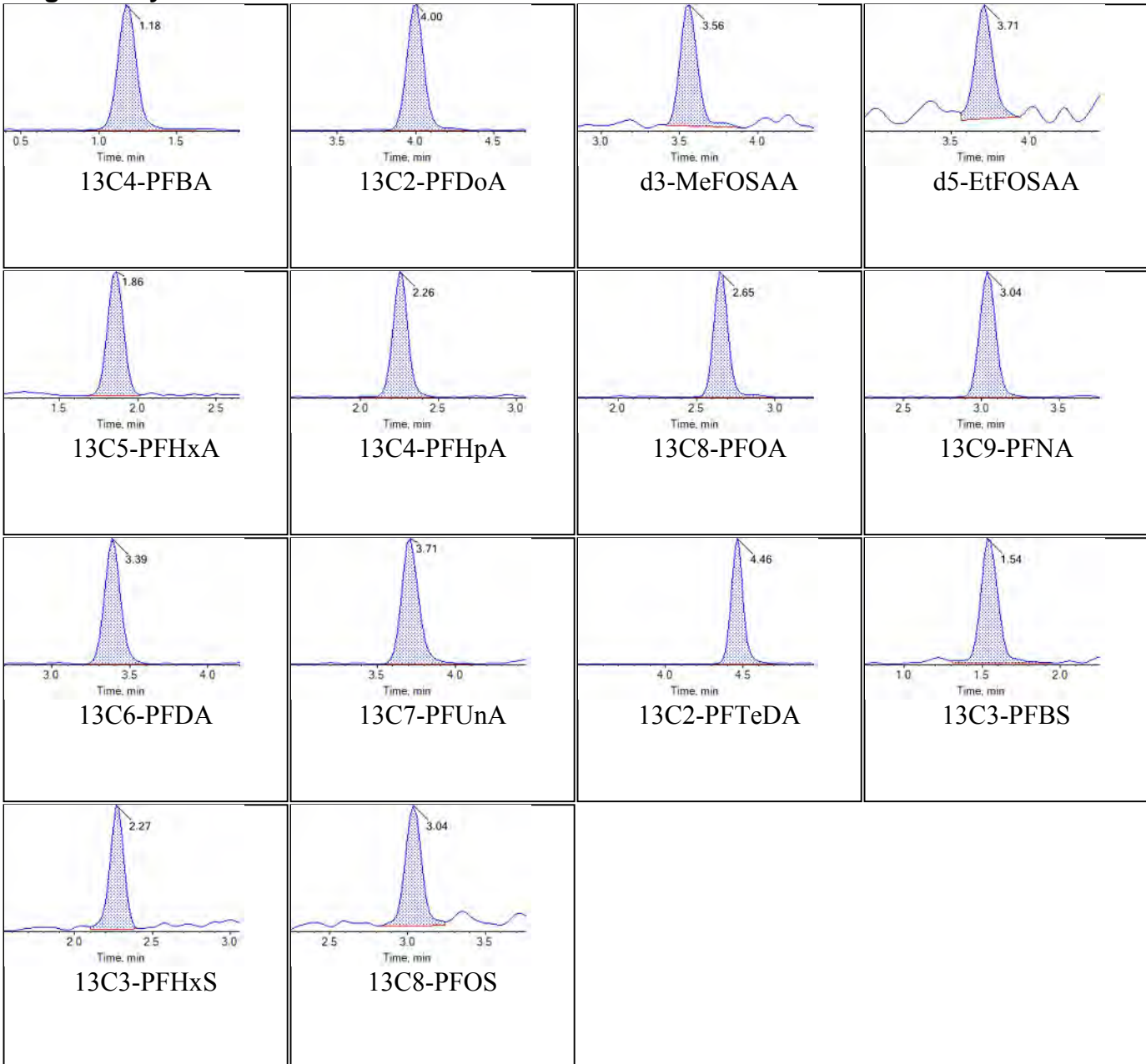
Internal Standards:



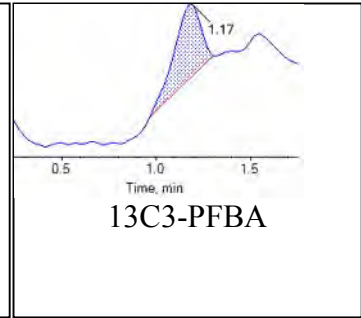
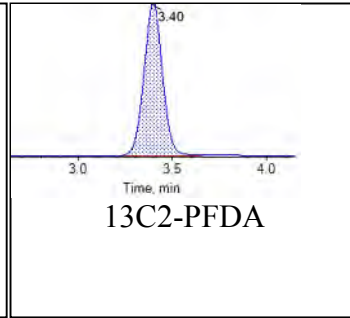
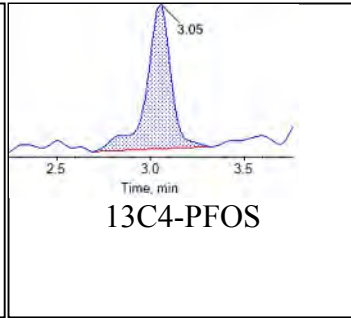
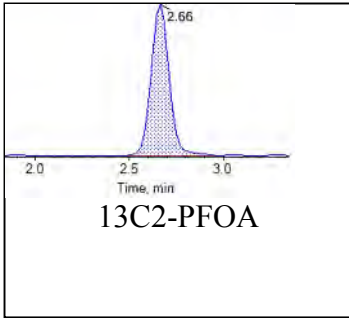
Sample Name	J7394-FS(3)	Injection Vial	35
Sample ID	NASB-CCC-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:19:19	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



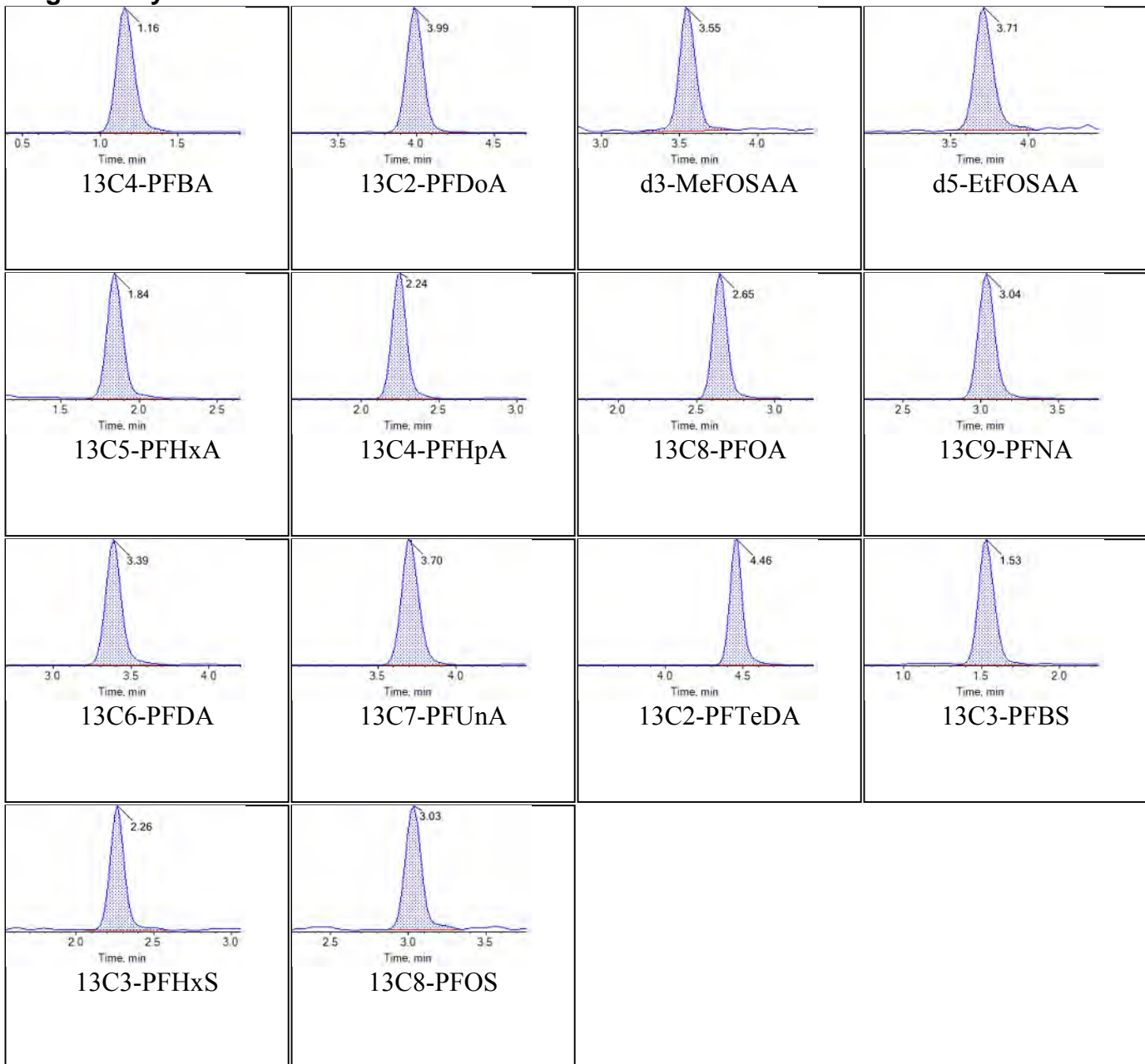
Internal Standards:



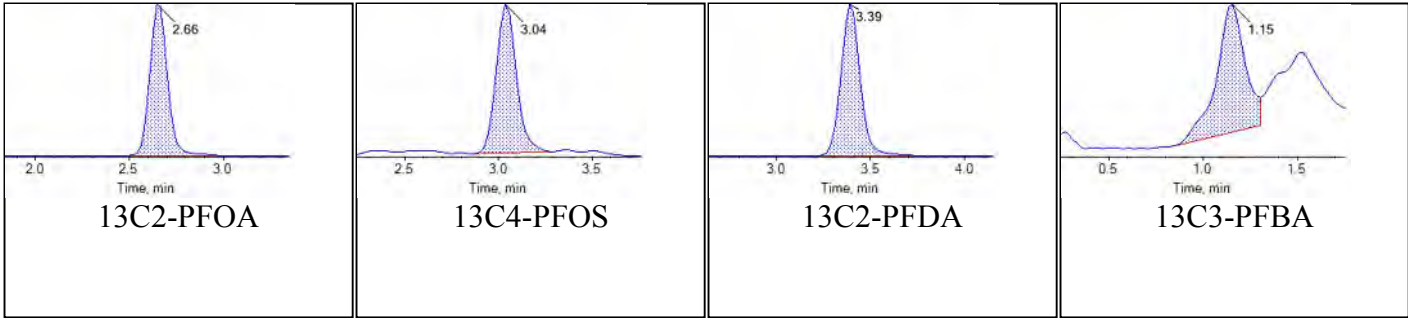
Sample Name	J7395-FS(3)	Injection Vial	36
Sample ID	NASB-CCC-GW-02-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:30:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



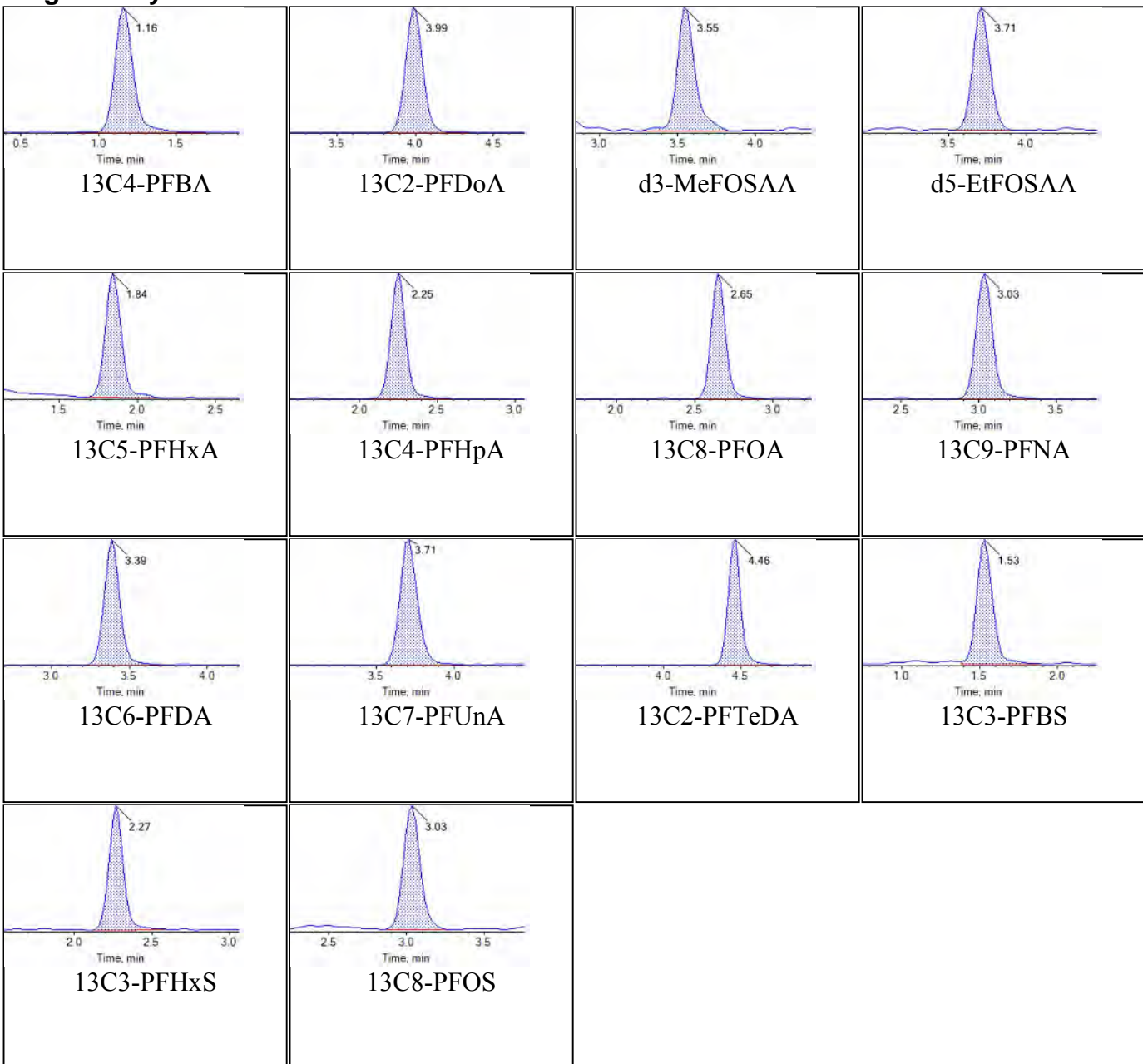
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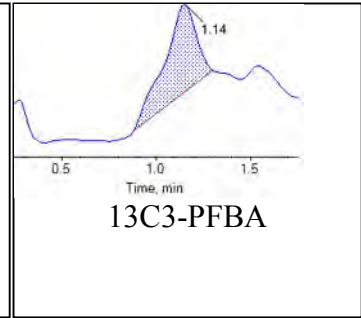
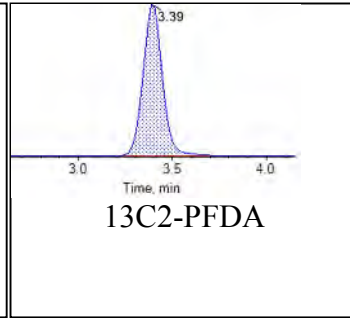
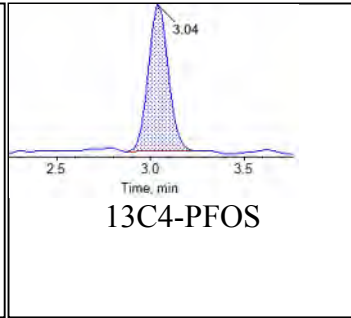
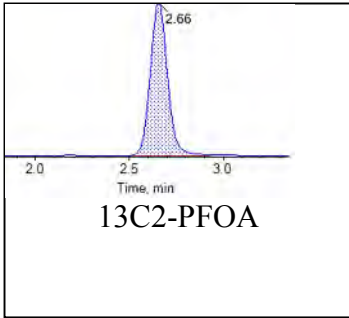
Sample Name	J7396-FS(3)	Injection Vial	37
Sample ID	NASB-BLL15-GW-02-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T05:41:02	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



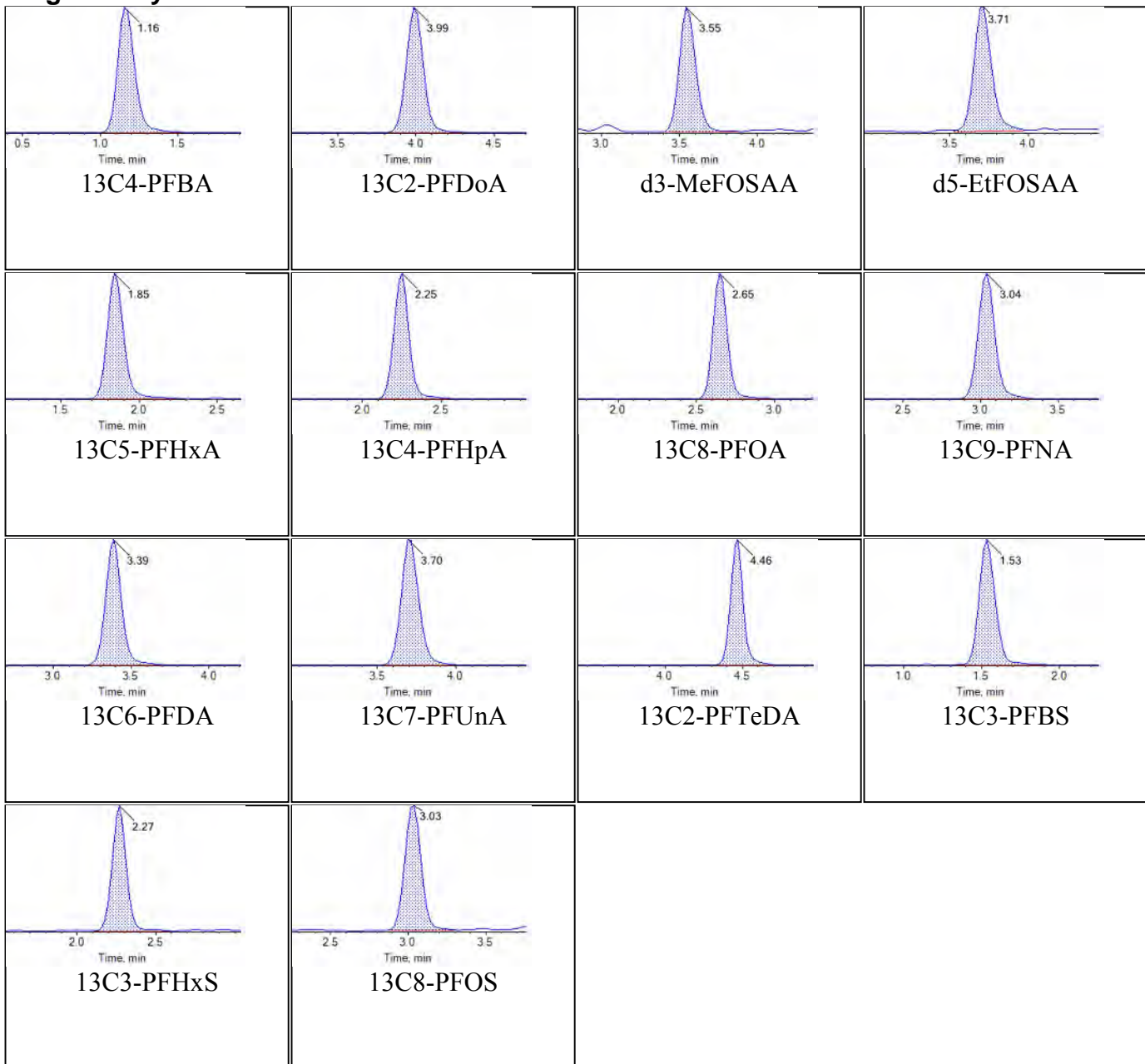
Internal Standards:



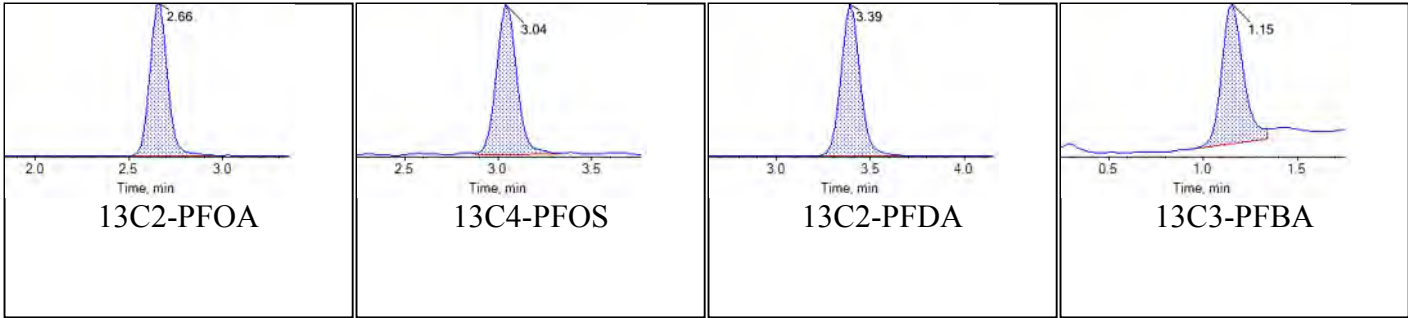
Sample Name	JY42 CCV	Injection Vial	38
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:02:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



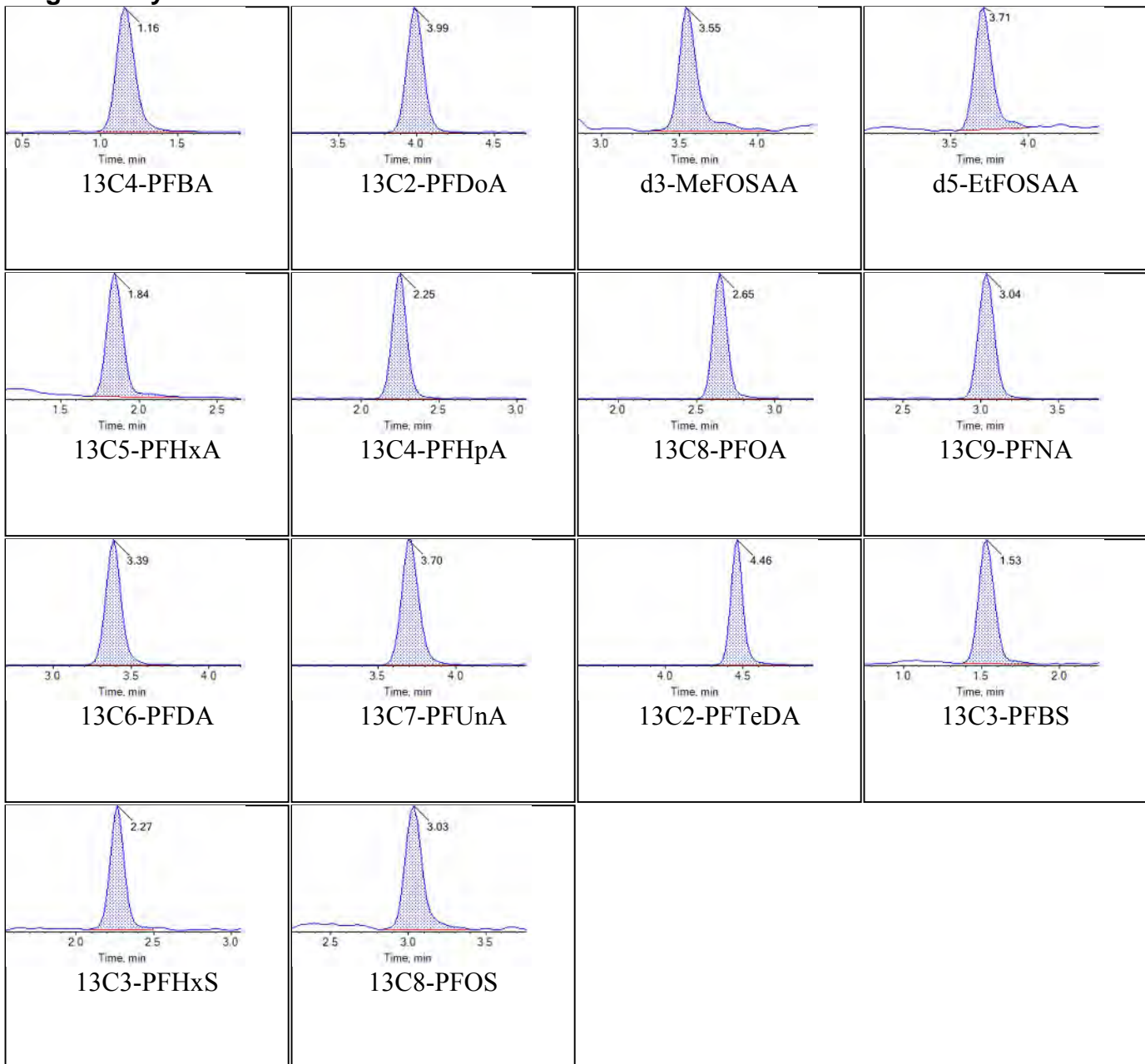
Internal Standards:



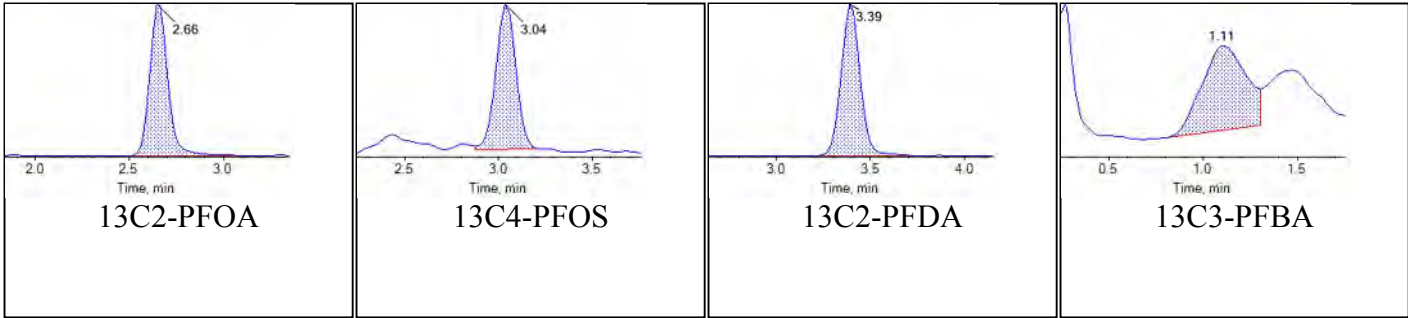
Sample Name	J7397-FS(3)	Injection Vial	39
Sample ID	NASB-BLL15-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:24:32	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



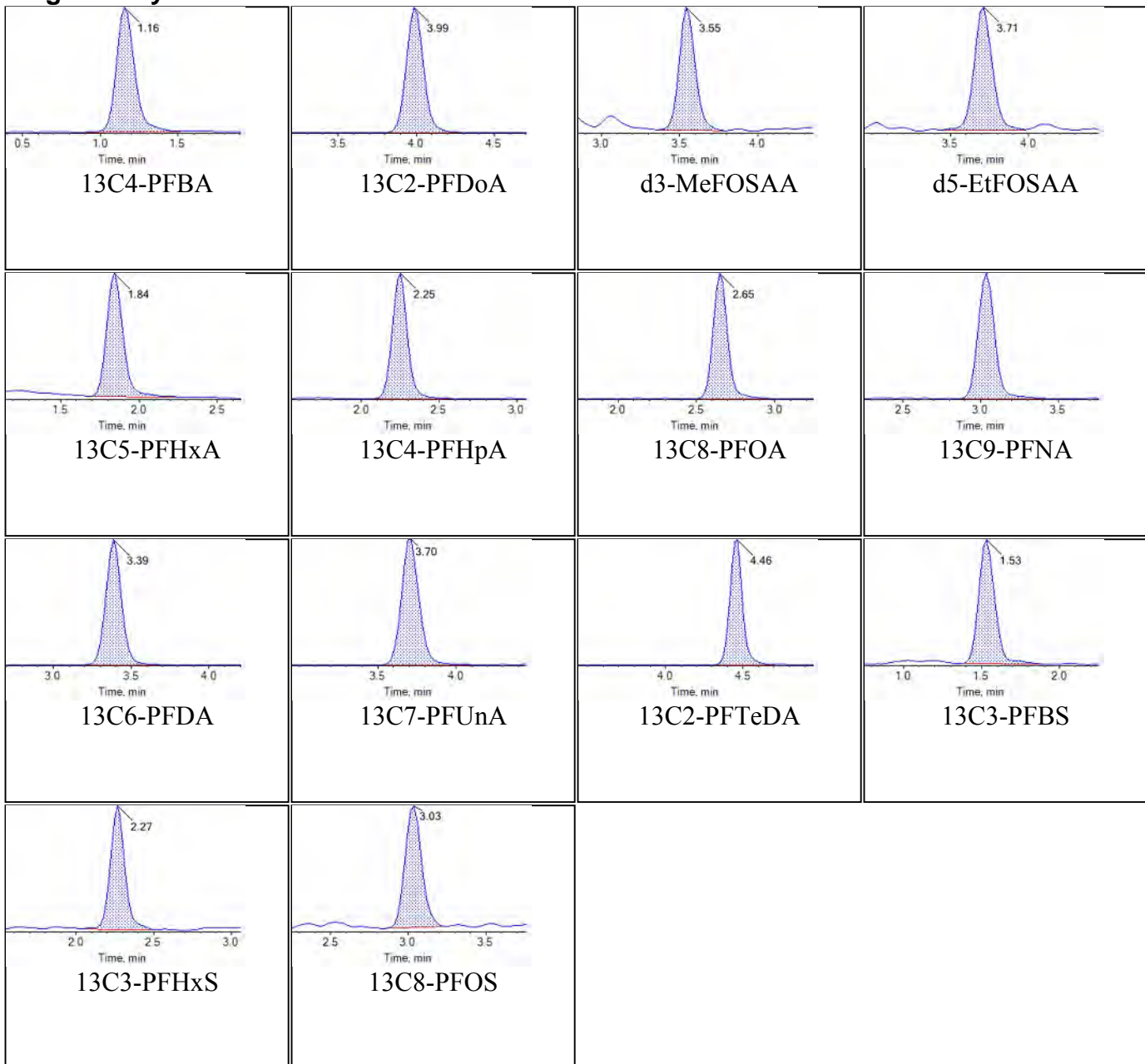
Internal Standards:



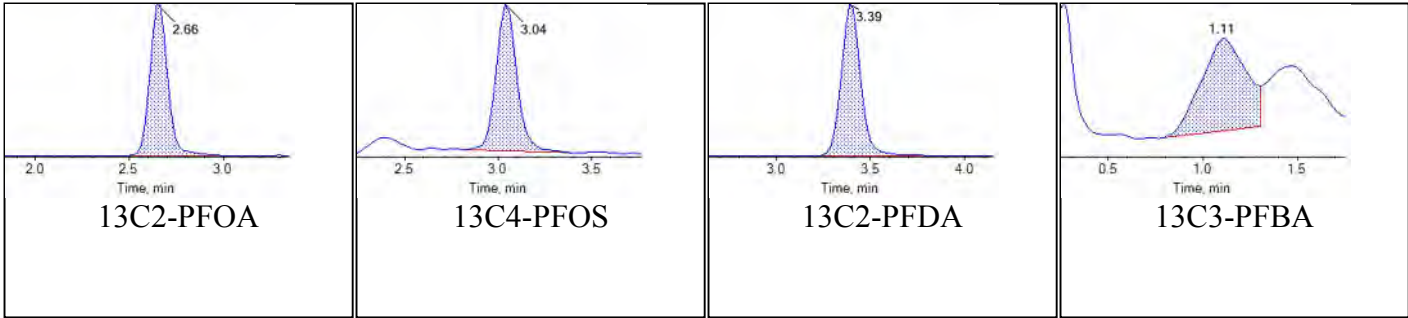
Sample Name	J7397MS-FS(3)	Injection Vial	40
Sample ID	Matrix Spike Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:35:25	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



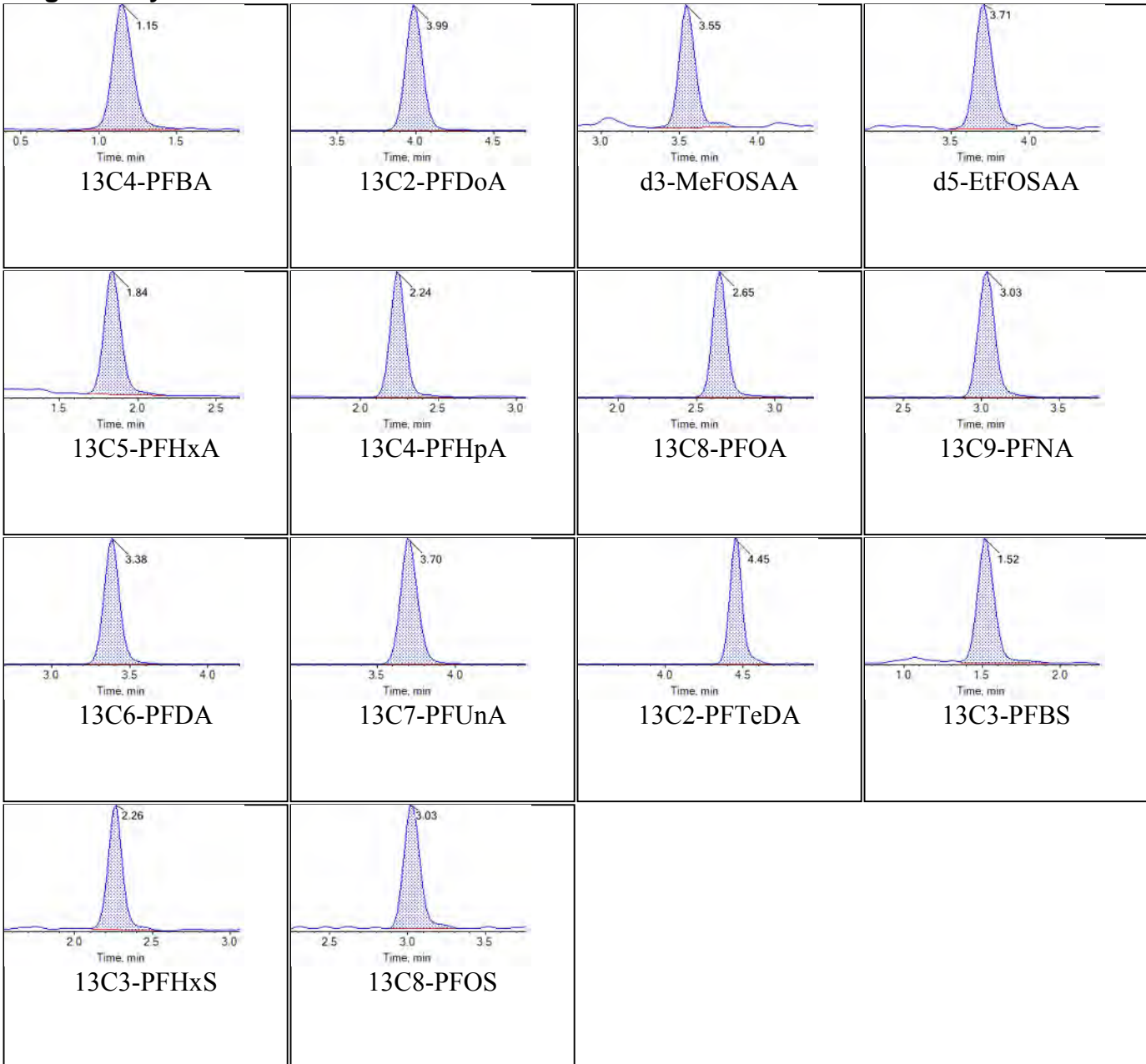
Internal Standards:



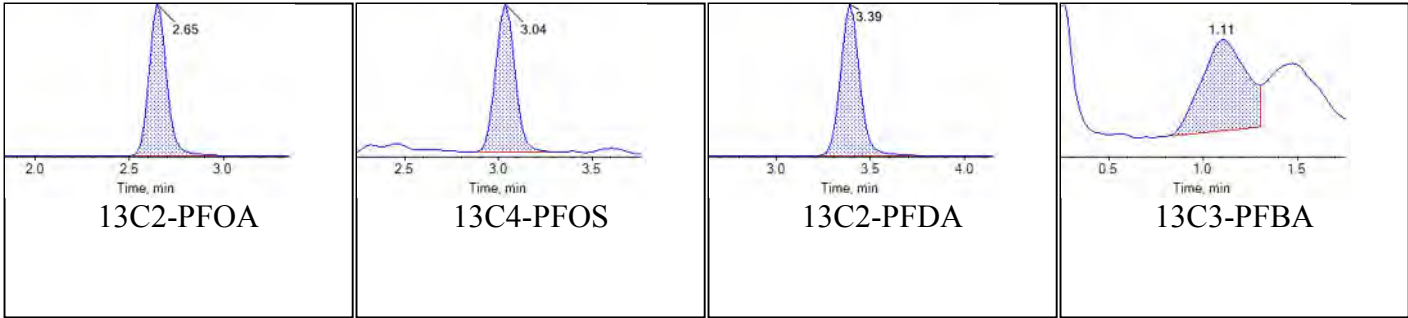
Sample Name	J7397MSD-FS(3)	Injection Vial	41
Sample ID	Matrix Spike Duplicate Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:46:18	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



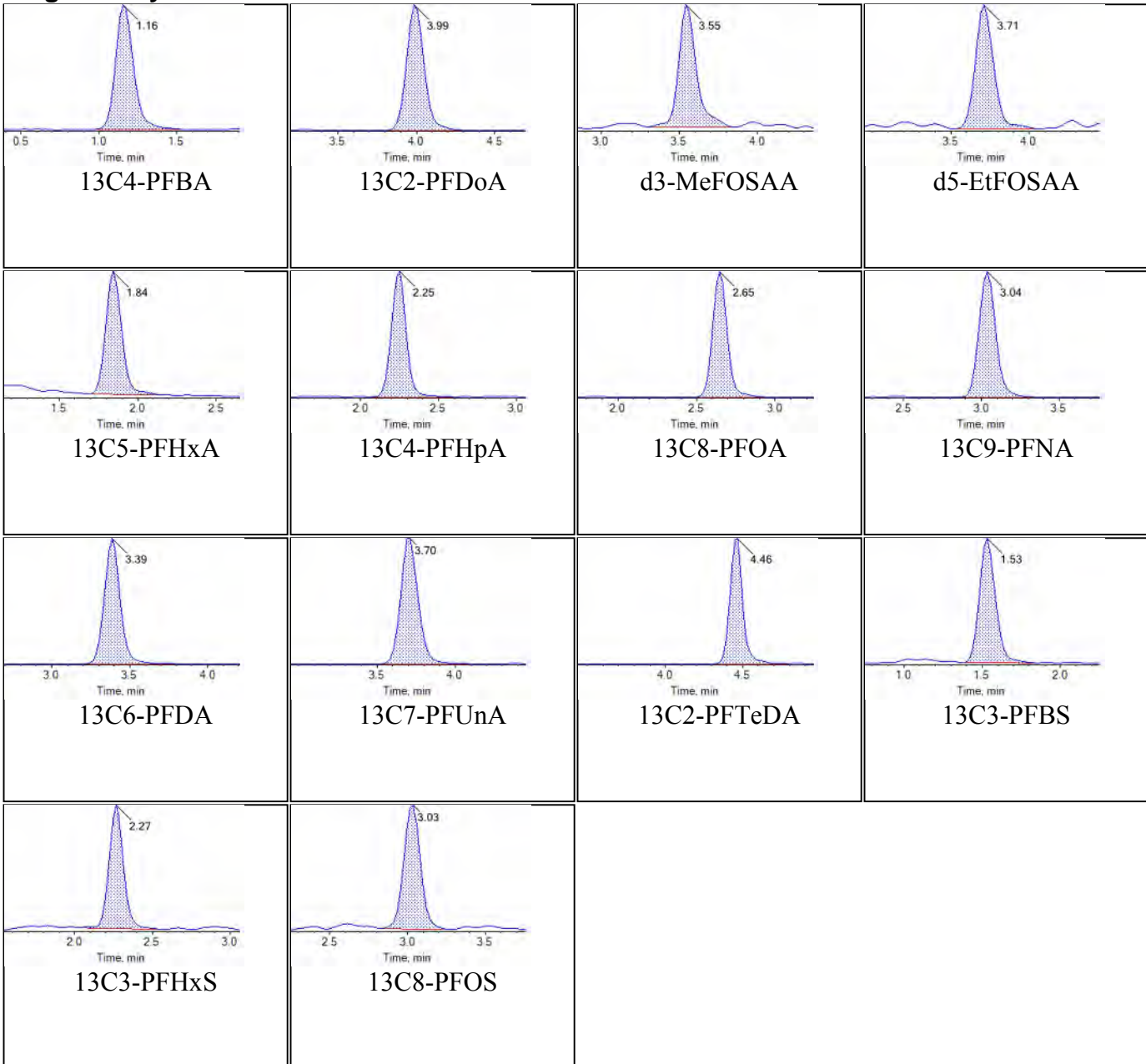
Internal Standards:



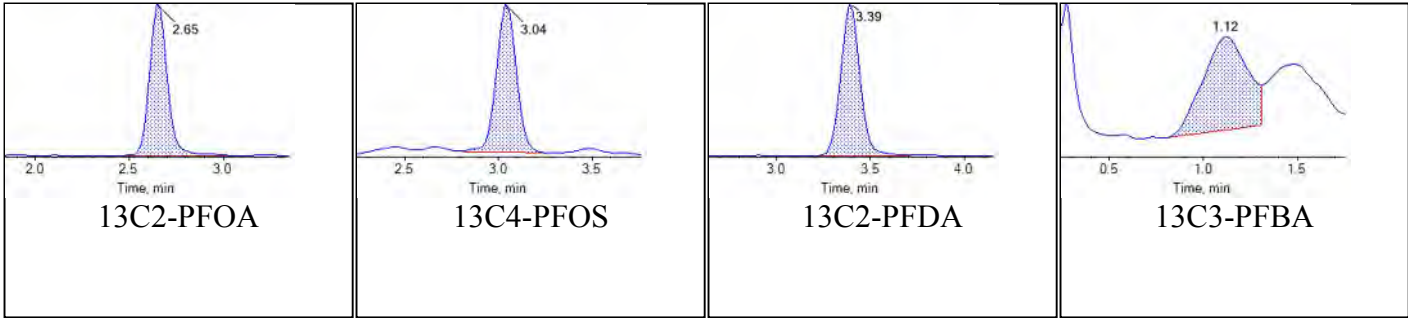
Sample Name	J7398-FS(3)	Injection Vial	42
Sample ID	NASB-BLL15-DUP-080918	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:57:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



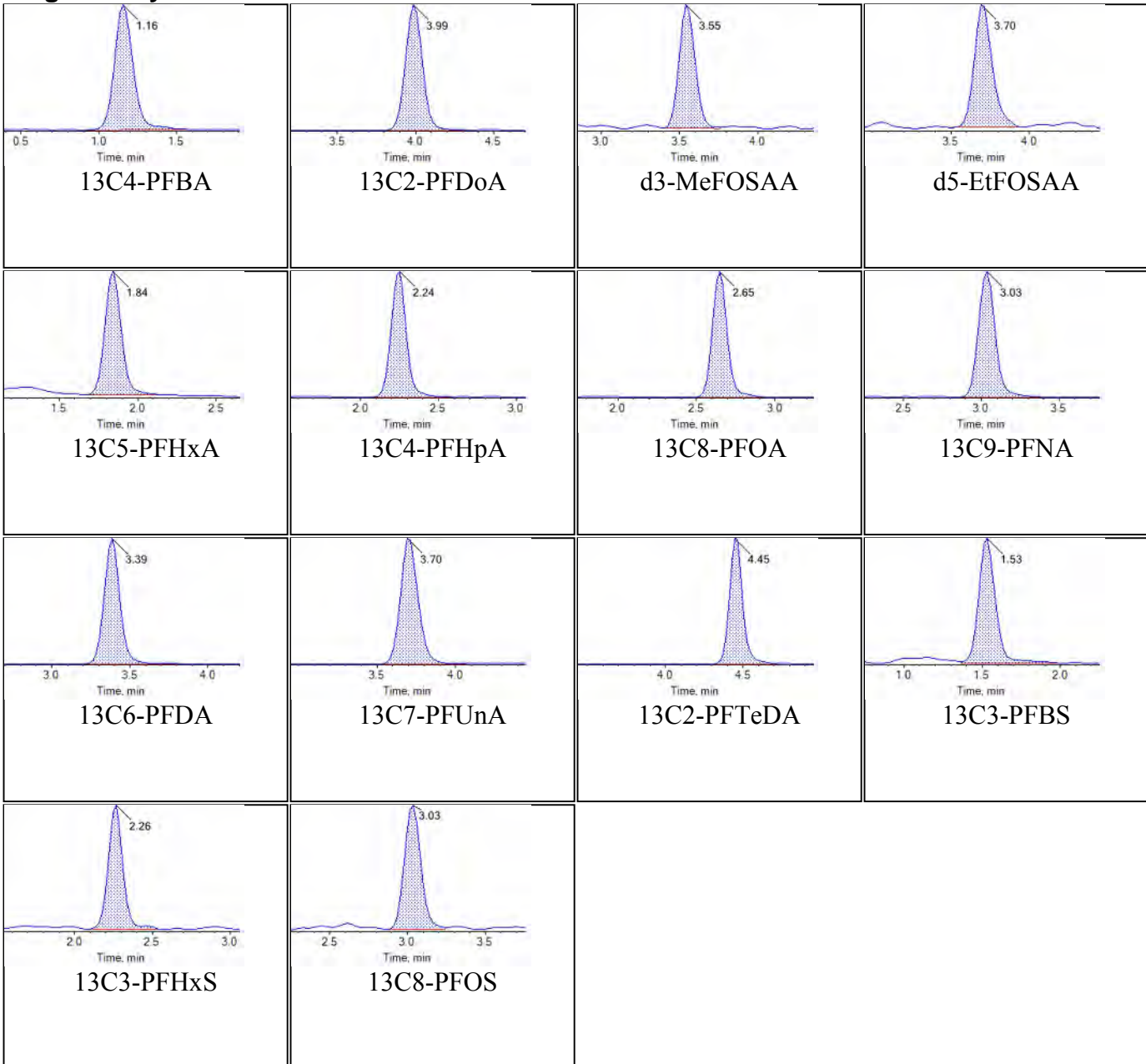
Internal Standards:



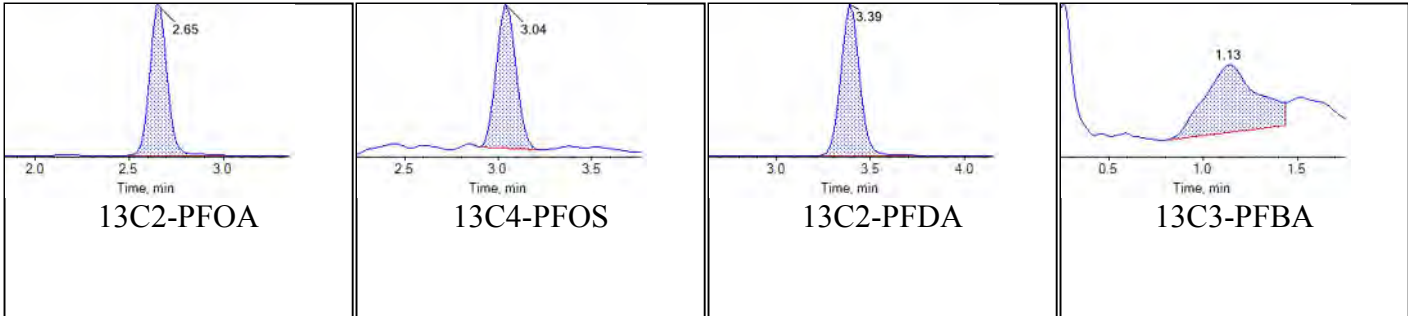
Sample Name	J7399-FS(3)	Injection Vial	43
Sample ID	NASB-BLL15-GW-03-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:08:02	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



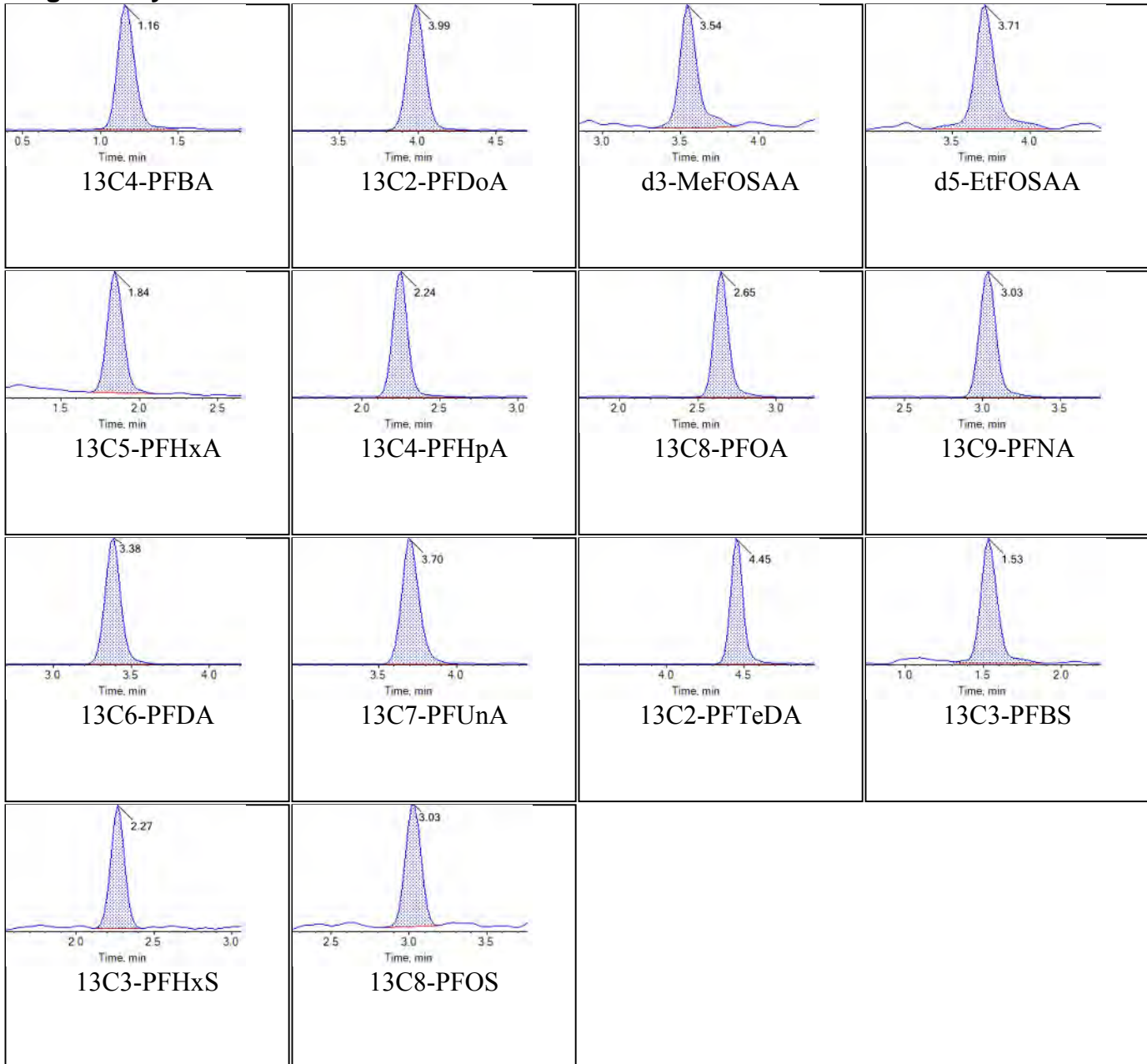
Internal Standards:



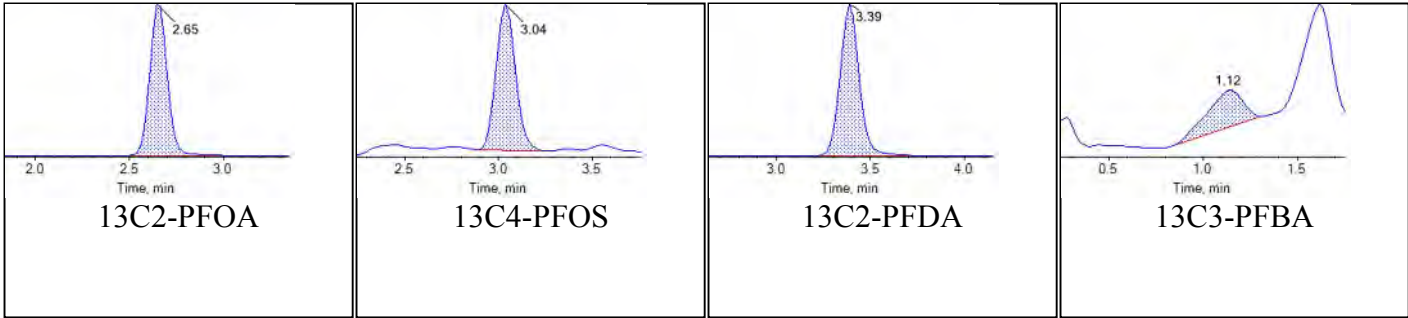
Sample Name	J7400-FS(3)	Injection Vial	44
Sample ID	NASB-BLL15-GW-04-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:18:54	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



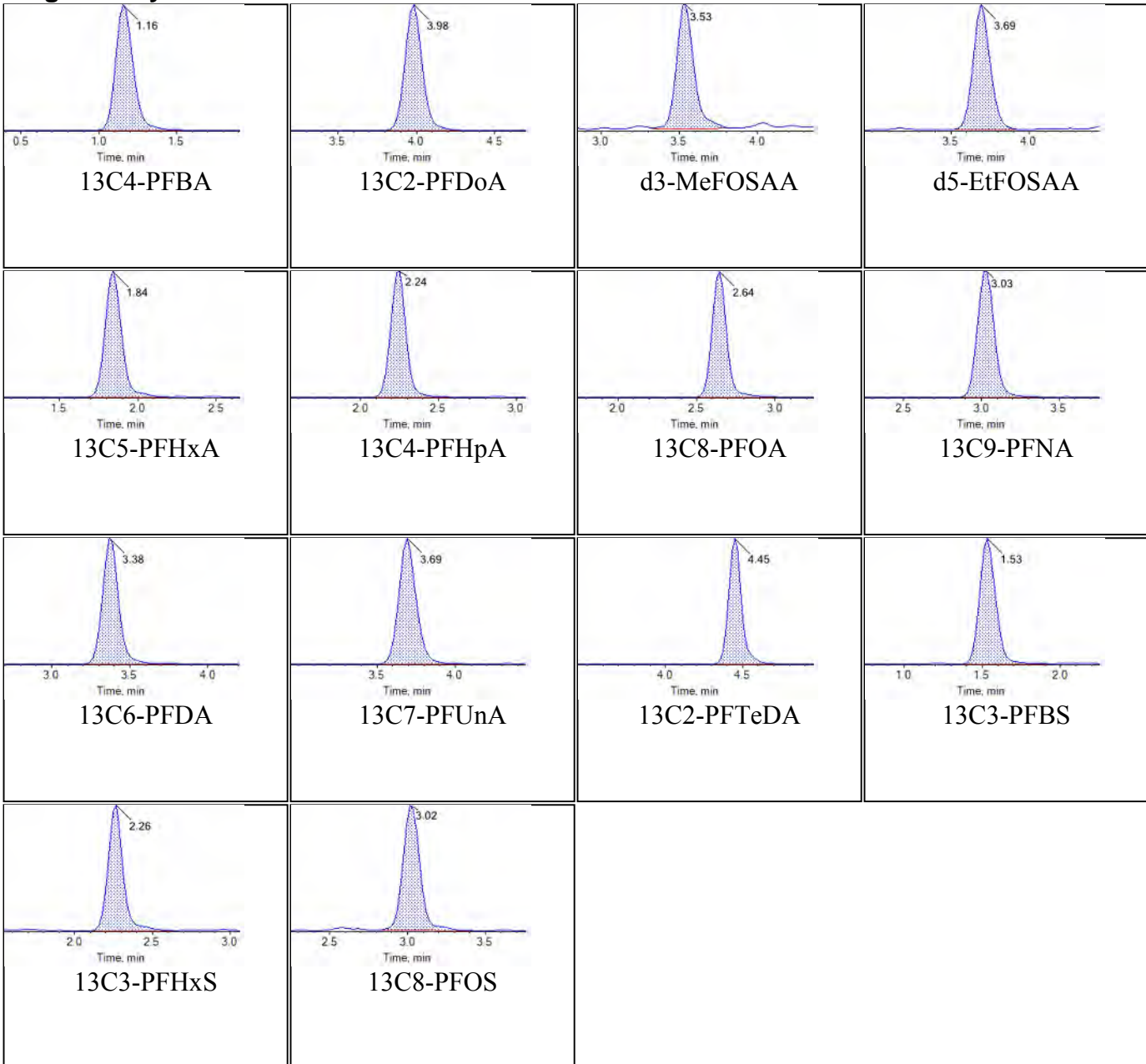
Internal Standards:



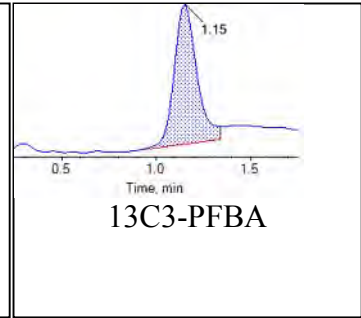
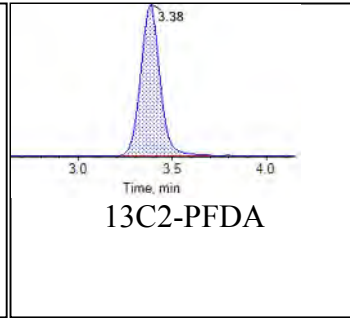
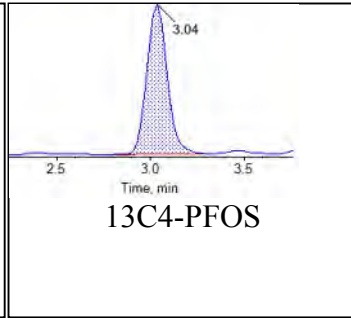
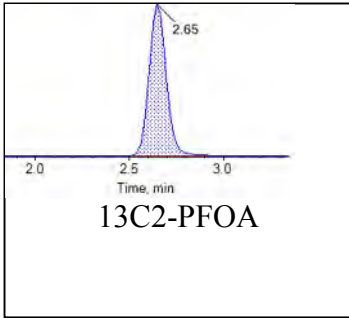
Sample Name	JY41 CCV	Injection Vial	46
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:40:38	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Chromatograms

Target Analytes:



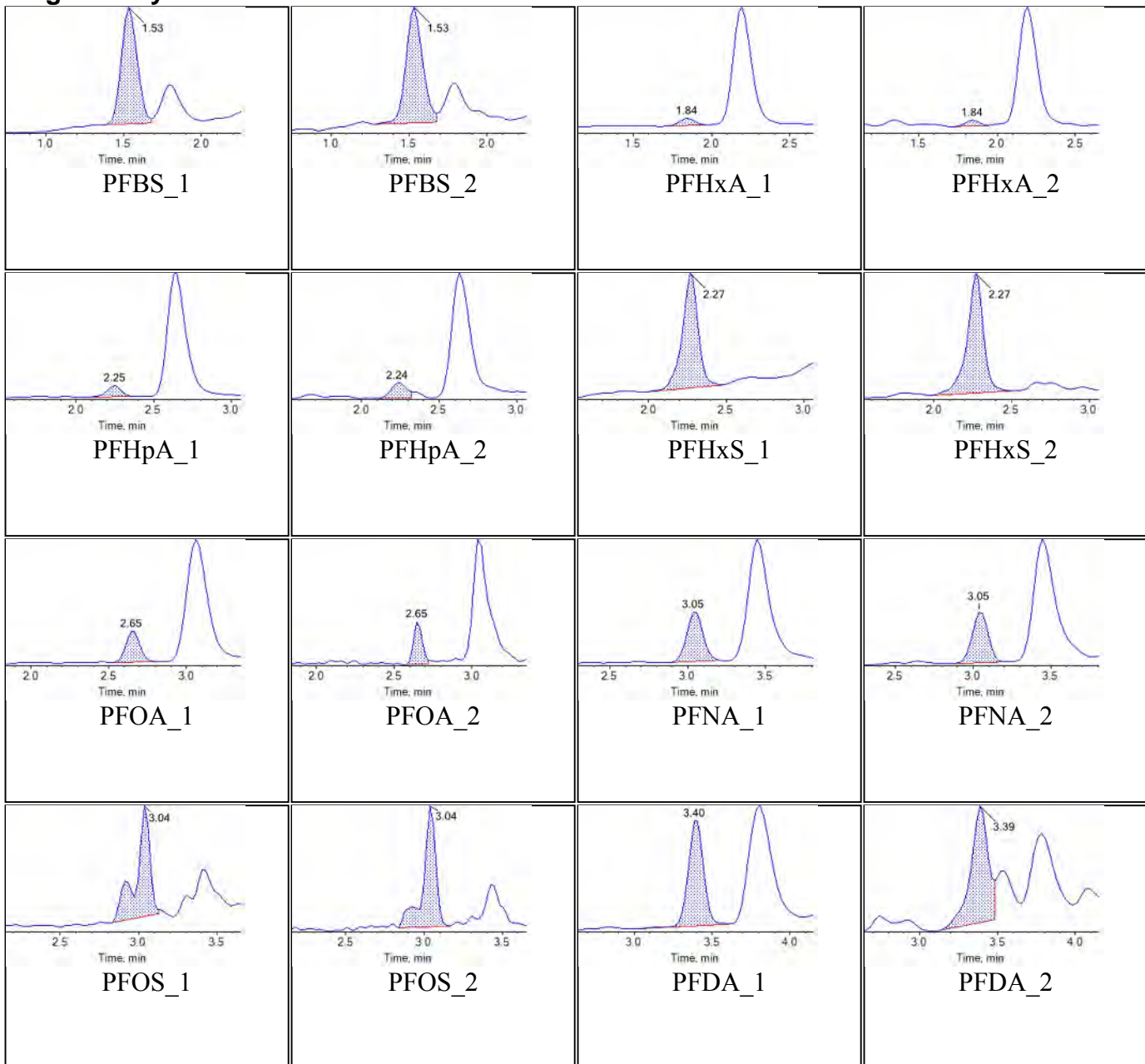
Internal Standards:

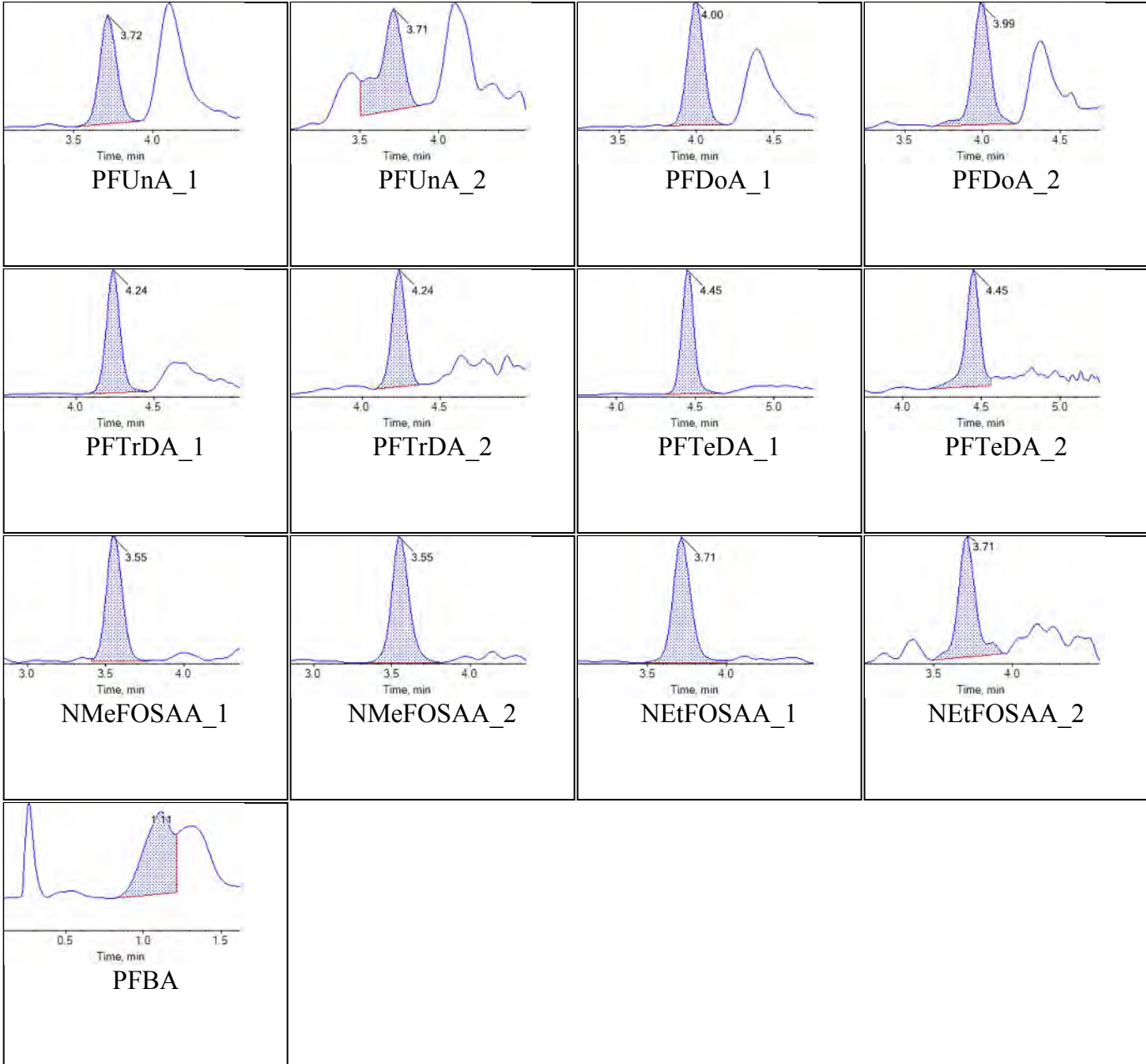


Sample Name	JY38	Injection Vial	16
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:04:50	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

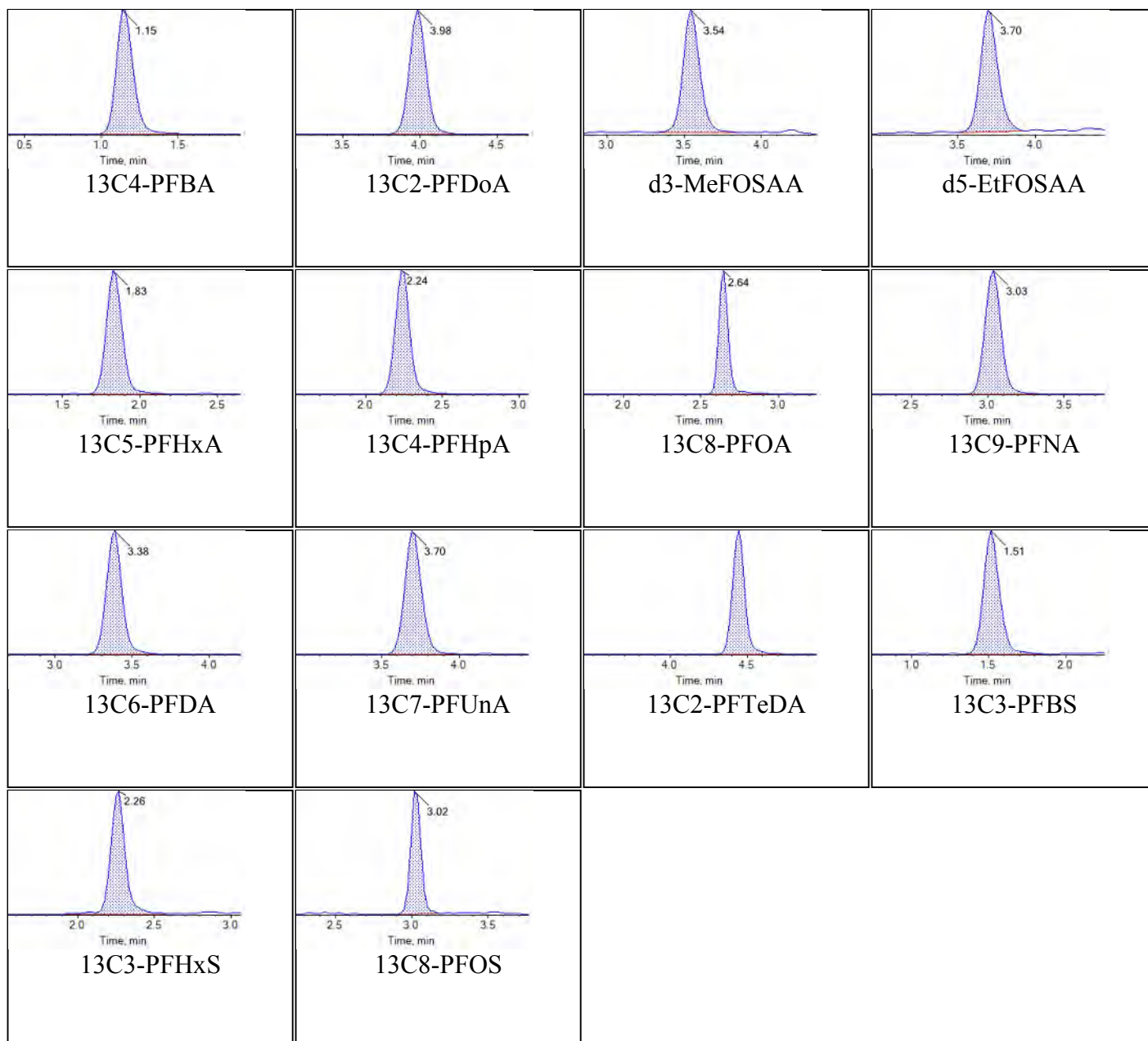
Chromatograms

Target Analytes:





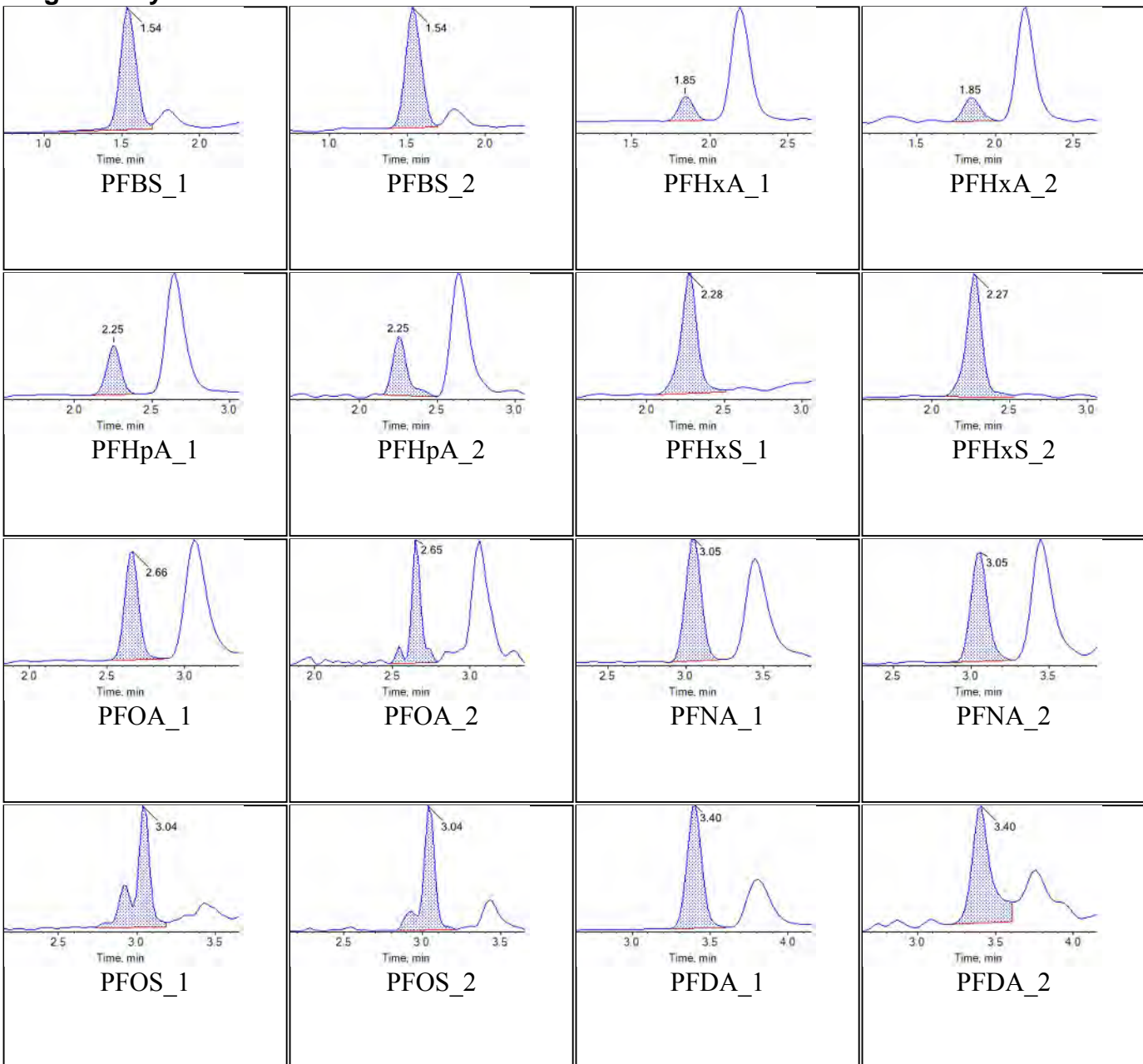
Internal Standards:

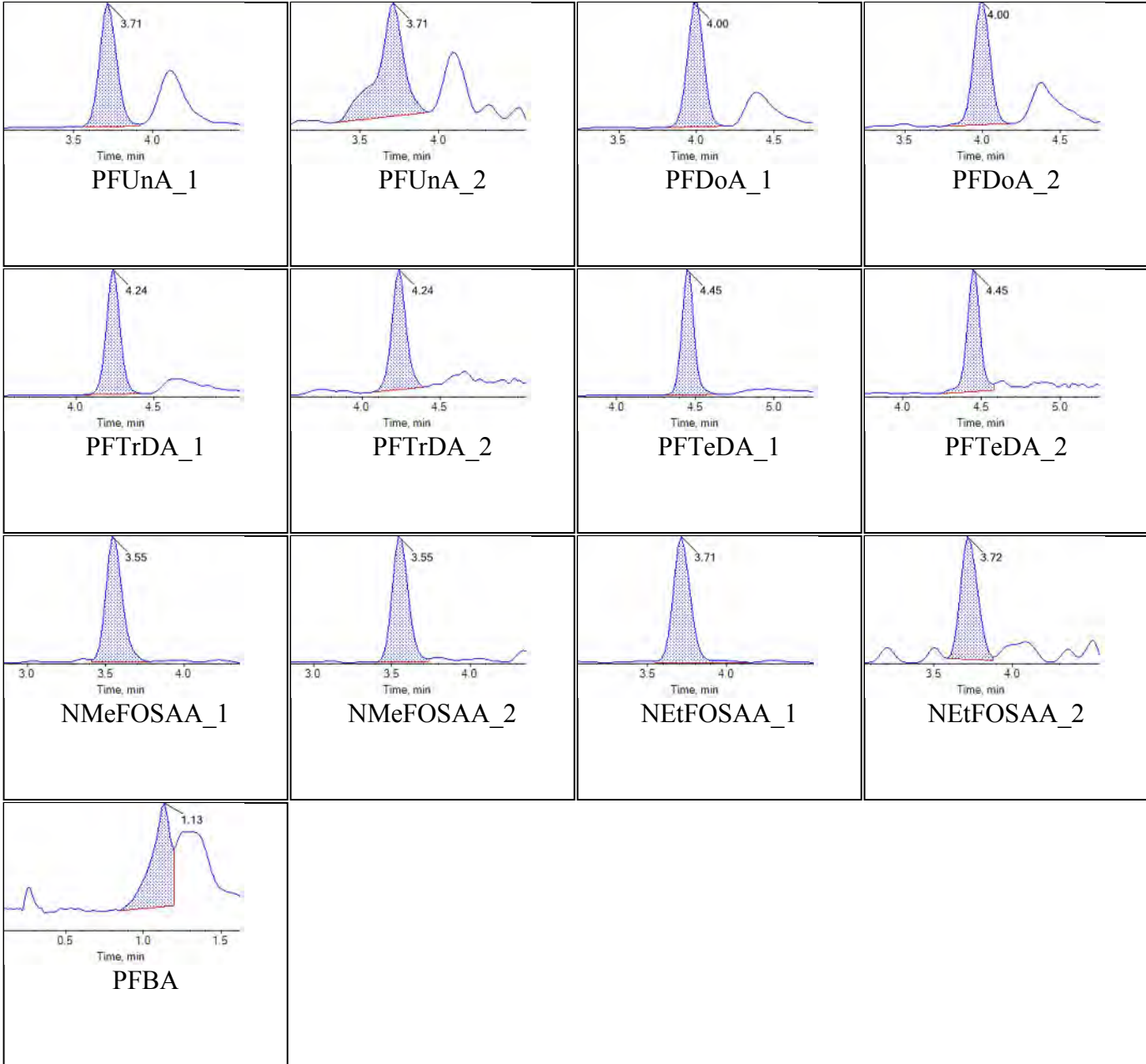


Sample Name	JY39	Injection Vial	17
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:15:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

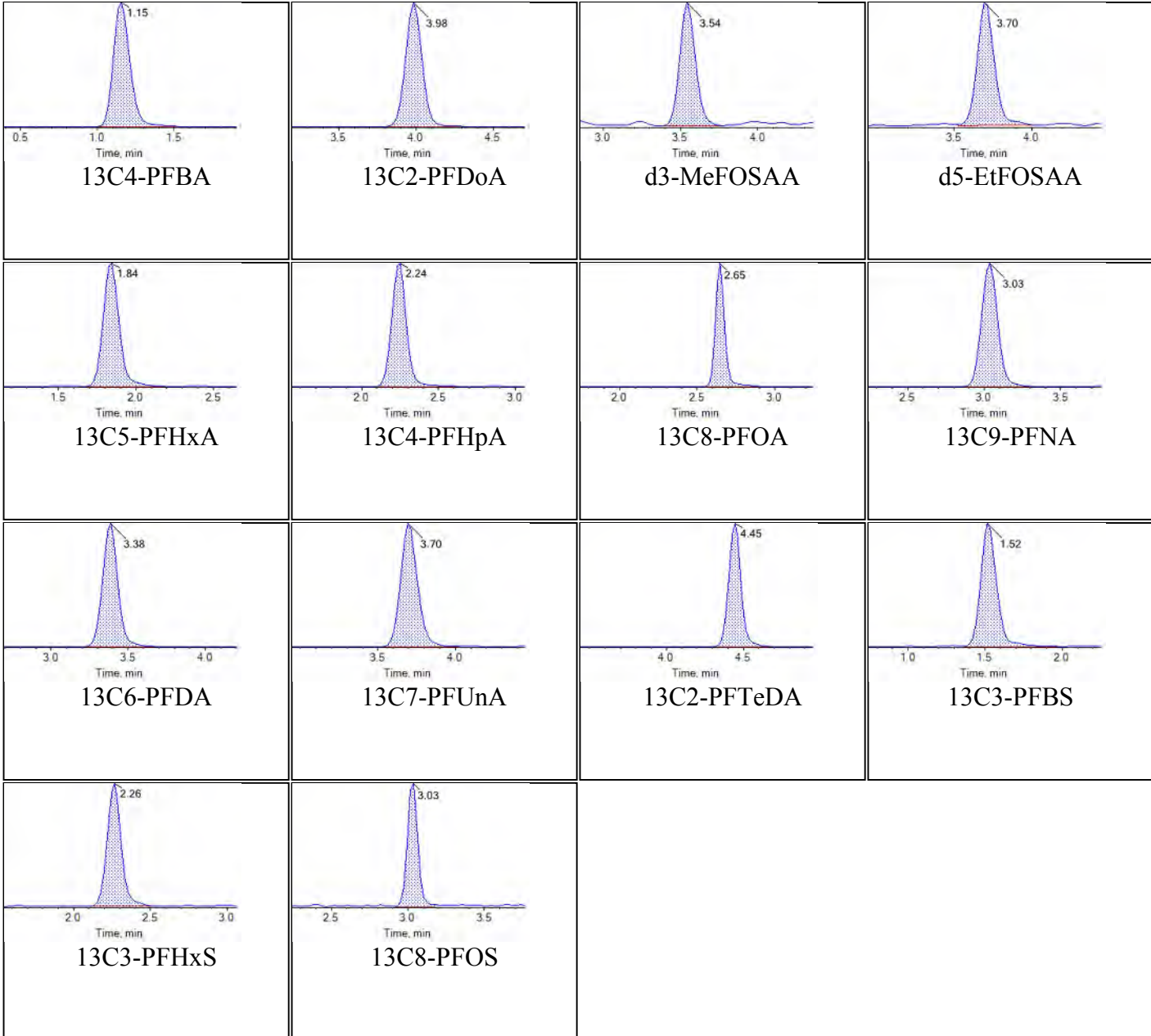
Chromatograms

Target Analytes:





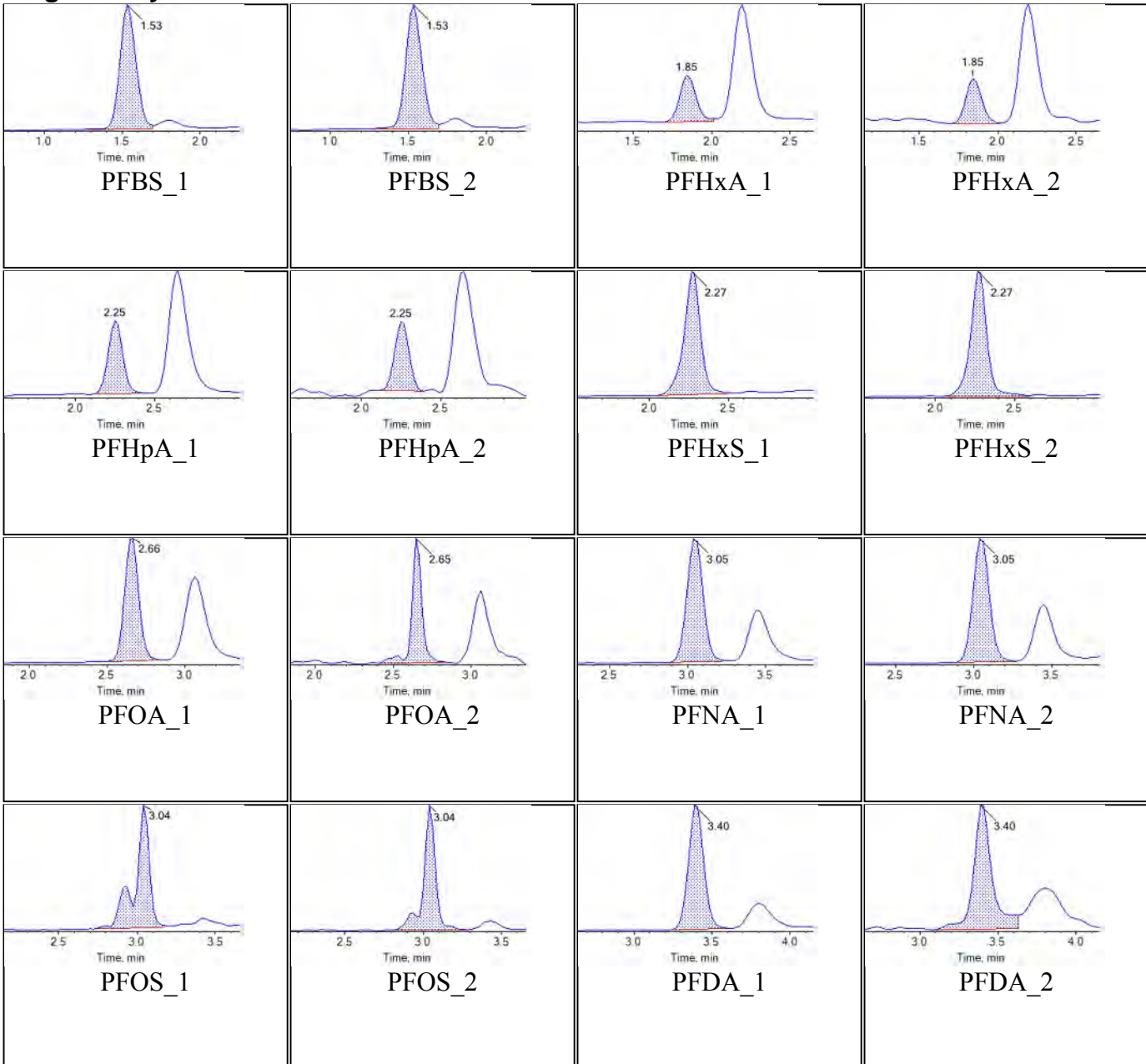
Internal Standards:

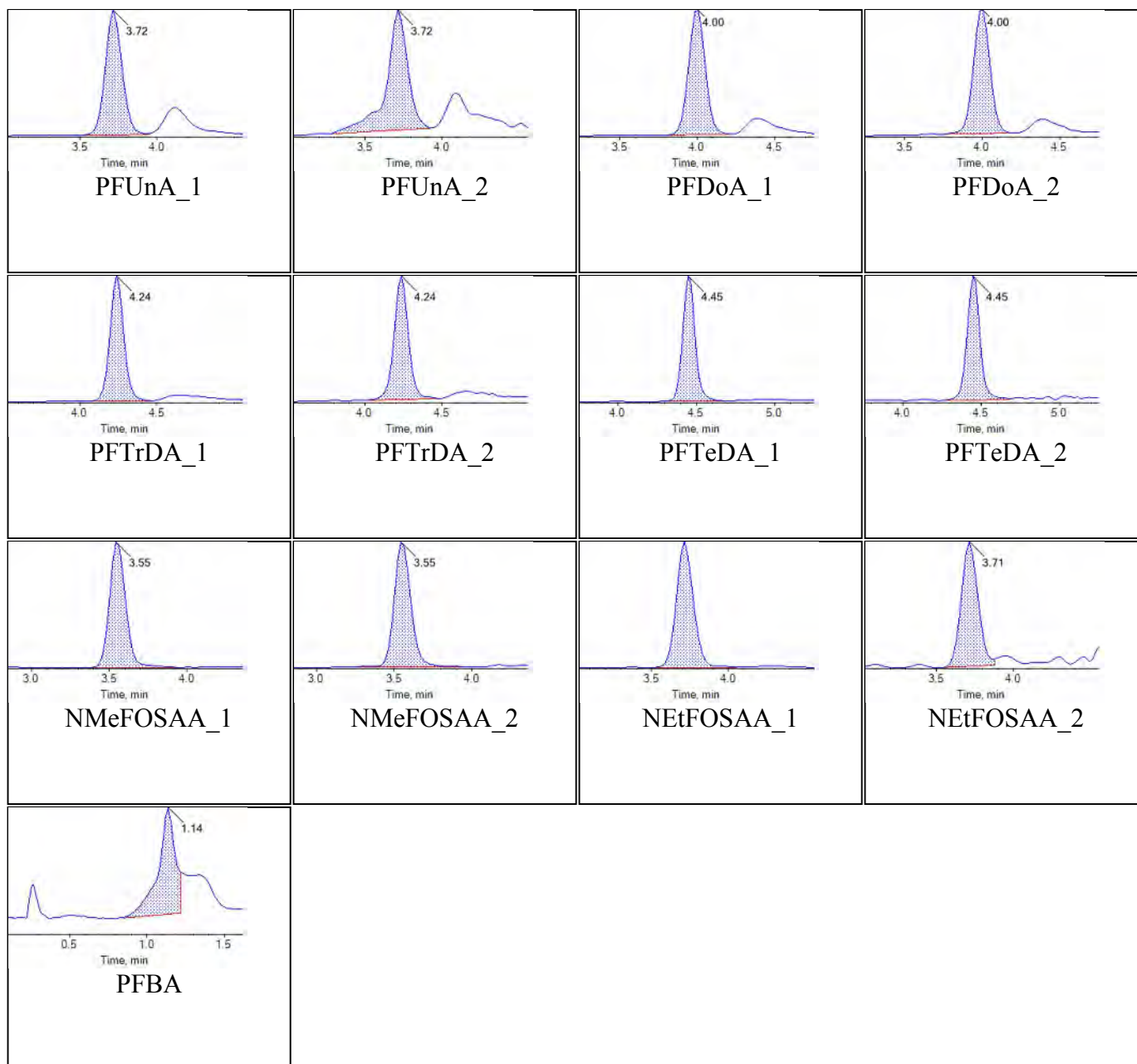


Sample Name	JY40	Injection Vial	18
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:26:32	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Chromatograms

Target Analytes:



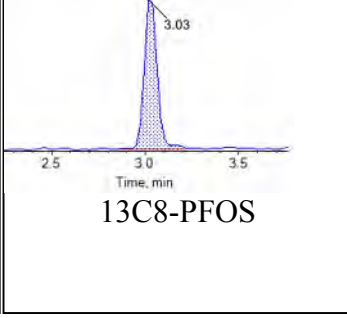
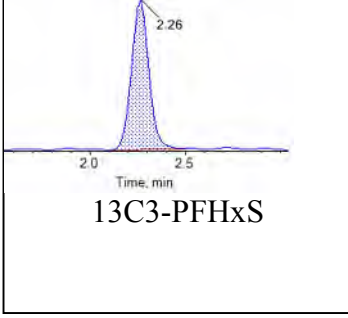
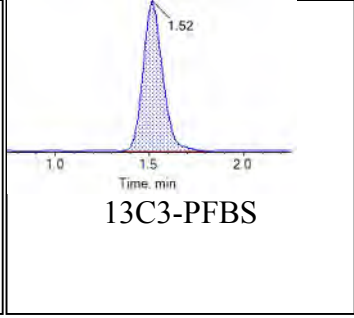
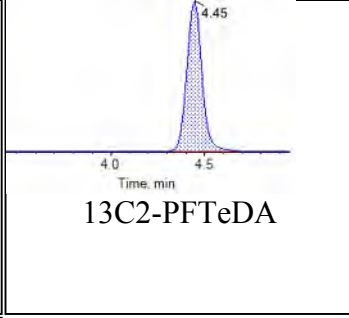
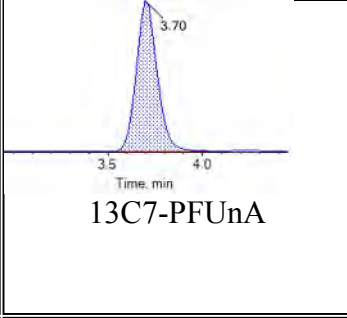
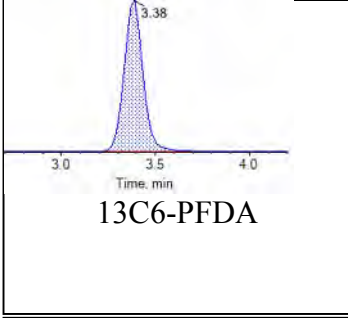
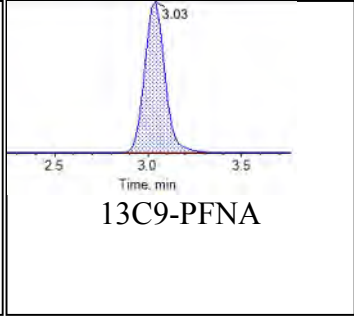
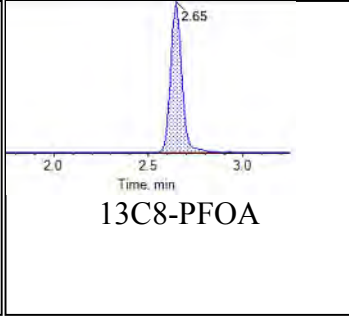
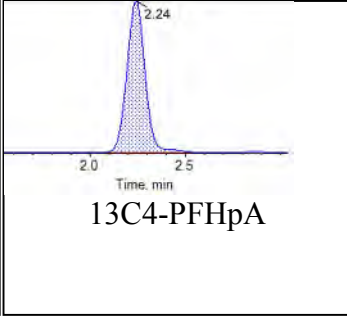
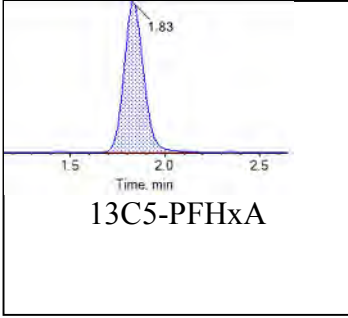
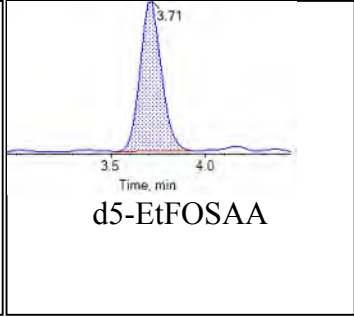
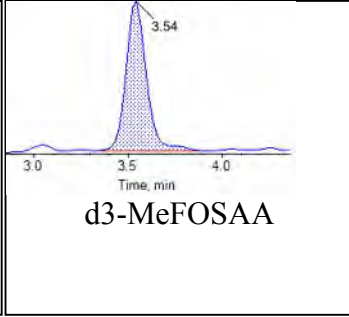
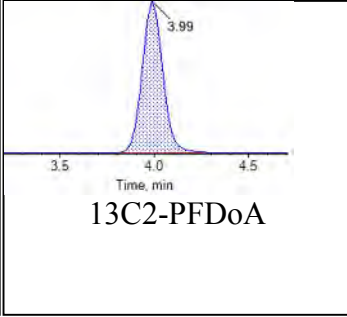
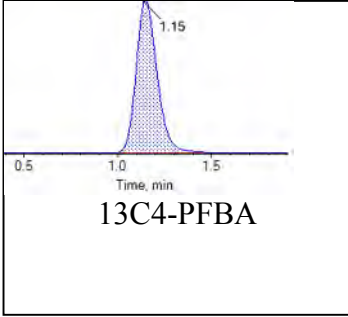


Internal Standards:



Chromatogram Report

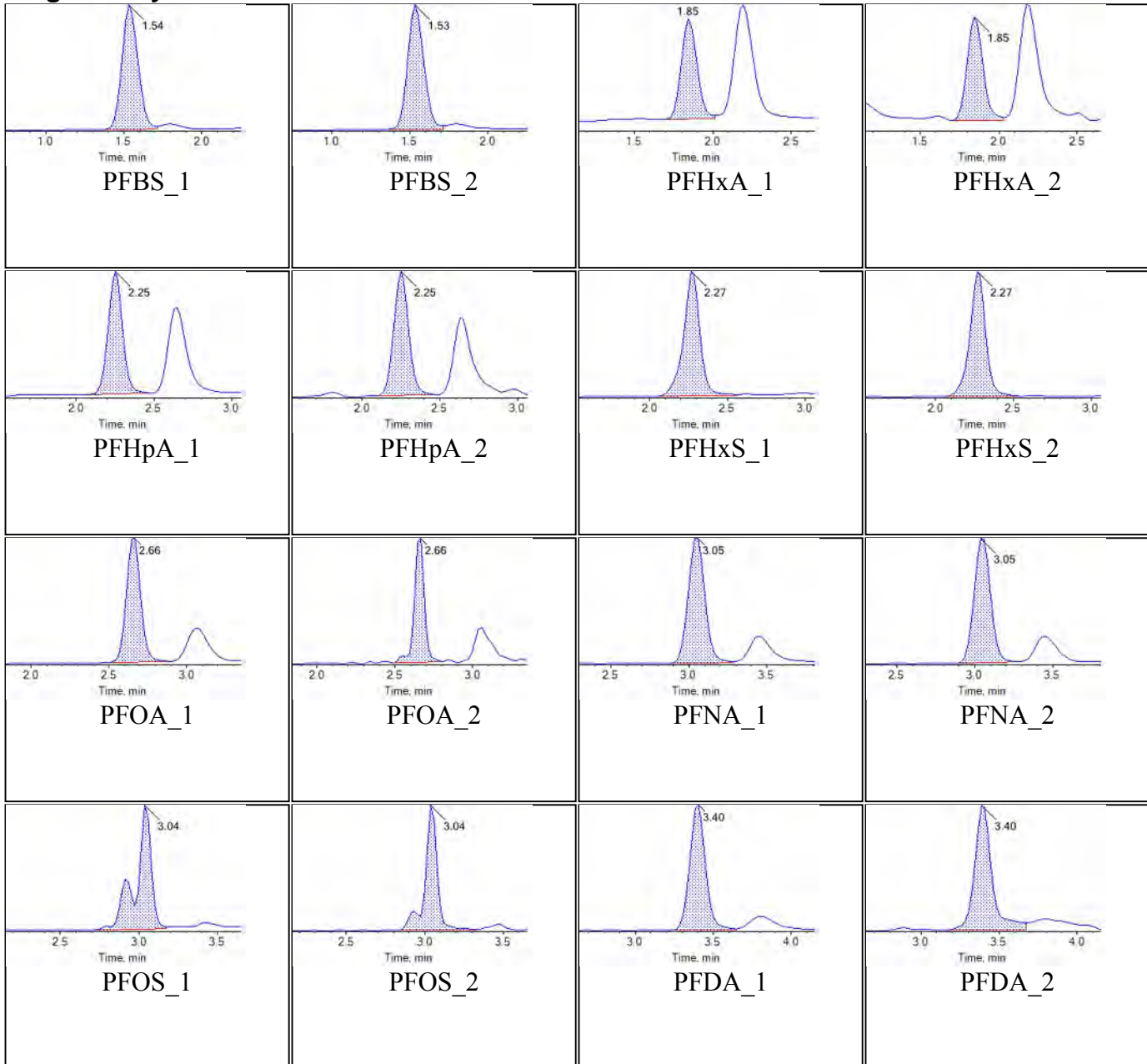
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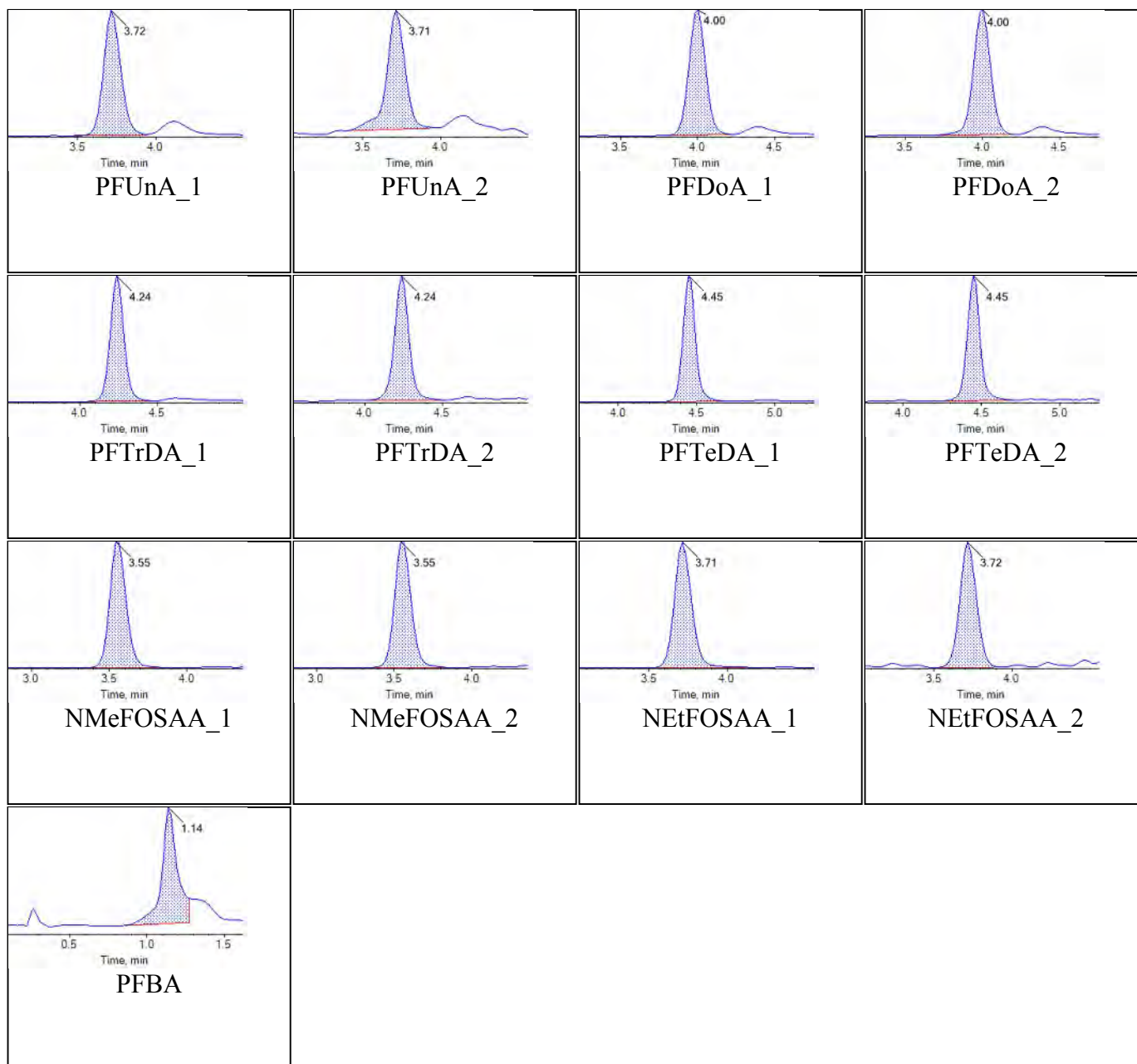


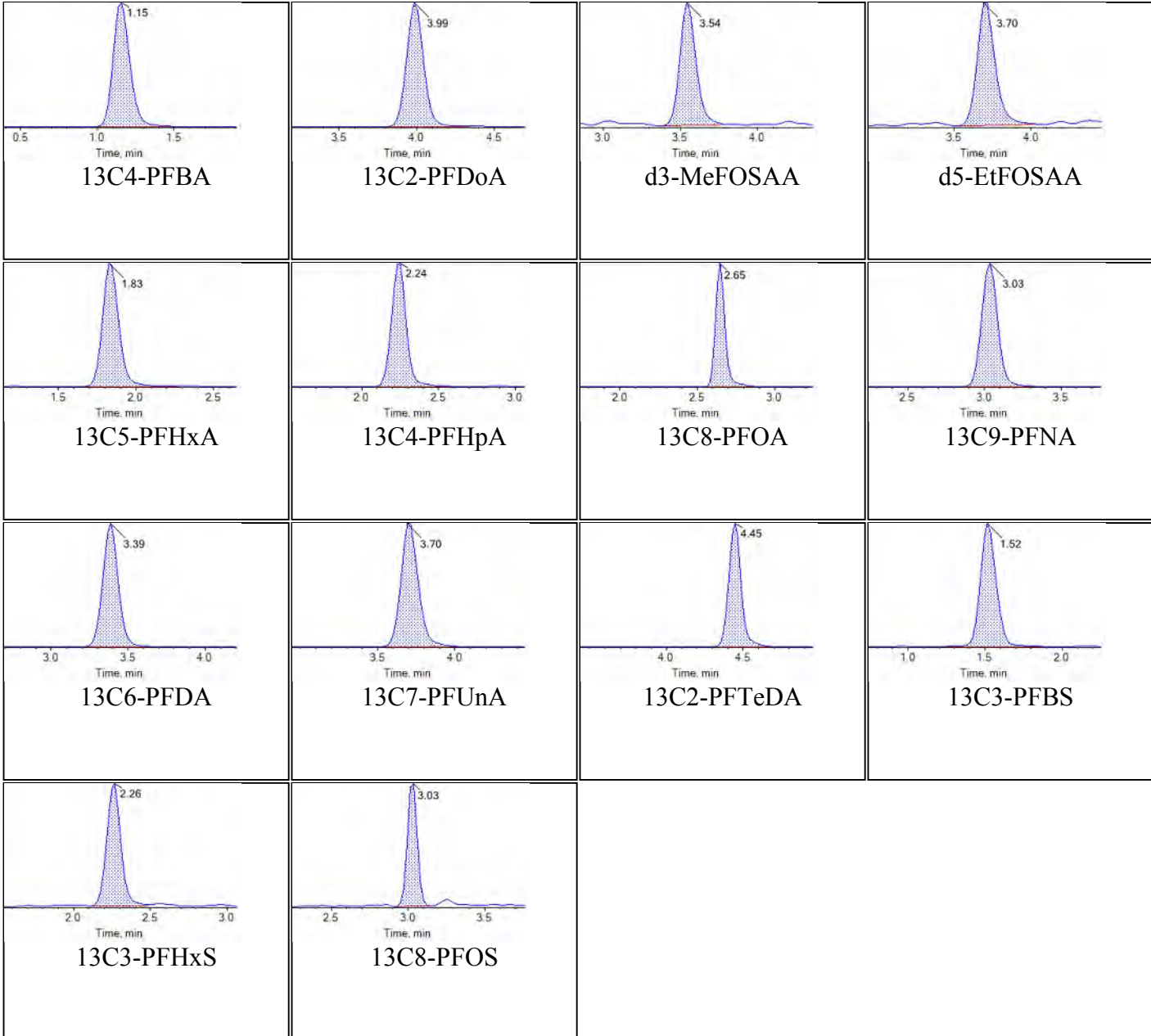
Sample Name	JY41	Injection Vial	19
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:37:24	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Chromatograms

Target Analytes:



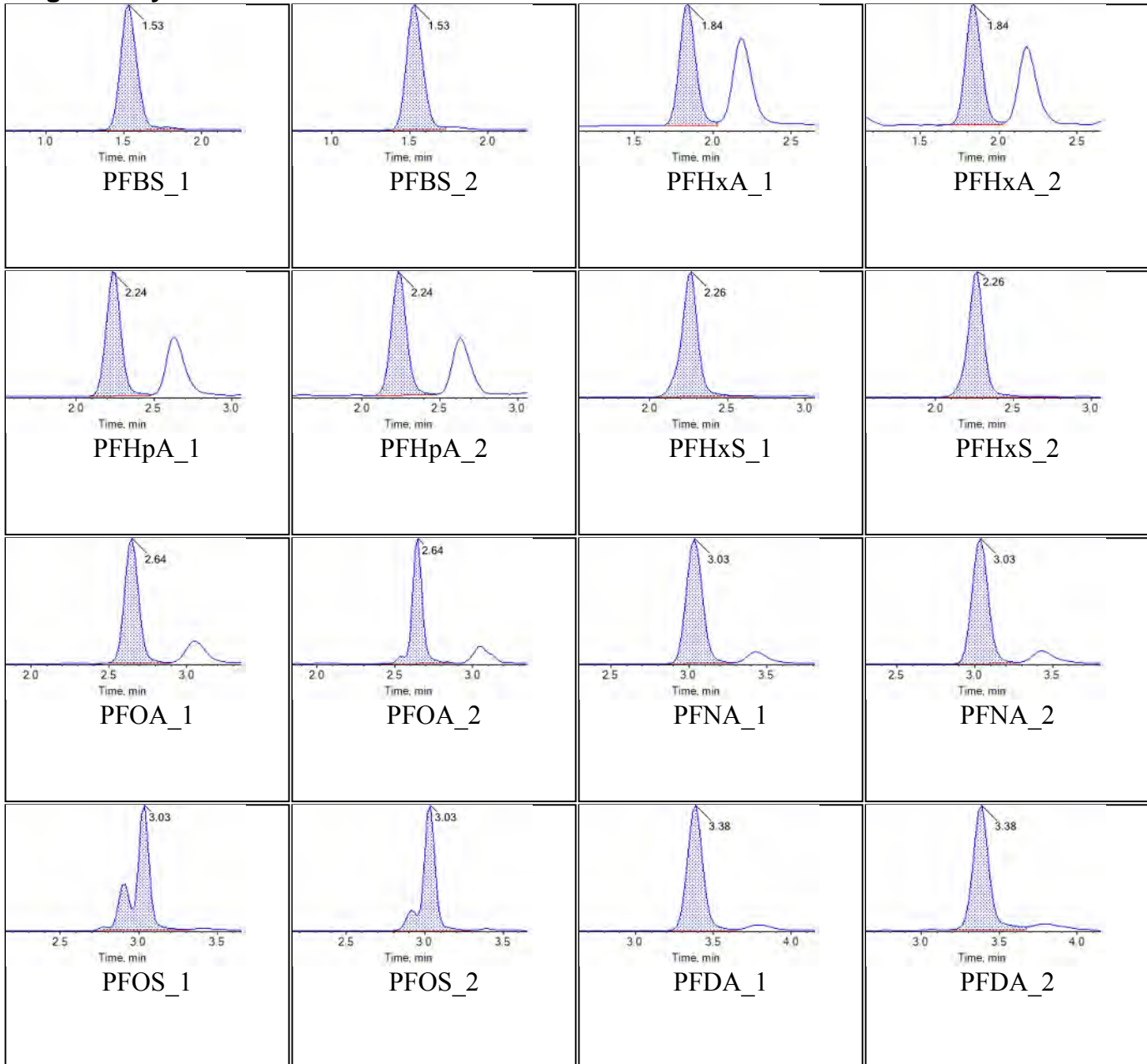
**Internal Standards:**



Sample Name	JY42	Injection Vial	20
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:48:15	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Chromatograms

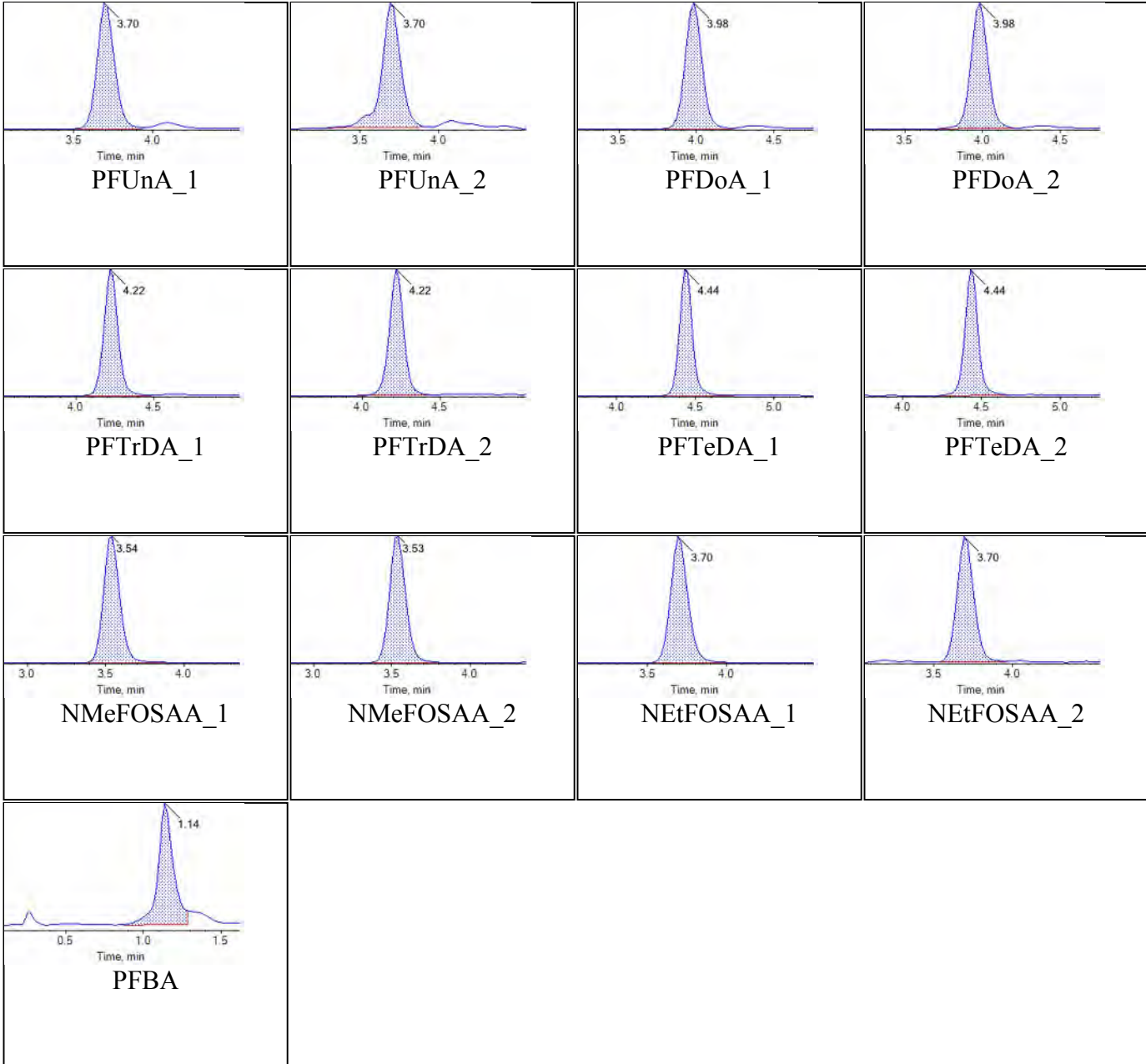
Target Analytes:



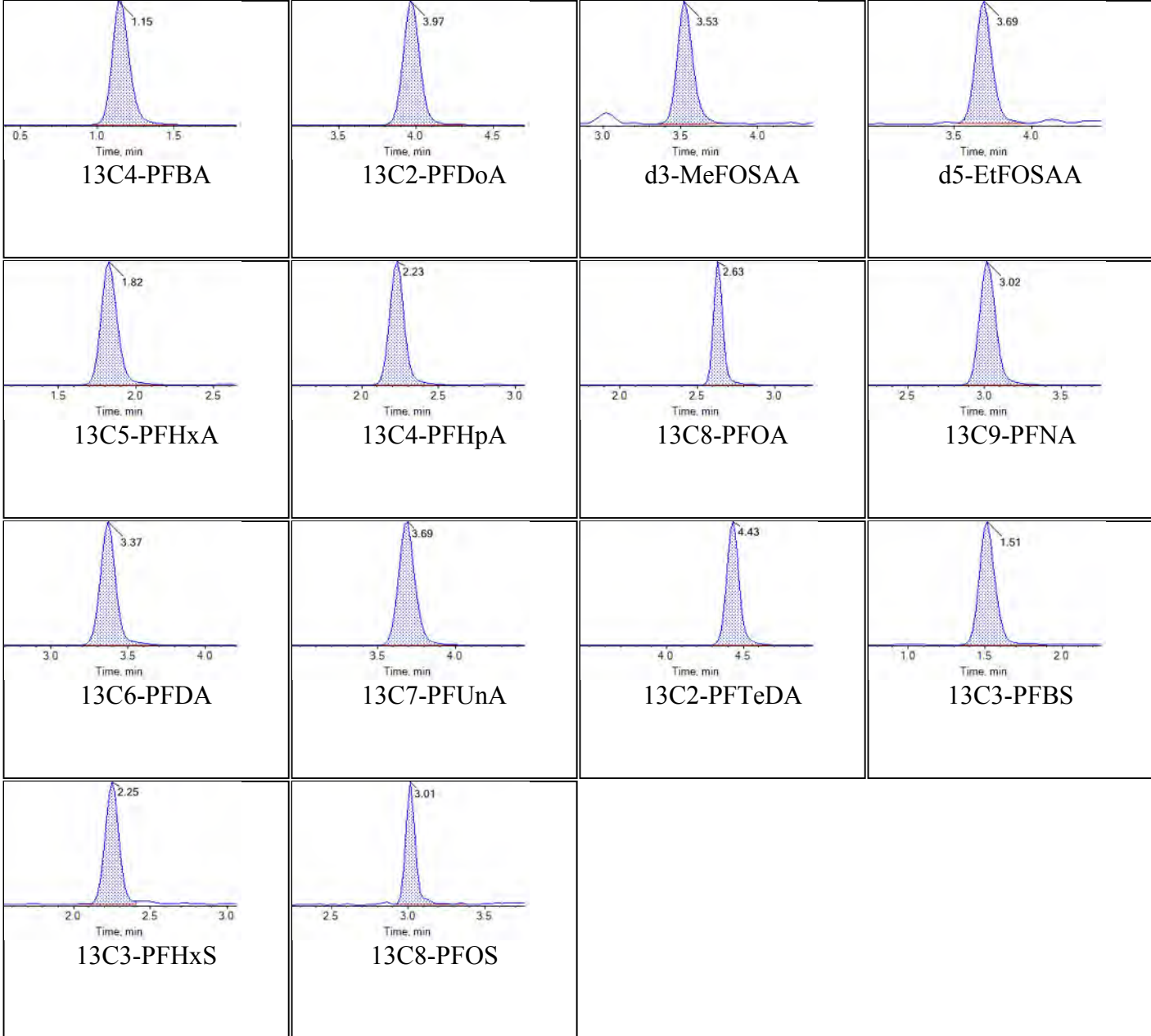


Chromatogram Report

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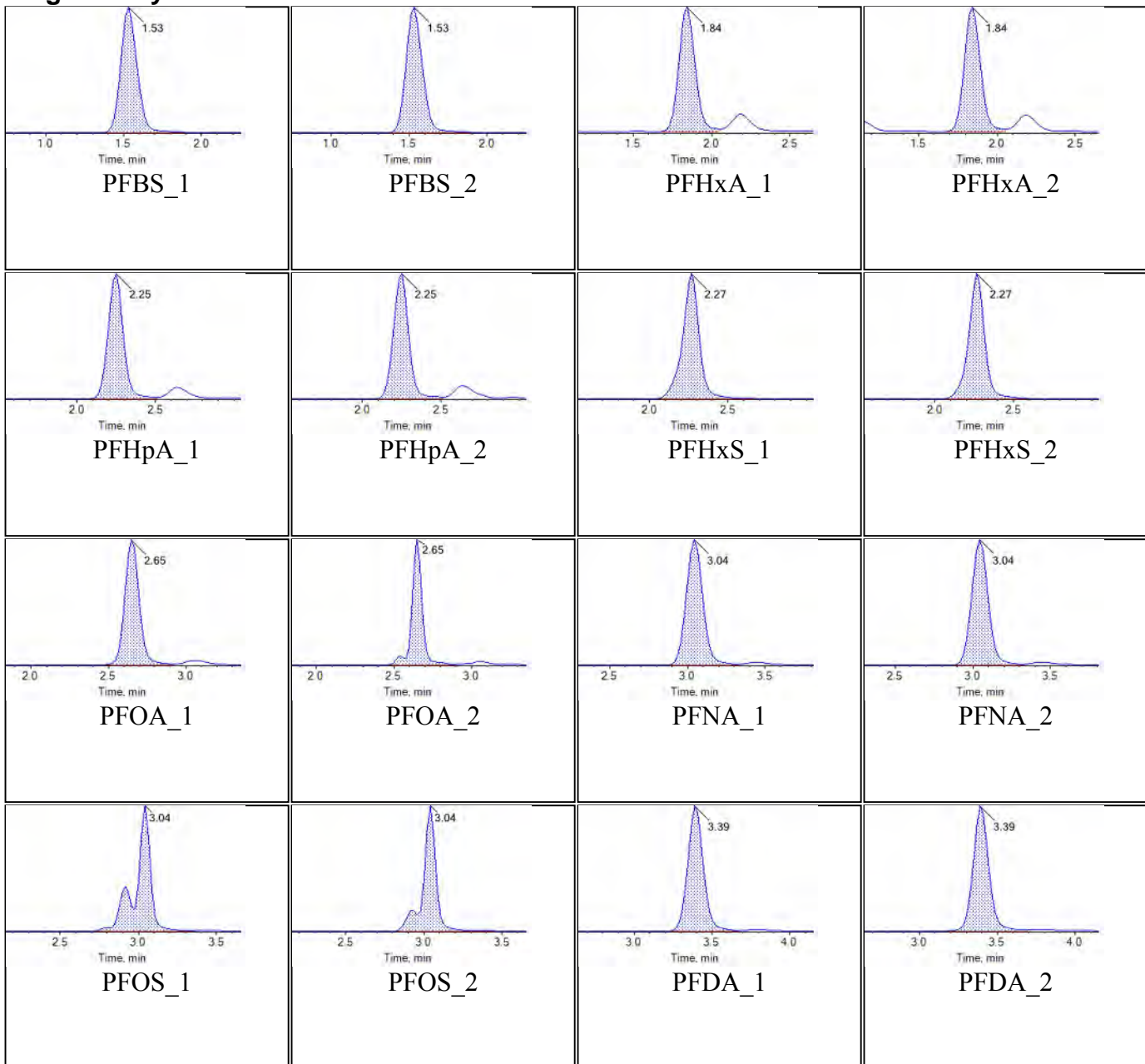
Internal Standards:



Sample Name	JY43	Injection Vial	21
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:59:08	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Chromatograms

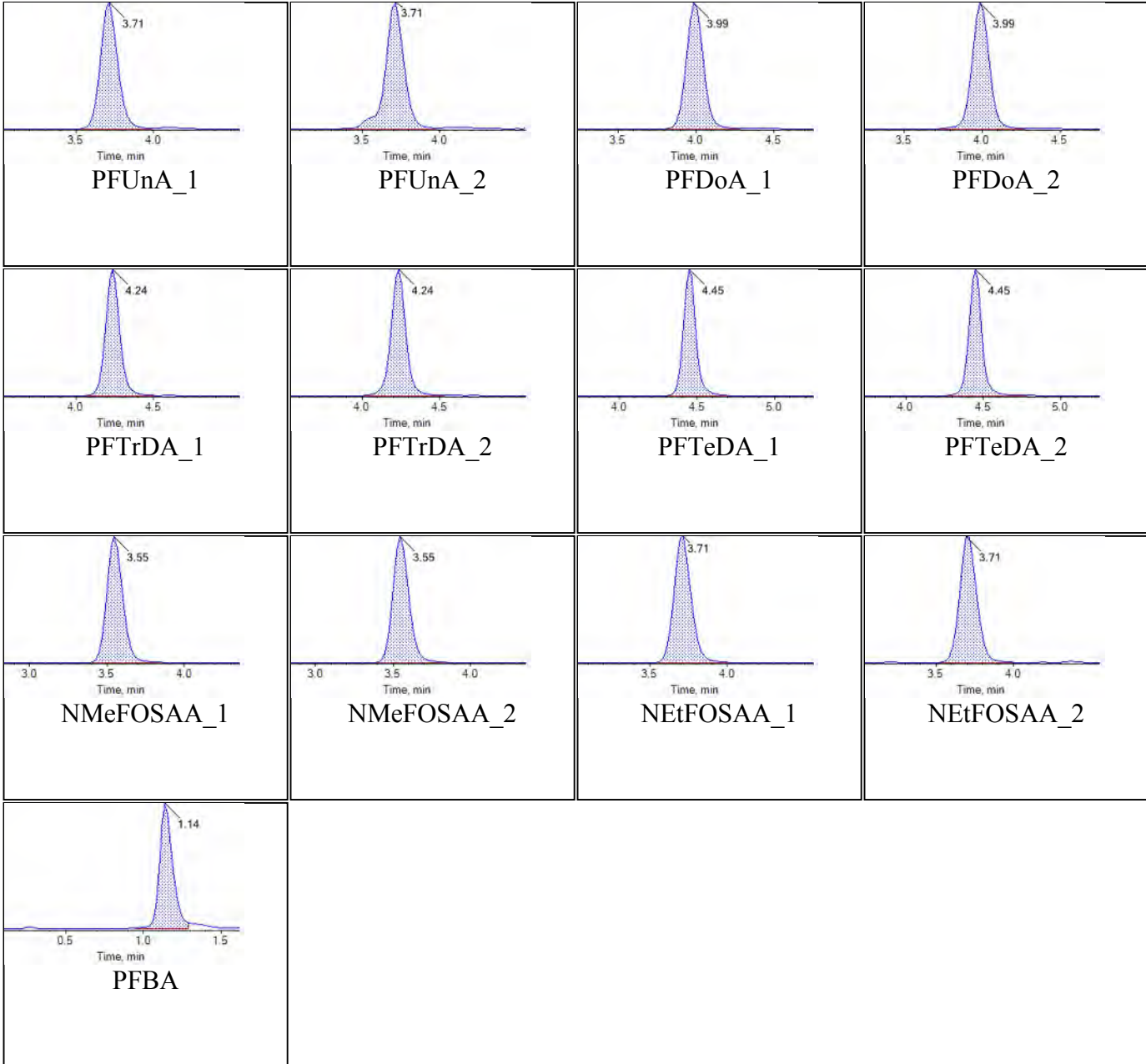
Target Analytes:





Chromatogram Report

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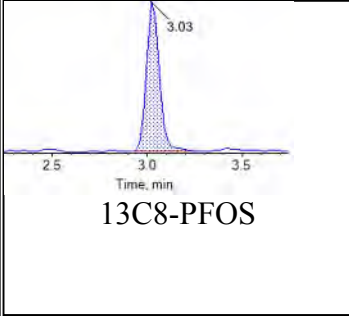
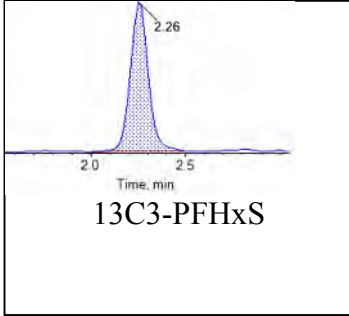
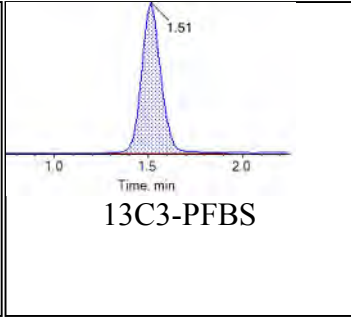
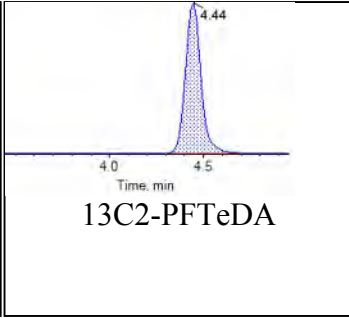
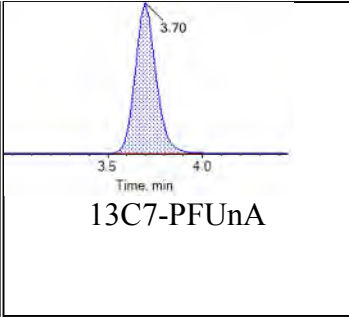
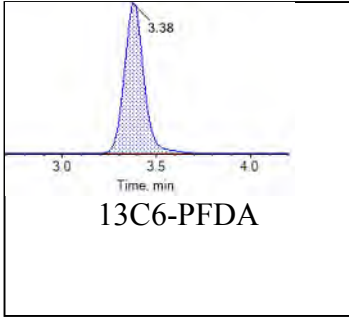
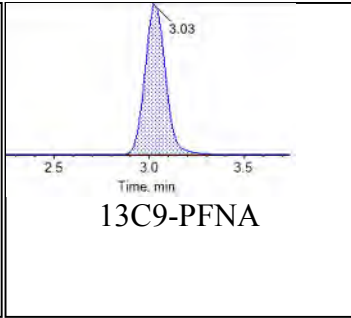
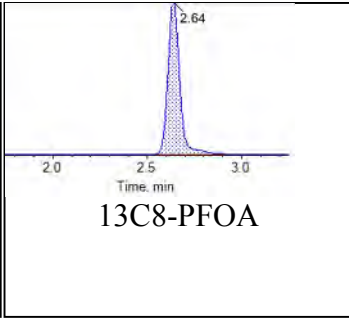
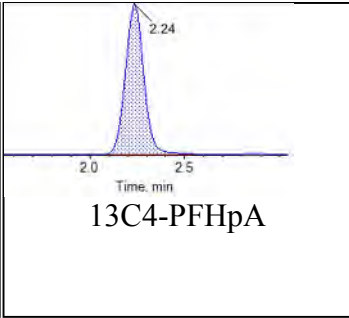
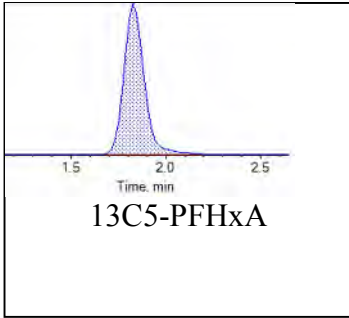
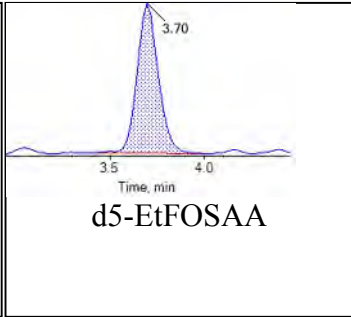
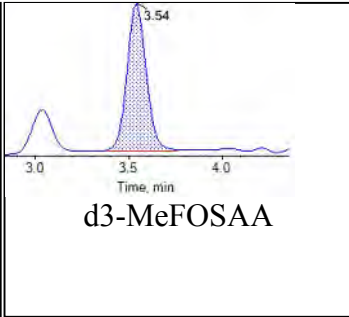
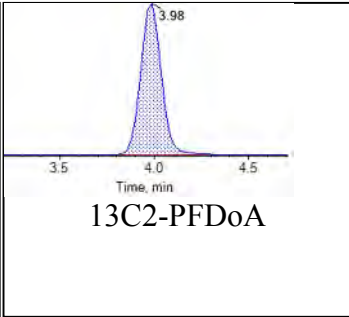
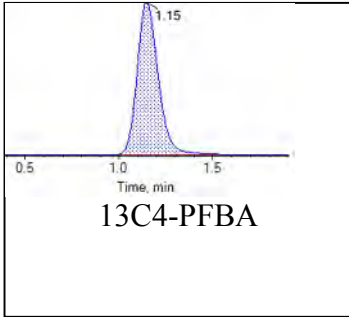


Internal Standards:



Chromatogram Report

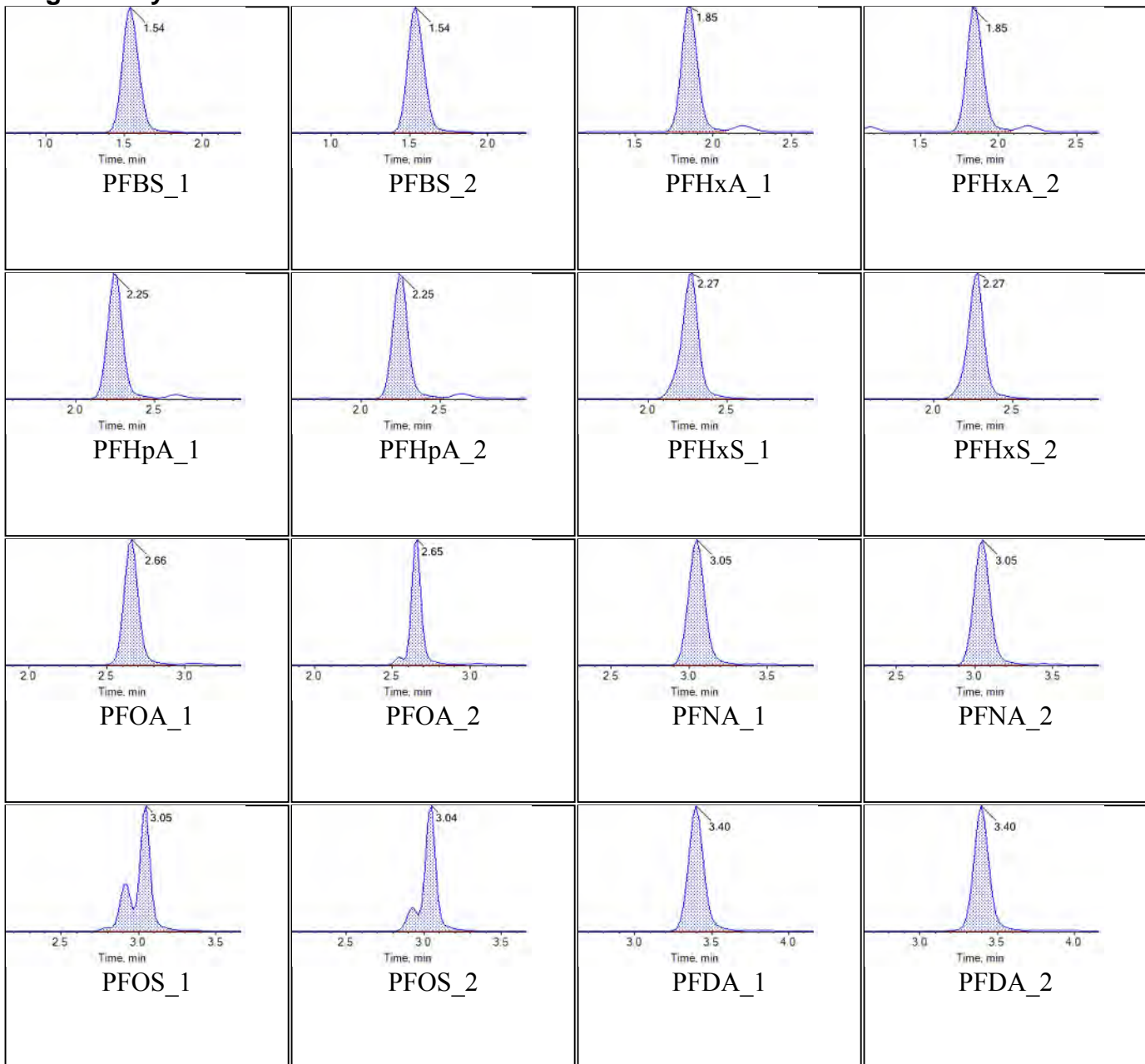
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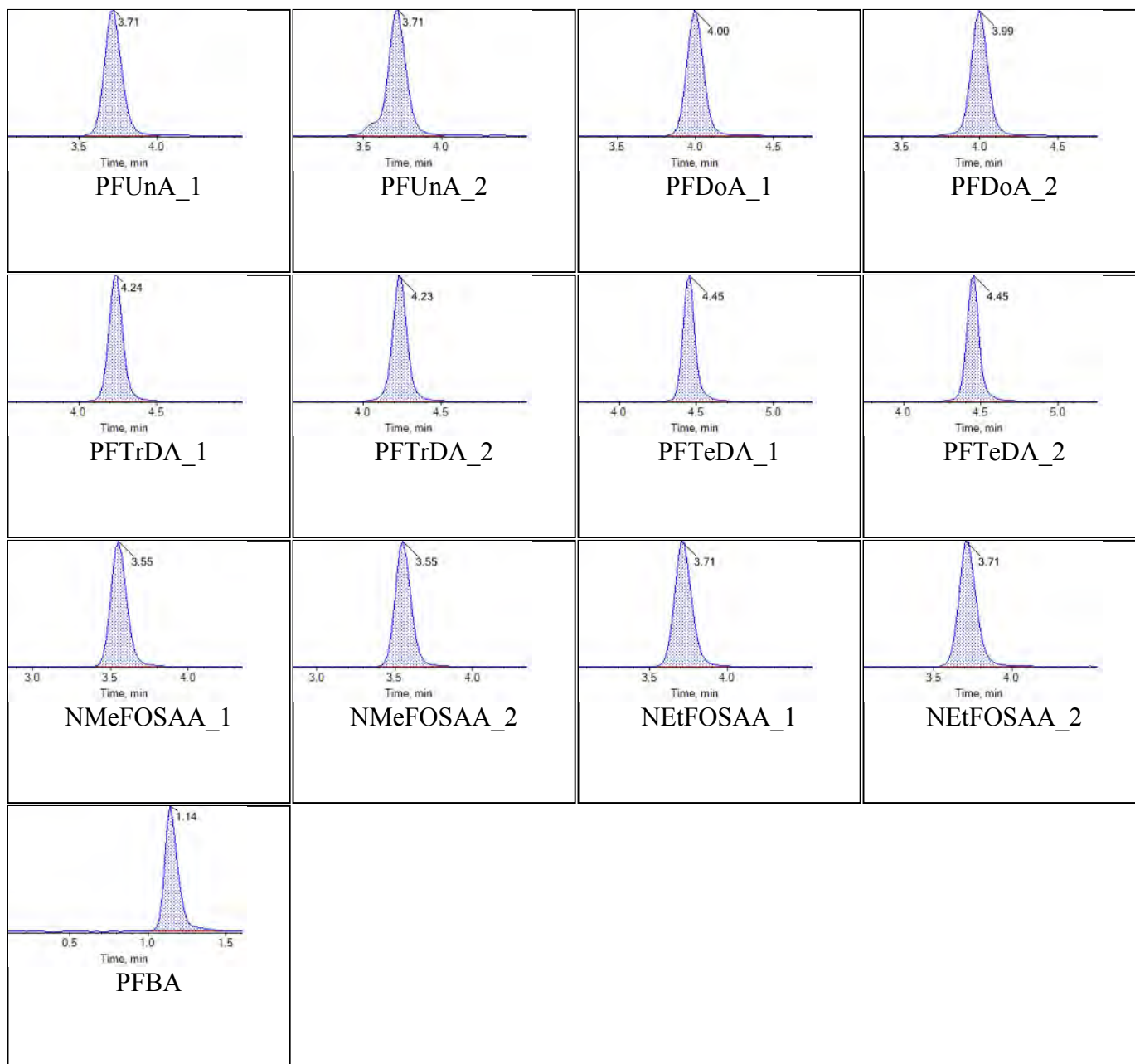


Sample Name	JY44	Injection Vial	22
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:09:59	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

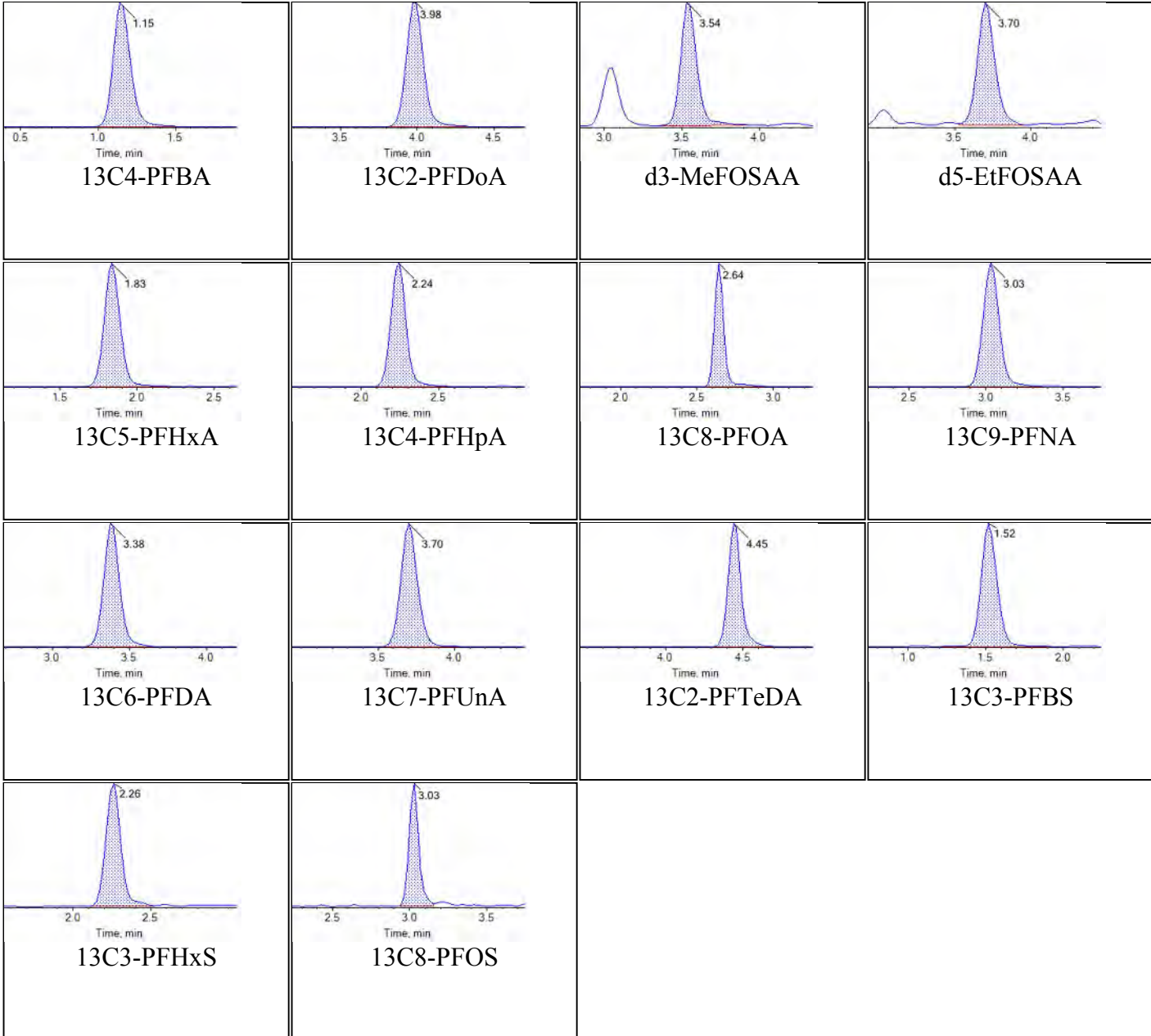
Chromatograms

Target Analytes:





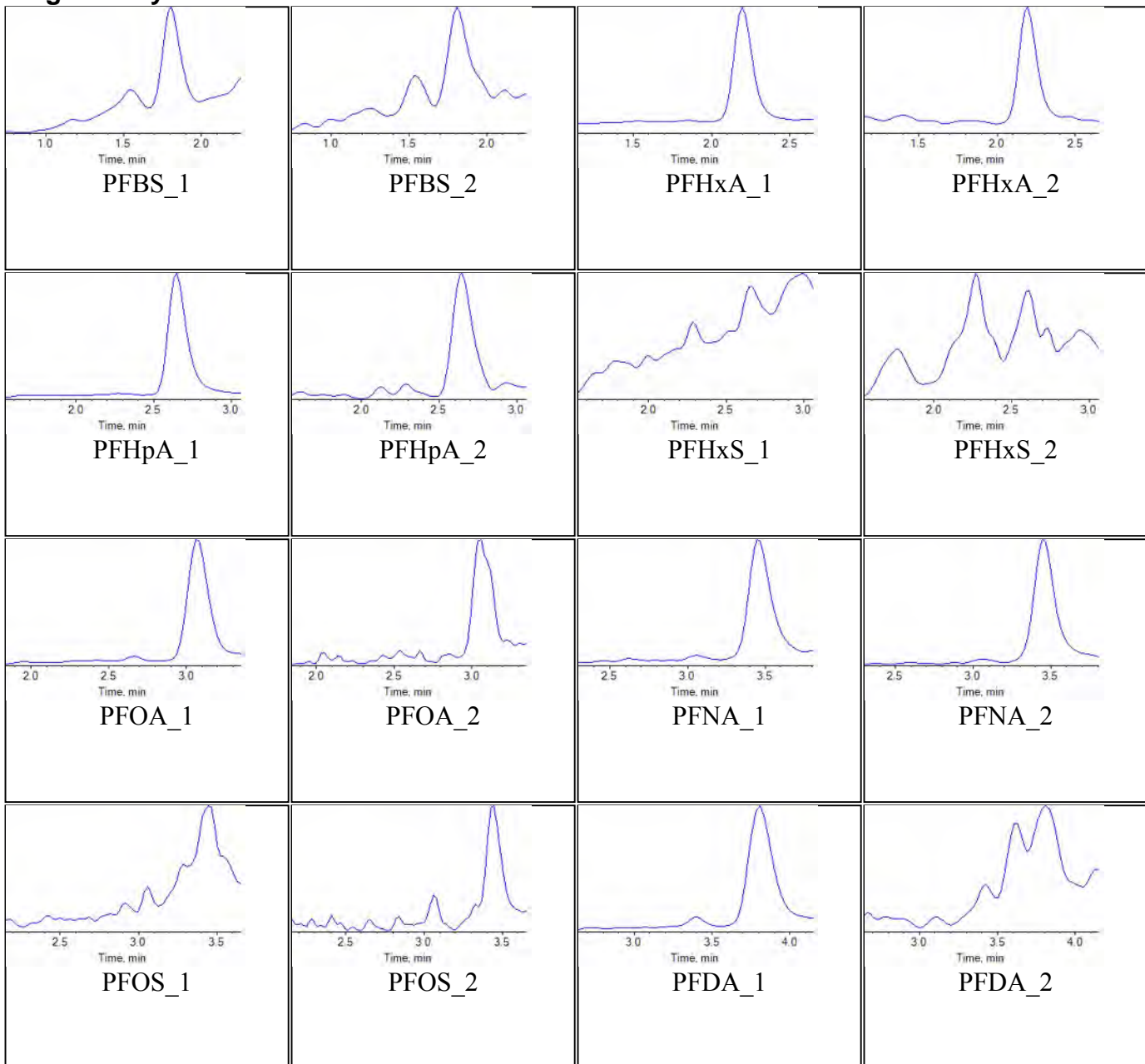
Internal Standards:



Sample Name	JY46 IB	Injection Vial	23
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:20:49	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Chromatograms

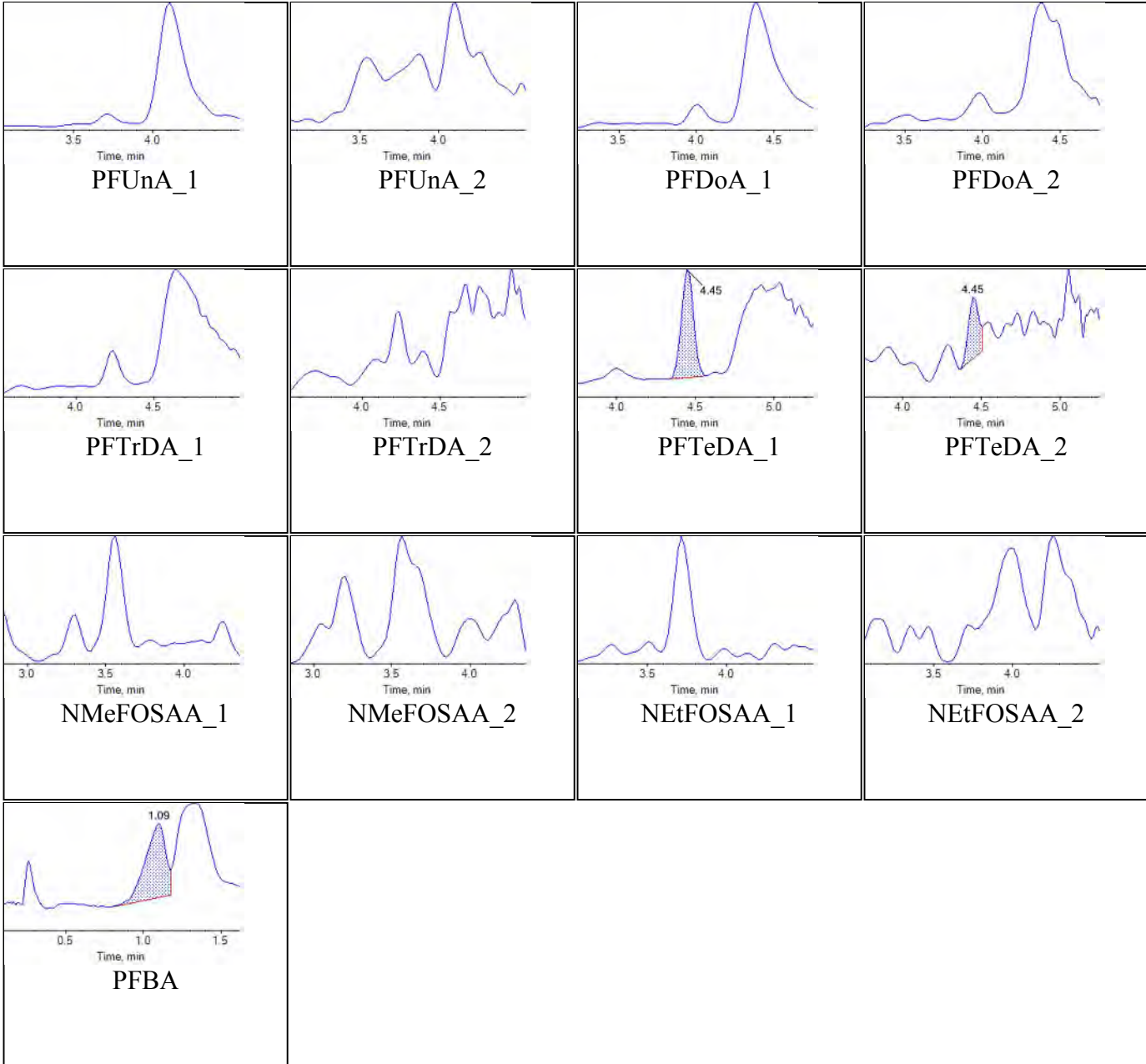
Target Analytes:





Chromatogram Report

Created with Analyst Reporter
Printed: 30/08/2018 2:23:01 PM

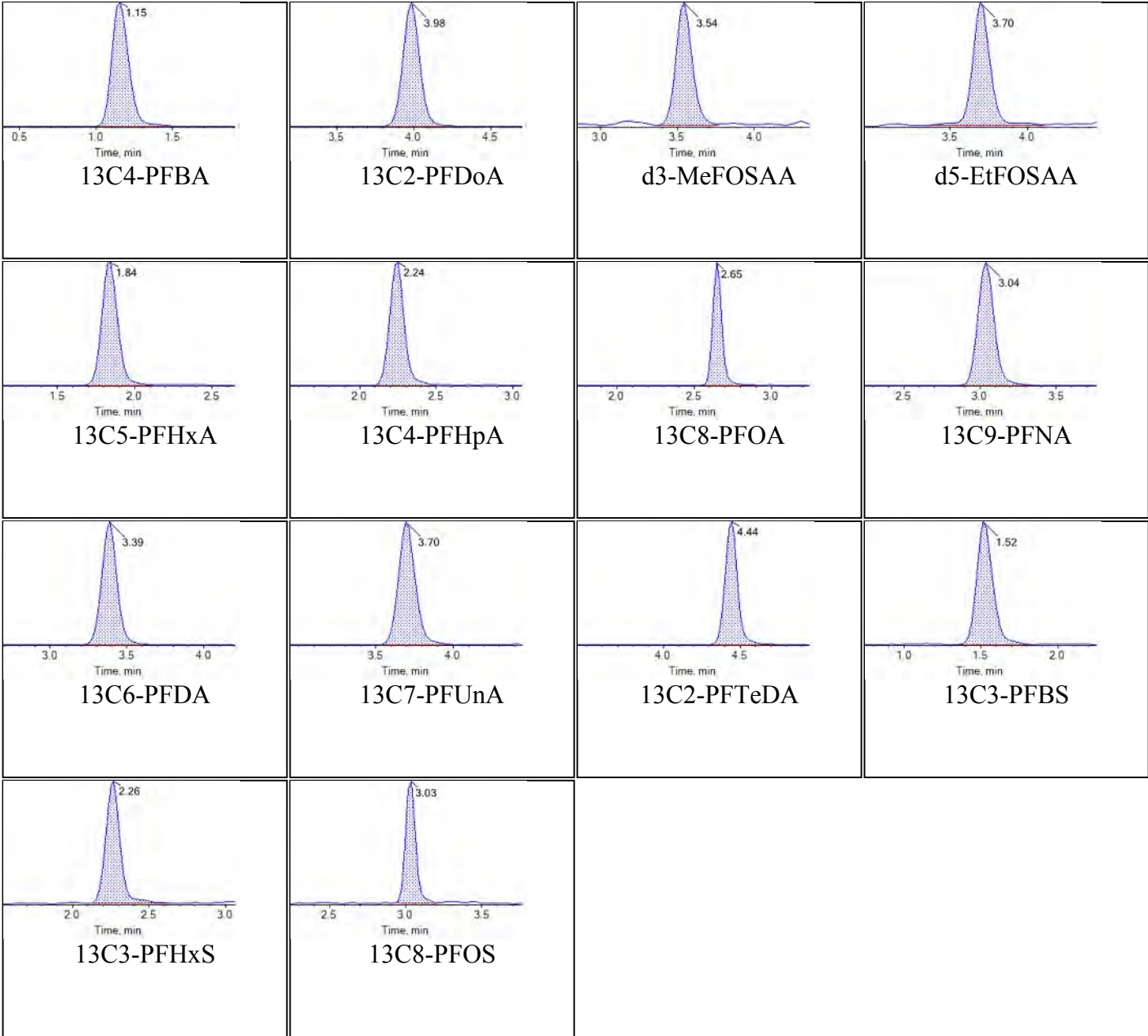


Internal Standards:



Chromatogram Report

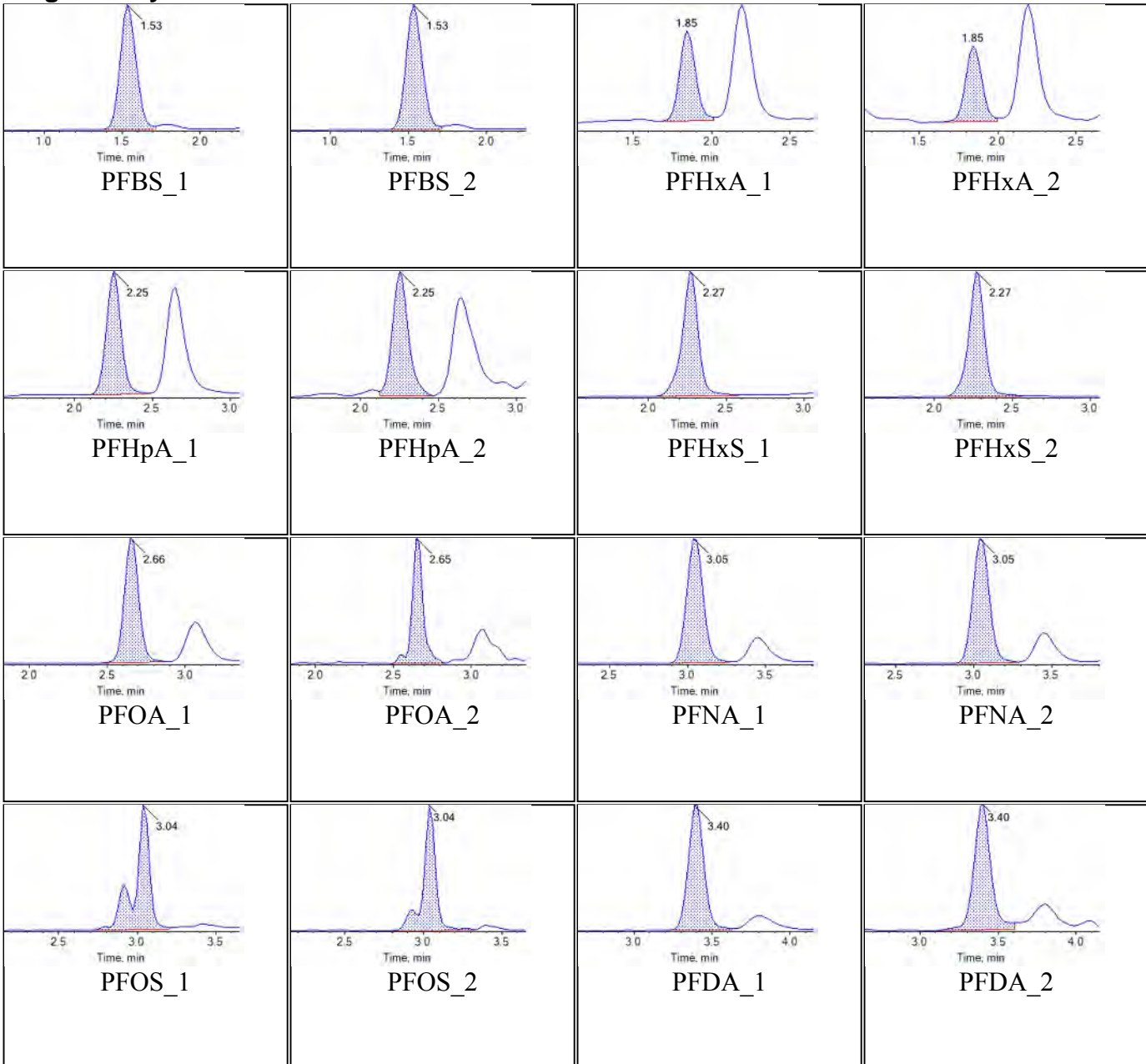
Created with Analyst Reporter
Printed: 30/08/2018 2:23:01 PM



Sample Name	JY45 ICC	Injection Vial	24
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Chromatograms

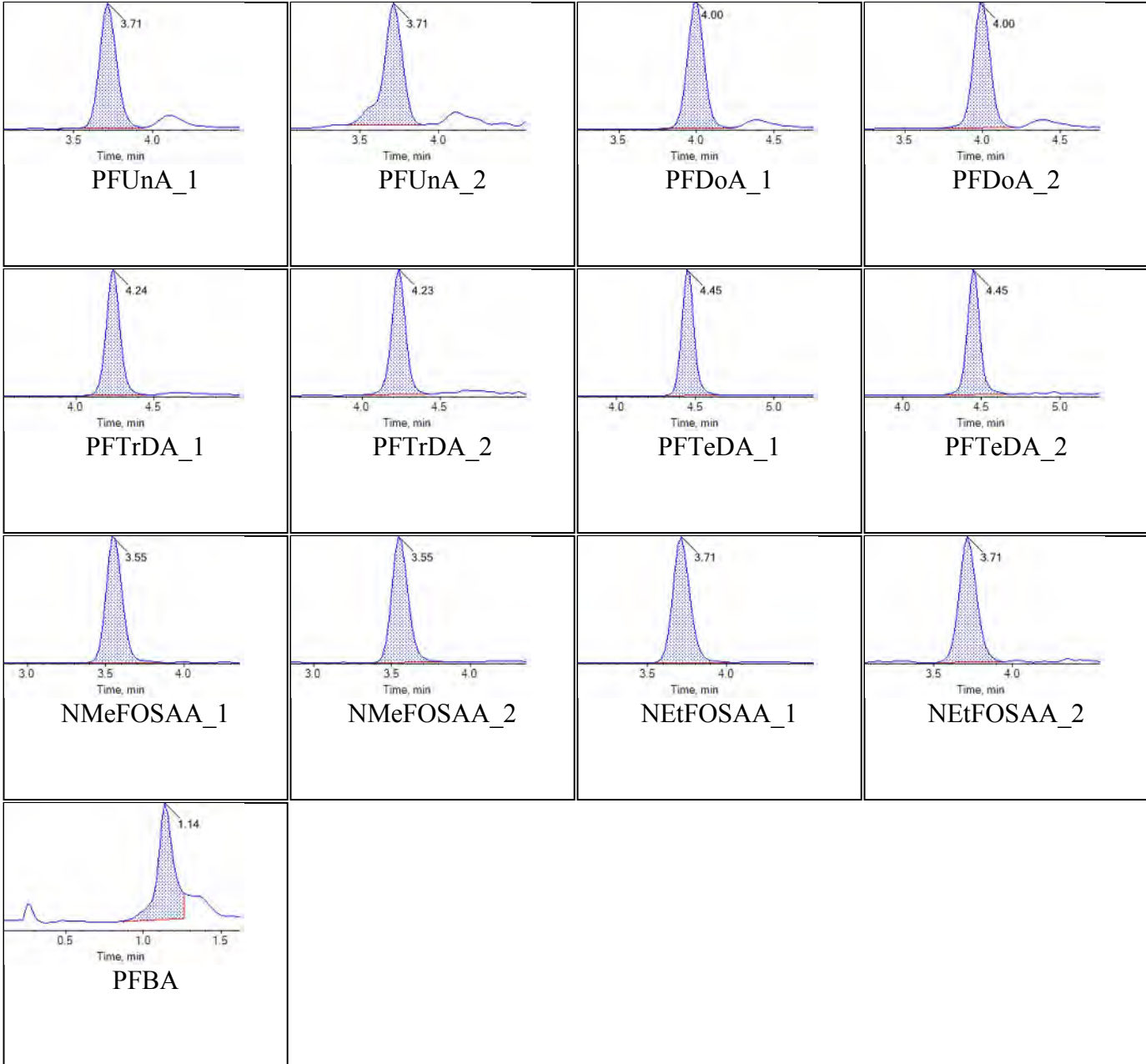
Target Analytes:



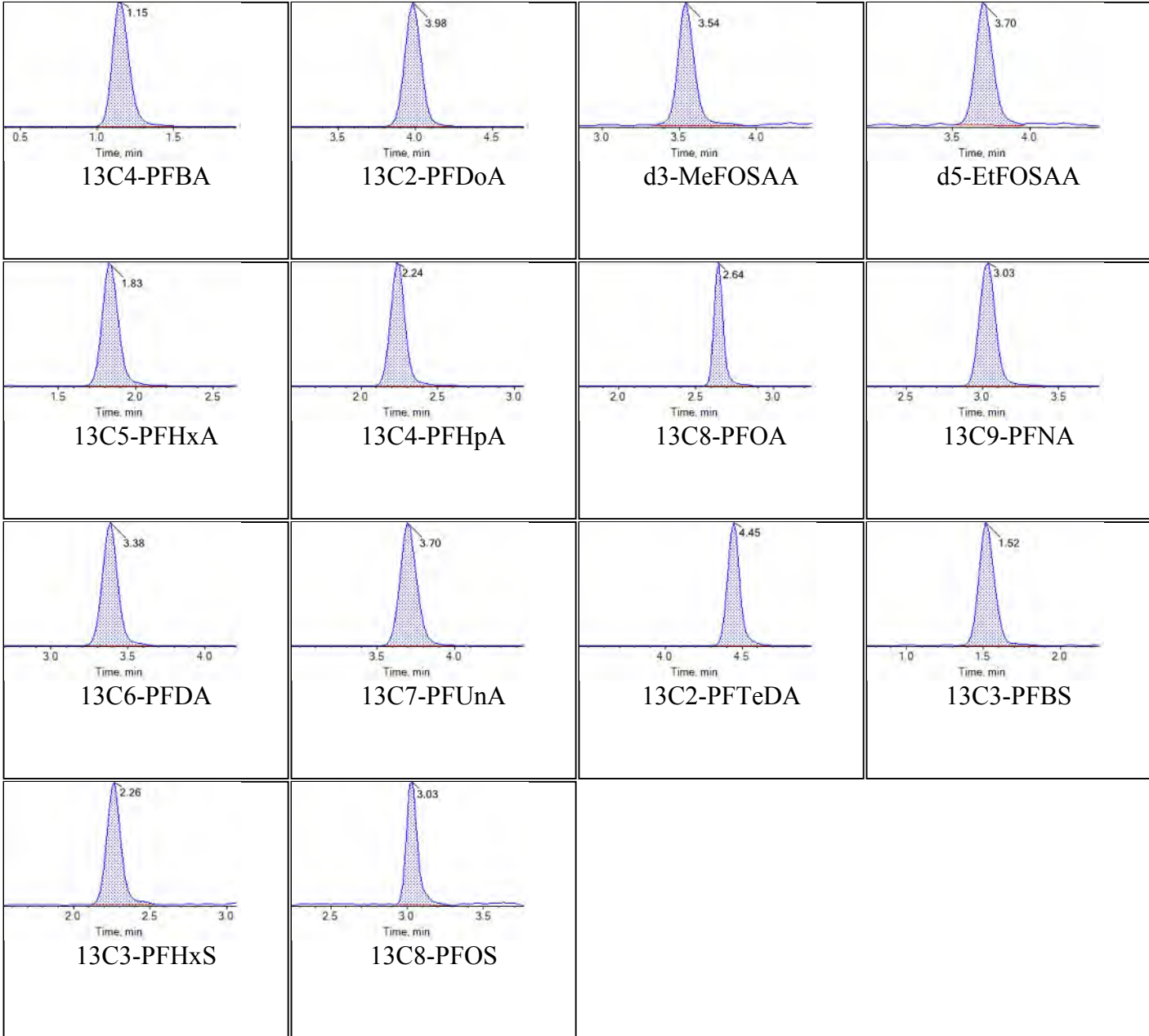


Chromatogram Report

Created with Analyst Reporter
Printed: 30/08/2018 2:23:06 PM



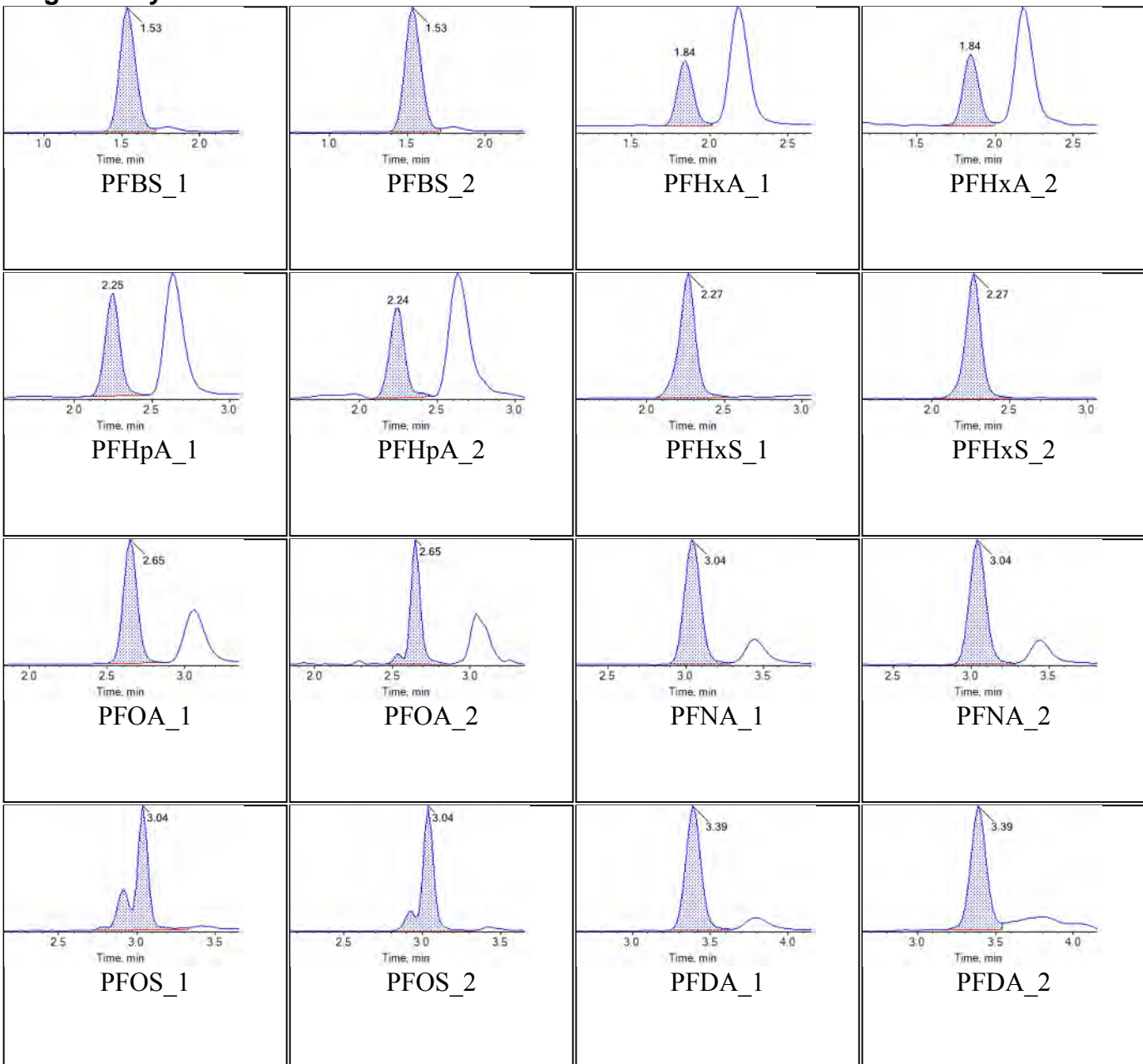
Internal Standards:

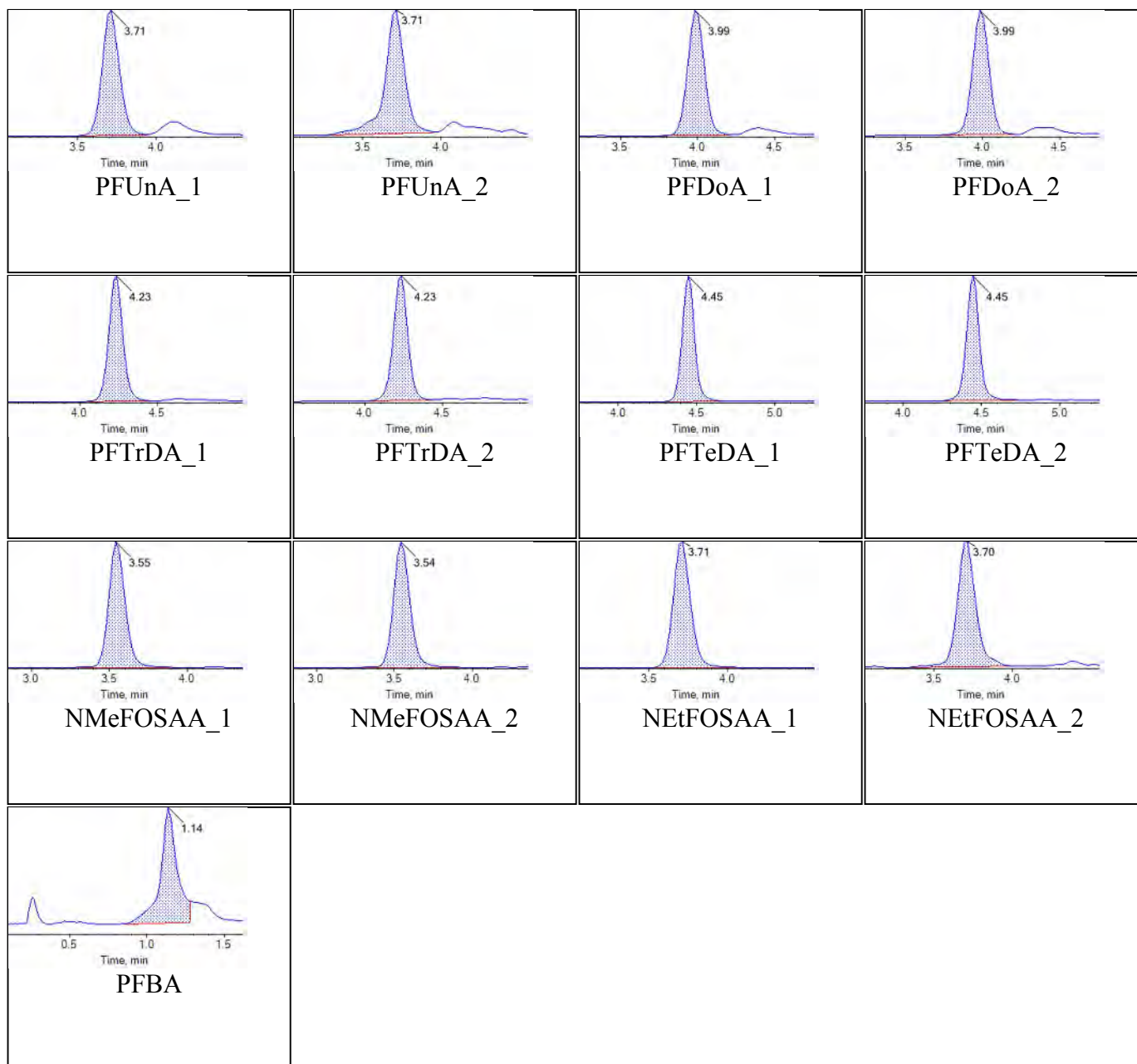


Sample Name	JY41 CCV	Injection Vial	19
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Chromatograms

Target Analytes:

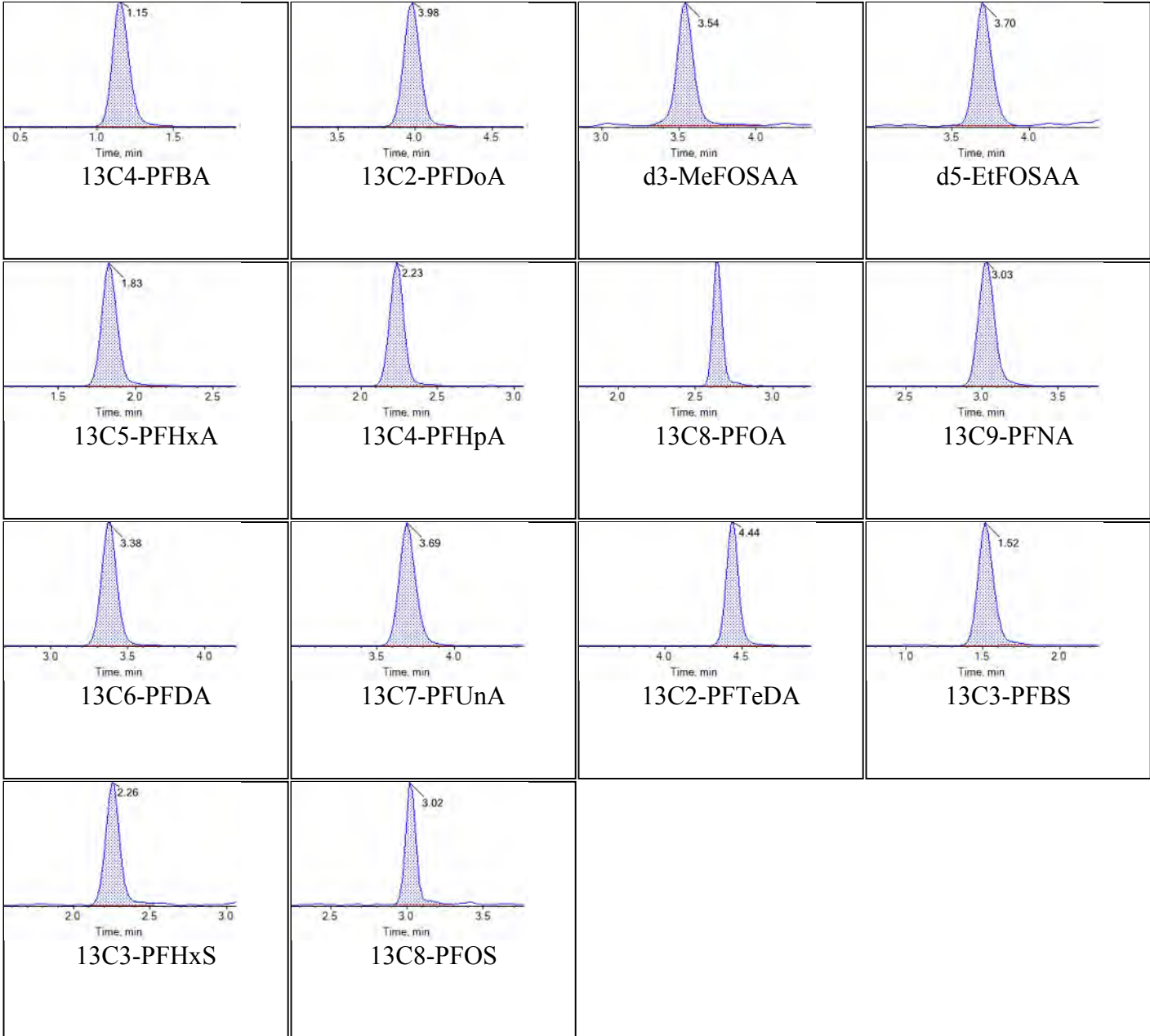


**Internal Standards:**



Chromatogram Report

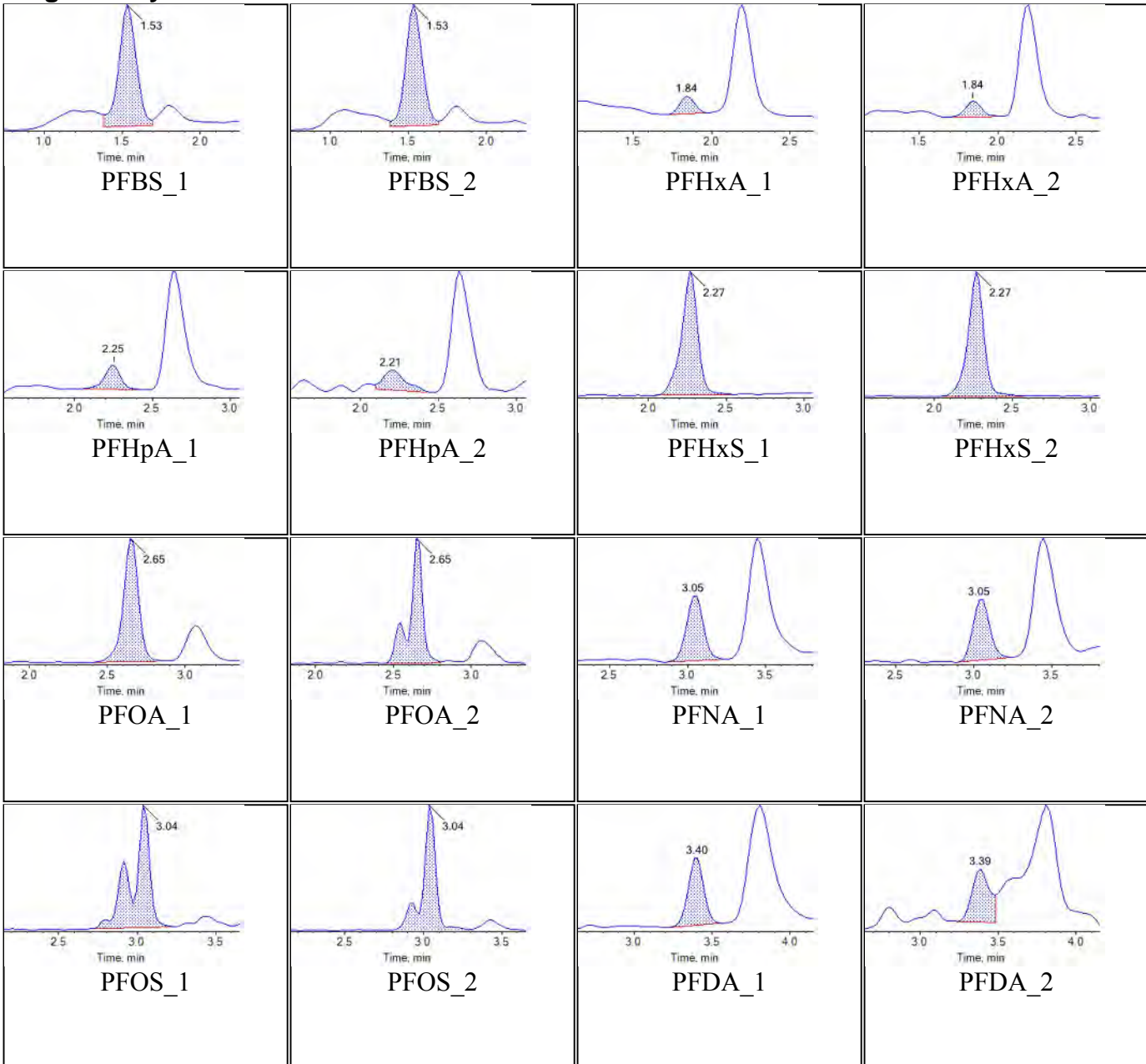
Created with Analyst Reporter
Printed: 30/08/2018 2:23:11 PM



Sample Name	J7394-FS(3)	Injection Vial	38
Sample ID	NASB-CCC-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T01:19:47	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Chromatograms

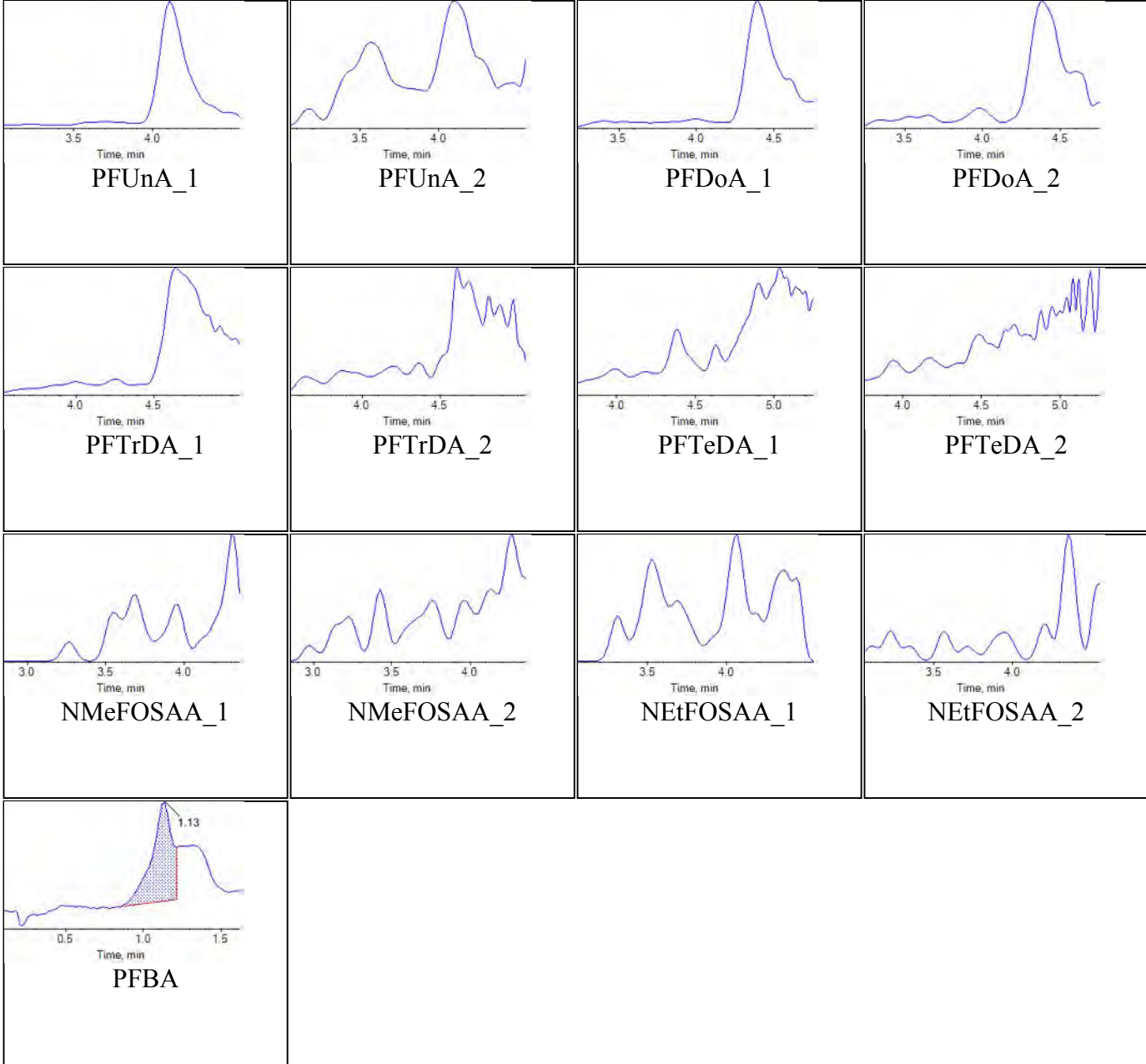
Target Analytes:



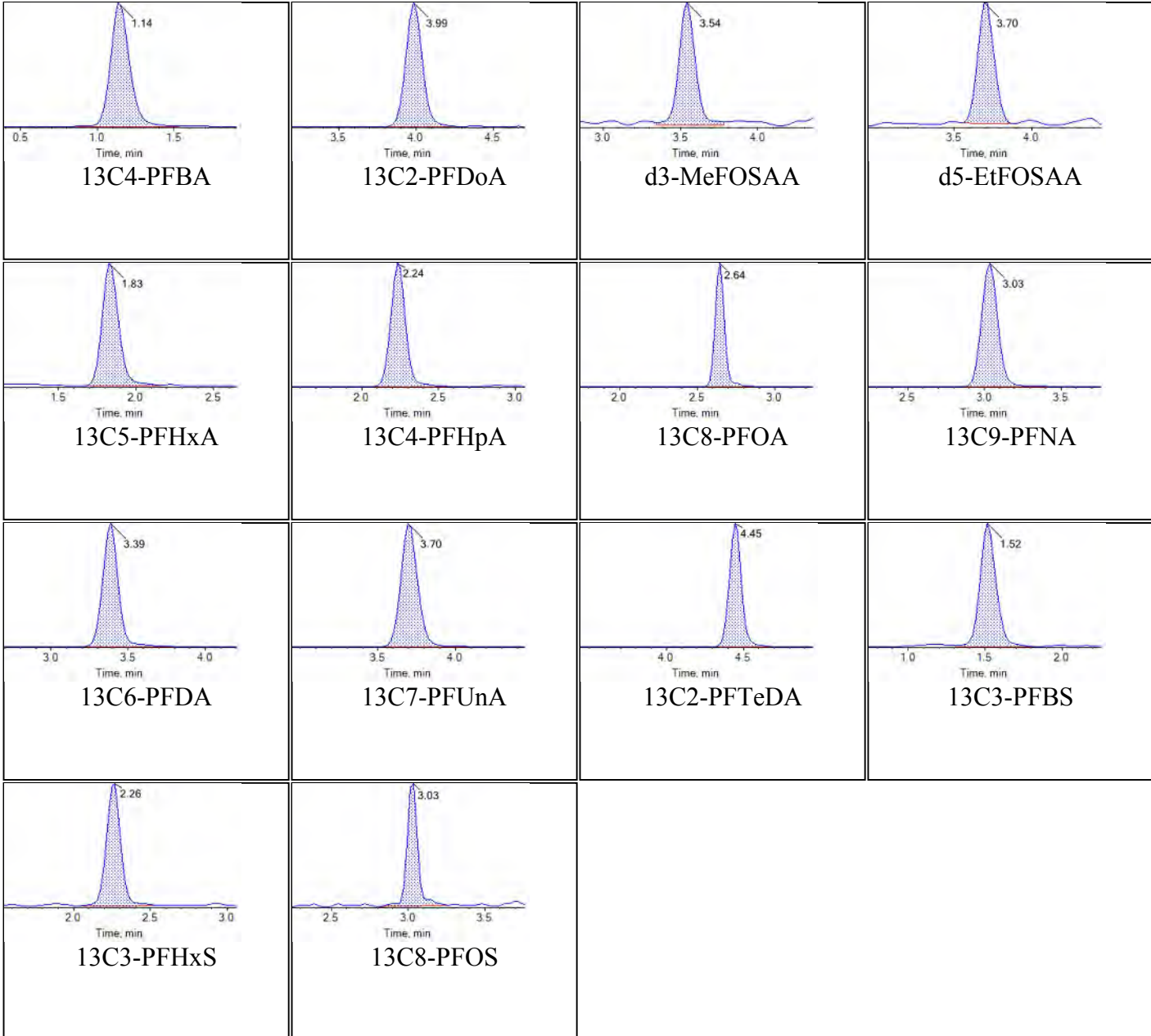


Chromatogram Report

Created with Analyst Reporter
Printed: 30/08/2018 2:23:17 PM



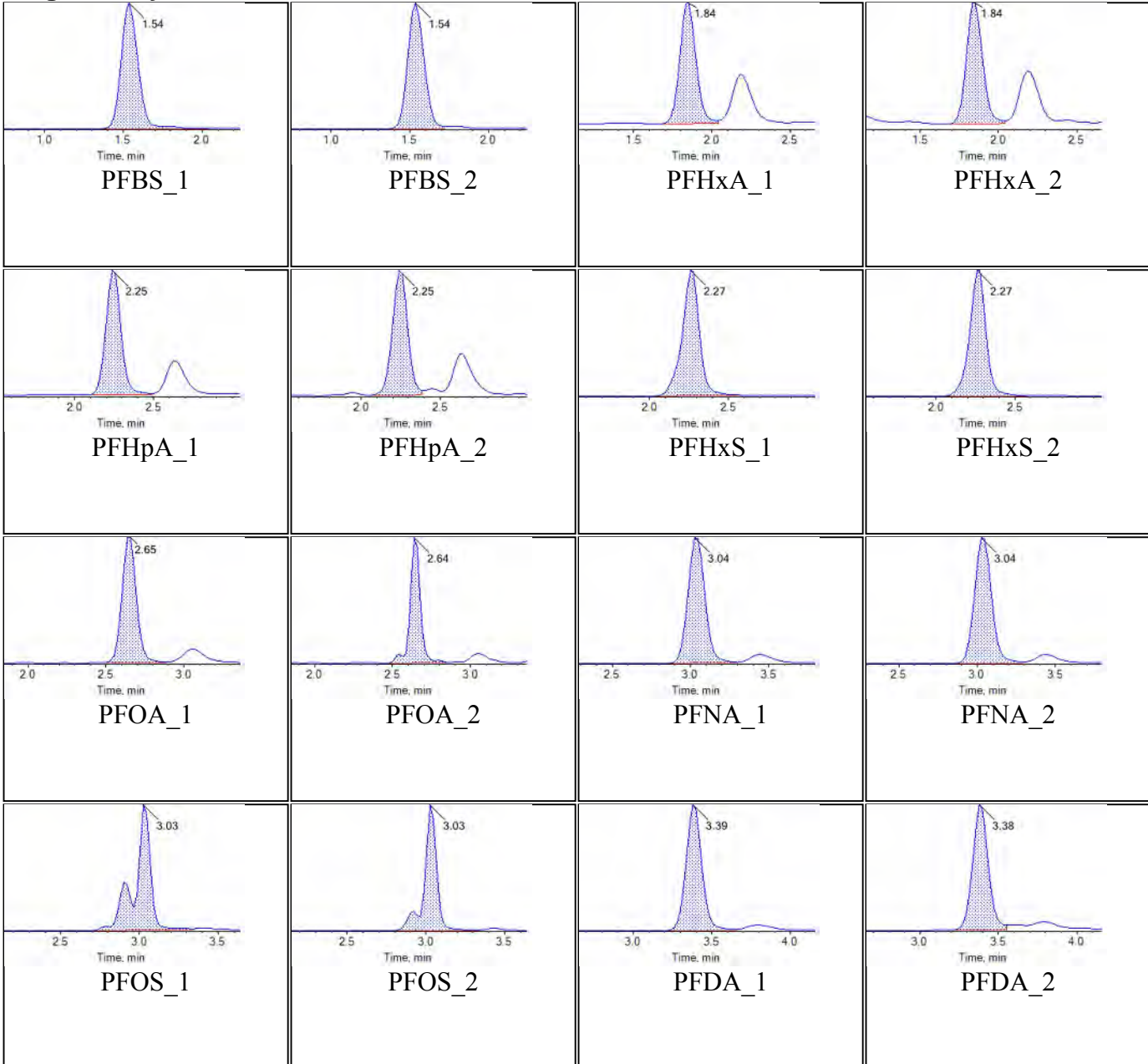
Internal Standards:

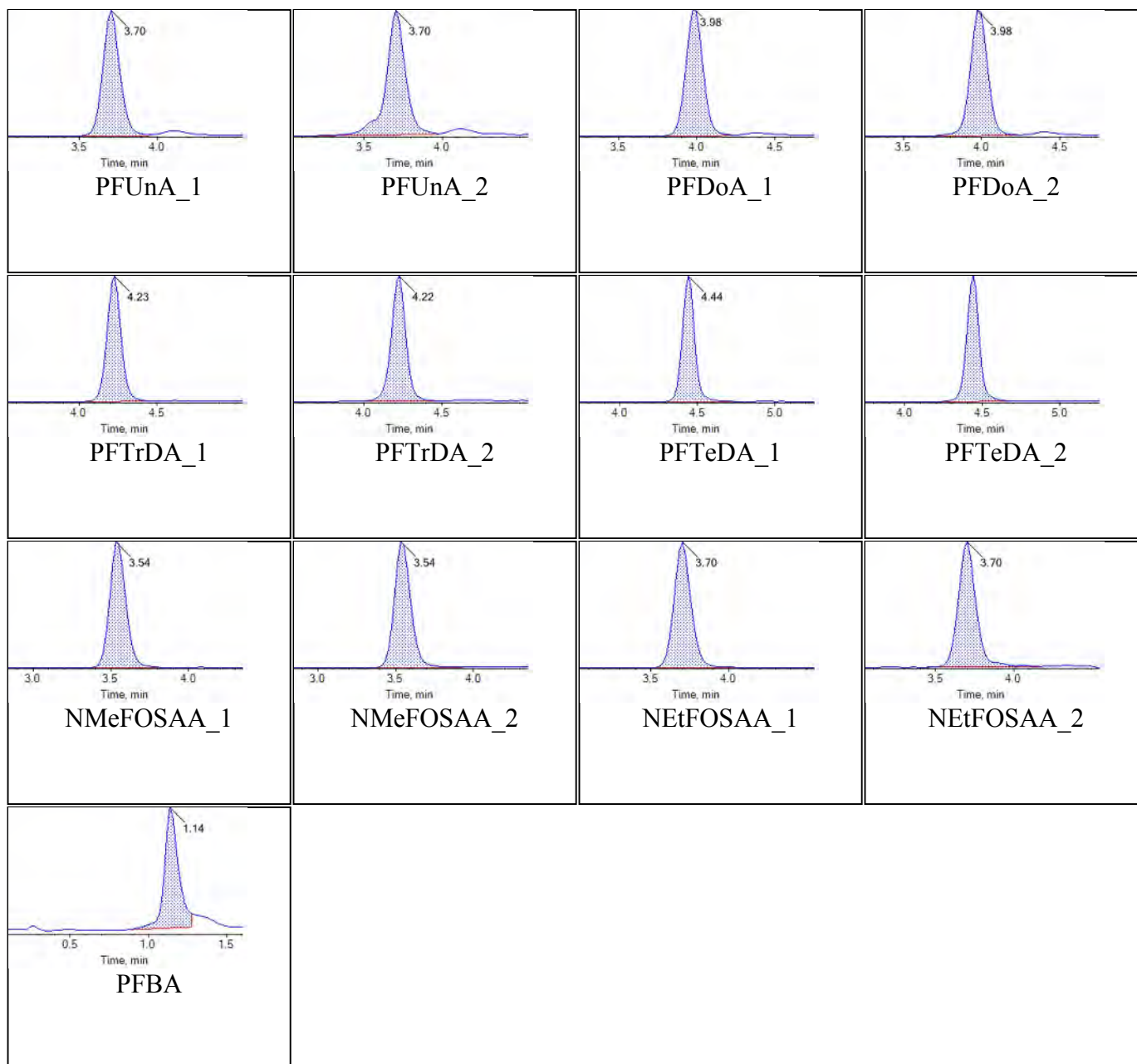


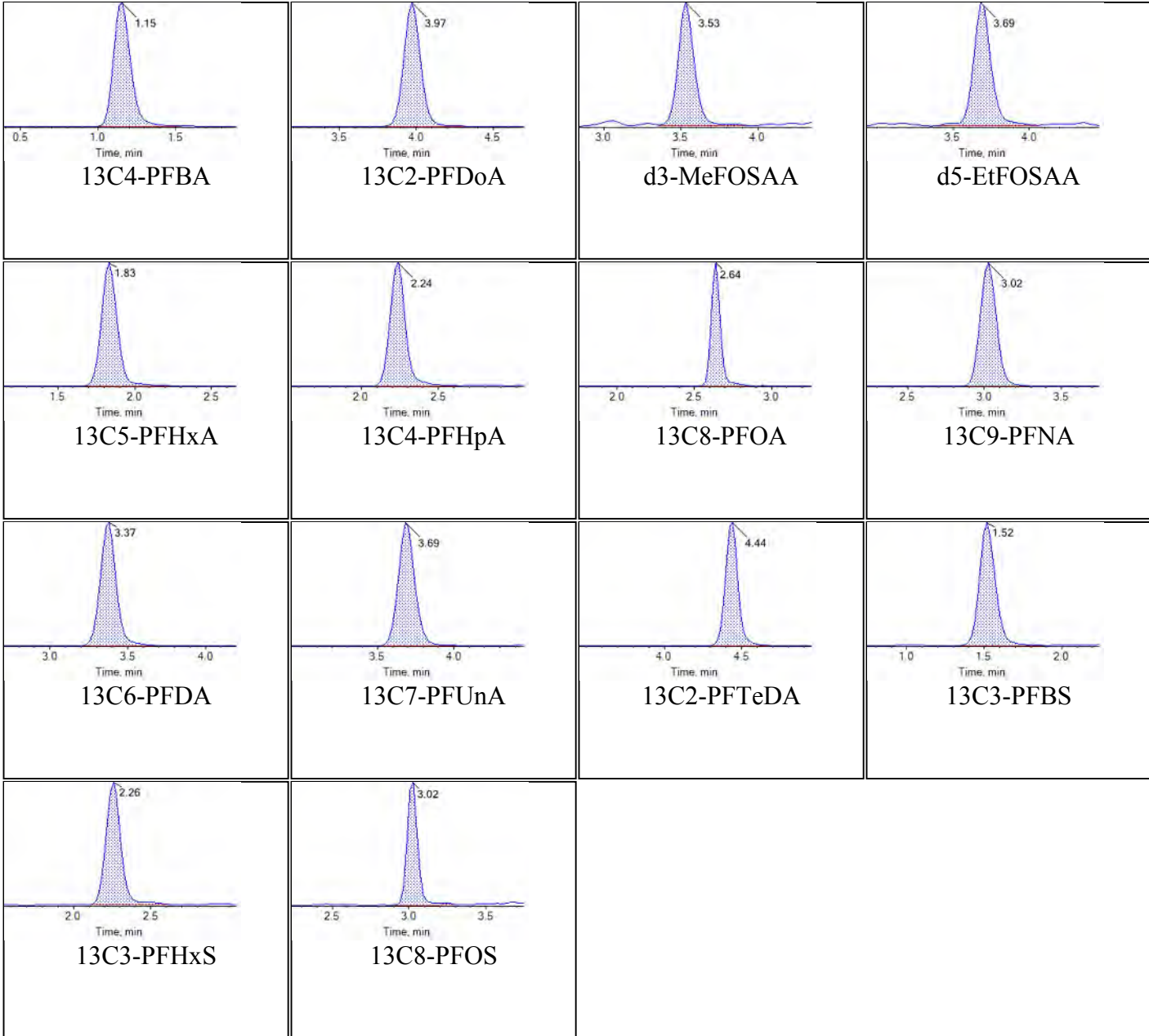
Sample Name	JY42 CCV	Injection Vial	20
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:46:39	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Chromatograms

Target Analytes:



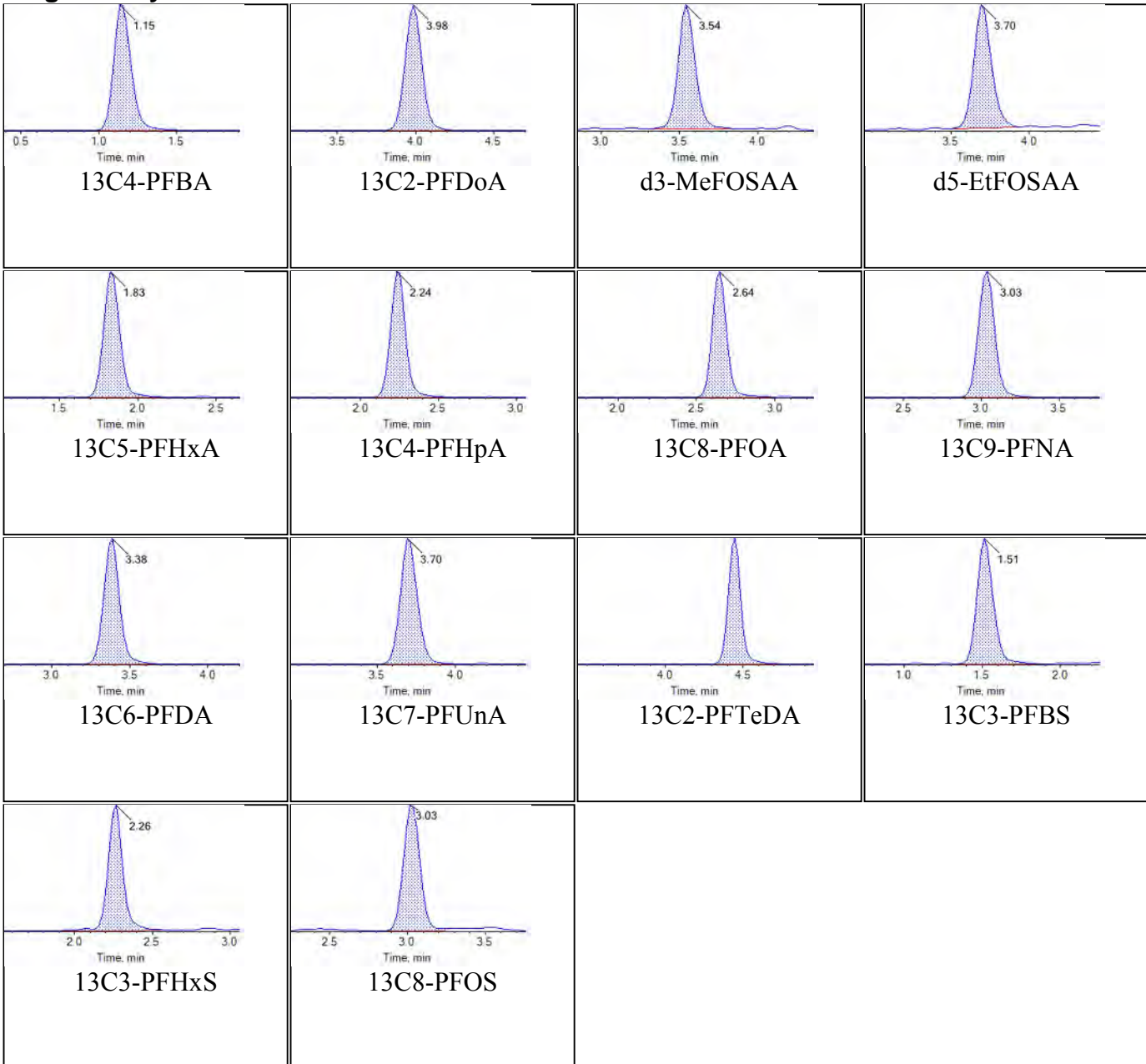
**Internal Standards:**



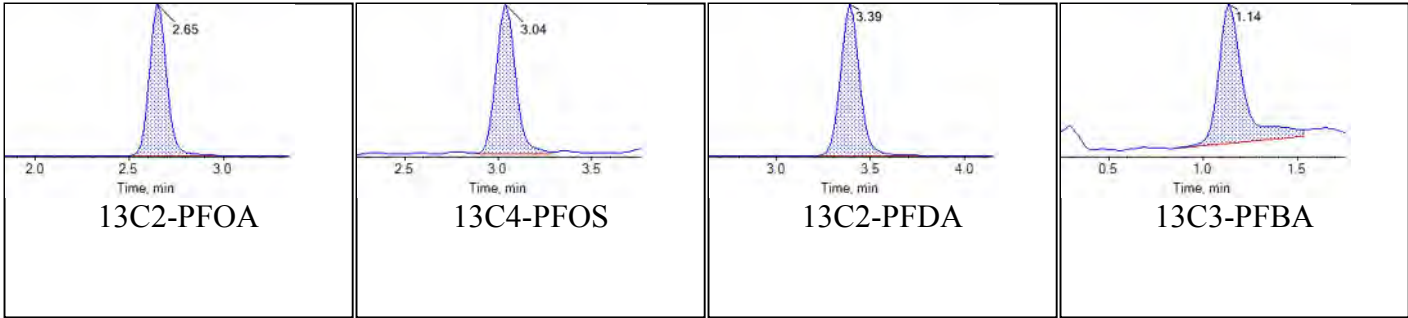
Sample Name	JY38	Injection Vial	16
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:04:50	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Chromatograms

Target Analytes:



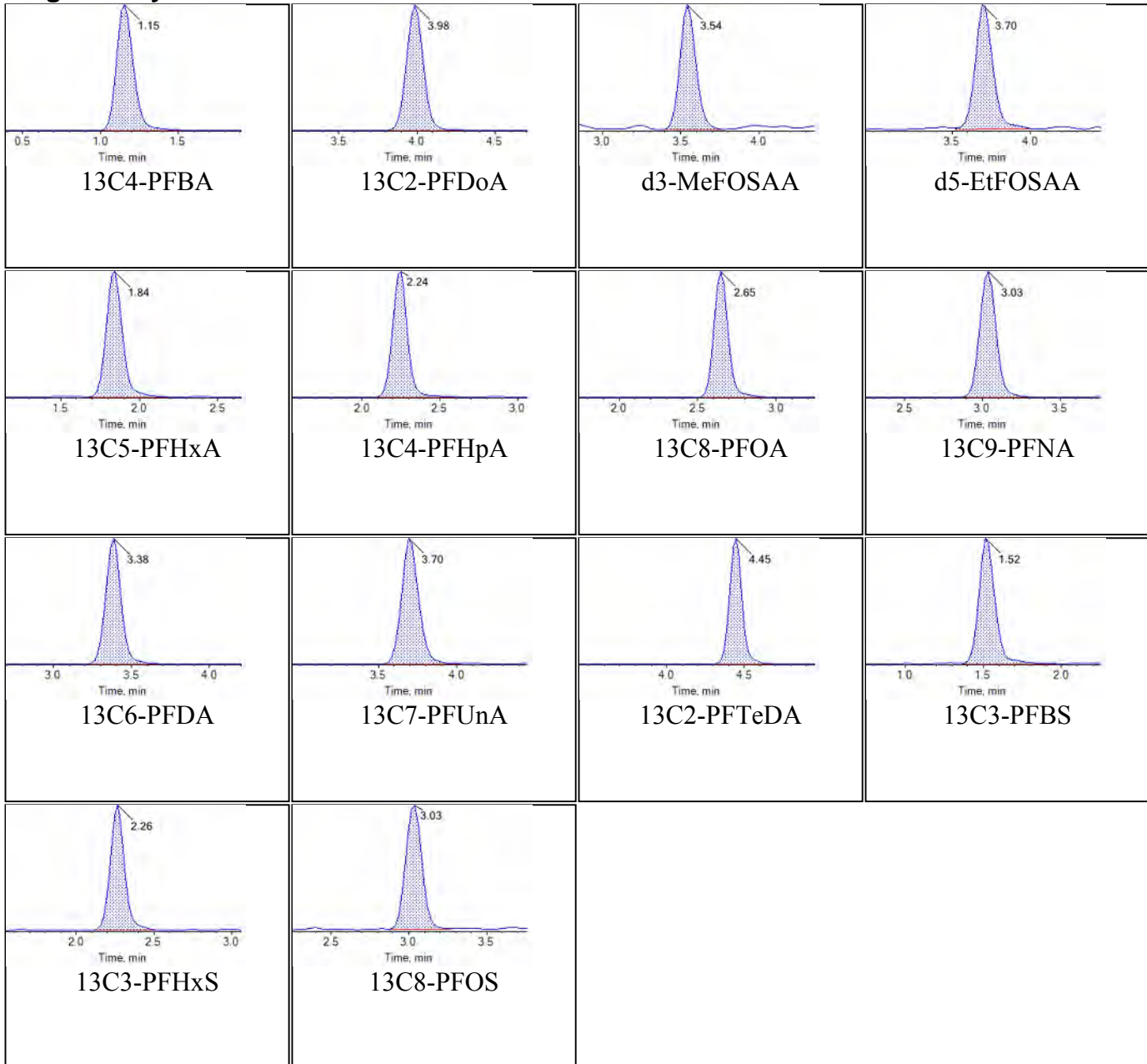
Internal Standards:



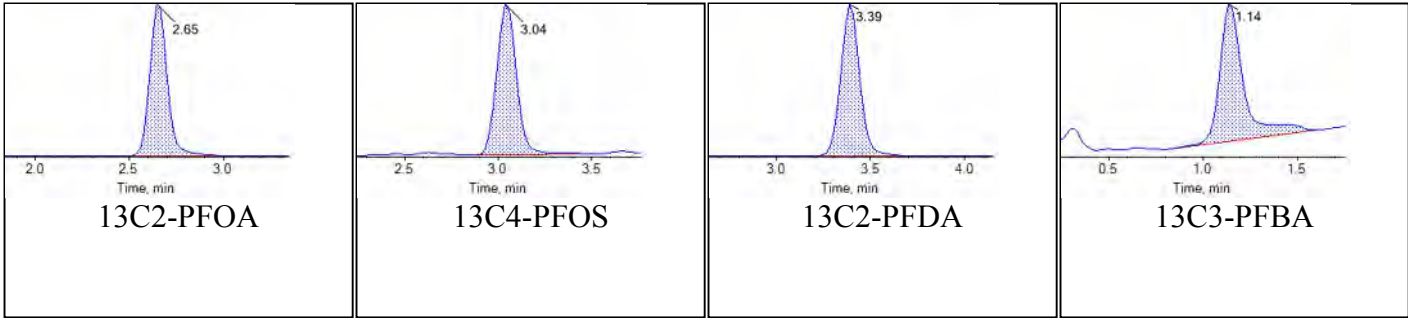
Sample Name	JY39	Injection Vial	17
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:15:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Chromatograms

Target Analytes:



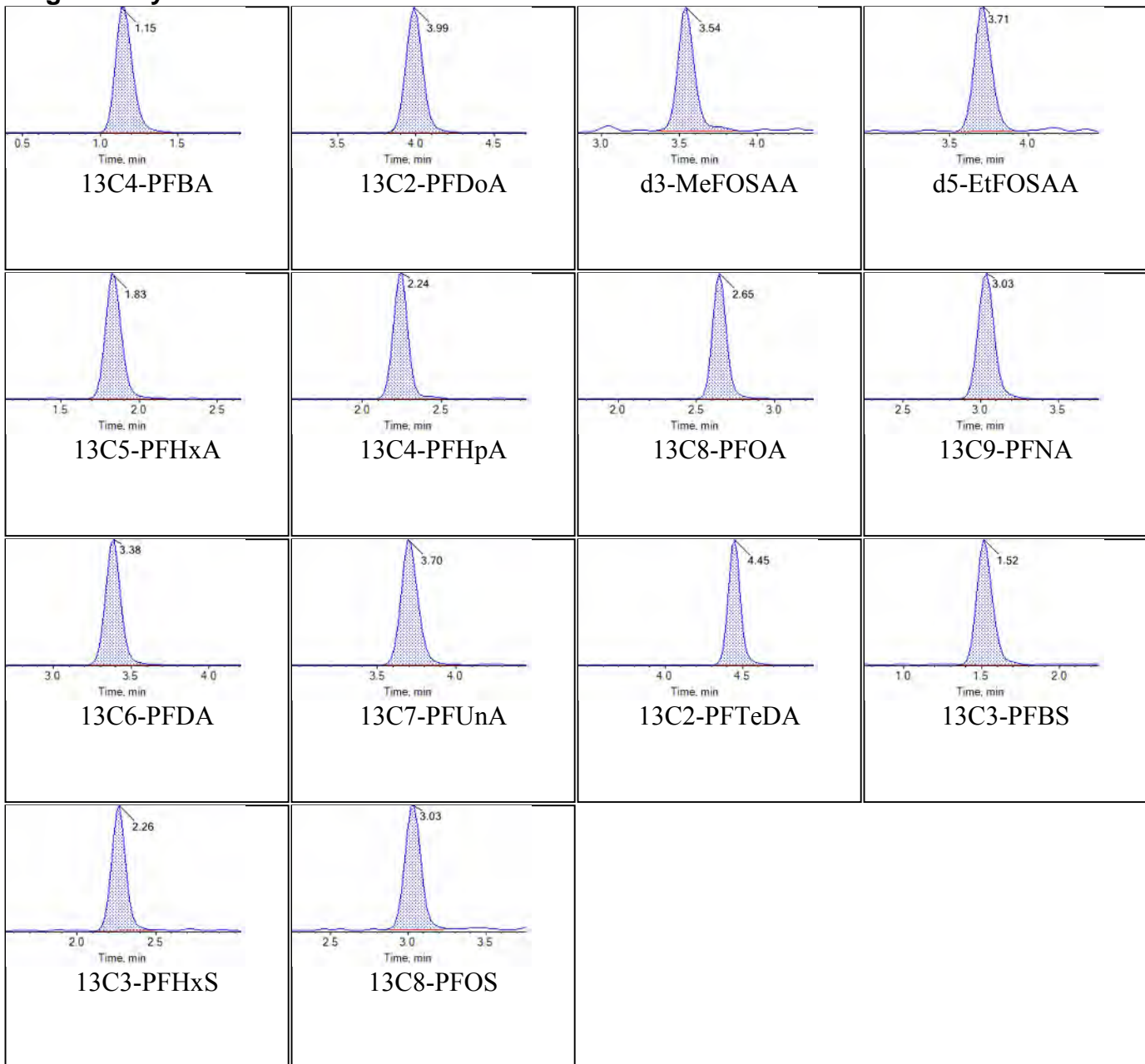
Internal Standards:



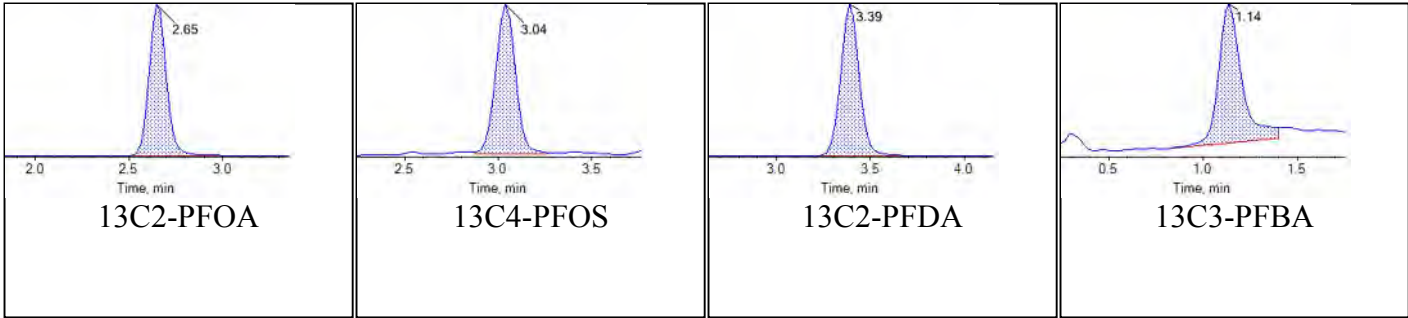
Sample Name	JY40	Injection Vial	18
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:26:32	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Chromatograms

Target Analytes:



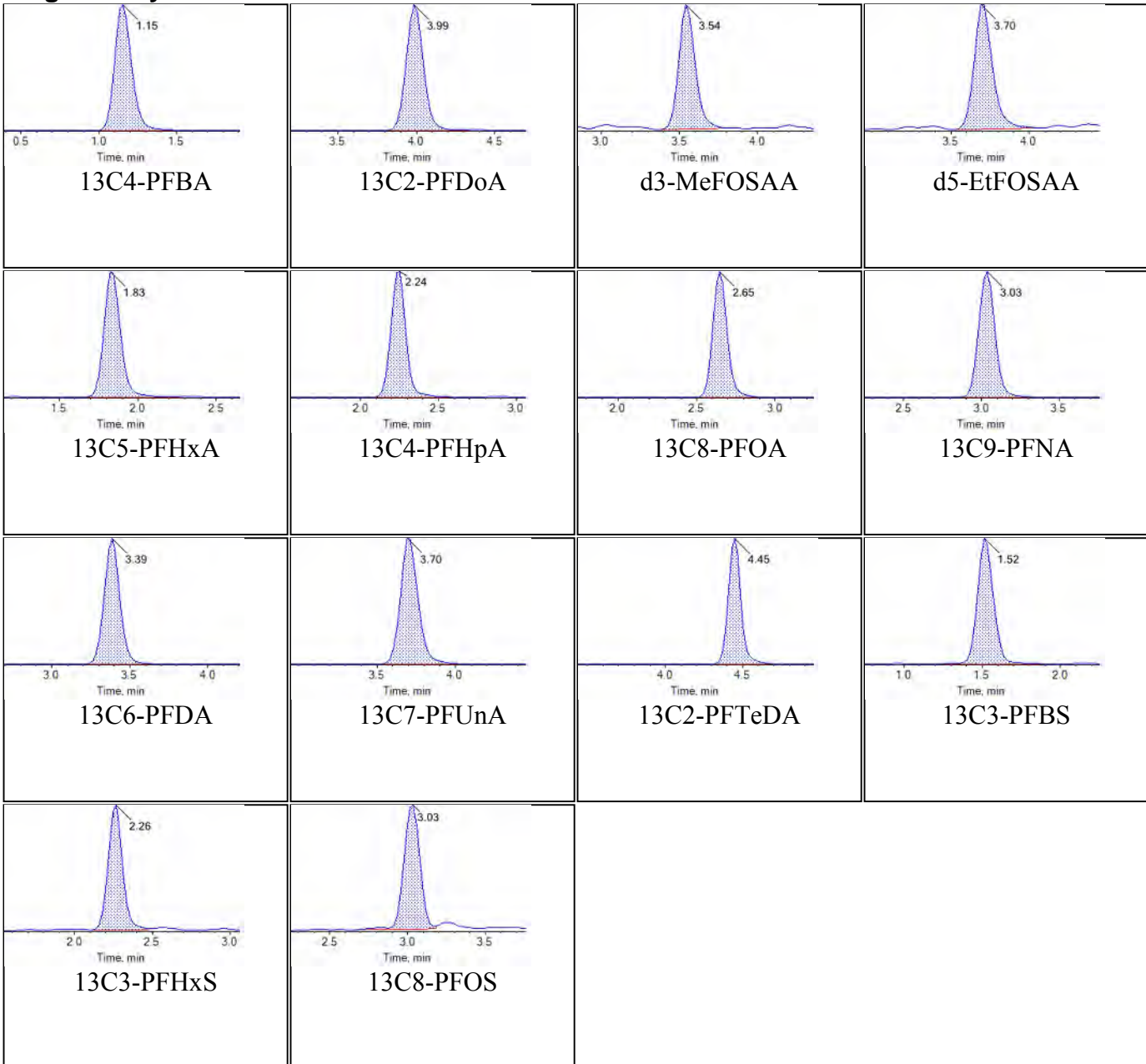
Internal Standards:



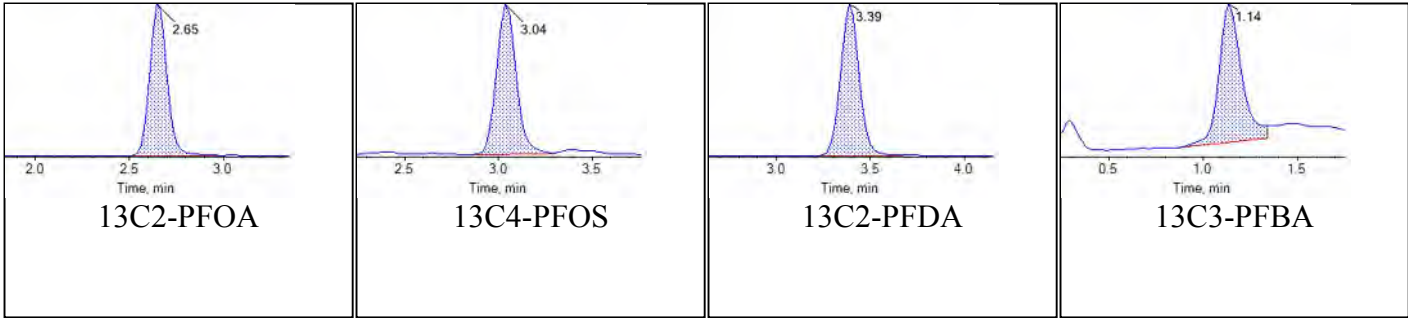
Sample Name	JY41	Injection Vial	19
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:37:24	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Chromatograms

Target Analytes:



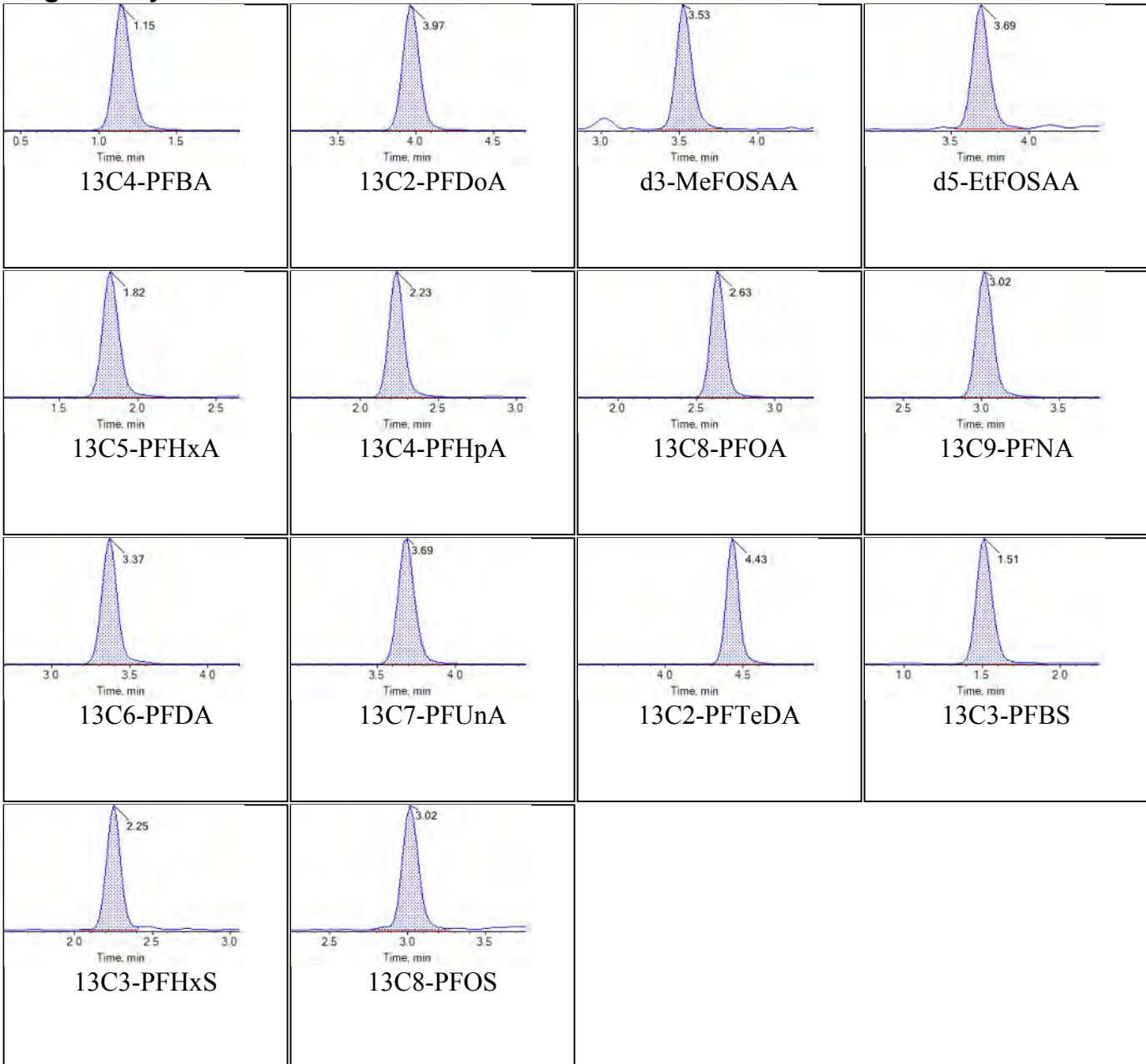
Internal Standards:



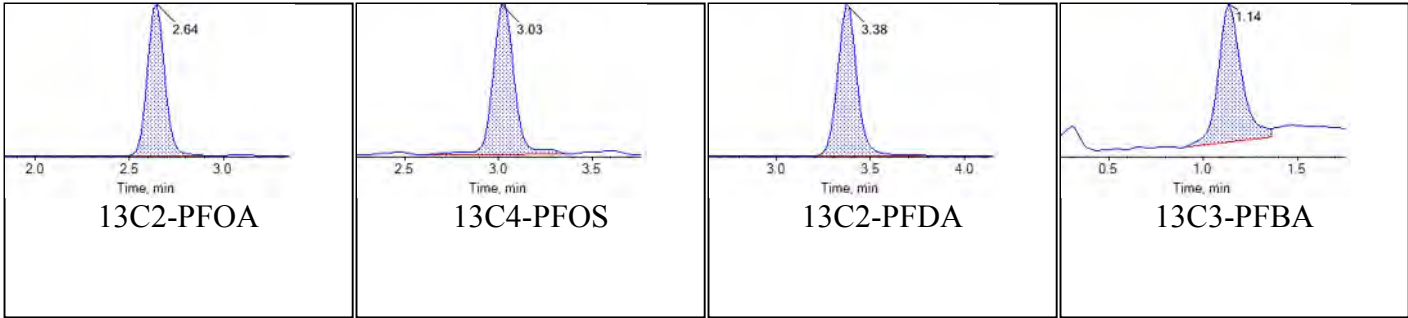
Sample Name	JY42	Injection Vial	20
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:48:15	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Chromatograms

Target Analytes:



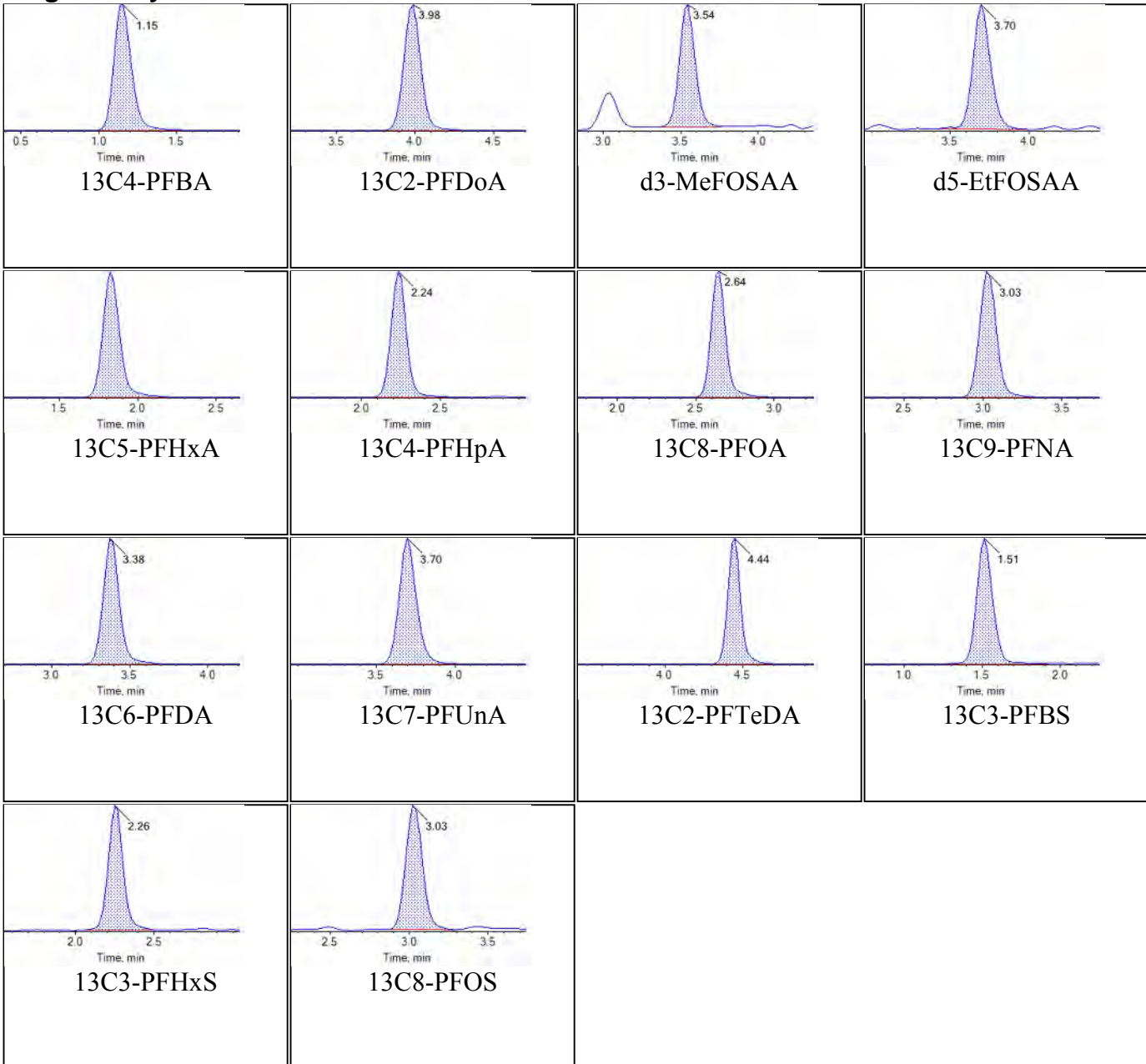
Internal Standards:



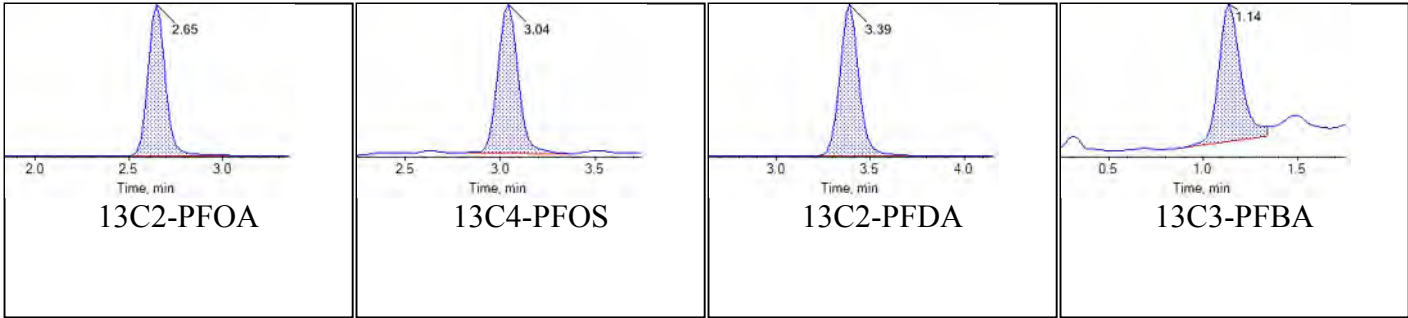
Sample Name	JY43	Injection Vial	21
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:59:08	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Chromatograms

Target Analytes:



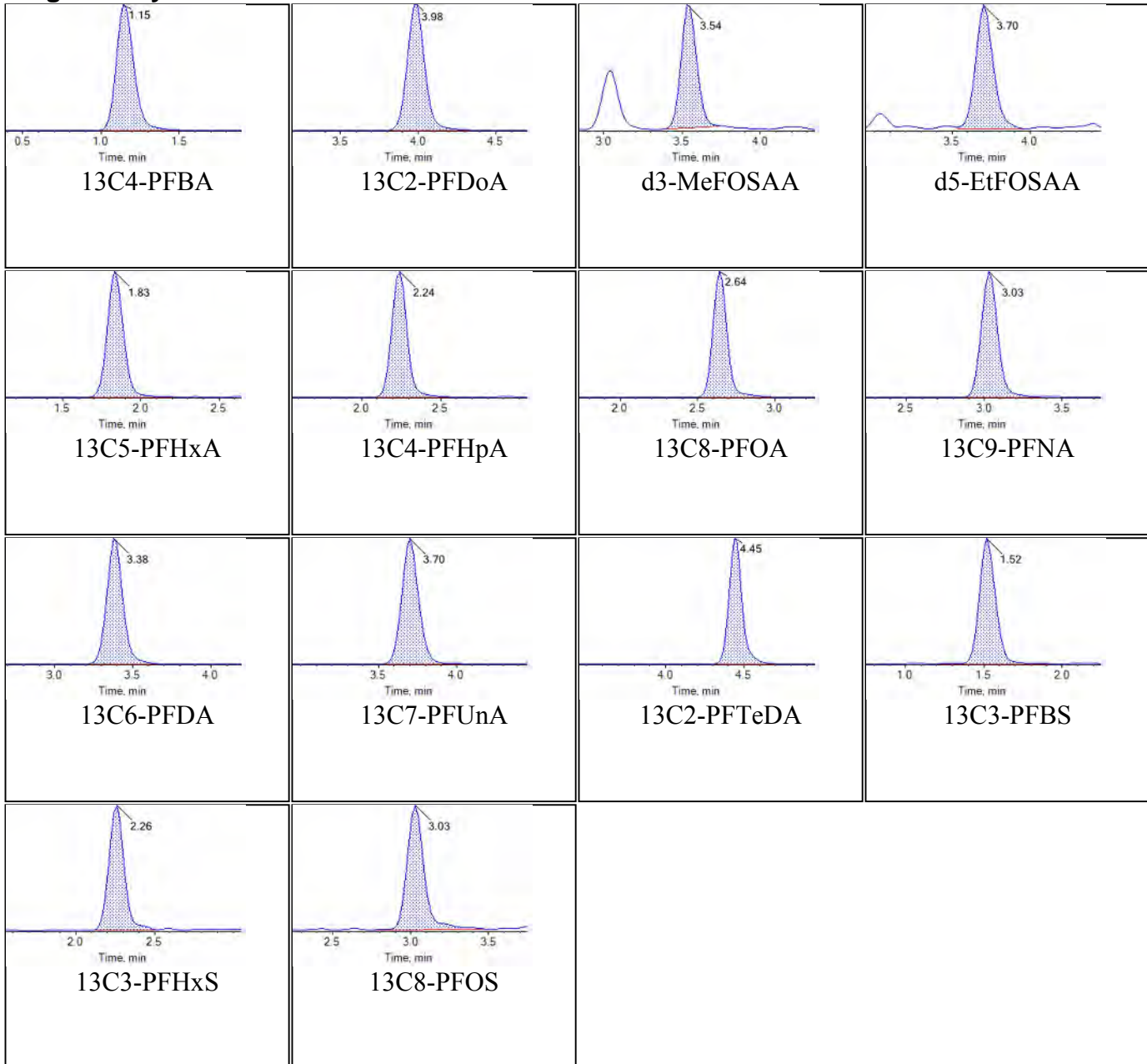
Internal Standards:



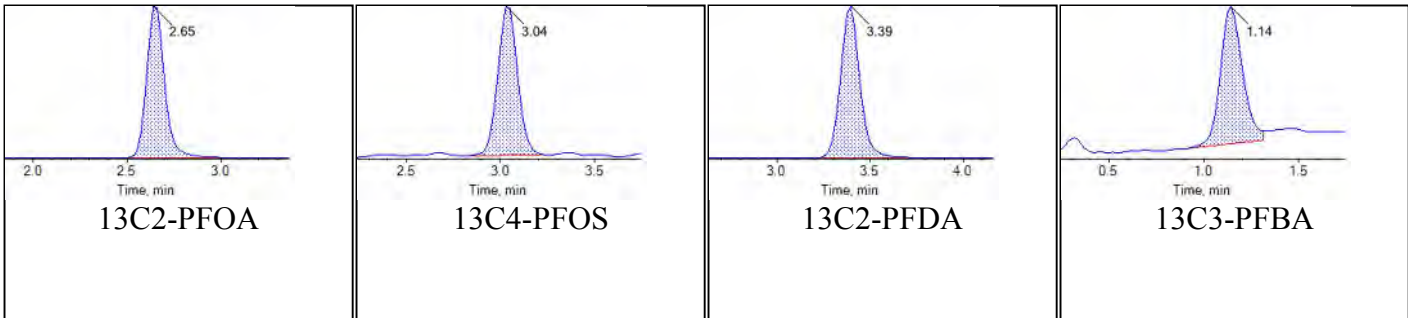
Sample Name	JY44	Injection Vial	22
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:09:59	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Chromatograms

Target Analytes:



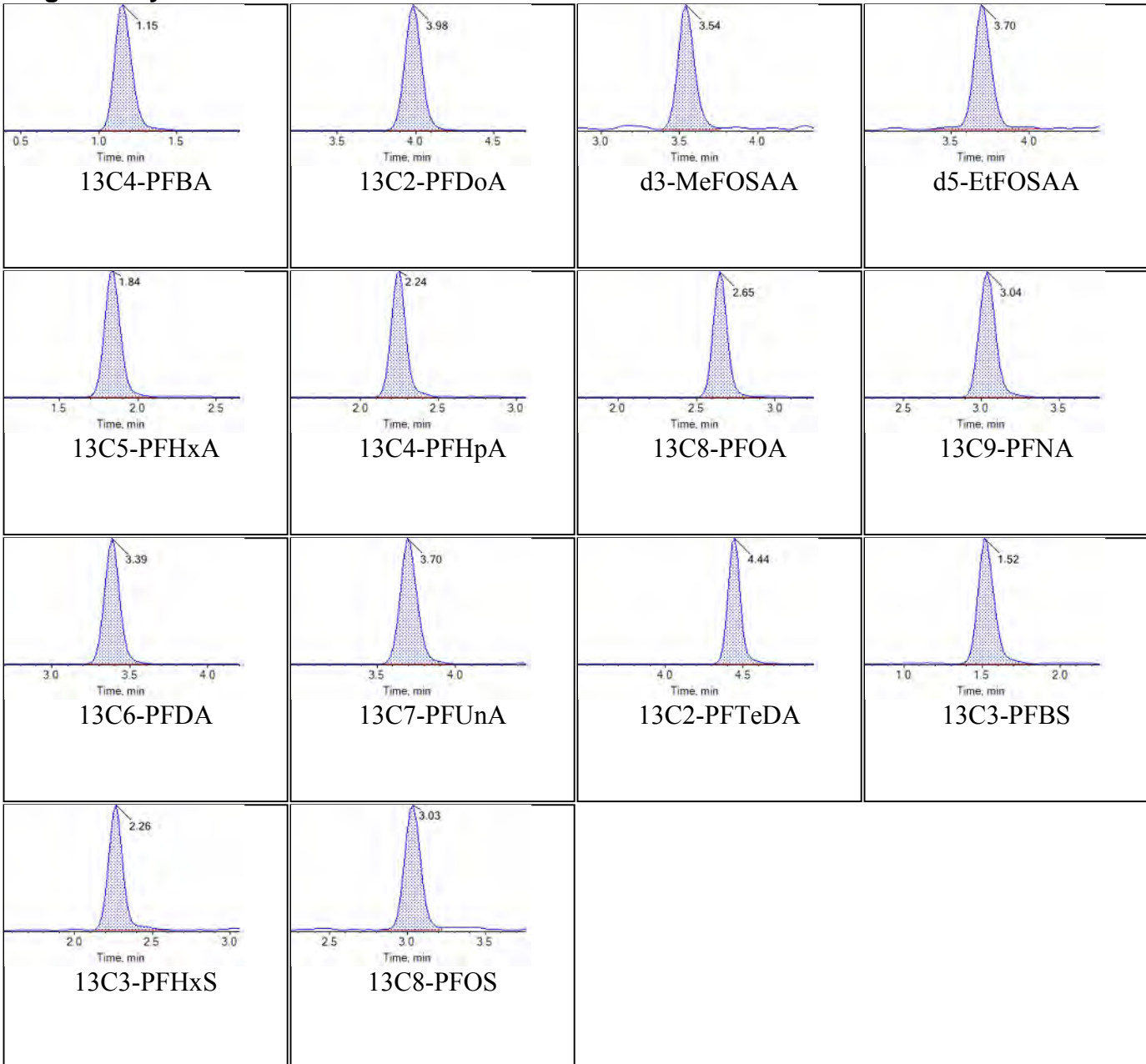
Internal Standards:



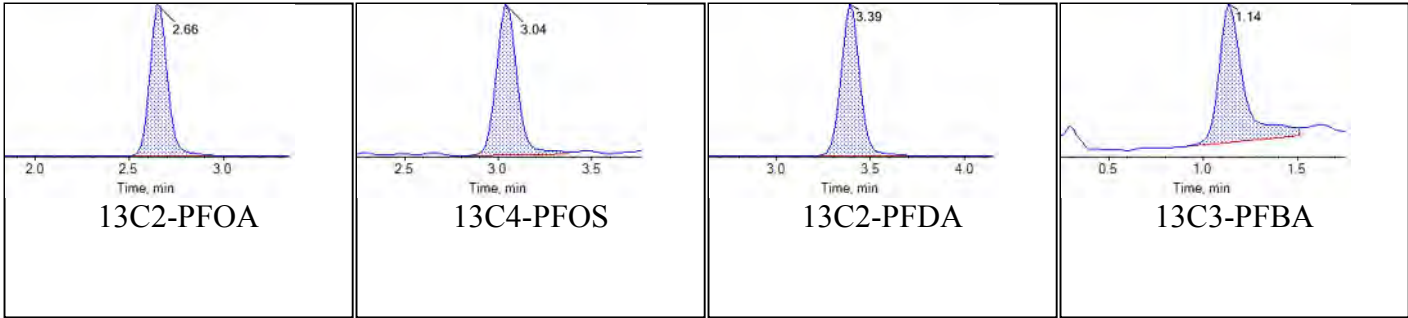
Sample Name	JY46 IB	Injection Vial	23
Sample ID	Instrument Blank	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:20:49	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Chromatograms

Target Analytes:



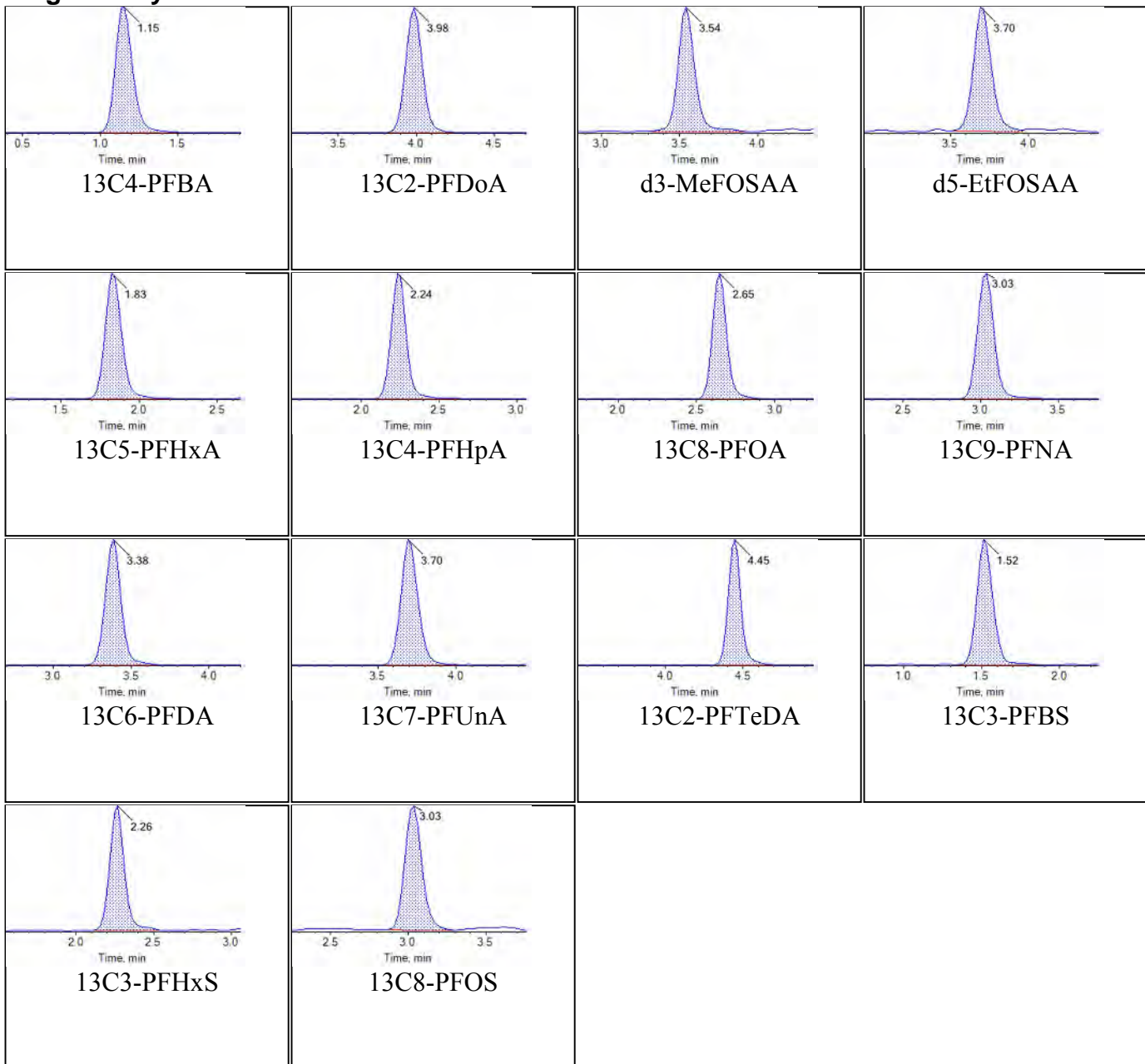
Internal Standards:



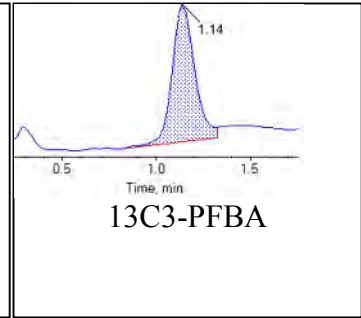
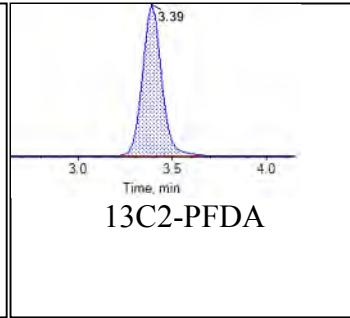
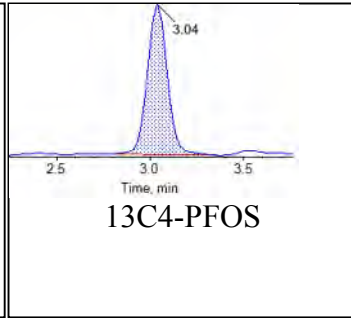
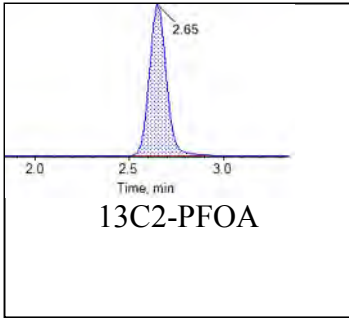
Sample Name	JY45 ICC	Injection Vial	24
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Chromatograms

Target Analytes:



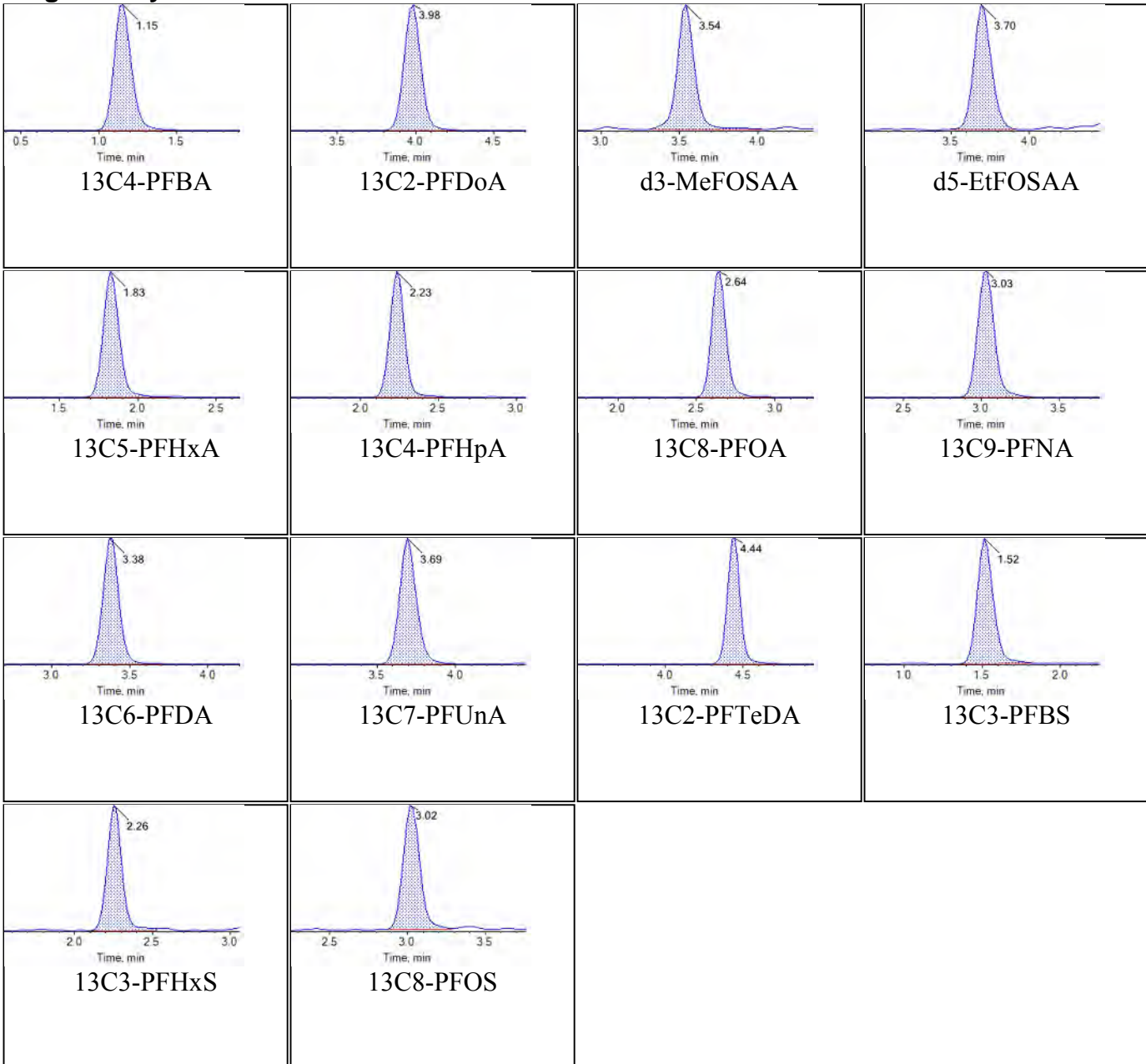
Internal Standards:



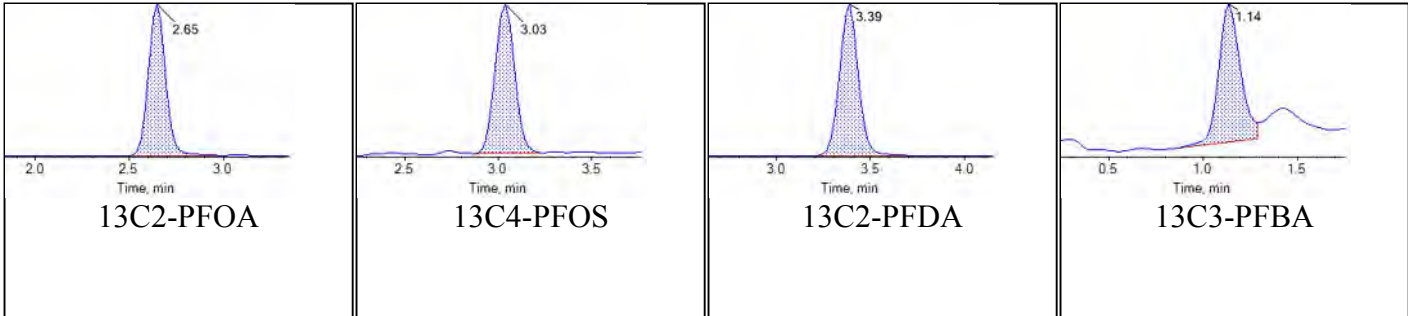
Sample Name	JY41 CCV	Injection Vial	19
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Chromatograms

Target Analytes:



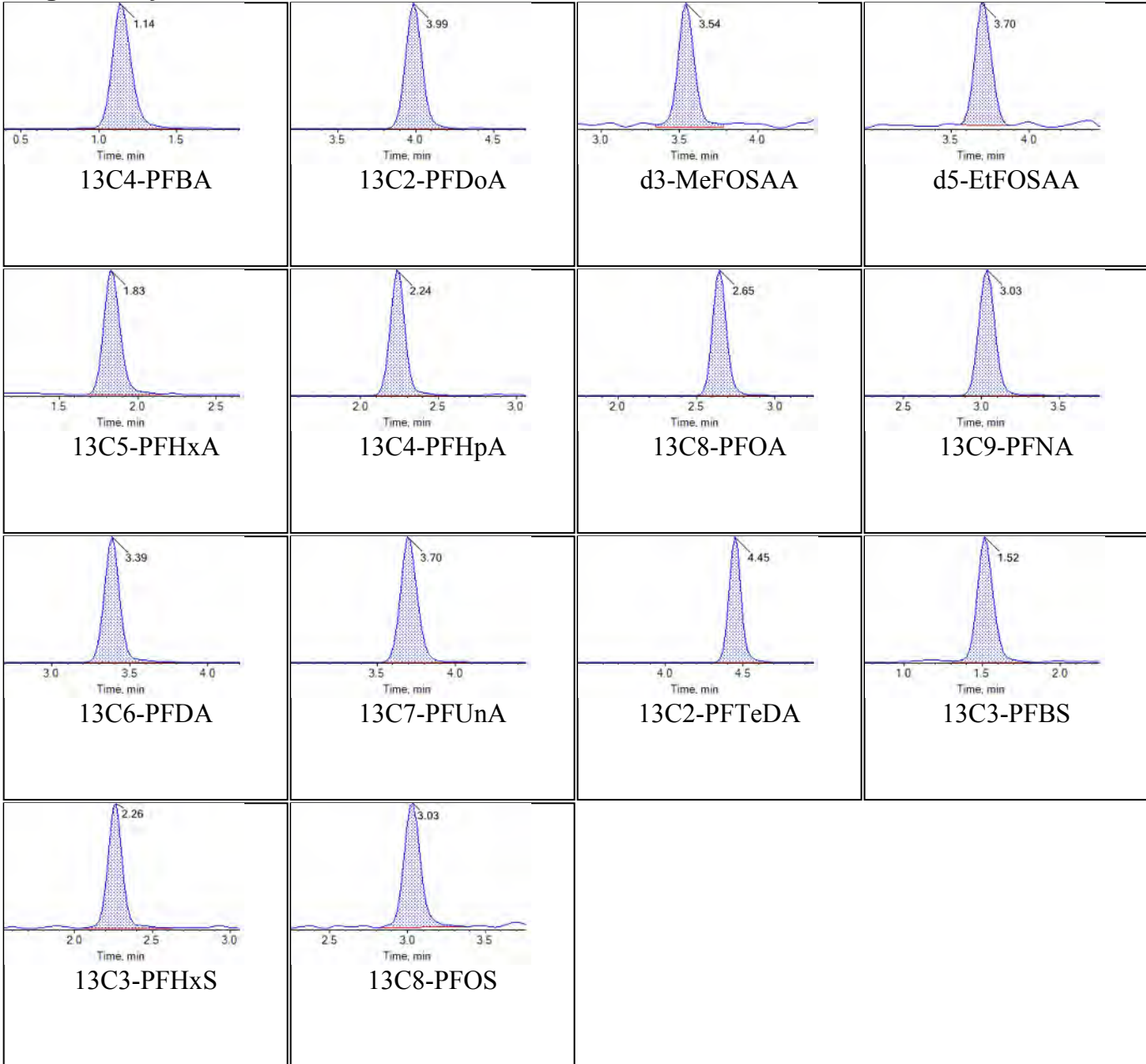
Internal Standards:



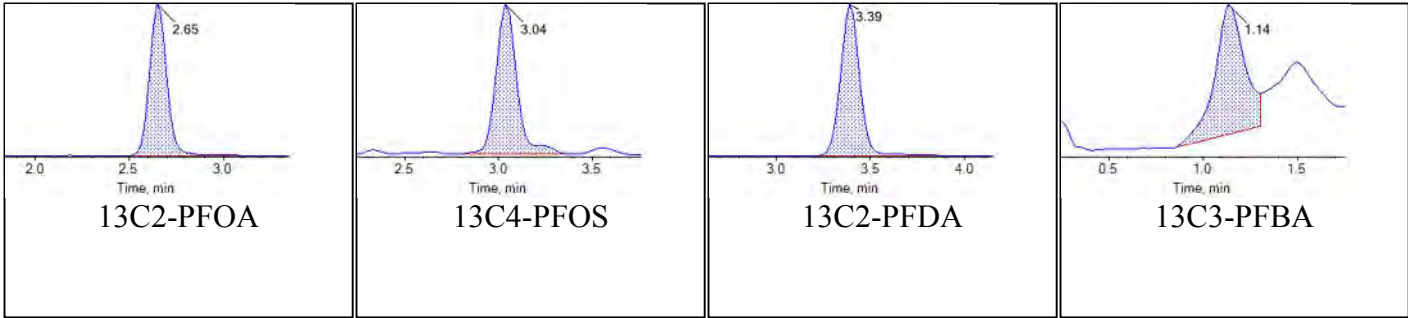
Sample Name	J7394-FS(3)	Injection Vial	38
Sample ID	NASB-CCC-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T01:19:47	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Chromatograms

Target Analytes:



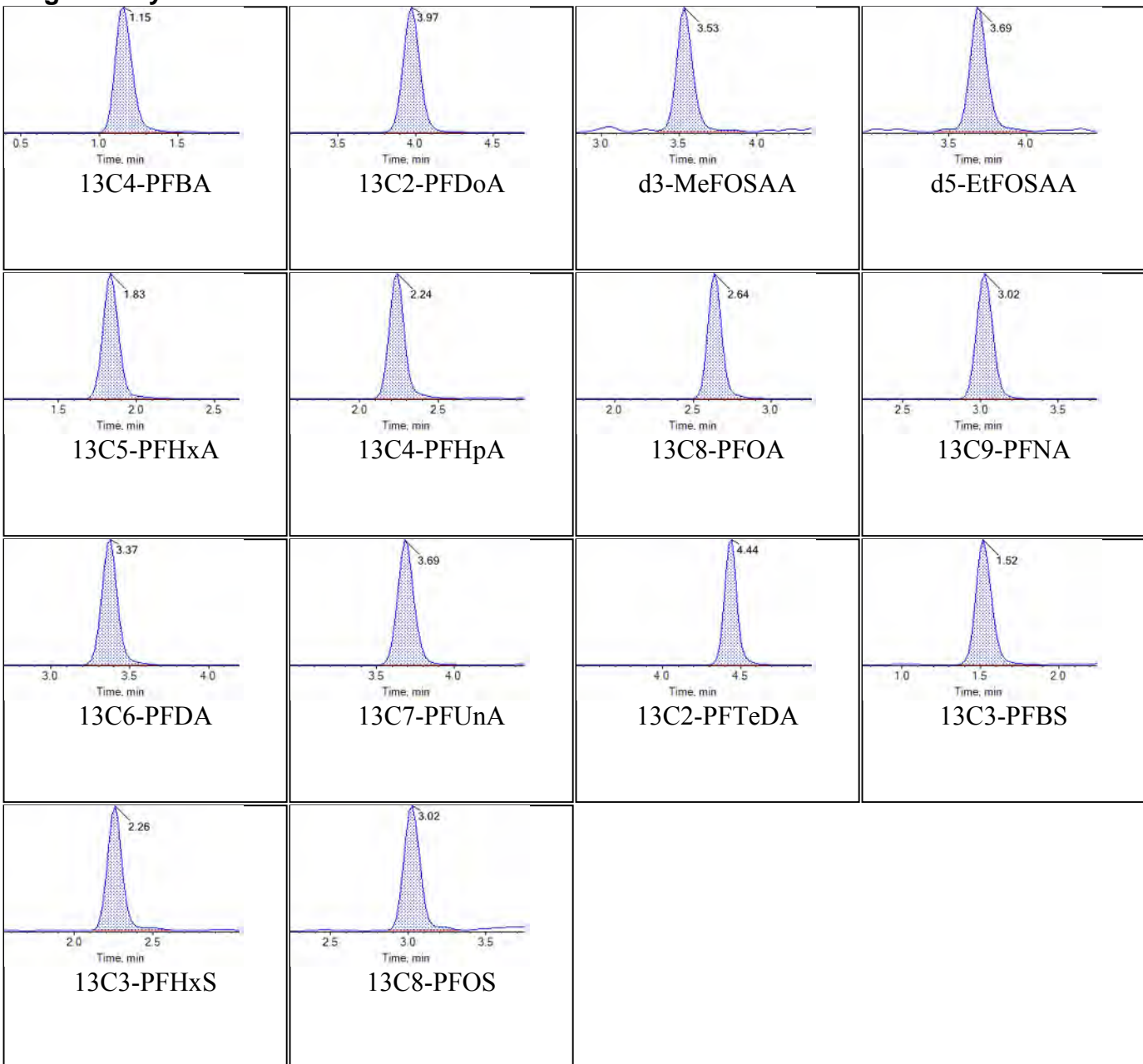
Internal Standards:



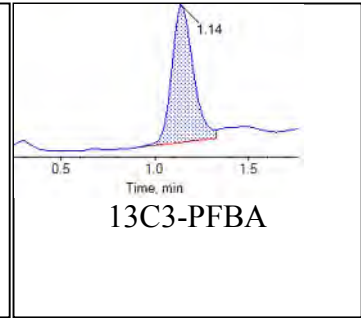
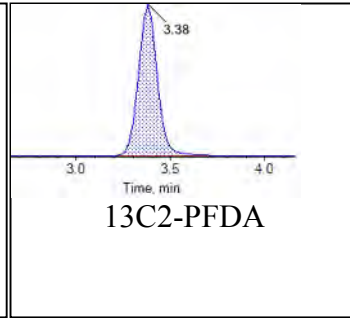
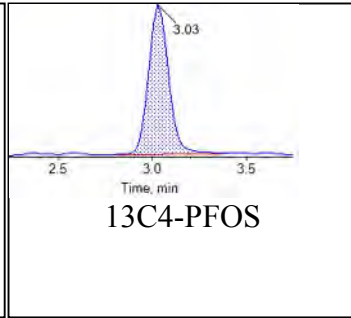
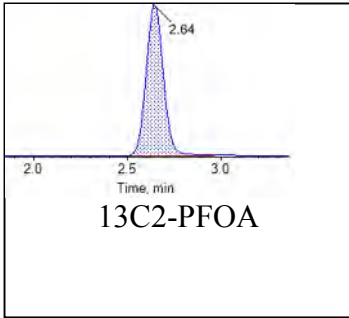
Sample Name	JY42 CCV	Injection Vial	20
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:46:39	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Chromatograms

Target Analytes:



Internal Standards:



Unused Data

Sequence Report

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 Printed: 30/08/2018 1:36:59 PM

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
23	JY38	L1	8/21/2018 9:09:32 PM	5-0369.dam	NP_08212018.wiff
24	JY39	L2	8/21/2018 9:20:23 PM	5-0369.dam	NP_08212018.wiff
25	JY40	L3	8/21/2018 9:31:15 PM	5-0369.dam	NP_08212018.wiff
26	JY41	L4	8/21/2018 9:42:06 PM	5-0369.dam	NP_08212018.wiff
27	JY42	L5	8/21/2018 9:52:57 PM	5-0369.dam	NP_08212018.wiff
28	JY43	L6	8/21/2018 10:03:48 PM	5-0369.dam	NP_08212018.wiff
29	JY44	L7	8/21/2018 10:14:39 PM	5-0369.dam	NP_08212018.wiff
30	JY46 IB	Instrument Blank	8/21/2018 10:25:30 PM	5-0369.dam	NP_08212018.wiff
31	JY45 ICC	ICC	8/21/2018 10:36:22 PM	5-0369.dam	NP_08212018.wiff
32	JX29 Branch	Branch Standard	8/21/2018 10:47:14 PM	5-0369.dam	NP_08212018.wiff
1	MeOH		8/21/2018 10:58:05 PM	5-0369.dam	NP_08212018.wiff
27	JY42 CCV	CCV	8/22/2018 1:51:50 AM	5-0369.dam	NP_08212018.wiff
1	MeOH		8/22/2018 2:02:41 AM	5-0369.dam	NP_08212018.wiff
46	CR552PB-FS(3)	Procedural Blank	8/22/2018 2:13:34 AM	5-0369.dam	NP_08212018.wiff
47	CR553LCS-FS(3)	Laboratory Control Sample	8/22/2018 2:24:25 AM	5-0369.dam	NP_08212018.wiff
48	J7402-FS(3)	NASB-BLL15-GW-RB01-080918	8/22/2018 2:35:17 AM	5-0369.dam	NP_08212018.wiff
25	JY40 CCV	CCV	8/22/2018 2:46:09 AM	5-0369.dam	NP_08212018.wiff
49	MeOH		8/22/2018 2:57:00 AM	5-0369.dam	NP_08212018.wiff
50	J7394-FS(3)	NASB-CCC-GW-01-0818	8/22/2018 3:07:52 AM	5-0369.dam	NP_08212018.wiff
51	J7395-FS(3)	NASB-CCC-GW-02-0818	8/22/2018 3:18:44 AM	5-0369.dam	NP_08212018.wiff
52	J7399-FS(3)	NASB-BLL15-GW-03-0818	8/22/2018 3:29:36 AM	5-0369.dam	NP_08212018.wiff
53	J7396-FS(3)	NASB-BLL15-GW-02-0818	8/22/2018 3:40:27 AM	5-0369.dam	NP_08212018.wiff
54	J7397-FS(3)	NASB-BLL15-GW-01-0818	8/22/2018 3:51:19 AM	5-0369.dam	NP_08212018.wiff
1	J7397MS-FS(3)	Matrix Spike Sample	8/22/2018 4:02:10 AM	5-0369.dam	NP_08212018.wiff
2	J7397MSD-FS(3)	Matrix Spike Duplicate Sample	8/22/2018 4:13:04 AM	5-0369.dam	NP_08212018.wiff
3	J7398-FS(3)	NASB-BLL15-DUP-080918	8/22/2018 4:23:57 AM	5-0369.dam	NP_08212018.wiff
4	J7400-FS(3)	NASB-BLL15-GW-04-	8/22/2018 4:34:50	5-0369.dam	NP_08212018.wiff

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
		0818	AM		
49	MeOH		8/22/2018 8:43:35 AM	5-0369.dam	NP_08212018.wiff
27	JY42 CCV	CCV	8/22/2018 8:54:26 AM	5-0369.dam	NP_08212018.wiff

Sample Name	J7397-FS(3)	Injection Vial	39
Sample ID	NASB-BLL15-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T01:30:39	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.15	19670.17	20.152720	484.8	false
13C2-PFDoA	615.0 / 570.0	N/A	N/A	N/A	N/A	true
d3-MeFOSAA	573.0 / 419.0	N/A	N/A	N/A	N/A	true
d5-EtFOSAA	589.0 / 419.0	N/A	N/A	N/A	N/A	true
13C5-PFHxA	318.0 / 273.0	N/A	N/A	N/A	N/A	true
13C4-PFHpA	367.0 / 322.0	N/A	N/A	N/A	N/A	true
13C8-PFOA	421.0 / 376.0	N/A	N/A	N/A	N/A	true
13C9-PFNA	472.0 / 427.0	N/A	N/A	N/A	N/A	true
13C6-PFDA	519.0 / 474.0	N/A	N/A	N/A	N/A	true
13C7-PFUnA	570.0 / 525.0	N/A	N/A	N/A	N/A	true
13C2-PFTeDA	715.0 / 670.0	4.44	22236.75	104.537411	871.7	false
13C3-PFBS	302.0 / 99.0	N/A	N/A	N/A	N/A	true
13C3-PFHxS	402.0 / 99.0	N/A	N/A	N/A	N/A	true
13C8-PFOS	507.0 / 99.0	N/A	N/A	N/A	N/A	true

Sample Name	J7397MS-FS(3)	Injection Vial	40
Sample ID	Matrix Spike Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T01:41:30	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.15	20014.39	18.554325	474.4	false
13C2-PFDoA	615.0 / 570.0	N/A	N/A	N/A	N/A	true
d3-MeFOSAA	573.0 / 419.0	N/A	N/A	N/A	N/A	true
d5-EtFOSAA	589.0 / 419.0	N/A	N/A	N/A	N/A	true
13C5-PFHxA	318.0 / 273.0	N/A	N/A	N/A	N/A	true
13C4-PFHpA	367.0 / 322.0	N/A	N/A	N/A	N/A	true
13C8-PFOA	421.0 / 376.0	N/A	N/A	N/A	N/A	true
13C9-PFNA	472.0 / 427.0	N/A	N/A	N/A	N/A	true
13C6-PFDA	519.0 / 474.0	N/A	N/A	N/A	N/A	true
13C7-PFUnA	570.0 / 525.0	N/A	N/A	N/A	N/A	true
13C2-PFTeDA	715.0 / 670.0	4.44	26704.62	103.672402	854.5	false
13C3-PFBS	302.0 / 99.0	N/A	N/A	N/A	N/A	true
13C3-PFHxS	402.0 / 99.0	N/A	N/A	N/A	N/A	true
13C8-PFOS	507.0 / 99.0	N/A	N/A	N/A	N/A	true

Sample Name	J7397MSD-FS(3)	Injection Vial	41
Sample ID	Matrix Spike Duplicate Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T01:52:22	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.15	22661.00	20.180416	503.3	false
13C2-PFDoA	615.0 / 570.0	N/A	N/A	N/A	N/A	true
d3-MeFOSAA	573.0 / 419.0	N/A	N/A	N/A	N/A	true
d5-EtFOSAA	589.0 / 419.0	N/A	N/A	N/A	N/A	true
13C5-PFHxA	318.0 / 273.0	N/A	N/A	N/A	N/A	true
13C4-PFHpA	367.0 / 322.0	N/A	N/A	N/A	N/A	true
13C8-PFOA	421.0 / 376.0	N/A	N/A	N/A	N/A	true
13C9-PFNA	472.0 / 427.0	N/A	N/A	N/A	N/A	true
13C6-PFDA	519.0 / 474.0	N/A	N/A	N/A	N/A	true
13C7-PFUnA	570.0 / 525.0	N/A	N/A	N/A	N/A	true
13C2-PFTeDA	715.0 / 670.0	4.44	35694.61	119.632700	964.1	false
13C3-PFBS	302.0 / 99.0	N/A	N/A	N/A	N/A	true
13C3-PFHxS	402.0 / 99.0	N/A	N/A	N/A	N/A	true
13C8-PFOS	507.0 / 99.0	N/A	N/A	N/A	N/A	true

Sample Name	J7398-FS(3)	Injection Vial	42
Sample ID	NASB-BLL15-DUP-080918	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:03:14	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.15	20207.68	18.358534	455.8	false
13C2-PFDoA	615.0 / 570.0	N/A	N/A	N/A	N/A	true
d3-MeFOSAA	573.0 / 419.0	N/A	N/A	N/A	N/A	true
d5-EtFOSAA	589.0 / 419.0	N/A	N/A	N/A	N/A	true
13C5-PFHxA	318.0 / 273.0	N/A	N/A	N/A	N/A	true
13C4-PFHpA	367.0 / 322.0	N/A	N/A	N/A	N/A	true
13C8-PFOA	421.0 / 376.0	N/A	N/A	N/A	N/A	true
13C9-PFNA	472.0 / 427.0	N/A	N/A	N/A	N/A	true
13C6-PFDA	519.0 / 474.0	N/A	N/A	N/A	N/A	true
13C7-PFUnA	570.0 / 525.0	N/A	N/A	N/A	N/A	true
13C2-PFTeDA	715.0 / 670.0	4.44	29906.73	94.674640	1031.1	false
13C3-PFBS	302.0 / 99.0	N/A	N/A	N/A	N/A	true
13C3-PFHxS	402.0 / 99.0	N/A	N/A	N/A	N/A	true
13C8-PFOS	507.0 / 99.0	N/A	N/A	N/A	N/A	true

Sample Name	J7399-FS(3)	Injection Vial	43
Sample ID	NASB-BLL15-GW-03-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:14:05	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.15	20458.27	36.375884	444.7	false
13C2-PFDoA	615.0 / 570.0	N/A	N/A	N/A	N/A	true
d3-MeFOSAA	573.0 / 419.0	N/A	N/A	N/A	N/A	true
d5-EtFOSAA	589.0 / 419.0	N/A	N/A	N/A	N/A	true
13C5-PFHxA	318.0 / 273.0	N/A	N/A	N/A	N/A	true
13C4-PFHpA	367.0 / 322.0	N/A	N/A	N/A	N/A	true
13C8-PFOA	421.0 / 376.0	N/A	N/A	N/A	N/A	true
13C9-PFNA	472.0 / 427.0	N/A	N/A	N/A	N/A	true
13C6-PFDA	519.0 / 474.0	N/A	N/A	N/A	N/A	true
13C7-PFUnA	570.0 / 525.0	N/A	N/A	N/A	N/A	true
13C2-PFTeDA	715.0 / 670.0	4.43	24391.87	95.386741	680.8	false
13C3-PFBS	302.0 / 99.0	N/A	N/A	N/A	N/A	true
13C3-PFHxS	402.0 / 99.0	N/A	N/A	N/A	N/A	true
13C8-PFOS	507.0 / 99.0	N/A	N/A	N/A	N/A	true

Sample Name	J7400-FS(3)	Injection Vial	44
Sample ID	NASB-BLL15-GW-04-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:24:57	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.15	22025.57	25.528547	542.0	false
13C2-PFDoA	615.0 / 570.0	N/A	N/A	N/A	N/A	true
d3-MeFOSAA	573.0 / 419.0	N/A	N/A	N/A	N/A	true
d5-EtFOSAA	589.0 / 419.0	N/A	N/A	N/A	N/A	true
13C5-PFHxA	318.0 / 273.0	N/A	N/A	N/A	N/A	true
13C4-PFHpA	367.0 / 322.0	N/A	N/A	N/A	N/A	true
13C8-PFOA	421.0 / 376.0	N/A	N/A	N/A	N/A	true
13C9-PFNA	472.0 / 427.0	N/A	N/A	N/A	N/A	true
13C6-PFDA	519.0 / 474.0	N/A	N/A	N/A	N/A	true
13C7-PFUnA	570.0 / 525.0	N/A	N/A	N/A	N/A	true
13C2-PFTeDA	715.0 / 670.0	4.43	29536.04	97.243117	680.5	false
13C3-PFBS	302.0 / 99.0	N/A	N/A	N/A	N/A	true
13C3-PFHxS	402.0 / 99.0	N/A	N/A	N/A	N/A	true
13C8-PFOS	507.0 / 99.0	N/A	N/A	N/A	N/A	true

Sample Name	J7397-FS(3)	Injection Vial	39
Sample ID	NASB-BLL15-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T01:30:39	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.15	13C3-PFBA	216.0 / 172.0	160906.49	250.00
13C2-PFDoA	615.0 / 570.0	N/A	13C2-PFDA	515.0 / 470.0	52889.26	250.00
d3-MeFOSAA	573.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
d5-EtFOSAA	589.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
13C5-PFHxA	318.0 / 273.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C4-PFHpA	367.0 / 322.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C8-PFOA	421.0 / 376.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C9-PFNA	472.0 / 427.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C6-PFDA	519.0 / 474.0	N/A	13C2-PFDA	515.0 / 470.0	52889.26	250.00
13C7-PFUnA	570.0 / 525.0	N/A	13C2-PFDA	515.0 / 470.0	52889.26	250.00
13C2-PFTeDA	715.0 / 670.0	4.44	13C2-PFDA	515.0 / 470.0	52889.26	250.00
13C3-PFBS	302.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
13C3-PFHxS	402.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
13C8-PFOS	507.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25

Sample Name	J7397MS-FS(3)	Injection Vial	40
Sample ID	Matrix Spike Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T01:41:30	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.15	13C3-PFBA	216.0 / 172.0	177826.43	250.00
13C2-PFDoA	615.0 / 570.0	N/A	13C2-PFDA	515.0 / 470.0	64045.88	250.00
d3-MeFOSAA	573.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
d5-EtFOSAA	589.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
13C5-PFHxA	318.0 / 273.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C4-PFHpA	367.0 / 322.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C8-PFOA	421.0 / 376.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C9-PFNA	472.0 / 427.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C6-PFDA	519.0 / 474.0	N/A	13C2-PFDA	515.0 / 470.0	64045.88	250.00
13C7-PFUnA	570.0 / 525.0	N/A	13C2-PFDA	515.0 / 470.0	64045.88	250.00
13C2-PFTeDA	715.0 / 670.0	4.44	13C2-PFDA	515.0 / 470.0	64045.88	250.00
13C3-PFBS	302.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
13C3-PFHxS	402.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
13C8-PFOS	507.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25

Sample Name	J7397MSD-FS(3)	Injection Vial	41
Sample ID	Matrix Spike Duplicate Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T01:52:22	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.15	13C3-PFBA	216.0 / 172.0	185117.74	250.00
13C2-PFDoA	615.0 / 570.0	N/A	13C2-PFDA	515.0 / 470.0	74185.79	250.00
d3-MeFOSAA	573.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
d5-EtFOSAA	589.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
13C5-PFHxA	318.0 / 273.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C4-PFHpA	367.0 / 322.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C8-PFOA	421.0 / 376.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C9-PFNA	472.0 / 427.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C6-PFDA	519.0 / 474.0	N/A	13C2-PFDA	515.0 / 470.0	74185.79	250.00
13C7-PFUnA	570.0 / 525.0	N/A	13C2-PFDA	515.0 / 470.0	74185.79	250.00
13C2-PFTeDA	715.0 / 670.0	4.44	13C2-PFDA	515.0 / 470.0	74185.79	250.00
13C3-PFBS	302.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
13C3-PFHxS	402.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
13C8-PFOS	507.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25

Sample Name	J7398-FS(3)	Injection Vial	42
Sample ID	NASB-BLL15-DUP-080918	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:03:14	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.15	13C3-PFBA	216.0 / 172.0	181458.60	250.00
13C2-PFDoA	615.0 / 570.0	N/A	13C2-PFDA	515.0 / 470.0	78542.24	250.00
d3-MeFOSAA	573.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
d5-EtFOSAA	589.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
13C5-PFHxA	318.0 / 273.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C4-PFHpA	367.0 / 322.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C8-PFOA	421.0 / 376.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C9-PFNA	472.0 / 427.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C6-PFDA	519.0 / 474.0	N/A	13C2-PFDA	515.0 / 470.0	78542.24	250.00
13C7-PFUnA	570.0 / 525.0	N/A	13C2-PFDA	515.0 / 470.0	78542.24	250.00
13C2-PFTeDA	715.0 / 670.0	4.44	13C2-PFDA	515.0 / 470.0	78542.24	250.00
13C3-PFBS	302.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
13C3-PFHxS	402.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
13C8-PFOS	507.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25

Sample Name	J7399-FS(3)	Injection Vial	43
Sample ID	NASB-BLL15-GW-03-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:14:05	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.15	13C3-PFBA	216.0 / 172.0	92715.93	250.00
13C2-PFDoA	615.0 / 570.0	N/A	13C2-PFDA	515.0 / 470.0	63580.68	250.00
d3-MeFOSAA	573.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
d5-EtFOSAA	589.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
13C5-PFHxA	318.0 / 273.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C4-PFHpA	367.0 / 322.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C8-PFOA	421.0 / 376.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C9-PFNA	472.0 / 427.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C6-PFDA	519.0 / 474.0	N/A	13C2-PFDA	515.0 / 470.0	63580.68	250.00
13C7-PFUnA	570.0 / 525.0	N/A	13C2-PFDA	515.0 / 470.0	63580.68	250.00
13C2-PFTeDA	715.0 / 670.0	4.43	13C2-PFDA	515.0 / 470.0	63580.68	250.00
13C3-PFBS	302.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
13C3-PFHxS	402.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
13C8-PFOS	507.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25

Sample Name	J7400-FS(3)	Injection Vial	44
Sample ID	NASB-BLL15-GW-04-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:24:57	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

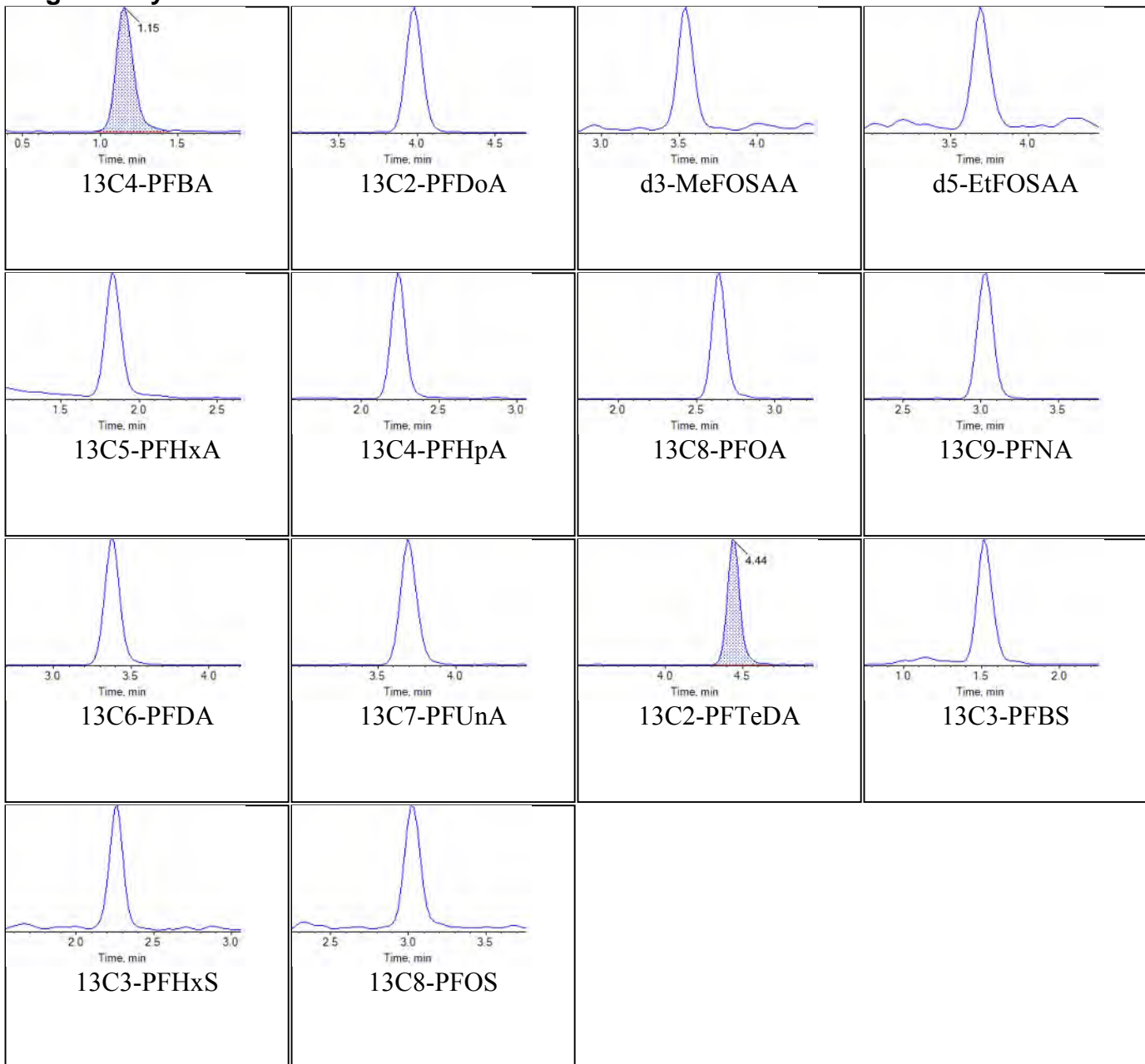
Results Summary

Analyte	MRM Transition	RT	IS	IS MRM Transition	IS Area	IS Conc. (ng/L)
13C4-PFBA	217.0 / 172.0	1.15	13C3-PFBA	216.0 / 172.0	142232.90	250.00
13C2-PFDoA	615.0 / 570.0	N/A	13C2-PFDA	515.0 / 470.0	75519.89	250.00
d3-MeFOSAA	573.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
d5-EtFOSAA	589.0 / 419.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
13C5-PFHxA	318.0 / 273.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C4-PFHpA	367.0 / 322.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C8-PFOA	421.0 / 376.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C9-PFNA	472.0 / 427.0	N/A	13C2-PFOA	415.0 / 370.0	N/A	250.00
13C6-PFDA	519.0 / 474.0	N/A	13C2-PFDA	515.0 / 470.0	75519.89	250.00
13C7-PFUnA	570.0 / 525.0	N/A	13C2-PFDA	515.0 / 470.0	75519.89	250.00
13C2-PFTeDA	715.0 / 670.0	4.43	13C2-PFDA	515.0 / 470.0	75519.89	250.00
13C3-PFBS	302.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
13C3-PFHxS	402.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25
13C8-PFOS	507.0 / 99.0	N/A	13C4-PFOS	503.0 / 99.0	N/A	239.25

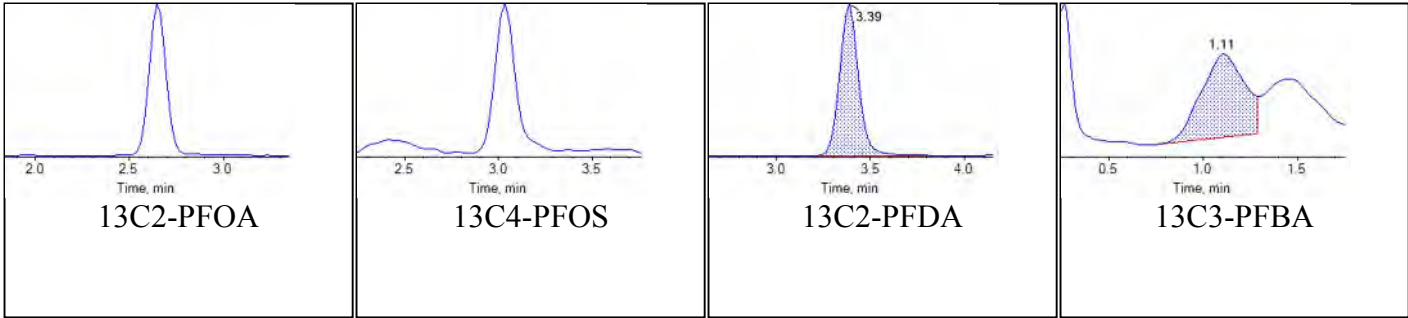
Sample Name	J7397-FS(3)	Injection Vial	39
Sample ID	NASB-BLL15-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T01:30:39	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Chromatograms

Target Analytes:



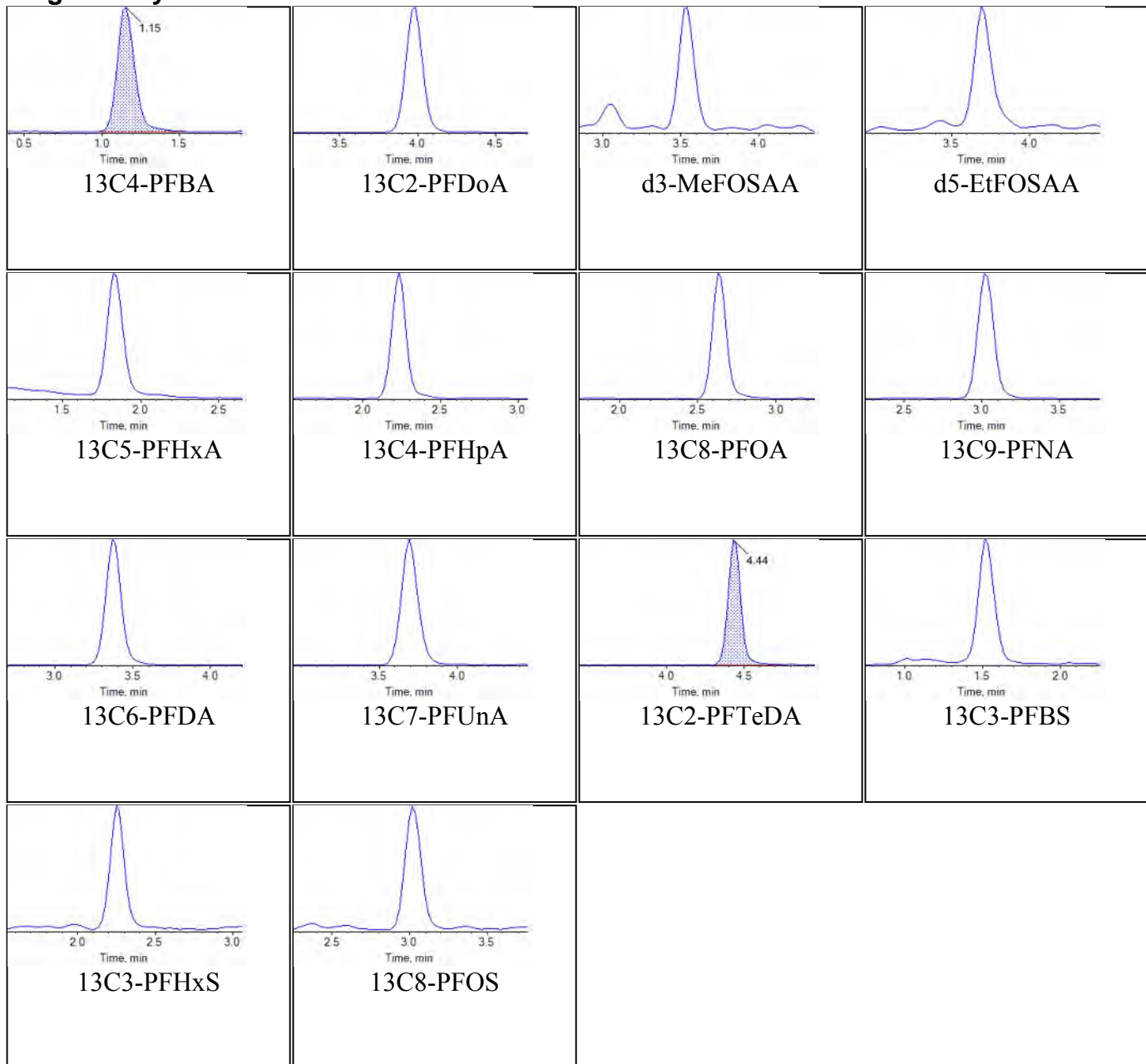
Internal Standards:



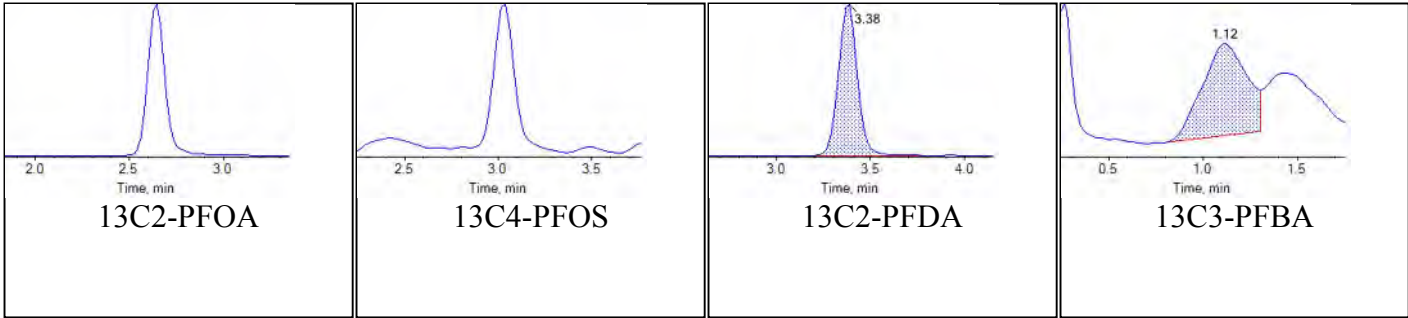
Sample Name	J7397MS-FS(3)	Injection Vial	40
Sample ID	Matrix Spike Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T01:41:30	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Chromatograms

Target Analytes:



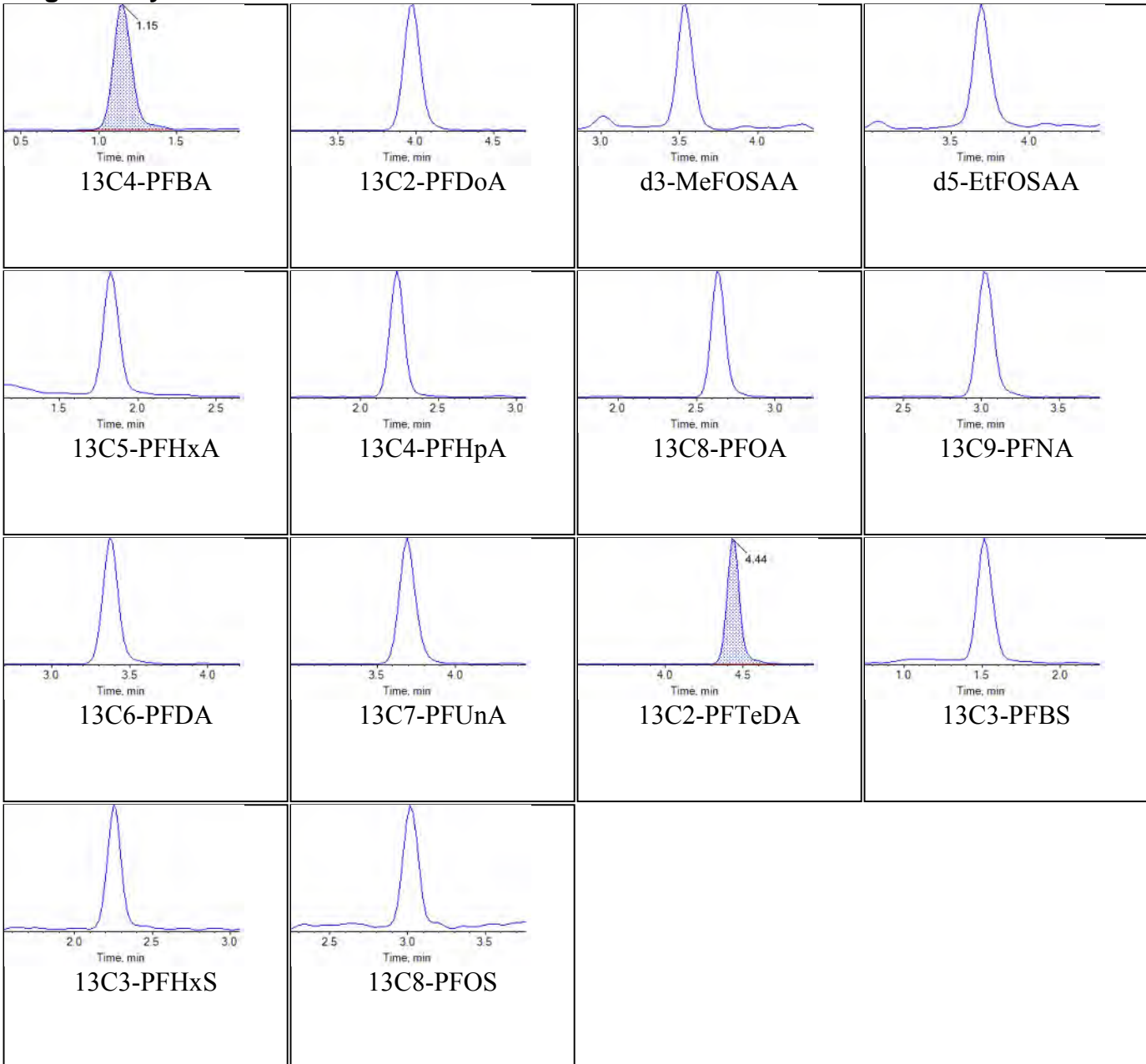
Internal Standards:



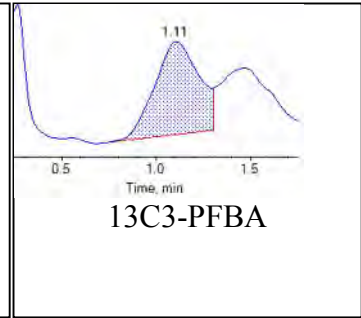
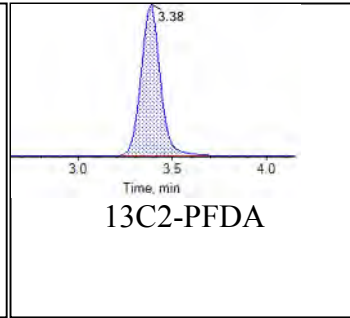
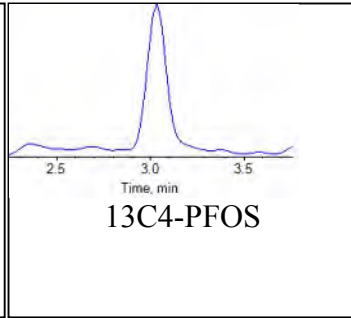
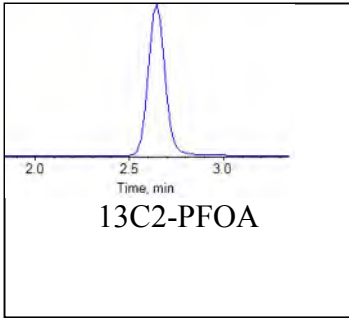
Sample Name	J7397MSD-FS(3)	Injection Vial	41
Sample ID	Matrix Spike Duplicate Sample	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T01:52:22	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Chromatograms

Target Analytes:



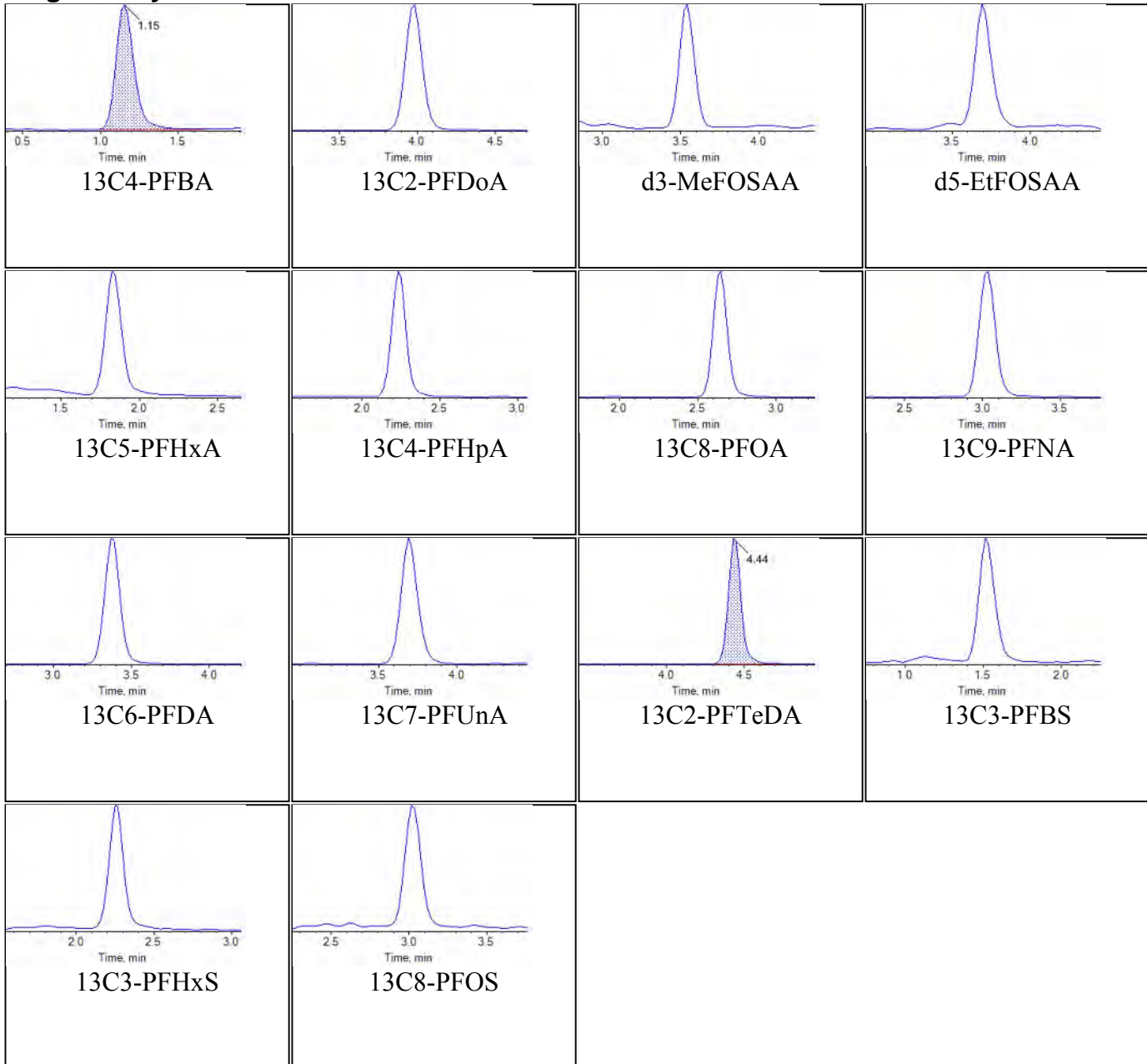
Internal Standards:



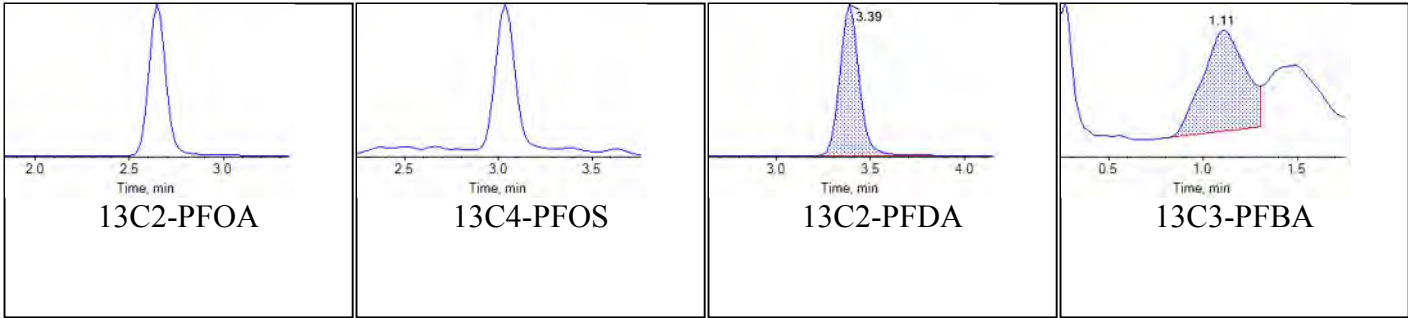
Sample Name	J7398-FS(3)	Injection Vial	42
Sample ID	NASB-BLL15-DUP-080918	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:03:14	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Chromatograms

Target Analytes:



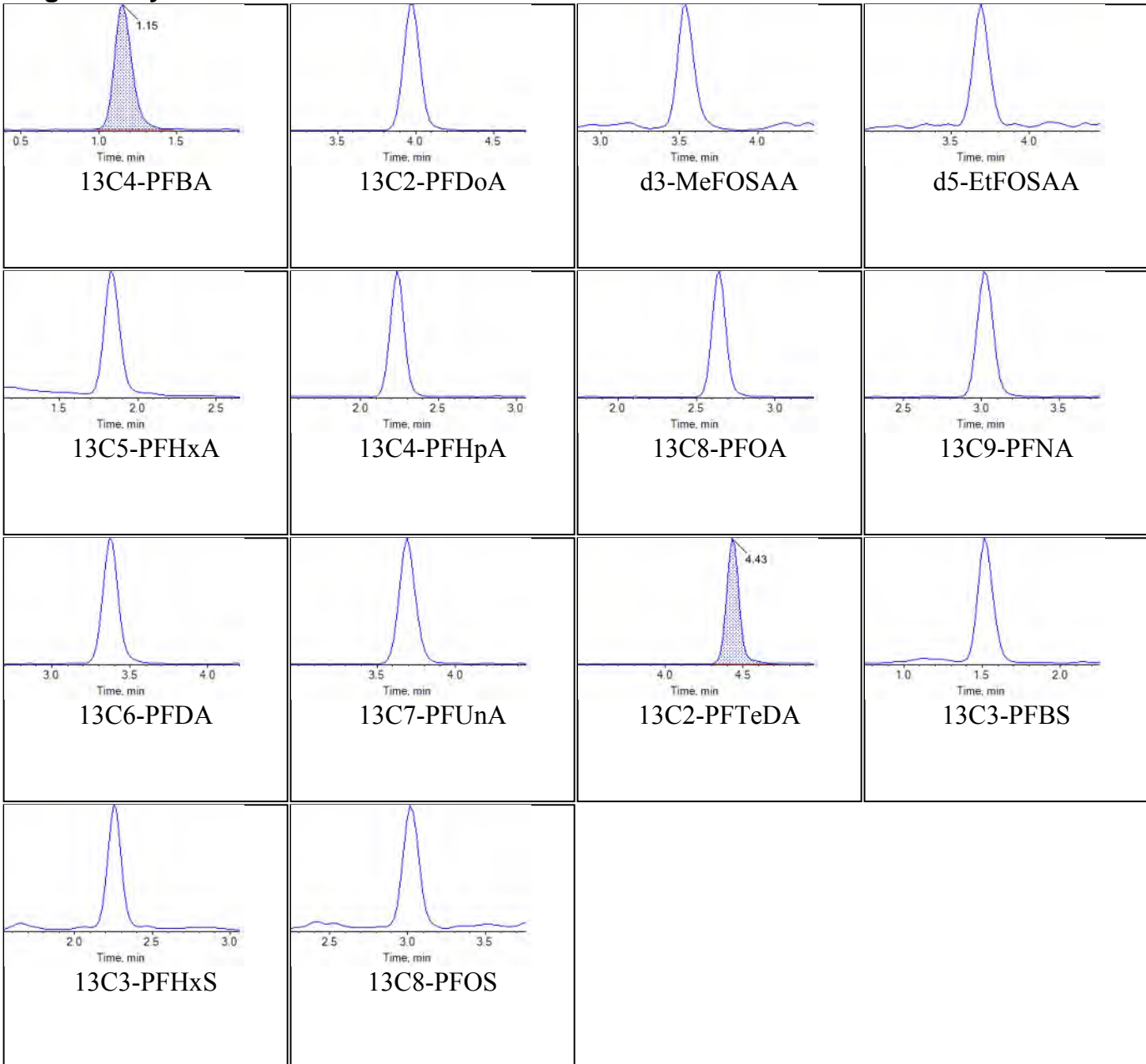
Internal Standards:



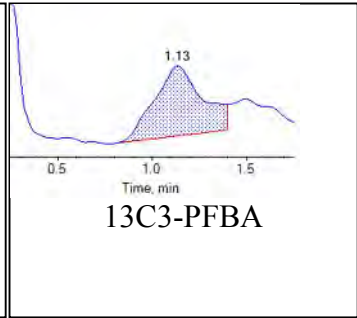
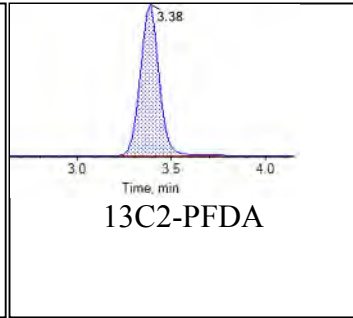
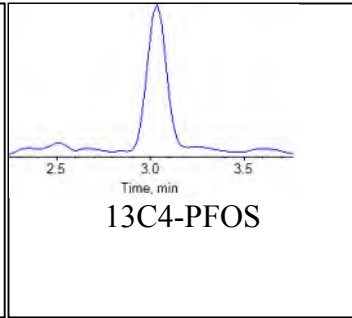
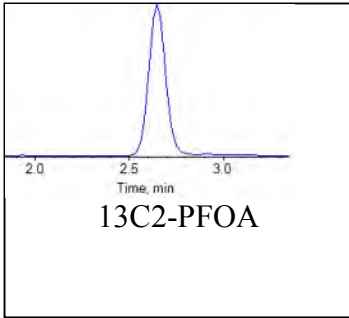
Sample Name	J7399-FS(3)	Injection Vial	43
Sample ID	NASB-BLL15-GW-03-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:14:05	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Chromatograms

Target Analytes:



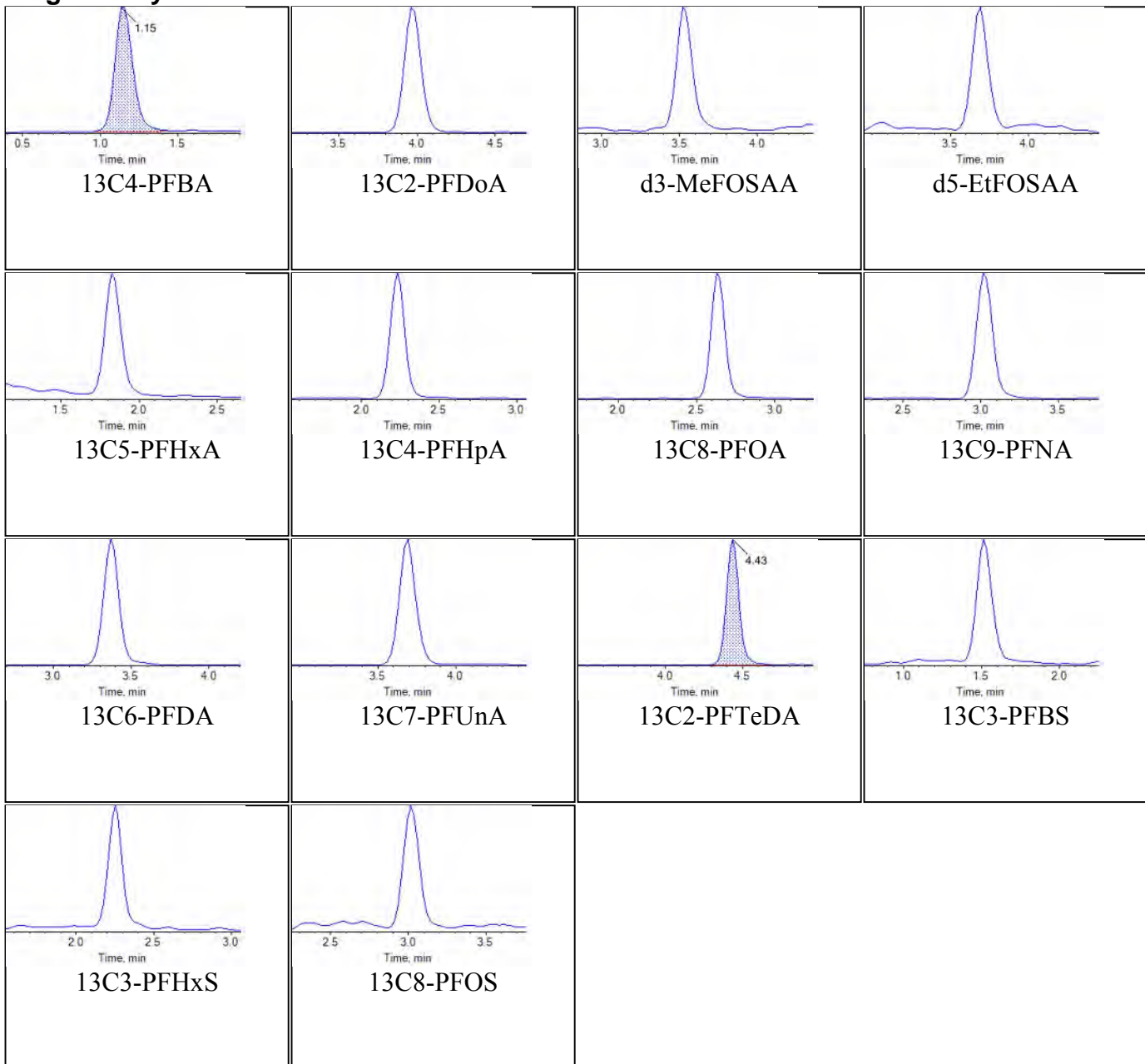
Internal Standards:



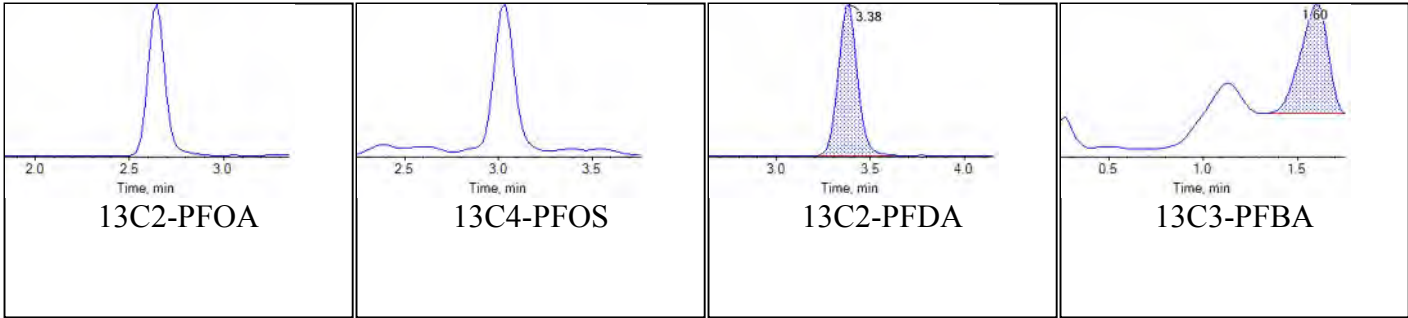
Sample Name	J7400-FS(3)	Injection Vial	44
Sample ID	NASB-BLL15-GW-04-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:24:57	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Chromatograms

Target Analytes:



Internal Standards:



"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","375-22-4","PFBA",".210000","ng/L","J",".14","MDL","","T","","","5.00","LOQ","YES",-99.000000","",".250000",".000500",".50",""

"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","307-24-4","PFHxA","1.890000","ng/L","J",".19","MDL","","T","","","5.00","LOQ","YES",-99.000000","",".250000",".000500",".50",""

"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","375-85-9","PFHpA",".500000","ng/L","U",".16","MDL","","T","","","5.00","LOQ","YES",-99.000000","",".250000",".000500",".50",""

"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","335-67-1","PFOA","1.210000","ng/L","J",".18","MDL","","T","","","5.00","LOQ","YES",-99.000000","",".250000",".000500",".50",""

"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","375-95-1","PFNA","1.000000","ng/L","U",".26","MDL","","T","","","5.00","LOQ","YES",-99.000000","",".250000",".000500","1.00",""

"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","335-76-2","PFDA",".500000","ng/L","U",".16","MDL","","T","","","5.00","LOQ","YES",-99.000000","",".250000",".000500",".50",""

"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","2058-94-8","PFUnA","1.000000","ng/L","U",".29","MDL","","T","","","5.00","LOQ","YES",-99.000000","",".250000",".000500","1.00",""

"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","307-55-1","PFDaA",".500000","ng/L","U",".18","MDL","","T","","","5.00","LOQ","YES",-99.000000","",".250000",".000500",".50",""

"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","72629-94-8","PFTrDA",".500000","ng/L","U",".15","MDL","","T","","","5.00","LOQ","YES",-99.000000","",".250000",".000500",".50",""

"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","376-06-7","PFTeDA","1.000000","ng/L","U",".25","MDL","","T","","","5.00","LOQ","YES",-99.000000","",".250000",".000500","1.00",""

"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","2355-31-9","NMeFOSAA","2.000000","ng/L","U",".56","MDL","","T","","","5.00","LOQ","YES",-99.000000","",".250000",".000500","2.00",""

"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","2991-50-6","NEtFOSAA","1.000000","ng/L","U",".49","MDL","","T","","","5.00","LOQ","YES",-99.000000","",".250000",".000500","1.00",""

"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","375-73-5","PFBS",".500000","ng/L","U",".13","MDL","","T","","","5.00","LOQ","YES",-99.000000","",".250000",".000500",".50",""

"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","355-46-4","PFHxS",".400000","ng/L","U",".11","MDL","","T","","","5.00","LOQ","YES",-99.000000","",".250000",".000500",".40",""

"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","1763-23-1","PFOS",".600000","ng/L","J",".19","MDL","","T","","","5.00","LOQ","YES",-99.000000","",".250000",".000500",".50",""

"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","BDO-2105","13C4-PFBA",".660000","ng/L","","-99.00","NA","","SIS","132.00","","-99.00","NA","YES",".500000","",".250000",".000500",".50",""

"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","BDO-2217","13C5-PFHxA",".660000","ng/L","","-99.00","NA","","SIS","131.00","","-99.00","NA","YES",".500000","",".250000",".000500",".50",""

"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","BDO-2218","13C4-PFHpA",".670000","ng/L","","-99.00","NA","","SIS","133.00","","-99.00","NA","YES",".500000","",".250000",".000500",".50",""

00",".50",""
"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","BDO-2219","13C8-
PFOA",".680000","ng/L","",-99.00","NA","","SIS","137.00","",-99.00","NA","YES",".500000","",".250000",".00050
0",".50",""
"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","BDO-2221","13C9-
PFNA",".680000","ng/L","",-99.00","NA","","SIS","136.00","",-99.00","NA","YES",".500000","",".250000",".00050
0",".50",""
"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","BDO-2222","13C6-
PFDA",".690000","ng/L","",-99.00","NA","","SIS","139.00","",-99.00","NA","YES",".500000","",".250000",".00050
0",".50",""
"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","BDO-2223","13C7-
PFUnA",".690000","ng/L","",-99.00","NA","","SIS","139.00","",-99.00","NA","YES",".500000","",".250000",".0005
00",".50",""
"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","BDO-2112","13C2-
PFDoA",".610000","ng/L","",-99.00","NA","","SIS","122.00","",-99.00","NA","YES",".500000","",".250000",".0005
00",".50",""
"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","BDO-2224","13C2-
PFTeDA",".560000","ng/L","",-99.00","NA","","SIS","112.00","",-99.00","NA","YES",".500000","",".250000",".000
500",".50",""
"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","BDO-1838","d3-
MeFOSAA",".610000","ng/L","",-99.00","NA","","SIS","122.00","",-99.00","NA","YES",".500000","",".250000",".0
00500",".50",""
"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","BDO-1839","d5-
EtFOSAA",".730000","ng/L","",-99.00","NA","","SIS","146.00","",-99.00","NA","YES",".500000","",".250000",".00
0500",".50",""
"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","BDO-2226","13C3-
PFBS",".630000","ng/L","",-99.00","NA","","SIS","135.00","",-99.00","NA","YES",".470000","",".250000",".00050
0",".50",""
"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","BDO-2227","13C3-
PFHxS",".660000","ng/L","",-99.00","NA","","SIS","139.00","",-99.00","NA","YES",".470000","",".250000",".0005
00",".50",""
"CR552PB-FS","SOP 5-369","Initial","CR552PB-FS","BNO","BDO-2228","13C8-
PFOS",".610000","ng/L","",-99.00","NA","","SIS","128.00","",-99.00","NA","YES",".480000","",".250000",".00050
0",".50",""
"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","375-22-
4","PFBA","11.040000","ng/L","",".14","MDL","","T","110.00","",".5.00","LOQ","YES","10.000000","",".250000",".0
00500",".50",""
"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","307-24-
4","PFHxA","12.610000","ng/L","B",".19","MDL","","T","125.00","",".5.00","LOQ","YES","10.100000","",".250000",
".000500",".50",""
"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","375-85-
9","PFHpA","11.000000","ng/L","",".16","MDL","","T","110.00","",".5.00","LOQ","YES","10.000000","",".250000",".
000500",".50",""
"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","335-67-
1","PFOA","12.270000","ng/L","",".18","MDL","","T","123.00","",".5.00","LOQ","YES","10.000000","",".250000",".0
00500",".50",""
"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","375-95-
1","PFNA","10.130000","ng/L","",".26","MDL","","T","101.00","",".5.00","LOQ","YES","10.000000","",".250000",".0
00500","1.00",""
"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","335-76-
2","PFDA","10.010000","ng/L","",".16","MDL","","T","100.00","",".5.00","LOQ","YES","10.000000","",".250000",".0
00500",".50",""
"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","2058-94-
8","PFUnA","9.370000","ng/L","",".29","MDL","","T","94.00","",".5.00","LOQ","YES","10.000000","",".250000",".00

0500","1.00",""
"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","307-55-1","PFD_oA","10.260000","ng/L","",".18","MDL","", "T","103.00","", "5.00","LOQ","YES","10.000000","", ".250000",".000500",".50",""
"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","72629-94-8","PFT_rDA","10.280000","ng/L","", ".15","MDL","", "T","103.00","", "5.00","LOQ","YES","10.000000","", ".250000",".000500",".50",""
"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","376-06-7","PFT_eDA","10.590000","ng/L","", ".25","MDL","", "T","106.00","", "5.00","LOQ","YES","10.000000","", ".250000",".000500","1.00",""
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"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","2991-50-6","NEtFOSAA","10.770000","ng/L","", ".49","MDL","", "T","108.00","", "5.00","LOQ","YES","10.000000","", ".250000",".000500","1.00",""
"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","375-73-5","PFBS","10.260000","ng/L","", ".13","MDL","", "T","102.00","", "5.00","LOQ","YES","10.100000","", ".250000",".000500",".50",""
"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","355-46-4","PFH_xS","9.810000","ng/L","", ".11","MDL","", "T","97.00","", "5.00","LOQ","YES","10.100000","", ".250000",".000500",".40",""
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"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","BDO-2105","13C4-PFBA",".440000","ng/L","", "-99.00","NA","", "SIS","88.00","", "-99.00","NA","YES",".500000","", ".250000",".000500",".50",""
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"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","BDO-2221","13C9-PFNA",".530000","ng/L","", "-99.00","NA","", "SIS","106.00","", "-99.00","NA","YES",".500000","", ".250000",".000500",".50",""
"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","BDO-2222","13C6-PFDA",".620000","ng/L","", "-99.00","NA","", "SIS","123.00","", "-99.00","NA","YES",".500000","", ".250000",".000500",".50",""
"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","BDO-2223","13C7-PFUnA",".600000","ng/L","", "-99.00","NA","", "SIS","119.00","", "-99.00","NA","YES",".500000","", ".250000",".000500",".50",""
"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","BDO-2112","13C2-PFD_oA",".570000","ng/L","", "-99.00","NA","", "SIS","115.00","", "-99.00","NA","YES",".500000","", ".250000",".000500",".50",""
"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","BDO-2224","13C2-PFT_eDA",".530000","ng/L","", "-99.00","NA","", "SIS","105.00","", "-99.00","NA","YES",".500000","", ".250000",".000500",".50",""
"CR553LCS-FS","SOP 5-369","Initial","CR553LCS-FS","BNO","BDO-1838","d3-MeFOSAA",".540000","ng/L","", "-99.00","NA","", "SIS","108.00","", "-99.00","NA","YES",".500000","", ".250000",".000500",".50",""

00500", ".50", ""
"CR553LCS-FS", "SOP 5-369", "Initial", "CR553LCS-FS", "BNO", "BDO-1839", "d5-
EtFOSAA", ".500000", "ng/L", "", "-99.00", "NA", "", "SIS", "101.00", "", "-99.00", "NA", "YES", ".500000", "", ".250000", ".00
0500", ".50", ""
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PFBS", ".470000", "ng/L", "", "-99.00", "NA", "", "SIS", "101.00", "", "-99.00", "NA", "YES", ".470000", "", ".250000", ".00050
0", ".50", ""
"CR553LCS-FS", "SOP 5-369", "Initial", "CR553LCS-FS", "BNO", "BDO-2227", "13C3-
PFHxS", ".500000", "ng/L", "", "-99.00", "NA", "", "SIS", "106.00", "", "-99.00", "NA", "YES", ".470000", "", ".250000", ".0005
00", ".50", ""
"CR553LCS-FS", "SOP 5-369", "Initial", "CR553LCS-FS", "BNO", "BDO-2228", "13C8-
PFOS", ".560000", "ng/L", "", "-99.00", "NA", "", "SIS", "116.00", "", "-99.00", "NA", "YES", ".480000", "", ".250000", ".00050
0", ".50", ""
"NASB-CCC-GW-01-0818", "SOP 5-369", "Initial", "J7394-FS", "BNO", "375-22-
4", "PFBA", "3.860000", "ng/L", "J", ".12", "MDL", "", "T", "", "", "4.39", "LOQ", "YES", "-99.000000", "", ".285000", ".000500
", ".44", ""
"NASB-CCC-GW-01-0818", "SOP 5-369", "Initial", "J7394-FS", "BNO", "307-24-
4", "PFHxA", "1.190000", "ng/L", "J", ".17", "MDL", "", "T", "", "", "4.39", "LOQ", "YES", "-99.000000", "", ".285000", ".00050
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"NASB-CCC-GW-01-0818", "SOP 5-369", "Initial", "J7394-FS", "BNO", "375-85-
9", "PFHpA", ".960000", "ng/L", "J", ".14", "MDL", "", "T", "", "", "4.39", "LOQ", "YES", "-99.000000", "", ".285000", ".000500
", ".44", ""
"NASB-CCC-GW-01-0818", "SOP 5-369", "Initial", "J7394-FS", "BNO", "335-67-
1", "PFOA", "6.280000", "ng/L", "B", ".16", "MDL", "", "T", "", "", "4.39", "LOQ", "YES", "-99.000000", "", ".285000", ".00050
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".88", ""
"NASB-CCC-GW-01-0818", "SOP 5-369", "Initial", "J7394-FS", "BNO", "335-76-
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"NASB-BLL15-GW-03-0818","SOP 5-369","Initial","J7399-FS","BNO","BDO-2222","13C6-PFDA",".380000","ng/L","","-99.00","NA","","SIS","81.00","","-99.00","NA","YES",".470000","",".265000",".000500",".50",""
"NASB-BLL15-GW-03-0818","SOP 5-369","Initial","J7399-FS","BNO","BDO-2223","13C7-PFUnA",".390000","ng/L","","-99.00","NA","","SIS","82.00","","-99.00","NA","YES",".470000","",".265000",".000500",".50",""
"NASB-BLL15-GW-03-0818","SOP 5-369","Initial","J7399-FS","BNO","BDO-2112","13C2-PFDoA",".330000","ng/L","","-99.00","NA","","SIS","69.00","","-99.00","NA","YES",".470000","",".265000",".000500",".50",""
"NASB-BLL15-GW-03-0818","SOP 5-369","Initial","J7399-FS","BNO","BDO-2224","13C2-PFTeDA",".180000","ng/L","","-99.00","NA","","SIS","38.00","","-99.00","NA","YES",".470000","",".265000",".000500",".50",""
"NASB-BLL15-GW-03-0818","SOP 5-369","Initial","J7399-FS","BNO","BDO-1838","d3-MeFOSAA",".500000","ng/L","","-99.00","NA","","SIS","106.00","","-99.00","NA","YES",".470000","",".265000",".000500",".50",""
"NASB-BLL15-GW-03-0818","SOP 5-369","Initial","J7399-FS","BNO","BDO-1839","d5-EtFOSAA",".430000","ng/L","","-99.00","NA","","SIS","91.00","","-99.00","NA","YES",".470000","",".265000",".000500",".50",""
"NASB-BLL15-GW-03-0818","SOP 5-369","Initial","J7399-FS","BNO","BDO-2226","13C3-PFBS",".430000","ng/L","","-99.00","NA","","SIS","97.00","","-99.00","NA","YES",".440000","",".265000",".000500"

",".50",""
"NASB-BLL15-GW-03-0818","SOP 5-369","Initial","J7399-FS","BNO","BDO-2227","13C3-PFHxS",".530000","ng/L","",-99.00","NA","","SIS","118.00","",-99.00","NA","YES",".450000","",".265000",".000500",".50",""
"NASB-BLL15-GW-03-0818","SOP 5-369","Initial","J7399-FS","BNO","BDO-2228","13C8-PFOS",".480000","ng/L","",-99.00","NA","","SIS","107.00","",-99.00","NA","YES",".450000","",".265000",".000500",".50",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","375-22-4","PFBA","17.430000","ng/L","",".12","MDL","","T","","","4.31","LOQ","YES","-99.000000","",".290000",".000500",".43",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","307-24-4","PFHxA","6.760000","ng/L","B",".16","MDL","","T","","","4.31","LOQ","YES","-99.000000","",".290000",".000500",".43",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","375-85-9","PFHpA","4.010000","ng/L","J",".14","MDL","","T","","","4.31","LOQ","YES","-99.000000","",".290000",".000500",".43",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","335-67-1","PFOA","15.390000","ng/L","",".16","MDL","","T","","","4.31","LOQ","YES","-99.000000","",".290000",".000500",".43",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","375-95-1","PFNA",".770000","ng/L","J",".22","MDL","","T","","","4.31","LOQ","YES","-99.000000","",".290000",".000500",".86",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","335-76-2","PFDA",".430000","ng/L","U",".14","MDL","","T","","","4.31","LOQ","YES","-99.000000","",".290000",".000500",".43",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","2058-94-8","PFUnA",".860000","ng/L","U",".25","MDL","","T","","","4.31","LOQ","YES","-99.000000","",".290000",".000500",".86",""
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"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","72629-94-8","PFTTrDA",".430000","ng/L","U",".13","MDL","","T","","","4.31","LOQ","YES","-99.000000","",".290000",".000500",".43",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","376-06-7","PFTeDA",".860000","ng/L","U",".22","MDL","","T","","","4.31","LOQ","YES","-99.000000","",".290000",".000500",".86",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","2355-31-9","NMeFOSAA","1.720000","ng/L","U",".48","MDL","","T","","","4.31","LOQ","YES","-99.000000","",".290000",".000500","1.72",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","2991-50-6","NEtFOSAA",".860000","ng/L","U",".42","MDL","","T","","","4.31","LOQ","YES","-99.000000","",".290000",".000500",".86",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","375-73-5","PFBS","2.840000","ng/L","J",".11","MDL","","T","","","4.31","LOQ","YES","-99.000000","",".290000",".000500",".43",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","355-46-4","PFHxS","11.030000","ng/L","",".09","MDL","","T","","","4.31","LOQ","YES","-99.000000","",".290000",".000500",".34",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","1763-23-1","PFOS","78.410000","ng/L","",".16","MDL","","T","","","4.31","LOQ","YES","-99.000000","",".290000",".000500",".43",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","BDO-2105","13C4-PFBA",".080000","ng/L","","-99.00","NA","","SIS","19.00","","-99.00","NA","YES",".430000","",".290000",".000500

",".50",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","BDO-2217","13C5-PFHxA",".310000","ng/L","",-99.00","NA","","SIS","72.00","",-99.00","NA","YES",".430000","",".290000",".000500",".50",""
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"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","BDO-2221","13C9-PFNA",".310000","ng/L","",-99.00","NA","","SIS","71.00","",-99.00","NA","YES",".430000","",".290000",".000500",".50",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","BDO-2222","13C6-PFDA",".300000","ng/L","",-99.00","NA","","SIS","70.00","",-99.00","NA","YES",".430000","",".290000",".000500",".50",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","BDO-2223","13C7-PFUnA",".250000","ng/L","",-99.00","NA","","SIS","59.00","",-99.00","NA","YES",".430000","",".290000",".000500",".50",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","BDO-2112","13C2-PFDoA",".210000","ng/L","",-99.00","NA","","SIS","50.00","",-99.00","NA","YES",".430000","",".290000",".000500",".50",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","BDO-2224","13C2-PFTeDA",".160000","ng/L","",-99.00","NA","","SIS","38.00","",-99.00","NA","YES",".430000","",".290000",".000500",".50",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","BDO-1838","d3-MeFOSAA",".300000","ng/L","",-99.00","NA","","SIS","69.00","",-99.00","NA","YES",".430000","",".290000",".000500",".50",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","BDO-1839","d5-EtFOSAA",".380000","ng/L","",-99.00","NA","","SIS","87.00","",-99.00","NA","YES",".430000","",".290000",".000500",".50",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","BDO-2226","13C3-PFBS",".400000","ng/L","",-99.00","NA","","SIS","100.00","",-99.00","NA","YES",".400000","",".290000",".000500",".50",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","BDO-2227","13C3-PFHxS",".370000","ng/L","",-99.00","NA","","SIS","90.00","",-99.00","NA","YES",".410000","",".290000",".000500",".50",""
"NASB-BLL15-GW-04-0818","SOP 5-369","Initial","J7400-FS","BNO","BDO-2228","13C8-PFOS",".310000","ng/L","",-99.00","NA","","SIS","76.00","",-99.00","NA","YES",".410000","",".290000",".000500",".50",""
"NASB-BLL15-GW-RB01-080918","SOP 5-369","Initial","J7402-FS","BNO","375-22-4","PFBA",".490000","ng/L","U",".14","MDL","","T","","","4.90","LOQ","YES","-99.000000","",".255000",".000500",".49",""
"NASB-BLL15-GW-RB01-080918","SOP 5-369","Initial","J7402-FS","BNO","307-24-4","PFHxA",".1450000","ng/L","J",".19","MDL","","T","","","4.90","LOQ","YES","-99.000000","",".255000",".000500",".49",""
"NASB-BLL15-GW-RB01-080918","SOP 5-369","Initial","J7402-FS","BNO","375-85-9","PFHpA",".630000","ng/L","J",".16","MDL","","T","","","4.90","LOQ","YES","-99.000000","",".255000",".000500",".49",""
"NASB-BLL15-GW-RB01-080918","SOP 5-369","Initial","J7402-FS","BNO","335-67-1","PFOA",".1380000","ng/L","J",".18","MDL","","T","","","4.90","LOQ","YES","-99.000000","",".255000",".000500",".49",""
"NASB-BLL15-GW-RB01-080918","SOP 5-369","Initial","J7402-FS","BNO","375-95-1","PFNA",".980000","ng/L","U",".25","MDL","","T","","","4.90","LOQ","YES","-99.000000","",".255000",".000500"

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"NASB-BLL15-GW-RB01-080918","SOP 5-369","Initial","J7402-FS","BNO","2058-94-
8","PFUnA",".980000","ng/L","U",".28","MDL","","T","","","4.90","LOQ","YES","-99.000000","",".255000",".00050
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"NASB-BLL15-GW-RB01-080918","SOP 5-369","Initial","J7402-FS","BNO","307-55-
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"NASB-BLL15-GW-RB01-080918","SOP 5-369","Initial","J7402-FS","BNO","72629-94-
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00",".49",""
"NASB-BLL15-GW-RB01-080918","SOP 5-369","Initial","J7402-FS","BNO","376-06-
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"NASB-BLL15-GW-RB01-080918","SOP 5-369","Initial","J7402-FS","BNO","2355-31-
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6","NEtFOSAA",".980000","ng/L","U",".48","MDL","","T","","","4.90","LOQ","YES","-99.000000","",".255000",".00
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4","PFHxS",".270000","ng/L","J",".11","MDL","","T","","","4.90","LOQ","YES","-99.000000","",".255000",".000500
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"NASB-BLL15-GW-RB01-080918","SOP 5-369","Initial","J7402-FS","BNO","1763-23-
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PFHpA",".500000","ng/L","","-99.00","NA","","SIS","102.00","","-99.00","NA","YES",".490000","",".255000",".0005
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PFOA",".460000","ng/L","","-99.00","NA","","SIS","94.00","","-99.00","NA","YES",".490000","",".255000",".000500
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"NASB-BLL15-GW-RB01-080918","SOP 5-369","Initial","J7402-FS","BNO","BDO-2221","13C9-
PFNA",".460000","ng/L","","-99.00","NA","","SIS","94.00","","-99.00","NA","YES",".490000","",".255000",".000500
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PFDA",".500000","ng/L","","-99.00","NA","","SIS","103.00","","-99.00","NA","YES",".490000","",".255000",".00050
0",".50",""
"NASB-BLL15-GW-RB01-080918","SOP 5-369","Initial","J7402-FS","BNO","BDO-2223","13C7-
PFUnA",".480000","ng/L","","-99.00","NA","","SIS","98.00","","-99.00","NA","YES",".490000","",".255000",".00050
0",".50",""
"NASB-BLL15-GW-RB01-080918","SOP 5-369","Initial","J7402-FS","BNO","BDO-2112","13C2-
PFDoA",".430000","ng/L","","-99.00","NA","","SIS","87.00","","-99.00","NA","YES",".490000","",".255000",".00050

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"112G08005-we21.PT.LT","CTO WE21, Former Naval Air Station Brunswick","NASB-BLL15-GW-01-0818MSD","","GW","J7397MSD-FS","MSD","",-99.000000","SOP 5-369","Gen Prep","Initial","08/15/2018 13:28","08/25/2018 06:46","BNO","COA","NA","T","2.000","NA","NA","","100.000000","18-0500","18-0500","DP-18-0217","DP-18-0217","18-0500","08/15/2018 13:28","08/31/2018 14:37",""
"112G08005-we21.PT.LT","CTO WE21, Former Naval Air Station Brunswick","NASB-BLL15-DUP-080918","08/09/2018 09:45","GW","J7398-FS","NM","SHP-180810-03",".900000","SOP 5-369","Gen Prep","Initial","08/15/2018 13:28","08/25/2018 06:57","BNO","COA","NA","T","2.000","NA","NA","","100.000000","18-0500","18-0500","DP-18-0217","DP-18-0217","18-0500","08/10/2018 10:30","08/31/2018 14:37",""
"112G08005-we21.PT.LT","CTO WE21, Former Naval Air Station Brunswick","NASB-BLL15-GW-03-0818","08/09/2018 10:54","GW","J7399-FS","NM","SHP-180810-03",".900000","SOP 5-369","Gen Prep","Initial","08/15/2018 13:28","08/25/2018 07:08","BNO","COA","NA","T","2.000","NA","NA","","100.000000","18-0500","18-0500","DP-18-0217","DP-18-0217","18-0500","08/10/2018 10:30","08/31/2018 14:37",""
"112G08005-we21.PT.LT","CTO WE21, Former Naval Air Station Brunswick","NASB-BLL15-GW-04-0818","08/09/2018 12:16","GW","J7400-FS","NM","SHP-180810-03",".900000","SOP 5-369","Gen Prep","Initial","08/15/2018 13:28","08/25/2018 07:18","BNO","COA","NA","T","2.000","NA","NA","","100.000000","18-0500","18-0500","DP-18-0217","DP-18-0217","18-0500","08/10/2018 10:30","08/31/2018 14:37",""
"112G08005-we21.PT.LT","CTO WE21, Former Naval Air Station Brunswick","NASB-BLL15-GW-RB01-080918","08/09/2018 14:15","QC","J7402-FS","NM","SHP-180810-03",".900000","SOP 5-369","Gen Prep","Initial","08/15/2018 10:11","08/25/2018 05:08","BNO","COA","NA","T","2.000","NA","NA","","100.000000","18-0500","18-0500","DP-18-0217","DP-18-0217","18-0500","08/10/2018 10:30","08/31/2018 14:37",""



TETRA TECH

INTERNAL CORRESPONDENCE

TO: J. ORIENT **DATE:** SEPTEMBER 13, 2018
FROM: TERRI L. SOLOMON **COPIES:** DV FILE
SUBJECT: ORGANIC DATA VALIDATION – POLYFLUOROALKYL SUBSTANCES (PFAS)
FORMER NAVAL AIR STATION (NAS) BRUNSWICK, BRUNSWICK, ME
CTO WE21
SAMPLE DELIVERY GROUPS (SDGs) 18-0500; 18-0520

SAMPLES: SDG 18-0500

7/Groundwater
NASB-BLL15-DUP-080918 NASB-BLL15-GW-01-0818
NASB-BLL15-GW-02-0818 NASB-BLL15-GW-03-0818
NASB-BLL15-GW-04-0818 NASB-CCC-GW-01-0818
NASB-CCC-GW-02-0818

1/Rinse Blank
NASB-BLL15-GW-RB01-080918

SDG 18-0520

1/ Field Blank
NASB-BLL15-GW-FB01-080918

Overview

The sample set for former NAS Brunswick, SDGs 18-0500 and 18-0520 consisted of seven (7) aqueous environmental samples, one (1) rinse blank and one (1) field blank. All aqueous samples were analyzed for Polyfluoroalkyl Substances (PFAS) including pentadecafluorooctanoic acid (PFOA), perfluorobutane sulfonic acid (PFBS), perfluoroheptanoic acid (PFHpA), perfluorohexanesulfonic acid (PFHxS), perfluorononanoic acid (PFNA), perfluorooctane sulfonic acid (PFOS), N-ethylperfluorooctane sulfonamidoacetate (NEFOSA), N-methylperfluorooctane sulfonamidoacetate (NMFOSA), perfluorodecanoic acid (PFDA), perfluorododecanoic acid (PFDoA), perfluorohexanoic acid (PFHxA), perfluorotetradecanoic acid (PFTeDA), perfluorotridecanoic acid (PFTrDA), perfluoroundecanoic acid (PFUnA) and perfluorobutanoic acid (PFBA). One (1) field duplicate pair, NASB-BLL15-GW-01-0818 / NASB-BLL15-DUP-080918 was included in this SDG.

The samples were collected by Tetra Tech, Inc. on August 8 and 9, 2018 and analyzed by Battelle Norwell Operations. The analyses were conducted using EPA Method 537 (Modified) analytical and reporting protocols. The data was evaluated based on the following parameters:

- * ● Data completeness
- * ● Hold times/Sample Preservation
- * ● Mass Calibration
- * ● LC/MS/MS System Tuning and Performance
- * ● Mass Spectral Acquisition Rate

- * • Instrument Sensitivity Check
- * • Ion Transition Check
- * • Initial/Continuing Calibrations
- Laboratory Instrument/Method/Field Blank Results
- Extraction Internal Standard (Surrogate) Recoveries
- Injection Internal Standard Recoveries
- * • Laboratory Control Sample Recoveries
- * • Matrix Spike / Matrix Spike Duplicate Recoveries
- * • Field Duplicate Precision
- * • Compound Identification
- * • Compound Quantitation
- * • Detection Limits

The asterisk (*) indicates that all quality control criteria were met for this parameter. Qualified (if applicable) analytical results are summarized in Appendix A. Results as reported by the laboratory are presented in Appendix B, and Appendix C contains the documentation to support the findings as discussed in this data validation report. An EPA Region 1 tier II validation at Stage 4 was performed on the data in these SDGs. The text of this report has been formulated to address only those areas affecting data quality.

PFAS

The following compounds were detected (< ½ LOQ) in the laboratory method/field blanks at concentrations below the Limit of Quantitation (LOQ).

Analyte	Maximum Concentration (ng/L)	Action Level LOQ > or <
PFHxA ⁽¹⁾	1.89	< LOQ
PFOA ⁽²⁾	1.38	< LOQ
PFHpA ⁽²⁾	0.63	< LOQ
PFHxS ⁽²⁾	0.27	< LOQ
PFOS ⁽²⁾	1.03	< LOQ
PFBA ⁽³⁾	2.31	< LOQ

⁽¹⁾ – Maximum concentration detected in the laboratory method blank affecting all samples except NASB-BLL15-GW-FB01-080918.

⁽²⁾ – Maximum concentration detected in the rinse blank.

⁽³⁾ – Maximum concentration detected in the field blank.

The detected results reported below the LOQ in the affected samples were qualified as non-detected, (U). Field blanks are not qualified for blank contamination

The extraction internal standard (surrogate) recoveries for 13C4-PFBA and 13C2-PFTeDA were below the 50% quality control limit for samples NASB-BLL15-GW-01-0818, NASB-BLL15-DUP-080918, NASB-BLL15-GW-03-0818 and NASB-BLL15-GW-04-0818. The laboratory reanalyzed the samples with similar results. The original samples were used for validation. The compounds PFBA, PFTeDA and PFTrDA were affected. The detected and nondetected results reported for the affected compounds were qualified as estimated with a low bias (J-) and (UJ), respectively.

Samples NASB-BLL15-GW-01-0818, NASB-BLL15-DUP-080918, NASB-BLL15-GW-01-0818 matrix spike and NASB-BLL15-GW-01-0818 matrix spike duplicate had surrogate recoveries for 13C4-PFBA less than 10%. The laboratory did not re-prepare the field duplicate pair referenced above. Because sample NASB-BLL15-

TO: J. ORIENT
SDGs: 18-0500; 18-0520

PAGE 3

GW-01-0818 is the sample basis for the duplicate and quality control samples, the issue of low recoveries were confirmed in all four sample analyses.

The injection internal standard compound 13C3-PFBA had peak areas above the 150% quality control limit for samples NASB-BLL15-GW-01-0818, NASB-BLL15-DUP-080918 and NASB-BLL15-GW-04-0818. The laboratory reanalyzed the samples with similar results. The injection standard 13C3-PFBA is only used to quantify the extraction internal standard 13C4-PFBA which is used to quantify PFBA. The original samples were used for validation. The detected results reported for PFBA in the affected samples were qualified as estimated with a low bias (J-).

NOTES

It was noted in the case narrative that the original analysis sequence for SDG 18-0500 had an instrument error that lead to a retention time shift on 08/21/2018. All samples were reanalyzed on 08/25/2018.

The laboratory uses a primary transition for the quantitation of each analyte and a secondary transition for confirmation.

All samples were analyzed at a 2X dilution including field blanks and laboratory quality control samples.

Detected results reported below the LOQ but above the Detection Limit (DL) were qualified as estimated, (J).

Non-detected results are reported to limit of detection (LOD).

The injection internal standard compounds 13C3-PFBA, 13C2-PFOA, 13C2-PFDA and 13C4-PFOS had peak areas below the 50% quality control limit for sample NASB-CCC-GW-01-0818. The laboratory reanalyzed the sample with passing results. The reanalysis was used for validation. No validation actions were required.

Samples NASB-BLL15-GW-03-0818 and NASB-BLL15-GW-04-0818 were not re-prepared by the lab but were re-analyzed. No further action was taken by the reviewer.

EXECUTIVE SUMMARY

Laboratory Performance: Contaminants were detected in the laboratory method/field blanks. Two extraction internal standard recoveries were below the quality control limits for several samples. One injection internal standard compound area was above the quality control limits for several samples.

Other Factors Affecting Data Quality: Detected results below the LOQ were estimated.

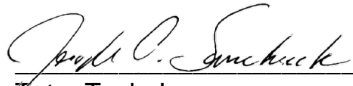
The data for these analyses were reviewed with reference to the EPA New England Environmental Data Review Supplement for Regional Data Review Elements Superfund Guidance/Procedures (April 2013), National Functional Guidelines for Organic Data Validation (January 2017), and the Department of Defense (DoD) document entitled, "Quality Systems Manual (QSM) for Environmental Laboratories" (July 2013). The text of this report has been formulated to address only those areas affecting data quality.



Tetra Tech, Inc.
Terri L. Solomon
Environmental Chemist

TO: J. ORIENT
SDGs: 18-0500; 18-0520

PAGE 4



Tetra Tech, Inc.
Joseph A. Samchuck
Data Validation Manager

Attachments:

Appendix A - Qualified Analytical Results
Appendix B - Results as reported by the Laboratory
Appendix C - Support Documentation

Data Qualifier Definitions

The following definitions provide brief explanations of the validation qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted detection limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the reporting limit).
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.
UJ	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
NJ	The analyte has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the sample.
R	The sample result (detected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
UR	The sample result (nondetected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
X	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team, but exclusion of the data is recommended.

Appendix A

Qualified Analytical Results

Qualifier Codes:

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (i.e., base-time drifting)
- P = Uncertainty near detection limit ($< 2 \times$ IDL for inorganics and $<$ CRQL for organics)
- Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = RPD between columns/detectors $>40\%$ for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids $<30\%$
- Z = Uncertainty at 2 standard deviations is greater than sample activity
- Z1 = Tentatively Identified Compound considered presumptively present
- Z2 = Tentatively Identified Compound column bleed
- Z3 = Tentatively Identified Compound aldol condensate
- Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
- Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

PROJ_NO: 08005-WE21 SDG: 18-0500 FRACTION: PFAS MEDIA: WATER	NSAMPLE	NASB-BLL15-DUP-080918			NASB-BLL15-GW-01-0818			NASB-BLL15-GW-02-0818			NASB-BLL15-GW-03-0818		
	LAB_ID	J7398-FS			J7397-FS			J7396-FS			J7399-FS		
	SAMP_DATE	8/9/2018			8/9/2018			8/9/2018			8/9/2018		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	NG/L			NG/L			NG/L			NG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF	NASB-BLL15-GW-01-0818											
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
N-ETHYLPERFLUOROOCCTANE SULFONAMIDOACETATE(NEFOSA)	0.91	U		0.96	U		0.93	U		0.94	U		
N-METHYLPERFLUOROOCCTANE SULFONAMIDOACETATE(NMFOSA)	1.82	U		1.92	U		1.85	U		1.89	U		
PENTADEC AFLUOROOCCTANOIC ACID (PFOA)	7.41			6.81			7.86			8.52			
PERFLUOROBUTANESULFONIC ACID (PFBS)	3.04	J	P	3.1	J	P	2.26	J	P	1.8	J	P	
PERFLUOROBUTANOIC ACID (PFBA)	43.74	J-	NR	57.74	J-	NR	0.46	U		0.47	UJ	R	
PERFLUORODECANOIC ACID (PFDA)	0.45	U		0.48	U		0.46	U		0.47	U		
PERFLUORODODECANOIC ACID (PFDOA)	0.45	U		0.48	U		0.46	U		0.47	U		
PERFLUOROHEPTANOIC ACID (PFHPA)	2.09	U	B	1.9	U	B	1.99	U	B	2.5	U	B	
PERFLUOROHEXANESULFONIC ACID (PFHXS)	14.22			12.63			11.26			10.73			
PERFLUOROHEXANOIC ACID (PFHXA)	4.16	U	A	3.47	U	A	3.84	U	A	3.77	U	A	
PERFLUORONONANOIC ACID (PFNA)	0.38	J	P	0.41	J	P	0.45	J	P	0.7	J	P	
PERFLUOROOCCTANESULFONIC ACID (PFOS)	2.67	U	B	3.3	U	B	5.86			11.61			
PERFLUOROTETRADECANOIC ACID (PFTEA)	0.91	UJ	R	0.96	UJ	R	0.93	U		0.94	UJ	R	
PERFLUOROTRIDECANOIC ACID (PFTRIA)	0.45	UJ	R	0.48	UJ	R	0.46	U		0.47	UJ	R	
PERFLUOROUNDECANOIC ACID (PFUNA)	0.91	U		0.96	U		0.93	U		0.94	U		

PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
N-ETHYLPERFLUOROOCCTANE SULFONAMIDOACETATE(NEFOSA)	0.86	U		0.98	U		0.88	U		0.91	U	
N-METHYLPERFLUOROOCCTANE SULFONAMIDOACETATE(NMFOSA)	1.72	U		1.96	U		1.75	U		1.82	U	
PENTADEC AFLUOROOCCTANOIC ACID (PFOA)	15.39			1.38	J	P	6.28			7.62		
PERFLUOROBUTANESULFONIC ACID (PFBS)	2.84	J	P	0.49	U		1.27	J	P	0.72	J	P
PERFLUOROBUTANOIC ACID (PFBA)	17.43	J-	NR	0.49	U		3.86	U	B	2.05	U	B
PERFLUORODECANOIC ACID (PFDA)	0.43	U		0.49	U		0.5	J	P	0.45	U	
PERFLUORODODECANOIC ACID (PFDOA)	0.43	U		0.49	U		0.44	U		0.45	U	
PERFLUOROHEPTANOIC ACID (PFHPA)	4.01	U	B	0.63	J	P	0.96	U	B	3.85	U	B
PERFLUOROHEXANESULFONIC ACID (PFHXS)	11.03			0.27	J	P	4	U	B	5.2		
PERFLUOROHEXANOIC ACID (PFHXA)	6.76			1.45	J	P	1.19	U	A	7.71		
PERFLUORONONANOIC ACID (PFNA)	0.77	J	P	0.98	U		0.78	J	P	0.29	J	P
PERFLUOROOCCTANESULFONIC ACID (PFOS)	78.41			1.03	J	P	3.36	U	B	6.22		
PERFLUOROTETRADECANOIC ACID (PFTEA)	0.86	UJ	R	0.98	U		0.88	U		0.91	U	
PERFLUOROTRIDECANOIC ACID (PFTRIA)	0.43	UJ	R	0.49	U		0.44	U		0.45	U	
PERFLUOROUNDECANOIC ACID (PFUNA)	0.86	U		0.98	U		0.88	U		0.91	U	

PROJ_NO: 08005-WE21 SDG: 18-0520 FRACTION: PFAS MEDIA: WATER	NSAMPLE	NASB-BLL15-GW-FB01-080918		
	LAB_ID	J7401-FS		
	SAMP_DATE	8/9/2018		
	QC_TYPE	NM		
	UNITS	NG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER	RESULT	VQL	QLCD	
N-ETHYLPERFLUOROOCTANE SULFONAMIDOACETATE(NEFOSA)	0.94	U		
N-METHYLPERFLUOROOCTANE SULFONAMIDOACETATE(NMFOSA)	1.89	U		
PENTADEC AFLUOROOCTANOIC ACID (PFOA)	1.28	J	P	
PERFLUOROBUTANESULFONIC ACID (PFBS)	0.47	U		
PERFLUOROBUTANOIC ACID (PFBA)	2.31	J	P	
PERFLUORODECANOIC ACID (PFDA)	0.47	U		
PERFLUORODODECANOIC ACID (PFDOA)	0.47	U		
PERFLUOROHEPTANOIC ACID (PFHPA)	0.47	U		
PERFLUOROHEXANESULFONIC ACID (PFHXS)	0.38	U		
PERFLUOROHEXANOIC ACID (PFHXA)	0.47	U		
PERFLUORONONANOIC ACID (PFNA)	0.94	U		
PERFLUOROOCTANESULFONIC ACID (PFOS)	0.47	U		
PERFLUOROTETRADECANOIC ACID (PFTEA)	0.94	U		
PERFLUOROTRIDECANOIC ACID (PFTRIA)	0.47	U		
PERFLUOROUNDECANOIC ACID (PFUNA)	0.94	U		

Appendix B

Results as Reported by the Laboratory



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	NASB-CCC-GW-01-0818			
Battelle ID	J7394-FS			
Sample Type	SA			
Collection Date	08/08/2018			
Extraction Date	08/15/2018			
Analysis Date	08/25/2018 08/29/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.285			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	3.86 J	0.12	0.44	4.39
PFHxA	1.19 J	0.17	0.44	4.39
PFHpA	0.96 J	0.14	0.44	4.39
PFOA	6.28 B	0.16	0.44	4.39
PFNA	0.78 J	0.23	0.88	4.39
PFDA	0.50 J	0.14	0.44	4.39
PFUnA	0.88 U	0.25	0.88	4.39
PFDoA	0.44 U	0.16	0.44	4.39
PFTTrDA	0.44 U	0.13	0.44	4.39
PFTeDA	0.88 U	0.22	0.88	4.39
NMeFOSAA	1.75 U	0.49	1.75	4.39
NEtFOSAA	0.88 U	0.43	0.88	4.39
PFBS	1.27 J	0.11	0.44	4.39
PFHxS	4.00 J	0.10	0.35	4.39
PFOS	3.36 J	0.17	0.44	4.39
Surrogate Recoveries (%)				
13C4-PFBA	66			
13C5-PFHxA	95			
13C4-PFHpA	99			
13C8-PFOA	86			
13C9-PFNA	85			
13C6-PFDA	86			
13C7-PFUnA	86			
13C2-PFDoA	77			
13C2-PFTeDA	80			
d3-MeFOSAA	80			
d5-EtFOSAA	61			
13C3-PFBS	94			
13C3-PFHxS	104			
13C8-PFOS	88			



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	NASB-CCC-GW-02-0818			
Battelle ID	J7395-FS			
Sample Type	SA			
Collection Date	08/08/2018			
Extraction Date	08/15/2018			
Analysis Date	08/25/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.275			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	2.05 J	0.13	0.45	4.55
PFHxA	7.71 B	0.17	0.45	4.55
PFHpA	3.85 J	0.15	0.45	4.55
PFOA	7.62 B	0.16	0.45	4.55
PFNA	0.29 J	0.24	0.91	4.55
PFDA	0.45 U	0.15	0.45	4.55
PFUnA	0.91 U	0.26	0.91	4.55
PFDoA	0.45 U	0.16	0.45	4.55
PFTTrDA	0.45 U	0.14	0.45	4.55
PFTeDA	0.91 U	0.23	0.91	4.55
NMeFOSAA	1.82 U	0.51	1.82	4.55
NEtFOSAA	0.91 U	0.45	0.91	4.55
PFBS	0.72 J	0.12	0.45	4.55
PFHxS	5.20	0.10	0.36	4.55
PFOS	6.22	0.17	0.45	4.55
Surrogate Recoveries (%)				
13C4-PFBA	58			
13C5-PFHxA	88			
13C4-PFHpA	94			
13C8-PFOA	76			
13C9-PFNA	85			
13C6-PFDA	83			
13C7-PFUnA	75			
13C2-PFDoA	77			
13C2-PFTeDA	67			
d3-MeFOSAA	72			
d5-EtFOSAA	66			
13C3-PFBS	102			
13C3-PFHxS	86			
13C8-PFOS	83			



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	NASB-BLL15-GW-02-0818			
Battelle ID	J7396-FS			
Sample Type	SA			
Collection Date	08/09/2018			
Extraction Date	08/15/2018			
Analysis Date	08/25/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.270			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	0.46 U	0.13	0.46	4.63
PFHxA	3.84 J	0.18	0.46	4.63
PFHpA	1.99 J	0.15	0.46	4.63
PFOA	7.86 B	0.17	0.46	4.63
PFNA	0.45 J	0.24	0.93	4.63
PFDA	0.46 U	0.15	0.46	4.63
PFUnA	0.93 U	0.27	0.93	4.63
PFDoA	0.46 U	0.17	0.46	4.63
PFTTrDA	0.46 U	0.14	0.46	4.63
PFTeDA	0.93 U	0.23	0.93	4.63
NMeFOSAA	1.85 U	0.52	1.85	4.63
NEtFOSAA	0.93 U	0.45	0.93	4.63
PFBS	2.26 J	0.12	0.46	4.63
PFHxS	11.26	0.10	0.37	4.63
PFOS	5.86 B	0.18	0.46	4.63
Surrogate Recoveries (%)				
13C4-PFBA	50			
13C5-PFHxA	97			
13C4-PFHpA	111			
13C8-PFOA	82			
13C9-PFNA	90			
13C6-PFDA	87			
13C7-PFUnA	75			
13C2-PFDoA	68			
13C2-PFTeDA	55			
d3-MeFOSAA	96			
d5-EtFOSAA	92			
13C3-PFBS	111			
13C3-PFHxS	122			
13C8-PFOS	99			



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	NASB-BLL15-GW-01-0818			
Battelle ID	J7397-FS			
Sample Type	SA			
Collection Date	08/09/2018			
Extraction Date	08/15/2018			
Analysis Date	08/25/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.260			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	57.74	0.13	0.48	4.81
PFHxA	3.47 J	0.18	0.48	4.81
PFHpA	1.90 J	0.15	0.48	4.81
PFOA	6.81 B	0.17	0.48	4.81
PFNA	0.41 J	0.25	0.96	4.81
PFDA	0.48 U	0.15	0.48	4.81
PFUnA	0.96 U	0.28	0.96	4.81
PFDoA	0.48 U	0.17	0.48	4.81
PFTTrDA	0.48 U	0.14	0.48	4.81
PFTeDA	0.96 U	0.24	0.96	4.81
NMeFOSAA	1.92 U	0.54	1.92	4.81
NEtFOSAA	0.96 U	0.47	0.96	4.81
PFBS	3.10 J	0.13	0.48	4.81
PFHxS	12.63	0.11	0.38	4.81
PFOS	3.30 J	0.18	0.48	4.81

Surrogate Recoveries (%)

13C4-PFBA	8 N
13C5-PFHxA	112
13C4-PFHpA	126
13C8-PFOA	102
13C9-PFNA	104
13C6-PFDA	99
13C7-PFUnA	91
13C2-PFDoA	73
13C2-PFTeDA	43 N
d3-MeFOSAA	95
d5-EtFOSAA	78
13C3-PFBS	100
13C3-PFHxS	128
13C8-PFOS	95



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	NASB-BLL15-DUP-080918			
Battelle ID	J7398-FS			
Sample Type	SA			
Collection Date	08/09/2018			
Extraction Date	08/15/2018			
Analysis Date	08/25/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.275			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	43.74	0.13	0.45	4.55
PFHxA	4.16 J	0.17	0.45	4.55
PFHpA	2.09 J	0.15	0.45	4.55
PFOA	7.41 B	0.16	0.45	4.55
PFNA	0.38 J	0.24	0.91	4.55
PFDA	0.45 U	0.15	0.45	4.55
PFUnA	0.91 U	0.26	0.91	4.55
PFDoA	0.45 U	0.16	0.45	4.55
PFTTrDA	0.45 U	0.14	0.45	4.55
PFTeDA	0.91 U	0.23	0.91	4.55
NMeFOSAA	1.82 U	0.51	1.82	4.55
NEtFOSAA	0.91 U	0.45	0.91	4.55
PFBS	3.04 J	0.12	0.45	4.55
PFHxS	14.22	0.10	0.36	4.55
PFOS	2.67 J	0.17	0.45	4.55

Surrogate Recoveries (%)

13C4-PFBA	7 N
13C5-PFHxA	79
13C4-PFHpA	97
13C8-PFOA	78
13C9-PFNA	84
13C6-PFDA	79
13C7-PFUnA	67
13C2-PFDoA	54
13C2-PFTeDA	36 N
d3-MeFOSAA	69
d5-EtFOSAA	67
13C3-PFBS	80
13C3-PFHxS	86
13C8-PFOS	79



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	NASB-BLL15-GW-03-0818			
Battelle ID	J7399-FS			
Sample Type	SA			
Collection Date	08/09/2018			
Extraction Date	08/15/2018			
Analysis Date	08/25/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.265			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	0.47 U	0.13	0.47	4.72
PFHxA	3.77 J	0.18	0.47	4.72
PFHpA	2.50 J	0.15	0.47	4.72
PFOA	8.52 B	0.17	0.47	4.72
PFNA	0.70 J	0.25	0.94	4.72
PFDA	0.47 U	0.15	0.47	4.72
PFUnA	0.94 U	0.27	0.94	4.72
PFDoA	0.47 U	0.17	0.47	4.72
PFTTrDA	0.47 U	0.14	0.47	4.72
PFTeDA	0.94 U	0.24	0.94	4.72
NMeFOSAA	1.89 U	0.53	1.89	4.72
NEtFOSAA	0.94 U	0.46	0.94	4.72
PFBS	1.80 J	0.12	0.47	4.72
PFHxS	10.73	0.10	0.38	4.72
PFOS	11.61	0.18	0.47	4.72

Surrogate Recoveries (%)

13C4-PFBA	13 N
13C5-PFHxA	93
13C4-PFHpA	101
13C8-PFOA	89
13C9-PFNA	97
13C6-PFDA	81
13C7-PFUnA	82
13C2-PFDoA	69
13C2-PFTeDA	38 N
d3-MeFOSAA	106
d5-EtFOSAA	91
13C3-PFBS	97
13C3-PFHxS	118
13C8-PFOS	107



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	NASB-BLL15-GW-04-0818			
Battelle ID	J7400-FS			
Sample Type	SA			
Collection Date	08/09/2018			
Extraction Date	08/15/2018			
Analysis Date	08/25/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	GW			
Sample Size	0.290			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	17.43	0.12	0.43	4.31
PFHxA	6.76 B	0.16	0.43	4.31
PFHpA	4.01 J	0.14	0.43	4.31
PFOA	15.39	0.16	0.43	4.31
PFNA	0.77 J	0.22	0.86	4.31
PFDA	0.43 U	0.14	0.43	4.31
PFUnA	0.86 U	0.25	0.86	4.31
PFDoA	0.43 U	0.16	0.43	4.31
PFTTrDA	0.43 U	0.13	0.43	4.31
PFTeDA	0.86 U	0.22	0.86	4.31
NMeFOSAA	1.72 U	0.48	1.72	4.31
NEtFOSAA	0.86 U	0.42	0.86	4.31
PFBS	2.84 J	0.11	0.43	4.31
PFHxS	11.03	0.09	0.34	4.31
PFOS	78.41	0.16	0.43	4.31

Surrogate Recoveries (%)

13C4-PFBA	19 N
13C5-PFHxA	72
13C4-PFHpA	91
13C8-PFOA	71
13C9-PFNA	71
13C6-PFDA	70
13C7-PFUnA	59
13C2-PFDoA	50
13C2-PFTeDA	38 N
d3-MeFOSAA	69
d5-EtFOSAA	87
13C3-PFBS	100
13C3-PFHxS	90
13C8-PFOS	76



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	NASB-BLL15-GW-RB01-080918			
Battelle ID	J7402-FS			
Sample Type	SA			
Collection Date	08/09/2018			
Extraction Date	08/15/2018			
Analysis Date	08/25/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	QC			
Sample Size	0.255			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	0.49 U	0.14	0.49	4.90
PFHxA	1.45 J	0.19	0.49	4.90
PFHpA	0.63 J	0.16	0.49	4.90
PFOA	1.38 J	0.18	0.49	4.90
PFNA	0.98 U	0.25	0.98	4.90
PFDA	0.49 U	0.16	0.49	4.90
PFUnA	0.98 U	0.28	0.98	4.90
PFDoA	0.49 U	0.18	0.49	4.90
PFTTrDA	0.49 U	0.15	0.49	4.90
PFTeDA	0.98 U	0.25	0.98	4.90
NMeFOSAA	1.96 U	0.55	1.96	4.90
NEtFOSAA	0.98 U	0.48	0.98	4.90
PFBS	0.49 U	0.13	0.49	4.90
PFHxS	0.27 J	0.11	0.39	4.90
PFOS	1.03 J	0.19	0.49	4.90

Surrogate Recoveries (%)

13C4-PFBA	81
13C5-PFHxA	98
13C4-PFHpA	102
13C8-PFOA	94
13C9-PFNA	94
13C6-PFDA	103
13C7-PFUnA	98
13C2-PFDoA	87
13C2-PFTeDA	85
d3-MeFOSAA	93
d5-EtFOSAA	82
13C3-PFBS	97
13C3-PFHxS	93
13C8-PFOS	90



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	NASB-BLL15-GW-FB01-080918			
Battelle ID	J7401-FS			
Sample Type	SA			
Collection Date	08/09/2018			
Extraction Date	08/22/2018			
Analysis Date	08/25/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	QC			
Sample Size	0.265			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	2.31 J	0.13	0.47	4.72
PFHxA	0.47 U	0.18	0.47	4.72
PFHpA	0.47 U	0.15	0.47	4.72
PFOA	1.28 J	0.17	0.47	4.72
PFNA	0.94 U	0.25	0.94	4.72
PFDA	0.47 U	0.15	0.47	4.72
PFUnA	0.94 U	0.27	0.94	4.72
PFDoA	0.47 U	0.17	0.47	4.72
PFTTrDA	0.47 U	0.14	0.47	4.72
PFTeDA	0.94 U	0.24	0.94	4.72
NMeFOSAA	1.89 U	0.53	1.89	4.72
NEtFOSAA	0.94 U	0.46	0.94	4.72
PFBS	0.47 U	0.12	0.47	4.72
PFHxS	0.38 U	0.10	0.38	4.72
PFOS	0.47 U	0.18	0.47	4.72

Surrogate Recoveries (%)

13C4-PFBA	53
13C5-PFHxA	52
13C4-PFHpA	54
13C8-PFOA	56
13C9-PFNA	51
13C6-PFDA	59
13C7-PFUnA	57
13C2-PFDoA	54
13C2-PFTeDA	51
d3-MeFOSAA	52
d5-EtFOSAA	55
13C3-PFBS	57
13C3-PFHxS	57
13C8-PFOS	59

Appendix C

Support Documentation

ANALYTE	ORIGINAL BLL15- GW-01	DUPLICATE BLL15- DUP	RL	RPD	RPD > 50%	ORIGINAL		
						SAMPLE CONC >2xRL	DUPLICATE SAMPLE CONC >2xRL	DIFFERENCE >2XRL
PENTADECAFLUOROOCTANOIC ACID (PFOA)	6.81	7.41	4.81	8.439	FALSE	FALSE	FALSE	FALSE
PERFLUOROBUTANESULFONIC ACID (PFBS)	3.1	3.04	4.81	1.954	FALSE	FALSE	FALSE	FALSE
PERFLUOROBUTANOIC ACID (PFBA)	57.74	43.74	4.81	27.592	FALSE	TRUE	TRUE	TRUE
PERFLUROHEPTANOIC ACID (PFHPA)	1.9	2.09	4.81	9.524	FALSE	FALSE	FALSE	FALSE
PERFLUROHEXANESULFONIC ACID (PFHXS)	12.63	14.22	4.81	11.844	FALSE	TRUE	TRUE	FALSE
PERFLUROHEXANOIC ACID (PFHXA)	3.47	4.16	4.81	18.087	FALSE	FALSE	FALSE	FALSE
PERFLURONONANOIC ACID (PFNA)	0.41	0.38	4.81	7.595	FALSE	FALSE	FALSE	FALSE
PERFLUROOCTANESULFONIC ACID (PFOS)	3.3	2.67	4.81	21.106	FALSE	FALSE	FALSE	FALSE

Sample Summary

Client: Tetra Tech Inc.

SDG: 18-0500

Project/Site: Former Naval Air Station, Brunswick, Maine

CTO: WE21

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Receipt Date
CR552PB-FS	Procedural Blank	WATER	8/15/2018	8/15/2018
CR553LCS-FS	Laboratory Control Sample	WATER	8/15/2018	8/15/2018
J7394-FS	NASB-CCC-GW-01-0818	GW	8/8/2018	8/10/2018
J7395-FS	NASB-CCC-GW-02-0818	GW	8/8/2018	8/10/2018
J7396-FS	NASB-BLL15-GW-02-0818	GW	8/9/2018	8/10/2018
J7397-FS	NASB-BLL15-GW-01-0818	GW	8/9/2018	8/10/2018
J7397MS-FS	NASB-BLL15-GW-01-0818	GW	8/9/2018	8/10/2018
J7397MSD-FS	NASB-BLL15-GW-01-0818	GW	8/9/2018	8/10/2018
J7398-FS	NASB-BLL15-DUP-080918	GW	8/9/2018	8/10/2018
J7399-FS	NASB-BLL15-GW-03-0818	GW	8/9/2018	8/10/2018
J7400-FS	NASB-BLL15-GW-04-0818	GW	8/9/2018	8/10/2018
J7402-FS	NASB-BLL15-GW-RB01-080918	QC	8/9/2018	8/10/2018



PROJECT NO: 112G08005WEZ1	FACILITY: NAS BRUNSWICK	PROJECT MANAGER JEFF ORIENT	PHONE NUMBER 412-921-7080	LABORATORY NAME AND CONTACT: 781-691-5588 BATTELLE JON THORN
SAMPLERS (SIGNATURE) <i>Sredlauer</i>		FIELD OPERATIONS LEADER FRED W. RAMSER	PHONE NUMBER 412-921-8838	ADDRESS 141 LONGWATER DR, SUITE 202
CARRIER/WAYBILL NUMBER FED EX 8111 8554 2137			CITY, STATE NORWELL, MA 02061	

STANDARD TAT RUSH TAT
 24 hr. 48 hr. 72 hr. 7 day 14 day

DATE YEAR	TIME	SAMPLE ID	LOCATION ID	TOP DEPTH (FT)	BOTTOM DEPTH (FT)	MATRIX (GW, SO, SW, SD, QC, ETC.)	COLLECTION METHOD GRAB (G) COMP (C)	No. OF CONTAINERS	CONTAINER TYPE PLASTIC (P) or GLASS (G)		PRESERVATIVE USED		TYPE OF ANALYSIS	COMMENTS
8/8	1512	NASB-CCC-GW-01-0818	CC MW01	-	-	GW	G	2					PFAS	
8/8	1606	NASB-CCC-GW-02-0818	CC MW02	-	-	GW	G	2					PFAS	
8/9	0837	NASB-BLL15-GW-02-0818	BLL15 MW02	-	-	GW	G	2					PFAS	
8/9	0940	NASB-BLL15-GW-01-0818	BLL15 MW01	-	-	GW	G	6+					PFAS	* RUN MS/MSD
8/9	0945	NASB-BLL15-DUP080918	-	-	-	GW	G	2					PFAS	
8/9	1054	NASB-BLL15-GW-03-0818	BLL15 MW03	-	-	GW	G	2					PFAS	
8/9	1216	NASB-BLL15-GW-04-0818	BLL15 MW04	-	-	GW	G	2					PFAS	
8/9	1400	NASB-BLL15-GW-RB01-080918	QC	-	-	QC	G	2					PFAS	
8/9	1415	NASB-BLL15-GW-RB01-080918	QC	-	-	QC	G	2					PFAS	

1. RELINQUISHED BY <i>Sredlauer</i>	DATE 8-9-18	TIME 1630	1. RECEIVED BY FED EX	DATE	TIME
2. RELINQUISHED BY	DATE	TIME	2. RECEIVED BY <i>M Battelle</i>	DATE 8-10-18	TIME 1030
3. RELINQUISHED BY	DATE	TIME	3. RECEIVED BY	DATE	TIME

COMMENTS

QA/QC Summary
Batch 18-0500

Project:	CTO-WE21: Former Naval Air Station, Brunswick, Maine
Parameters:	PFAS
Laboratory:	Battelle, Norwell, MA
Matrix:	GW
Data Set:	DP-18-0217
Analytical SOP:	5-369
Method Reference:	PFAS to QSM 5.1 Table B-15

Sample Custody		
Collection Date	Receipt Date	Temp (°C)
8/8 and 9/2018	8/10/2018	0.9
Corrective Actions	None.	
Sample Storage	The water samples were stored refrigerated until extraction.	
Related samples	This FRB sample is related to these field samples in SDG 18-0520.	

METHOD SUMMARIES	
Sample Preparation	Water samples were spiked with surrogates in the original sample container from the field. The water was extracted using a weak ion exchange solid phase extraction (SPE) cartridge and eluted from the SPE with 0.4% NH ₃ in methanol. Extracts were split and 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	Samples NASB-BLL15-GW-02-0818 (J7396-FS), NASB-BLL15-GW-01-0818 (J7397-FS), NASB-BLL15-GW-01-0818 (J7397MS-FS), NASB-BLL15-GW-01-0818 (J7397MSD-FS), NASB-BLL15-DUP-080918 (J7398-FS), NASB-BLL15-GW-03-0818 (J7399-FS), and NASB-BLL15-GW-04-0818 (J7400-FS) had a yellow color in the original sample containers.
Analysis	PFAS were measured by liquid chromatography tandem mass spectrometry (LC-MS/MS) in the multiple reaction monitoring (MRM). An initial calibration consisting of representative target analytes, labelled analogs, and internal standards was analyzed prior to analysis to demonstrate the linear range of analysis. Calibration verification was performed at the beginning and end of 10 injections and at the end of each sequence. Target PFAS were quantified using the isotope dilution method. Samples are reported in ng/L concentrations.
Analysis Comments	<p>Samples analyzed on Sciex 5500 LC-MS/MS.</p> <p>The original sequence for Data File NP_08212018.wiff had an instrument error that lead to retention time shifts, all samples were re-run with the sequence for Data File 18-0501-515-520-500.wiff. The original sequence can be found in the unused data section of the full data package.</p> <p>Sample NASB-CCC-GW-01-0818 (J7394-FS) failed internal standard area criteria for all four internal standards in the sequence for Data File 18-0501-515-520-500.wiff, this sample was re-run on the sequence for Data File 18-0511_18-</p>

QA/QC Summary
Batch 18-0500

	0517.wiff with passing results, this sample was reported from Data File 18-0511_18-0517.wiff with quant methods 18-0500_BASE_R and 18-0500_SIS_R.	
	Sample NASB-BLL15-GW-04-0818 (J7400-FS) had ion ratio exceedances (> 50% RPD) for PFOA.	
Holding Times	Extraction Date(s)	Analysis Date(s)
	8/15/2018	8/24, 25 and 28, 29/2018
Procedural Blank (PB)	A PB was prepared with this analytical batch to ensure the sample extraction and analysis methods are free of contamination.	
$\leq \frac{1}{2}$ the LOQ Samples >10x PB	<p>10 exceedances noted.</p> <p>PFHxA was detected in samples NASB-CCC-GW-02-0818 (J7395-FS), NASB-BLL15-GW-04-0818 (J7400-FS), and the LCS at a concentration less than 10 times the amount found in the PB. The amount found in the PB (1.89 ng/L) was less than $\frac{1}{2}$ the LOQ.</p> <p>PFOA was detected in samples NASB-CCC-GW-01-0818 (J7394-FS), NASB-CCC-GW-02-0818 (J7395-FS), NASB-BLL15-GW-02-0818 (J7396-FS), NASB-BLL15-GW-01-0818 (J7397-FS), NASB-BLL15-DUP-080918 (J7398-FS), and NASB-BLL15-GW-03-0818 (J7399-FS) at a concentration less than 10 times the amount found in the PB. The amount found in the PB (1.21 ng/L) was less than $\frac{1}{2}$ the LOQ.</p> <p>PFOS was detected in sample NASB-BLL15-GW-02-0818 (J7396-FS) at a concentration less than 10 times the amount found in the PB. The amount found in the PB (0.60 ng/L) was less than $\frac{1}{2}$ the LOQ.</p> <p>The PB was re-run to verify initial results, the re-analysis can be found in the unused data section of the full data package.</p>	
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	<p>No exceedances noted.</p> <p>No comments.</p>	
Matrix Spike (MS) / Duplicate (MSD)	A MS/MSD were prepared with this analytical batch. The percent recoveries of target analytes were calculated to measure accuracy. The relative percent difference was calculated to measure precision.	
Laboratory derived control limits for recovery, RPD \leq 30%	<p>No exceedances noted.</p> <p>No comments.</p>	

QA/QC Summary Batch 18-0500

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	12 exceedances noted. The surrogates 13C4-PFBA and 13C2-PFTeDA for samples NASB-BLL15-GW-01-0818 (J7397-FS), NASB-BLL15-GW-01-0818 (J7397MS-FS), NASB-BLL15-GW-01-0818 (J7397MSD-FS), NASB-BLL15-DUP-080918 (J7398-FS), NASB-BLL15-GW-03-0818 (J7399-FS), and NASB-BLL15-GW-04-0818 (J7400-FS) failed low. All extracts were re-run to verify the low recoveries, re-analysis results can be found in the unused data section of the full data package.
Internal Standard Analytes	Labelled analog compounds were added prior to analysis.
+/- 50% of the area of the L5 calibration point.	Five exceedances noted. 13C2-PFBA in samples NASB-BLL15-GW-01-0818 (J7397-FS), NASB-BLL15-GW-01-0818 (J7397MS-FS), NASB-BLL15-GW-01-0818 (J7397MSD-FS), NASB-BLL15-DUP-080918 (J7398-FS), and NASB-BLL15-GW-03-0818 (J7399-FS) were outside criteria in the sequence for Data File 18-0501-515-520-500.wiff, these samples were re-run on the sequence for Data File 18-0511_18-0517.wiff confirming the exceedances. The original results were reported, and the re-analysis can be found in the unused data section of the final data package.
Initial Calibration (ICAL)	The LC-MS/MS was calibrated with multi-level calibration curve for all compounds using linear or quadratic curve fitting.
+/- 30% of true value, $R^2 \geq 0.99$	No exceedances noted. No comments.
Independent Calibration Check (ICC)	The independent check was run after each initial calibration to verify the calibration. This standard is from a different source than the ICAL.
+/- 30% of true value	No exceedances noted. No comments.
Continuing Calibration Verification (CCV)	Continuing calibration standards were run at the beginning and end of 10 injections and at the end of the sequence to ensure that initial calibration is still valid.
+/- 30% of true value	No exceedances noted. No comments.
Instrument Blank (IB)	Immediately following the highest standard analyzed and daily prior to sample analysis.
$\leq \frac{1}{2}$ the LOQ	No exceedances noted. No comments.



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project Number: 100122108-CTOWE21
 Preparation Batch: 18-0500
 Data Set: DP-18-0217
 Test Code: Master_369

QC Parameter:	Exceed:	Justification:
Procedural Blank	0	None
PB Measurement Quality Objective	10	In Samples CR553LCS, J7400 and J7395 PFHxA was detected ten times lower than that of the PB. In samples J7394, J7395, J7396 J7397, J7398 and J7399 PFOA was detected ten times lower than that of the PB. The blank was run previously with the similar results and that data can be found in the unused data section of this package. DMS 8/30/2018
Laboratory Control Sample	0	None
Matrix Spike / Matrix Spike Duplicate Recovery	0	None
Matrix Spike / Matrix Spike Duplicate Precision	0	None
Extracted Internal Standard Analytes (Surrogates)	12	13C4-PFBA and 13C2-PFTeDA fall below passing criteria in samples J7397, J7398, J7399, J7400, J7397MS and J7397MSD. These samples were rerun against a new instrument and the results confirmed (this data can be found in the unused data section of this data package). All of these extracts were dark yellow in color and where all other extracted SIS's pass, matrix would have caused the suppression of the 13C4-PFBA and 13C2-PFTeDA. DMS 8/30/2018
Instrument Calibration	0	None
Instrument Blank	0	None
Independent Calibration Check	0	None
Continuing Calibration Verification	0	None



It can be done

BATTELLE - NORWELL OPERATIONS MISCELLANEOUS DOCUMENTATION FORM

Project Title:	CTO-WE21: Former Naval Air Station, B	Data Set Number:	DP-18-0217
Project Number:	100122108-CTOWE21	Prep Batch Number:	18-0500
Entered By:	Denise Schumitz	Entered On:	08/30/2018
Test Code (Matrix Type):	Master_369(L)		

Samples that were manually integrated are noted on the quant reports with the comment (TRUE).
DMS 8/30/2018

This batch was originally run on 8/21/2018 however due to an instrument error there was a retention time shift that warranted the samples to be rerun. The original data can be found in the unused data section of this data package.
DMS 8/30/2018

JY38 is not being used for PFHpA in method BASE_A. There is no impact on the data once this point is removed from the calibration.
DMS 8/30/2018

JY38 is not being used for PFBA and NEtFOSAA. There is no impact on the data once this point is removed from the calibration.
DMS 8/30/2018

Sample J7394 does not meet passing IS area criteria for 13C3-PFBA, 13C2-PFOA, 13C2-PFDA and 13C4-PFOS. A fresh aliquot of this sample was taken and run with passing criteria from methods 18-0500_SIS_R and 18-0500_BASE_R.
DMS 8/30/2018

Samples J7397, J7397MS, J7397MSD, J7398 and J7399 do not meet passing IS area criteria for 13C3-PFBA but do for all other IS areas. A fresh aliquot was taken of these samples and rerun with confirming results in method 18-0500_SIS_R. These sample extracts were all dark yellow in color and 13C3-PFBA is the first eluting analyte from the analytical run, it can be presumed that matrix is effecting the results. The original results are being reported from 18-0500_SIS_A.
DMS 8/30/2018

Sample J7400 has an ion ratio >50% RPD for PFOA.
DMS 8/30/2018

Task Leader Approval:

Supervisor Approval:

PM Approval:

Digitally signed by Jonathan Thorn
Date: 2018.08.30 15:36:52 -04'00'



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	JY46 IB			
Battelle ID	JY46 IB_08/24/2018			
Sample Type	IB			
Collection Date	NA			
Extraction Date	NA			
Analysis Date	08/24/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	Water			
Sample Size	0.250			
Size Unit-Basis	NA			
Units	ng/L	MDL	LOD	LOQ
PFBA	0.50 U	0.14	0.50	5.00
PFHxA	0.50 U	0.19	0.50	5.00
PFHpA	0.50 U	0.16	0.50	5.00
PFOA	0.50 U	0.18	0.50	5.00
PFNA	1.00 U	0.26	1.00	5.00
PFDA	0.50 U	0.16	0.50	5.00
PFUnA	1.00 U	0.29	1.00	5.00
PFDoA	0.50 U	0.18	0.50	5.00
PFTTrDA	0.50 U	0.15	0.50	5.00
PFTeDA	1.00 U	0.25	1.00	5.00
NMeFOSAA	2.00 U	0.56	2.00	5.00
NEtFOSAA	1.00 U	0.49	1.00	5.00
PFBS	0.50 U	0.13	0.50	5.00
PFHxS	0.40 U	0.11	0.40	5.00
PFOS	0.50 U	0.19	0.50	5.00

Surrogate Recoveries (%)

13C4-PFBA	103
13C5-PFHxA	101
13C4-PFHpA	100
13C8-PFOA	106
13C9-PFNA	99
13C6-PFDA	111
13C7-PFUnA	103
13C2-PFDoA	108
13C2-PFTeDA	99
d3-MeFOSAA	101
d5-EtFOSAA	123
13C3-PFBS	100
13C3-PFHxS	99
13C8-PFOS	103



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	JY46 IB			
Battelle ID	JY46 IB_08/28/2018			affects sample CCC-GW-01 only
Sample Type	IB			
Collection Date	NA			
Extraction Date	NA			
Analysis Date	08/28/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	Water			
Sample Size	0.250			
Size Unit-Basis	NA			
Units	ng/L	MDL	LOD	LOQ
PFBA	0.20 J	0.14	0.50	5.00
PFHxA	0.50 U	0.19	0.50	5.00
PFHpA	0.50 U	0.16	0.50	5.00
PFOA	0.50 U	0.18	0.50	5.00
PFNA	1.00 U	0.26	1.00	5.00
PFDA	0.50 U	0.16	0.50	5.00
PFUnA	1.00 U	0.29	1.00	5.00
PFDoA	0.50 U	0.18	0.50	5.00
PFTeDA	0.50 U	0.15	0.50	5.00
PFTeDA	1.00 U	0.25	1.00	5.00
NMeFOSAA	2.00 U	0.56	2.00	5.00
NEtFOSAA	1.00 U	0.49	1.00	5.00
PFBS	0.50 U	0.13	0.50	5.00
PFHxS	0.40 U	0.11	0.40	5.00
PFOS	0.50 U	0.19	0.50	5.00

Surrogate Recoveries (%)

13C4-PFBA	94
13C5-PFHxA	100
13C4-PFHpA	99
13C8-PFOA	107
13C9-PFNA	104
13C6-PFDA	107
13C7-PFUnA	106
13C2-PFDoA	97
13C2-PFTeDA	97
d3-MeFOSAA	89
d5-EtFOSAA	111
13C3-PFBS	87
13C3-PFHxS	100
13C8-PFOS	108



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	Procedural Blank				
Battelle ID	CR552PB-FS				
Sample Type	PB				
Collection Date	08/15/2018				
Extraction Date	08/15/2018				
Analysis Date	08/25/2018				
Analytical Instrument	Sciex 5500 LC/MS/MS				
% Moisture	NA				
Matrix	WATER				
Sample Size	0.250				
Size Unit-Basis	L				
Units	ng/L	MDL	LOD	LOQ	
PFBA	0.21 J	0.14	0.50	5.00	
PFHxA	1.89 J	0.19	0.50	5.00	
PFHpA	0.50 U	0.16	0.50	5.00	
PFOA	1.21 J	0.18	0.50	5.00	
PFNA	1.00 U	0.26	1.00	5.00	
PFDA	0.50 U	0.16	0.50	5.00	
PFUnA	1.00 U	0.29	1.00	5.00	
PFDoA	0.50 U	0.18	0.50	5.00	
PFTTrDA	0.50 U	0.15	0.50	5.00	
PFTeDA	1.00 U	0.25	1.00	5.00	
NMeFOSAA	2.00 U	0.56	2.00	5.00	
NEtFOSAA	1.00 U	0.49	1.00	5.00	
PFBS	0.50 U	0.13	0.50	5.00	
PFHxS	0.40 U	0.11	0.40	5.00	
PFOS	0.60 J	0.19	0.50	5.00	

Surrogate Recoveries (%)

13C4-PFBA	132
13C5-PFHxA	131
13C4-PFHpA	133
13C8-PFOA	137
13C9-PFNA	136
13C6-PFDA	139
13C7-PFUnA	139
13C2-PFDoA	122
13C2-PFTeDA	112
d3-MeFOSAA	122
d5-EtFOSAA	146
13C3-PFBS	135
13C3-PFHxS	139
13C8-PFOS	128



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	Laboratory Control Sample					
Battelle ID	CR553LCS-FS					
Sample Type	LCS					
Collection Date	08/15/2018					
Extraction Date	08/15/2018					
Analysis Date	08/25/2018					
Analytical Instrument	Sciex 5500 LC/MS/MS					
% Moisture	NA					
Matrix	WATER					
Sample Size	0.250					
Size Unit-Basis	L					
Units	ng/L	Target	Recovery	Qual	Control Limits	
					Lower	Upper
PFBA	11.04	10.00	110		61	139
PFHxA	12.61 B	10.10	125		51	137
PFHpA	11.00	10.00	110		48	136
PFOA	12.27	10.00	123		49	141
PFNA	10.13	10.00	101		58	122
PFDA	10.01	10.00	100		59	135
PFUnA	9.37	10.00	94		64	134
PFDoA	10.26	10.00	103		75	131
PFTTrDA	10.28	10.00	103		42	148
PFTeDA	10.59	10.00	106		42	158
NMeFOSAA	11.05	10.00	111		50	146
NEtFOSAA	10.77	10.00	108		51	131
PFBS	10.26	10.10	102		56	134
PFHxS	9.81	10.10	97		52	128
PFOS	9.68	10.00	97		40	144

Surrogate Recoveries (%)

13C4-PFBA	88
13C5-PFHxA	105
13C4-PFHpA	102
13C8-PFOA	96
13C9-PFNA	106
13C6-PFDA	123
13C7-PFUnA	119
13C2-PFDoA	115
13C2-PFTeDA	105
d3-MeFOSAA	108
d5-EtFOSAA	101
13C3-PFBS	101
13C3-PFHxS	106
13C8-PFOS	116



Project Client: Tetra Tech

Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine

Object ID No.: 100122108-CTOWE21 NASB-BLL15-GW-01-0818 NASB-BLL15-GW-01-0818

Battelle ID	J7397-FS		J7397MS-FS					
	Sample Type	SA	MS					
Collection Date	08/09/2018	08/09/2018	08/09/2018					
Extraction Date	08/15/2018	08/15/2018	08/15/2018					
Analysis Date	08/25/2018	08/25/2018	08/25/2018					
Analytical Instrument	Sciex 5500 LC/MS/MS		Sciex 5500 LC/MS/MS					
% Moisture	NA	NA	NA					
Matrix	GW	GW	GW					
Sample Size	0.260	0.260	0.260					
Size Unit-Basis	L	L	L				Control Limits	
Units	ng/L	ng/L	ng/L	Target	Recovery	Qual	Lower	Upper
PFBA	57.74	85.96	85.96	28.85	98		61	139
PFHxA	3.47 J	30.85	30.85	29.13	94		51	137
PFHpA	1.90 J	30.50	30.50	28.85	99		48	136
PFOA	6.81 B	31.78	31.78	28.85	87		49	141
PFNA	0.41 J	28.62	28.62	28.85	98		58	122
PFDA	0.48 U	28.54	28.54	28.85	99		59	135
PFUnA	0.96 U	26.03	26.03	28.85	90		64	134
PFDaA	0.48 U	28.08	28.08	28.85	97		75	131
PFTeDA	0.48 U	34.42	34.42	28.85	119		42	148
PFTeDA	0.96 U	29.03	29.03	28.85	101		42	158
NMeFOSAA	1.92 U	31.14	31.14	28.85	108		50	146
NEtFOSAA	0.96 U	31.01	31.01	28.85	108		51	131
PFBS	3.10 J	31.13	31.13	29.13	96		56	134
PFHxS	12.63	43.11	43.11	29.13	105		52	128
PFOS	3.30 J	34.71	34.71	28.85	109		40	144

Surrogate Recoveries (%)

13C4-PFBA	8 N	7 N
13C5-PFHxA	112	95
13C4-PFHpA	126	108
13C8-PFOA	102	88
13C9-PFNA	104	85
13C6-PFDA	99	80
13C7-PFUnA	91	76
13C2-PFDaA	73	67
13C2-PFTeDA	43 N	43 N
d3-MeFOSAA	95	94
d5-EtFOSAA	78	75
13C3-PFBS	100	99
13C3-PFHxS	128	119
13C8-PFOS	95	88



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21 NASB-BLL15-GW-01-0818

Battelle ID	J7397MSD-FS									
Sample Type	MSD									
Collection Date	08/09/2018									
Extraction Date	08/15/2018									
Analysis Date	08/25/2018									
Analytical Instrument	Sciex 5500 LC/MS/MS									
% Moisture	NA									
Matrix	GW									
Sample Size	0.255									
Size Unit-Basis	L									
Units	ng/L	Target	Recovery	Qual	Control Limits Lower	Upper	RPD	Qual	RPD Limit	
PFBA	91.78	29.41	116		61	139	16.8			≤ 30
PFHxA	34.07	29.71	103		51	137	9.1			≤ 30
PFHpA	30.76	29.41	98		48	136	1.0			≤ 30
PFOA	33.91	29.41	92		49	141	5.6			≤ 30
PFNA	29.73	29.41	100		58	122	2.0			≤ 30
PFDA	27.34	29.41	93		59	135	6.3			≤ 30
PFUnA	24.63	29.41	84		64	134	6.9			≤ 30
PFDoA	31.53	29.41	107		75	131	9.8			≤ 30
PFTroA	33.65	29.41	114		42	148	4.3			≤ 30
PFTeDA	29.44	29.41	100		42	158	1.0			≤ 30
NMeFOSAA	34.17	29.41	116		50	146	7.1			≤ 30
NEtFOSAA	31.69	29.41	108		51	131	0.0			≤ 30
PFBS	33.05	29.71	101		56	134	5.1			≤ 30
PFHxS	37.36	29.71	83		52	128	23.4			≤ 30
PFOS	33.19	29.41	102		40	144	6.6			≤ 30

Surrogate Recoveries (%)

13C4-PFBA	7 N
13C5-PFHxA	81
13C4-PFHpA	96
13C8-PFOA	81
13C9-PFNA	80
13C6-PFDA	85
13C7-PFUnA	85
13C2-PFDoA	68
13C2-PFTeDA	48 N
d3-MeFOSAA	80
d5-EtFOSAA	69
13C3-PFBS	76
13C3-PFHxS	112
13C8-PFOS	81



Glossary of Data Qualifiers

Flag: Application:

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



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21
 Preparation Batch: 18-0500
 Data Set: DP-18-0217

	CR552PB-FS (Procedural Blank)	CR553LCS-FS (Laboratory Control Sample)	J7397MS-FS (NASB-BLL15-GW-01-0818)	J7397MSD-FS (NASB-BLL15-GW-01-0818)	J7394-FS (NASB-CCC-GW-01-0818)	J7395-FS (NASB-CCC-GW-02-0818)	J7396-FS (NASB-BLL15-GW-02-0818)	J7397-FS (NASB-BLL15-GW-01-0818)
PFBA	L	L	L	L	L	L	L	L
PFHxA	L	L	L	L	L	L	L	L
PFHpA	-	L	L	L	L	L	L	L
PFOA	L	L	L	L	L	L	L	L
PFNA	-	L	L	L	L	L	L	L
PFDA	-	L	L	L	L	-	-	-
PFUnA	-	L	L	L	-	-	-	-
PFDoA	-	L	L	L	-	-	-	-
PFTTrDA	-	L	L	L	-	-	-	-
PFTeDA	-	L	L	L	-	-	-	-
NMeFOSAA	-	L	L	L	-	-	-	-
NEtFOSAA	-	L	L	L	-	-	-	-
PFBS	-	L	L	L	L	L	L	L
PFHxS	-	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br	L/Br
PFOS	L	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: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21
 Preparation Batch: 18-0500
 Data Set: DP-18-0217

	J7398-FS (NASB-BLL15-DUP-080918)	J7399-FS (NASB-BLL15-GW-03-0818)	J7400-FS (NASB-BLL15-GW-04-0818)	J7402-FS (NASB-BLL15-GW-RB01-080918)
PFBA	L	L	L	-
PFHxA	L	L	L	L
PFHpA	L	L	L	L
PFOA	L	L	L	L
PFNA	L	L	L	-
PFDA	-	-	-	-
PFUnA	-	-	-	-
PFDoA	-	-	-	-
PFTrDA	-	-	-	-
PFTeDA	-	-	-	-
NMeFOSAA	-	-	-	-
NEtFOSAA	-	-	-	-
PFBS	L	L	L	-
PFHxS	L/Br	L/Br	L/Br	L/Br
PFOS	L/Br	L/Br	L/Br	L/Br

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

Project Client: Tetra Tech

Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/24/18 23:20	13C3-PFBA	62,099.81	31,049.91	93,149.72

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/24/18 22:36	13C3-PFBA	55,737.70	31,049.91	93,149.72	
JY39	L2	8/24/18 22:47	13C3-PFBA	54,856.95	31,049.91	93,149.72	
JY40	L3	8/24/18 22:58	13C3-PFBA	57,614.29	31,049.91	93,149.72	
JY41	L4	8/24/18 23:09	13C3-PFBA	57,883.97	31,049.91	93,149.72	
JY42	L5	8/24/18 23:20	13C3-PFBA	62,099.81	31,049.91	93,149.72	
JY43	L6	8/24/18 23:31	13C3-PFBA	58,707.76	31,049.91	93,149.72	
JY44	L7	8/24/18 23:42	13C3-PFBA	56,480.01	31,049.91	93,149.72	
JY46 IB	Instrument Blank	8/24/18 23:53	13C3-PFBA	55,663.08	31,049.91	93,149.72	
JY45 ICC	ICC	8/25/18 0:03	13C3-PFBA	59,885.14	31,049.91	93,149.72	
CR552PB-FS(3)	Procedural Blank	8/25/18 4:46	13C3-PFBA	39,560.86	31,049.91	93,149.72	
CR553LCS-FS(3)	Laboratory Control Sample	8/25/18 4:57	13C3-PFBA	55,753.46	31,049.91	93,149.72	
J7402-FS(3)	NASB-BLL15-GW-RB01-080918	8/25/18 5:08	13C3-PFBA	55,148.70	31,049.91	93,149.72	
J7394-FS(3)	NASB-CCC-GW-01-0818	8/25/18 5:19	13C3-PFBA	10,273.60	31,049.91	93,149.72	N
J7395-FS(3)	NASB-CCC-GW-02-0818	8/25/18 5:30	13C3-PFBA	47,502.78	31,049.91	93,149.72	
J7396-FS(3)	NASB-BLL15-GW-02-0818	8/25/18 5:41	13C3-PFBA	37,713.82	31,049.91	93,149.72	
JY42 CCV	CCV	8/25/18 6:02	13C3-PFBA	54,530.51	31,049.91	93,149.72	
J7397-FS(3)	NASB-BLL15-GW-01-0818	8/25/18 6:24	13C3-PFBA	173,257.35	31,049.91	93,149.72	N
J7397MS-FS(3)	Matrix Spike Sample	8/25/18 6:35	13C3-PFBA	192,682.81	31,049.91	93,149.72	N
J7397MSD-FS(3)	Matrix Spike Duplicate Sample	8/25/18 6:46	13C3-PFBA	195,651.07	31,049.91	93,149.72	N
J7398-FS(3)	NASB-BLL15-DUP-080918	8/25/18 6:57	13C3-PFBA	168,448.12	31,049.91	93,149.72	N
J7399-FS(3)	NASB-BLL15-GW-03-0818	8/25/18 7:08	13C3-PFBA	101,986.13	31,049.91	93,149.72	N
J7400-FS(3)	NASB-BLL15-GW-04-0818	8/25/18 7:18	13C3-PFBA	68,374.98	31,049.91	93,149.72	
JY41 CCV	CCV	8/25/18 7:40	13C3-PFBA	52,177.80	31,049.91	93,149.72	

Project Client: Tetra Tech

Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/24/18 23:20	13C2-PFOA	92,608.08	46,304.04	138,912.12

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/24/18 22:36	13C2-PFOA	89,686.34	46,304.04	138,912.12	
JY39	L2	8/24/18 22:47	13C2-PFOA	90,381.96	46,304.04	138,912.12	
JY40	L3	8/24/18 22:58	13C2-PFOA	87,326.72	46,304.04	138,912.12	
JY41	L4	8/24/18 23:09	13C2-PFOA	89,865.42	46,304.04	138,912.12	
JY42	L5	8/24/18 23:20	13C2-PFOA	92,608.08	46,304.04	138,912.12	
JY43	L6	8/24/18 23:31	13C2-PFOA	91,795.08	46,304.04	138,912.12	
JY44	L7	8/24/18 23:42	13C2-PFOA	91,050.54	46,304.04	138,912.12	
JY46 IB	Instrument Blank	8/24/18 23:53	13C2-PFOA	86,993.18	46,304.04	138,912.12	
JY45 ICC	ICC	8/25/18 0:03	13C2-PFOA	94,996.84	46,304.04	138,912.12	
CR552PB-FS(3)	Procedural Blank	8/25/18 4:46	13C2-PFOA	61,640.47	46,304.04	138,912.12	
CR553LCS-FS(3)	Laboratory Control Sample	8/25/18 4:57	13C2-PFOA	73,989.36	46,304.04	138,912.12	
J7402-FS(3)	NASB-BLL15-GW-RB01-080918	8/25/18 5:08	13C2-PFOA	79,568.13	46,304.04	138,912.12	
J7394-FS(3)	NASB-CCC-GW-01-0818	8/25/18 5:19	13C2-PFOA	16,178.63	46,304.04	138,912.12	N
J7395-FS(3)	NASB-CCC-GW-02-0818	8/25/18 5:30	13C2-PFOA	78,894.96	46,304.04	138,912.12	
J7396-FS(3)	NASB-BLL15-GW-02-0818	8/25/18 5:41	13C2-PFOA	62,008.69	46,304.04	138,912.12	
JY42 CCV	CCV	8/25/18 6:02	13C2-PFOA	82,508.65	46,304.04	138,912.12	
J7397-FS(3)	NASB-BLL15-GW-01-0818	8/25/18 6:24	13C2-PFOA	58,674.53	46,304.04	138,912.12	
J7397MS-FS(3)	Matrix Spike Sample	8/25/18 6:35	13C2-PFOA	74,066.12	46,304.04	138,912.12	
J7397MSD-FS(3)	Matrix Spike Duplicate Sample	8/25/18 6:46	13C2-PFOA	87,164.02	46,304.04	138,912.12	
J7398-FS(3)	NASB-BLL15-DUP-080918	8/25/18 6:57	13C2-PFOA	67,737.02	46,304.04	138,912.12	
J7399-FS(3)	NASB-BLL15-GW-03-0818	8/25/18 7:08	13C2-PFOA	65,277.04	46,304.04	138,912.12	
J7400-FS(3)	NASB-BLL15-GW-04-0818	8/25/18 7:18	13C2-PFOA	66,198.76	46,304.04	138,912.12	
JY41 CCV	CCV	8/25/18 7:40	13C2-PFOA	77,497.71	46,304.04	138,912.12	

Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/24/18 23:20	13C2-PFDA	105,936.28	52,968.14	158,904.42

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/24/18 22:36	13C2-PFDA	101,703.93	52,968.14	158,904.42	
JY39	L2	8/24/18 22:47	13C2-PFDA	104,669.39	52,968.14	158,904.42	
JY40	L3	8/24/18 22:58	13C2-PFDA	99,261.32	52,968.14	158,904.42	
JY41	L4	8/24/18 23:09	13C2-PFDA	100,506.14	52,968.14	158,904.42	
JY42	L5	8/24/18 23:20	13C2-PFDA	105,936.28	52,968.14	158,904.42	
JY43	L6	8/24/18 23:31	13C2-PFDA	113,124.25	52,968.14	158,904.42	
JY44	L7	8/24/18 23:42	13C2-PFDA	103,798.12	52,968.14	158,904.42	
JY46 IB	Instrument Blank	8/24/18 23:53	13C2-PFDA	98,444.02	52,968.14	158,904.42	
JY45 ICC	ICC	8/25/18 0:03	13C2-PFDA	113,766.69	52,968.14	158,904.42	
CR552PB-FS(3)	Procedural Blank	8/25/18 4:46	13C2-PFDA	69,525.37	52,968.14	158,904.42	
CR553LCS-FS(3)	Laboratory Control Sample	8/25/18 4:57	13C2-PFDA	78,542.82	52,968.14	158,904.42	
J7402-FS(3)	NASB-BLL15-GW-RB01-080918	8/25/18 5:08	13C2-PFDA	92,715.53	52,968.14	158,904.42	
J7394-FS(3)	NASB-CCC-GW-01-0818	8/25/18 5:19	13C2-PFDA	17,532.80	52,968.14	158,904.42	N
J7395-FS(3)	NASB-CCC-GW-02-0818	8/25/18 5:30	13C2-PFDA	85,960.93	52,968.14	158,904.42	
J7396-FS(3)	NASB-BLL15-GW-02-0818	8/25/18 5:41	13C2-PFDA	77,585.56	52,968.14	158,904.42	
JY42 CCV	CCV	8/25/18 6:02	13C2-PFDA	90,676.97	52,968.14	158,904.42	
J7397-FS(3)	NASB-BLL15-GW-01-0818	8/25/18 6:24	13C2-PFDA	68,663.42	52,968.14	158,904.42	
J7397MS-FS(3)	Matrix Spike Sample	8/25/18 6:35	13C2-PFDA	86,049.09	52,968.14	158,904.42	
J7397MSD-FS(3)	Matrix Spike Duplicate Sample	8/25/18 6:46	13C2-PFDA	99,733.95	52,968.14	158,904.42	
J7398-FS(3)	NASB-BLL15-DUP-080918	8/25/18 6:57	13C2-PFDA	81,245.71	52,968.14	158,904.42	
J7399-FS(3)	NASB-BLL15-GW-03-0818	8/25/18 7:08	13C2-PFDA	81,268.83	52,968.14	158,904.42	
J7400-FS(3)	NASB-BLL15-GW-04-0818	8/25/18 7:18	13C2-PFDA	81,919.89	52,968.14	158,904.42	
JY41 CCV	CCV	8/25/18 7:40	13C2-PFDA	87,962.69	52,968.14	158,904.42	

Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/24/18 23:20	13C4-PFOS	32,248.02	16,124.01	48,372.03

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/24/18 22:36	13C4-PFOS	33,175.18	16,124.01	48,372.03	
JY39	L2	8/24/18 22:47	13C4-PFOS	31,211.04	16,124.01	48,372.03	
JY40	L3	8/24/18 22:58	13C4-PFOS	31,393.82	16,124.01	48,372.03	
JY41	L4	8/24/18 23:09	13C4-PFOS	31,692.96	16,124.01	48,372.03	
JY42	L5	8/24/18 23:20	13C4-PFOS	32,248.02	16,124.01	48,372.03	
JY43	L6	8/24/18 23:31	13C4-PFOS	32,619.41	16,124.01	48,372.03	
JY44	L7	8/24/18 23:42	13C4-PFOS	28,605.63	16,124.01	48,372.03	
JY46 IB	Instrument Blank	8/24/18 23:53	13C4-PFOS	30,847.94	16,124.01	48,372.03	
JY45 ICC	ICC	8/25/18 0:03	13C4-PFOS	37,275.00	16,124.01	48,372.03	
CR552PB-FS(3)	Procedural Blank	8/25/18 4:46	13C4-PFOS	19,734.44	16,124.01	48,372.03	
CR553LCS-FS(3)	Laboratory Control Sample	8/25/18 4:57	13C4-PFOS	25,543.65	16,124.01	48,372.03	
J7402-FS(3)	NASB-BLL15-GW-RB01-080918	8/25/18 5:08	13C4-PFOS	28,797.12	16,124.01	48,372.03	
J7394-FS(3)	NASB-CCC-GW-01-0818	8/25/18 5:19	13C4-PFOS	5,918.75	16,124.01	48,372.03	N
J7395-FS(3)	NASB-CCC-GW-02-0818	8/25/18 5:30	13C4-PFOS	26,519.64	16,124.01	48,372.03	
J7396-FS(3)	NASB-BLL15-GW-02-0818	8/25/18 5:41	13C4-PFOS	19,254.63	16,124.01	48,372.03	
JY42 CCV	CCV	8/25/18 6:02	13C4-PFOS	29,425.91	16,124.01	48,372.03	
J7397-FS(3)	NASB-BLL15-GW-01-0818	8/25/18 6:24	13C4-PFOS	18,517.23	16,124.01	48,372.03	
J7397MS-FS(3)	Matrix Spike Sample	8/25/18 6:35	13C4-PFOS	20,046.86	16,124.01	48,372.03	
J7397MSD-FS(3)	Matrix Spike Duplicate Sample	8/25/18 6:46	13C4-PFOS	26,463.71	16,124.01	48,372.03	
J7398-FS(3)	NASB-BLL15-DUP-080918	8/25/18 6:57	13C4-PFOS	22,238.46	16,124.01	48,372.03	
J7399-FS(3)	NASB-BLL15-GW-03-0818	8/25/18 7:08	13C4-PFOS	19,123.67	16,124.01	48,372.03	
J7400-FS(3)	NASB-BLL15-GW-04-0818	8/25/18 7:18	13C4-PFOS	19,104.92	16,124.01	48,372.03	
JY41 CCV	CCV	8/25/18 7:40	13C4-PFOS	27,471.32	16,124.01	48,372.03	

Project Client: Tetra Tech

Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/28/18 20:48	13C3-PFBA	51,124.18	25,562.09	76,686.27

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/28/18 20:04	13C3-PFBA	61,083.71	25,562.09	76,686.27	
JY39	L2	8/28/18 20:15	13C3-PFBA	53,621.70	25,562.09	76,686.27	
JY40	L3	8/28/18 20:26	13C3-PFBA	56,475.25	25,562.09	76,686.27	
JY41	L4	8/28/18 20:37	13C3-PFBA	49,987.19	25,562.09	76,686.27	
JY42	L5	8/28/18 20:48	13C3-PFBA	51,124.18	25,562.09	76,686.27	
JY43	L6	8/28/18 20:59	13C3-PFBA	53,288.49	25,562.09	76,686.27	
JY44	L7	8/28/18 21:09	13C3-PFBA	50,812.75	25,562.09	76,686.27	
JY46 IB	Instrument Blank	8/28/18 21:20	13C3-PFBA	56,562.61	25,562.09	76,686.27	
JY45 ICC	ICC	8/28/18 21:31	13C3-PFBA	50,669.86	25,562.09	76,686.27	
JY41 CCV	CCV	8/29/18 0:58	13C3-PFBA	51,658.25	25,562.09	76,686.27	
J7394-FS(3)	NASB-CCC-GW-01-0818	8/29/18 1:19	13C3-PFBA	41,020.69	25,562.09	76,686.27	
J7397-FS(3)	NASB-BLL15-GW-01-0818	8/29/18 1:30	13C3-PFBA	160,906.49	25,562.09	76,686.27	N
J7397MS-FS(3)	Matrix Spike Sample	8/29/18 1:41	13C3-PFBA	177,826.43	25,562.09	76,686.27	N
J7397MSD-FS(3)	Matrix Spike Duplicate Sample	8/29/18 1:52	13C3-PFBA	185,117.74	25,562.09	76,686.27	N
J7398-FS(3)	NASB-BLL15-DUP-080918	8/29/18 2:03	13C3-PFBA	181,458.60	25,562.09	76,686.27	N
J7399-FS(3)	NASB-BLL15-GW-03-0818	8/29/18 2:14	13C3-PFBA	92,715.93	25,562.09	76,686.27	N
J7400-FS(3)	NASB-BLL15-GW-04-0818	8/29/18 2:24	13C3-PFBA	142,232.90	25,562.09	76,686.27	N
JY42 CCV	CCV	8/29/18 2:46	13C3-PFBA	50,774.45	25,562.09	76,686.27	

Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/28/18 20:48	13C2-PFOA	70,686.29	35,343.15	106,029.44

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/28/18 20:04	13C2-PFOA	84,330.39	35,343.15	106,029.44	
JY39	L2	8/28/18 20:15	13C2-PFOA	70,363.64	35,343.15	106,029.44	
JY40	L3	8/28/18 20:26	13C2-PFOA	82,022.48	35,343.15	106,029.44	
JY41	L4	8/28/18 20:37	13C2-PFOA	71,523.55	35,343.15	106,029.44	
JY42	L5	8/28/18 20:48	13C2-PFOA	70,686.29	35,343.15	106,029.44	
JY43	L6	8/28/18 20:59	13C2-PFOA	83,677.30	35,343.15	106,029.44	
JY44	L7	8/28/18 21:09	13C2-PFOA	78,516.75	35,343.15	106,029.44	
JY46 IB	Instrument Blank	8/28/18 21:20	13C2-PFOA	74,344.26	35,343.15	106,029.44	
JY45 ICC	ICC	8/28/18 21:31	13C2-PFOA	75,529.88	35,343.15	106,029.44	
JY41 CCV	CCV	8/29/18 0:58	13C2-PFOA	74,719.91	35,343.15	106,029.44	
J7394-FS(3)	NASB-CCC-GW-01-0818	8/29/18 1:19	13C2-PFOA	48,584.46	35,343.15	106,029.44	
JY42 CCV	CCV	8/29/18 2:46	13C2-PFOA	83,329.18	35,343.15	106,029.44	

Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/28/18 20:48	13C2-PFDA	82,579.96	41,289.98	123,869.94

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/28/18 20:04	13C2-PFDA	97,894.02	41,289.98	123,869.94	
JY39	L2	8/28/18 20:15	13C2-PFDA	79,143.80	41,289.98	123,869.94	
JY40	L3	8/28/18 20:26	13C2-PFDA	94,637.43	41,289.98	123,869.94	
JY41	L4	8/28/18 20:37	13C2-PFDA	79,399.67	41,289.98	123,869.94	
JY42	L5	8/28/18 20:48	13C2-PFDA	82,579.96	41,289.98	123,869.94	
JY43	L6	8/28/18 20:59	13C2-PFDA	86,460.00	41,289.98	123,869.94	
JY44	L7	8/28/18 21:09	13C2-PFDA	94,107.95	41,289.98	123,869.94	
JY46 IB	Instrument Blank	8/28/18 21:20	13C2-PFDA	83,546.56	41,289.98	123,869.94	
JY45 ICC	ICC	8/28/18 21:31	13C2-PFDA	85,834.11	41,289.98	123,869.94	
JY41 CCV	CCV	8/29/18 0:58	13C2-PFDA	87,991.97	41,289.98	123,869.94	
J7394-FS(3)	NASB-CCC-GW-01-0818	8/29/18 1:19	13C2-PFDA	56,339.76	41,289.98	123,869.94	
JY42 CCV	CCV	8/29/18 2:46	13C2-PFDA	89,429.45	41,289.98	123,869.94	

Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/28/18 20:48	13C4-PFOS	30,907.19	15,453.60	46,360.79

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/28/18 20:04	13C4-PFOS	29,953.96	15,453.60	46,360.79	
JY39	L2	8/28/18 20:15	13C4-PFOS	28,891.71	15,453.60	46,360.79	
JY40	L3	8/28/18 20:26	13C4-PFOS	29,758.83	15,453.60	46,360.79	
JY41	L4	8/28/18 20:37	13C4-PFOS	23,457.09	15,453.60	46,360.79	
JY42	L5	8/28/18 20:48	13C4-PFOS	30,907.19	15,453.60	46,360.79	
JY43	L6	8/28/18 20:59	13C4-PFOS	27,142.68	15,453.60	46,360.79	
JY44	L7	8/28/18 21:09	13C4-PFOS	24,977.32	15,453.60	46,360.79	
JY46 IB	Instrument Blank	8/28/18 21:20	13C4-PFOS	27,744.14	15,453.60	46,360.79	
JY45 ICC	ICC	8/28/18 21:31	13C4-PFOS	27,304.48	15,453.60	46,360.79	
JY41 CCV	CCV	8/29/18 0:58	13C4-PFOS	23,956.70	15,453.60	46,360.79	
J7394-FS(3)	NASB-CCC-GW-01-0818	8/29/18 1:19	13C4-PFOS	18,899.28	15,453.60	46,360.79	
JY42 CCV	CCV	8/29/18 2:46	13C4-PFOS	27,975.91	15,453.60	46,360.79	

Sample Name	JY44	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 11:42:11 PM	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
PFBS_1	298.9 / 80.0	1.55	55	>10
PFBS_2	298.9 / 99.0	1.55	51	>10
PFHxA_1	313.0 / 269.0	1.86	25	>10
PFHxA_2	313.0 / 119.0	1.86	26	>10
PFHpA_1	363.0 / 319.0	2.26	29	>10
PFHpA_2	363.0 / 169.0	2.26	30	>10
PFHxS_1	399.0 / 80.0	2.28	48	>10
PFHxS_2	399.0 / 99.0	2.28	46	>10
PFOA_1	413.0 / 369.0	2.66	34	>10
PFOA_2	413.0 / 169.0	2.66	36	>10
PFNA_1	463.0 / 419.0	3.05	33	>10
PFNA_2	463.0 / 219.0	3.05	31	>10
PFOS_1	499.0 / 80.0	3.04	49	>10
PFOS_2	499.0 / 99.0	3.04	52	>10
PFDA_1	513.0 / 469.0	3.40	46	>10
PFDA_2	513.0 / 219.0	3.40	39	>10
PFUnA_1	563.0 / 519.0	3.72	30	>10
PFUnA_2	563.0 / 269.0	3.72	57	>10
PFDaA_1	613.0 / 569.0	4.01	32	>10
PFDaA_2	613.0 / 319.0	4.00	38	>10
PFTrDA_1	663.0 / 619.0	4.25	64	>10
PFTrDA_2	663.0 / 169.0	4.25	37	>10
PFTeDA_1	713.0 / 669.0	4.47	86	>10
PFTeDA_2	713.0 / 169.0	4.47	49	>10
NMeFOSAA_1	570.0 / 419.0	3.55	48	>10
NMeFOSAA_2	570.0 / 512.0	3.55	34	>10
NEtFOSAA_1	584.0 / 419.0	3.72	36	>10
NEtFOSAA_2	584.0 / 483.0	3.72	25	>10
PFBA	213.0 / 169.0	1.16	40	>10

Mass Spectral Acquisition Rate Report

Sample Name	JY44	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 11:42:11 PM	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
13C4-PFBA	217.0 / 172.0	1.16	44	>10
13C2-PFDoA	615.0 / 570.0	3.99	41	>10
d3-MeFOSAA	573.0 / 419.0	3.55	35	>10
d5-EtFOSAA	589.0 / 419.0	3.71	23	>10
13C5-PFHxA	318.0 / 273.0	1.85	37	>10
13C4-PFHpA	367.0 / 322.0	2.25	37	>10
13C8-PFOA	421.0 / 376.0	2.65	34	>10
13C9-PFNA	472.0 / 427.0	3.03	35	>10
13C6-PFDA	519.0 / 474.0	3.38	33	>10
13C7-PFUnA	570.0 / 525.0	3.71	37	>10
13C2-PFTeDA	715.0 / 670.0	4.46	42	>10
13C3-PFBS	302.0 / 99.0	1.53	33	>10
13C3-PFHxS	402.0 / 99.0	2.27	33	>10
13C8-PFOS	507.0 / 99.0	3.03	25	>10

Sample Name	JY44	Injection Vial	22
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 9:09:59 PM	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
PFBS_1	298.9 / 80.0	1.54	50	>10
PFBS_2	298.9 / 99.0	1.54	55	>10
PFHxA_1	313.0 / 269.0	1.85	25	>10
PFHxA_2	313.0 / 119.0	1.85	23	>10
PFHpA_1	363.0 / 319.0	2.25	30	>10
PFHpA_2	363.0 / 169.0	2.25	27	>10
PFHxS_1	399.0 / 80.0	2.27	52	>10
PFHxS_2	399.0 / 99.0	2.27	59	>10
PFOA_1	413.0 / 369.0	2.66	33	>10
PFOA_2	413.0 / 169.0	2.65	35	>10
PFNA_1	463.0 / 419.0	3.05	29	>10
PFNA_2	463.0 / 219.0	3.05	33	>10
PFOS_1	499.0 / 80.0	3.05	44	>10
PFOS_2	499.0 / 99.0	3.04	49	>10
PFDA_1	513.0 / 469.0	3.40	31	>10
PFDA_2	513.0 / 219.0	3.40	40	>10
PFUnA_1	563.0 / 519.0	3.71	30	>10
PFUnA_2	563.0 / 269.0	3.71	37	>10
PFDaA_1	613.0 / 569.0	4.00	63	>10
PFDaA_2	613.0 / 319.0	3.99	38	>10
PFTrDA_1	663.0 / 619.0	4.24	83	>10
PFTrDA_2	663.0 / 169.0	4.23	44	>10
PFTeDA_1	713.0 / 669.0	4.45	84	>10
PFTeDA_2	713.0 / 169.0	4.45	72	>10
NMeFOSAA_1	570.0 / 419.0	3.55	46	>10
NMeFOSAA_2	570.0 / 512.0	3.55	52	>10
NEtFOSAA_1	584.0 / 419.0	3.71	58	>10
NEtFOSAA_2	584.0 / 483.0	3.71	39	>10
PFBA	213.0 / 169.0	1.14	45	>10

Sample Name	JY44	Injection Vial	22
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 9:09:59 PM	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
13C4-PFBA	217.0 / 172.0	1.15	38	>10
13C2-PFDoA	615.0 / 570.0	3.98	33	>10
d3-MeFOSAA	573.0 / 419.0	3.54	19	>10
d5-EtFOSAA	589.0 / 419.0	3.70	21	>10
13C5-PFHxA	318.0 / 273.0	1.83	36	>10
13C4-PFHpA	367.0 / 322.0	2.24	41	>10
13C8-PFOA	421.0 / 376.0	2.64	40	>10
13C9-PFNA	472.0 / 427.0	3.03	28	>10
13C6-PFDA	519.0 / 474.0	3.38	34	>10
13C7-PFUnA	570.0 / 525.0	3.70	52	>10
13C2-PFTeDA	715.0 / 670.0	4.45	43	>10
13C3-PFBS	302.0 / 99.0	1.52	45	>10
13C3-PFHxS	402.0 / 99.0	2.26	25	>10
13C8-PFOS	507.0 / 99.0	3.03	40	>10



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

Analyte	CAS No.	Average (ng/L)	ST DEV	3 Sigma	n
PFBA	375-22-4	12.40	2.18	6.54	11
PFPeA	2706-90-3	10.73	1.51	4.53	9
PFHxA	307-24-4	10.07	1.25	3.75	30
PFHpA	375-85-9	9.51	1.71	5.13	30
PFOA	335-67-1	10.06	1.60	4.80	31
PFNA	375-95-1	9.70	1.23	3.69	30
PFDA	335-76-2	10.04	1.43	4.29	30
PFUnA	2058-94-8	9.95	1.45	4.35	30
PFDoA	307-55-1	11.03	1.28	3.84	30
PFTTrDA	72629-94-8	11.52	1.50	4.50	30
PFTeDA	376-06-7	10.92	2.07	6.21	30
NMeFOSAA	2355-31-9	10.21	2.04	6.12	30
NEtFOSAA	2991-50-6	9.60	1.70	5.10	30
PFOSA	754-91-6	9.74	1.14	3.42	3
PFBS	375-73-5	10.25	1.55	4.65	31
PFPeS	BDO-2114	9.80	0.96	2.88	4
PFHxS	355-46-4	9.90	1.52	4.56	30
PFHpS	375-99-6	10.96	0.96	2.88	9
PFOS	1763-23-1	10.16	1.47	4.41	30
PFNS	98789-57-2	9.34	1.10	3.30	4
PFDS	2806-15-7	10.13	1.88	5.64	9
4:2FTS	BDO-2205	11.03	1.26	3.78	9
6:2FTS	27619-97-2	12.52	2.91	8.73	9
8:2FTS	39108-34-4	12.11	2.54	7.62	9

BATTELLE DETECTION LIMITS FOR PFAS IN NON-POTABLE WATER

Analytical SOP 5-369
Extraction SOP 5-370

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

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

Analytes on NELAP and ELAP QSM 5.1 Scope of accreditation

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

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

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

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

¹ – extracted internal standard (surrogate)

² – injection internal standard



Non-Potable Water Calibration to Sample Equivalents

ICAL (ng/L)	PIV (mL)	DF ¹	Sample Size (L)	Sample Equivalent (ng/L) ²
25	0.5	2	0.250	0.1
50	0.5	2	0.250	0.2
100	0.5	2	0.250	0.4
250	0.5	2	0.250	1.0
500	0.5	2	0.250	2.0
1,000	0.5	2	0.250	4.0
2,500	0.5	2	0.250	10.0
10,000	0.5	2	0.250	40.0
20,000	0.5	2	0.250	80.0

¹ - base level dilution as part of the extraction procedure

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

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

PRE PM PPG PERFORMANCE EVALUATION:

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

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

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

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

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

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

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

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

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

Appendix ZEFPM003-2L

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

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

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

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

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

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

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

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

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

PREVENTIVE MAINTENANCE CHECKLIST:

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

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

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

- Pump down overnight if possible. N/A

- Perform Maintenance on Turbo V source.

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

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

Appendix ZEFPM003-2L

POST PM PPG PERFORMANCE TESTS:

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

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

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

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

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

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

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

Transmission Efficiency: 21.10% (≥ 10.0%)

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

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

Appendix ZEFPM003-2L

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

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

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

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

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

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

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

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

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

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

**Zef Scientific Inc.**

12707 High Bluff Dr.
Suite 200
San Diego, CA
USA 92130

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Phone: 1.866.854.7988

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

Appendix ZEFPM003-2L

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

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

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

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

REVIEW:

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

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

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



It can be done

**BATTELLE - NORWELL OPERATIONS
SAMPLE PREPARATION RECORDS**

<u>Project Title(s)</u>	<u>Project No.(s)</u>
CTO-WE21: Former Naval Air Station, Brunswick, Maine	100122108-CTOWE21
18-0500	
CTO-WE21: Former Naval Air Station, Brunswick, Maine	
GW	
SOP Numbers (see workplan for modifications)	
ExtractionSOP No.	5-370

This Batch Contains The Following Samples:	
CR552PB-FS	J7397MS-FS
CR553LCS-FS	J7397MSD-FS
J7394-FS	J7398-FS
J7395-FS	J7399-FS
J7396-FS	J7400-FS
J7397-FS	J7402-FS

Laboratory Preparation Records
COMPLETE AND VALIDATED

Prep Task Leader: Stephanie Schultz

Approved By:	Date	Initials
Denise Schumitz	08/24/2018	DMS



It can be done

BATTELLE - NORWELL OPERATIONS LIQUID SAMPLE ID FORM

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.(s)100122108-
CTOWE21**18-0500****CTO-WE21: Former Naval Air Station, Brunswick, Maine****GW**

Sample ID	Description	Volume (mL)	Bottles	*	Date Initials
CR552PB-FS	Procedural Blank	250.0	NA	--	08/15/18 SAS
CR553LCS-FS	Laboratory Control Sample	250.0	NA	--	08/15/18 SAS
J7394-FS	NASB-CCC-GW-01-0818	285.0	1	C	08/15/18 SAS
J7395-FS	NASB-CCC-GW-02-0818	275.0	1	C	08/15/18 SAS
J7396-FS	NASB-BLL15-GW-02-0818	270.0	1	C	08/15/18 SAS
J7397-FS	NASB-BLL15-GW-01-0818	260.0	1	C	08/15/18 SAS
J7397MS-FS	Matrix Spike	260.0	3	C	08/15/18 SAS
J7397MSD-FS	Matrix Spike Duplicate	255.0	5	C	08/15/18 SAS
J7398-FS	NASB-BLL15-DUP-080918	275.0	1	C	08/15/18 SAS
J7399-FS	NASB-BLL15-GW-03-0818	265.0	1	C	08/15/18 SAS
J7400-FS	NASB-BLL15-GW-04-0818	290.0	1	C	08/15/18 SAS
J7402-FS	NASB-BLL15-GW-RB01-080918	255.0	1	C	08/15/18 SAS

Comments:

Samples Assigned By

Jonathan Thorn

Date : August 10, 2018

* - "C" = Sample is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS SURROGATE SPIKE FORM

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.(s)100122108-
CTOWE21**18-0500****CTO-WE21: Former Naval Air Station, Brunswick, Maine****GW**

Sample ID	Standard ID	Type	Vial No.	Vol Added (uL)	Date Spiked/ Spiked By	Witn'd By	Comment
CR552PB-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
CR553LCS-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
CR553LCS-FS	JZ27	LCS/MS	1	50	08/15/18 SAS	SG	NA
J7394-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
J7395-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
J7396-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
J7397-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
J7397MS-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
J7397MS-FS	JZ27	LCS/MS	1	150	08/15/18 SAS	SG	NA
J7397MSD-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
J7397MSD-FS	JZ27	LCS/MS	1	150	08/15/18 SAS	SG	NA
J7398-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
J7399-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
J7400-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA
J7402-FS	JY28	SIS	1	50	08/15/18 SAS	SG	NA

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
JY28	Pipette	I0793912B
JZ27	Pipette	B814657482
JZ27	Pipette	I0793912B



It can be done

BATTELLE - NORWELL OPERATIONS INTERNAL STANDARD SPIKING FORM

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine 100122108-

Project No.(s)

CTOWE21

18-0500**CTO-WE21: Former Naval Air Station, Brunswick, Maine****GW****(N/A Fraction)**

Extract Id	Extr. Vol. (uL)	Added (uL)	Std. Id	Accm . (uL)	Vial No.	Pre Inj. Vol. (uL)^	Final Dilution	Date Spiked/ Spiked By	Witn'd By
CR552PB-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
CR553LCS-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7394-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7395-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7396-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7397-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7397MS-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7397MSD-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7398-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7399-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7400-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG
J7402-FS(3)	475	25	JY26	25	1	500	2.000	08/20/18 SAS	LMG

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
JY26	Pipette	B814659662

Extract Id:	Comments:
CR552PB-FS	Samples reconstituted in 80/20 Methanol/milli-q water (RP-180820-3)

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

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



It can be done

BATTELLE - NORWELL OPERATIONS PREPARATION EXTRACT SPLIT FORM

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.(s)100122108-
CTOWE21**18-0500****CTO-WE21: Former Naval Air Station, Brunswick, Maine****GW**

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
CR552PB-FS	0	C	8/15/2018 10:11:00 AM	NA		NA	NA	1.000	1.000	08/15/18 SAS
CR552PB-FS	2	--	8/17/2018 3:53:00 PM	CR552PB-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
CR552PB-FS	3	--	8/17/2018 3:53:00 PM	CR552PB-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
CR553LCS-FS	0	C	8/15/2018 10:11:00 AM	NA		NA	NA	1.000	1.000	08/15/18 SAS
CR553LCS-FS	2	--	8/17/2018 3:53:00 PM	CR553LCS-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
CR553LCS-FS	3	--	8/17/2018 3:53:00 PM	CR553LCS-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7394-FS	0	C	8/15/2018 10:11:00 AM	NA		NA	NA	1.000	1.000	08/15/18 SAS
J7394-FS	2	--	8/17/2018 3:53:00 PM	J7394-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7394-FS	3	--	8/17/2018 3:53:00 PM	J7394-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7395-FS	0	C	8/15/2018 10:11:00 AM	NA		NA	NA	1.000	1.000	08/15/18 SAS
J7395-FS	2	--	8/17/2018 3:53:00 PM	J7395-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7395-FS	3	--	8/17/2018 3:53:00 PM	J7395-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7396-FS	0	C	8/15/2018 10:11:00 AM	NA		NA	NA	1.000	1.000	08/15/18 SAS
J7396-FS	2	--	8/17/2018 3:53:00 PM	J7396-FS	0	10000	5000	2.000	2.000	08/17/18 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]

Dilution Factor = [Sample Volume (uL) / Aliquot Volume (uL)] * Prior Dilution Factor

* - "C" = Extract is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS PREPARATION EXTRACT SPLIT FORM

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.(s)100122108-
CTOWE21**18-0500****CTO-WE21: Former Naval Air Station, Brunswick, Maine****GW**

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J7396-FS	3	--	8/17/2018 3:53:00 PM	J7396-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7397-FS	0	C	8/15/2018 1:28:00 PM	NA		NA	NA	1.000	1.000	08/15/18 SAS
J7397-FS	2	--	8/17/2018 3:53:00 PM	J7397-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7397-FS	3	--	8/17/2018 3:53:00 PM	J7397-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7397MS-FS	0	C	8/15/2018 1:28:00 PM	NA		NA	NA	1.000	1.000	08/15/18 SAS
J7397MS-FS	2	--	8/17/2018 3:53:00 PM	J7397MS-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7397MS-FS	3	--	8/17/2018 3:53:00 PM	J7397MS-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7397MSD-FS	0	C	8/15/2018 1:28:00 PM	NA		NA	NA	1.000	1.000	08/15/18 SAS
J7397MSD-FS	2	--	8/17/2018 3:53:00 PM	J7397MSD-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7397MSD-FS	3	--	8/17/2018 3:53:00 PM	J7397MSD-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7398-FS	0	C	8/15/2018 1:28:00 PM	NA		NA	NA	1.000	1.000	08/15/18 SAS
J7398-FS	2	--	8/17/2018 3:53:00 PM	J7398-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7398-FS	3	--	8/17/2018 3:53:00 PM	J7398-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7399-FS	0	C	8/15/2018 1:28:00 PM	NA		NA	NA	1.000	1.000	08/15/18 SAS

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]

Dilution Factor = [Sample Volume (uL) / Aliquot Volume (uL)] * Prior Dilution Factor

* - "C" = Extract is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS PREPARATION EXTRACT SPLIT FORM

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.(s)100122108-
CTOWE21**18-0500****CTO-WE21: Former Naval Air Station, Brunswick, Maine****GW**

Extract		*	Extract Date	Source		Initial Extract Vol (uL)	Extract Split	Extract Split	Total Dilution	Date/Initials
Name	#			Name	#					
J7399-FS	2	--	8/17/2018 3:53:00 PM	J7399-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7399-FS	3	--	8/17/2018 3:53:00 PM	J7399-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7400-FS	0	C	8/15/2018 1:28:00 PM	NA		NA	NA	1.000	1.000	08/15/18 SAS
J7400-FS	2	--	8/17/2018 3:53:00 PM	J7400-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7400-FS	3	--	8/17/2018 3:53:00 PM	J7400-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7402-FS	0	C	8/15/2018 10:11:00 AM	NA		NA	NA	1.000	1.000	08/15/18 SAS
J7402-FS	2	--	8/17/2018 3:53:00 PM	J7402-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
J7402-FS	3	--	8/17/2018 3:53:00 PM	J7402-FS	0	10000	5000	2.000	2.000	08/17/18 SAS
Extract Id: CR552PB-FS	Comments: Samples reconstituted in 80/20 Methanol/milli-q water (RP-180820-3)									

Total Oil = [Sample Volume (uL) / Aliquot Volume (uL)] * [Aliquot Weight (mg)]

Dilution Factor = [Sample Volume (uL) / Aliquot Volume (uL)] * Prior Dilution Factor

* - "C" = Extract is Consumed



It can be done

**BATTELLE - NORWELL OPERATIONS
SAMPLE SPECIFIC COMMENTS**

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.(s)

100122108-
CTOWE21

18-0500

CTO-WE21: Former Naval Air Station, Brunswick, Maine

GW

Sample ID:	Comment:	Date/Initials:
CR552PB-FS	Extraction for samples CR552PB-FS through J7396-FS and J7402-FS began at 10:11am	08/15/18 SAS
CR552PB-FS	Sample extraction ended at 11:09am	08/15/18 SAS
CR553LCS-FS	Sample extraction ended at 11:04am	08/15/18 SAS
J7394-FS	Sample extraction ended at 11:11am	08/15/18 SAS
J7395-FS	Sample extraction ended at 11:10am	08/15/18 SAS
J7396-FS	Sample was yellow in color.	08/15/18 SAS
J7396-FS	Sample extraction ended at 11:16am	08/15/18 SAS
J7397-FS	Sample was yellow in color.	08/15/18 SAS
J7397-FS	Extraction for samples J7397-FS through J7400-FS began at 1:28pm	08/15/18 SAS
J7397-FS	Sample extraction ended at 2:28pm	08/15/18 SAS
J7397MS-FS	Sample was yellow in color.	08/15/18 SAS
J7397MS-FS	Sample extraction ended at 2:28pm	08/15/18 SAS
J7397MSD-FS	Sample was yellow in color.	08/15/18 SAS
J7397MSD-FS	Sample extraction ended at 2:31pm	08/15/18 SAS
J7398-FS	Sample was yellow in color.	08/15/18 SAS
J7398-FS	Sample extraction ended at 2:30pm	08/15/18 SAS
J7399-FS	Sample was yellow in color.	08/15/18 SAS
J7399-FS	Sample extraction ended at 2:33pm	08/15/18 SAS
J7400-FS	Sample was yellow in color.	08/15/18 SAS
J7400-FS	Sample extraction ended at 2:37pm	08/15/18 SAS
J7402-FS	Sample extraction ended at 11:07am	08/15/18 SAS

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
1	MEOH		8/24/2018 10:26:02 PM	5-0369.dam	18-0501-515-520-500.wiff
2	JY38	L1	8/24/2018 10:36:54 PM	5-0369.dam	18-0501-515-520-500.wiff
3	JY39	L2	8/24/2018 10:47:47 PM	5-0369.dam	18-0501-515-520-500.wiff
4	JY40	L3	8/24/2018 10:58:41 PM	5-0369.dam	18-0501-515-520-500.wiff
5	JY41	L4	8/24/2018 11:09:34 PM	5-0369.dam	18-0501-515-520-500.wiff
6	JY42	L5	8/24/2018 11:20:26 PM	5-0369.dam	18-0501-515-520-500.wiff
7	JY43	L6	8/24/2018 11:31:18 PM	5-0369.dam	18-0501-515-520-500.wiff
8	JY44	L7	8/24/2018 11:42:11 PM	5-0369.dam	18-0501-515-520-500.wiff
9	JY46 IB	Instrument Blank	8/24/2018 11:53:03 PM	5-0369.dam	18-0501-515-520-500.wiff
10	JY45 ICC	ICC	8/25/2018 12:03:55 AM	5-0369.dam	18-0501-515-520-500.wiff
11	JX29 BRANCH	Branch Standard	8/25/2018 12:14:48 AM	5-0369.dam	18-0501-515-520-500.wiff
1	MEOH		8/25/2018 4:35:48 AM	5-0369.dam	18-0501-515-520-500.wiff
32	CR552PB-FS(3)	Procedural Blank	8/25/2018 4:46:41 AM	5-0369.dam	18-0501-515-520-500.wiff
33	CR553LCS-FS(3)	Laboratory Control Sample	8/25/2018 4:57:34 AM	5-0369.dam	18-0501-515-520-500.wiff
34	J7402-FS(3)	NASB-BLL15-GW-RB01-080918	8/25/2018 5:08:27 AM	5-0369.dam	18-0501-515-520-500.wiff
35	J7394-FS(3)	NASB-CCC-GW-01-0818	8/25/2018 5:19:19 AM	5-0369.dam	18-0501-515-520-500.wiff
36	J7395-FS(3)	NASB-CCC-GW-02-0818	8/25/2018 5:30:11 AM	5-0369.dam	18-0501-515-520-500.wiff
37	J7396-FS(3)	NASB-BLL15-GW-02-0818	8/25/2018 5:41:02 AM	5-0369.dam	18-0501-515-520-500.wiff
51	MEOH		8/25/2018 5:51:55 AM	5-0369.dam	18-0501-515-520-500.wiff
38	JY42 CCV	CCV	8/25/2018 6:02:47 AM	5-0369.dam	18-0501-515-520-500.wiff
51	MEOH		8/25/2018 6:13:40 AM	5-0369.dam	18-0501-515-520-500.wiff
39	J7397-FS(3)	NASB-BLL15-GW-01-0818	8/25/2018 6:24:32 AM	5-0369.dam	18-0501-515-520-500.wiff
40	J7397MS-FS(3)	Matrix Spike Sample	8/25/2018 6:35:25 AM	5-0369.dam	18-0501-515-520-500.wiff
41	J7397MSD-FS(3)	Matrix Spike Duplicate Sample	8/25/2018 6:46:18 AM	5-0369.dam	18-0501-515-520-500.wiff
42	J7398-FS(3)	NASB-BLL15-DUP-080918	8/25/2018 6:57:11 AM	5-0369.dam	18-0501-515-520-500.wiff
43	J7399-FS(3)	NASB-BLL15-GW-03-0818	8/25/2018 7:08:02 AM	5-0369.dam	18-0501-515-520-500.wiff
44	J7400-FS(3)	NASB-BLL15-GW-04-	8/25/2018 7:18:54	5-0369.dam	18-0501-515-520-

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
		0818	AM		500.wiff
45	MEOH		8/25/2018 7:29:46 AM	5-0369.dam	18-0501-515-520- 500.wiff
46	JY41 CCV	CCV	8/25/2018 7:40:38 AM	5-0369.dam	18-0501-515-520- 500.wiff

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
1	MeOH		8/28/2018 7:53:59 PM	5-0369.dam	18-0511_18-0517.wiff
16	JY38	L1	8/28/2018 8:04:50 PM	5-0369.dam	18-0511_18-0517.wiff
17	JY39	L2	8/28/2018 8:15:41 PM	5-0369.dam	18-0511_18-0517.wiff
18	JY40	L3	8/28/2018 8:26:32 PM	5-0369.dam	18-0511_18-0517.wiff
19	JY41	L4	8/28/2018 8:37:24 PM	5-0369.dam	18-0511_18-0517.wiff
20	JY42	L5	8/28/2018 8:48:15 PM	5-0369.dam	18-0511_18-0517.wiff
21	JY43	L6	8/28/2018 8:59:08 PM	5-0369.dam	18-0511_18-0517.wiff
22	JY44	L7	8/28/2018 9:09:59 PM	5-0369.dam	18-0511_18-0517.wiff
23	JY46 IB	Instrument Blank	8/28/2018 9:20:49 PM	5-0369.dam	18-0511_18-0517.wiff
24	JY45 ICC	ICC	8/28/2018 9:31:41 PM	5-0369.dam	18-0511_18-0517.wiff
25	JX29 Branch		8/28/2018 9:42:33 PM	5-0369.dam	18-0511_18-0517.wiff
1	MeOH		8/28/2018 9:53:25 PM	5-0369.dam	18-0511_18-0517.wiff
19	JY41 CCV	CCV	8/29/2018 12:58:01 AM	5-0369.dam	18-0511_18-0517.wiff
1	MeOH		8/29/2018 1:08:54 AM	5-0369.dam	18-0511_18-0517.wiff
38	J7394-FS(3)	NASB-CCC-GW-01-0818	8/29/2018 1:19:47 AM	5-0369.dam	18-0511_18-0517.wiff
39	J7397-FS(3)	NASB-BLL15-GW-01-0818	8/29/2018 1:30:39 AM	5-0369.dam	18-0511_18-0517.wiff
40	J7397MS-FS(3)	Matrix Spike Sample	8/29/2018 1:41:30 AM	5-0369.dam	18-0511_18-0517.wiff
41	J7397MSD-FS(3)	Matrix Spike Duplicate Sample	8/29/2018 1:52:22 AM	5-0369.dam	18-0511_18-0517.wiff
42	J7398-FS(3)	NASB-BLL15-DUP-080918	8/29/2018 2:03:14 AM	5-0369.dam	18-0511_18-0517.wiff
43	J7399-FS(3)	NASB-BLL15-GW-03-0818	8/29/2018 2:14:05 AM	5-0369.dam	18-0511_18-0517.wiff
44	J7400-FS(3)	NASB-BLL15-GW-04-0818	8/29/2018 2:24:57 AM	5-0369.dam	18-0511_18-0517.wiff
45	MeOH		8/29/2018 2:35:48 AM	5-0369.dam	18-0511_18-0517.wiff
20	JY42 CCV	CCV	8/29/2018 2:46:39 AM	5-0369.dam	18-0511_18-0517.wiff



1 These samples were rerun for confirmation and the results can be found in the unused data section of this data package. DMS 8/30/2018



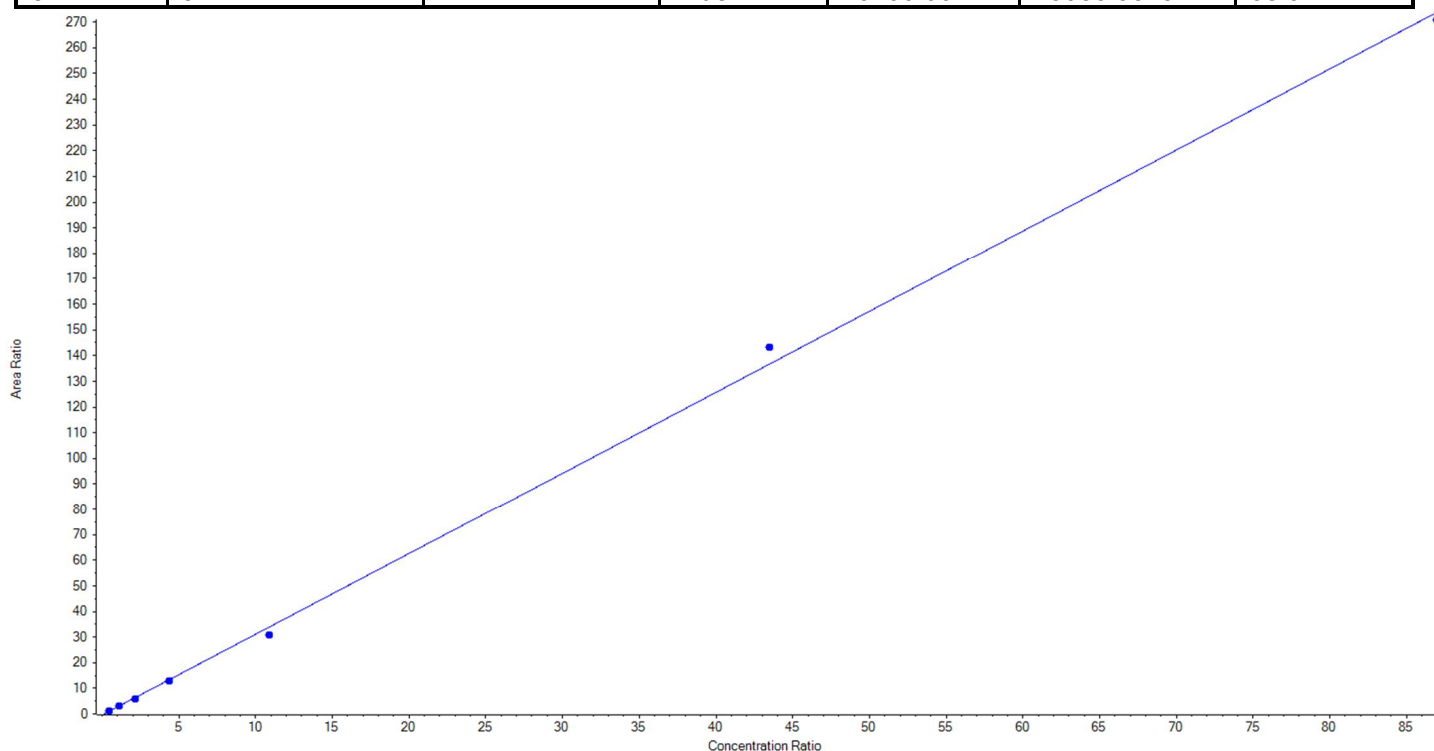
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Created with Analyst Reporter
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Analyte Name	PFBS_1	Data File	18-0501-515-520-500.wiff
MRM Transition	298.9 / 80.0	Result Table	18-0500_BASE_A
Internal Standard	13C3-PFBS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 3.15281x + -0.41358$ ($r = 0.99916$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	118.174563	117.0
3	JY39	L2	True	252.50	254.441490	100.8
4	JY40	L3	True	505.00	456.707111	90.4
5	JY41	L4	True	1010.00	973.620829	96.4
6	JY42	L5	True	2525.00	2311.981236	91.6
7	JY43	L6	True	10100.00	10594.642449	104.9
8	JY44	L7	True	20200.00	19983.932322	98.9





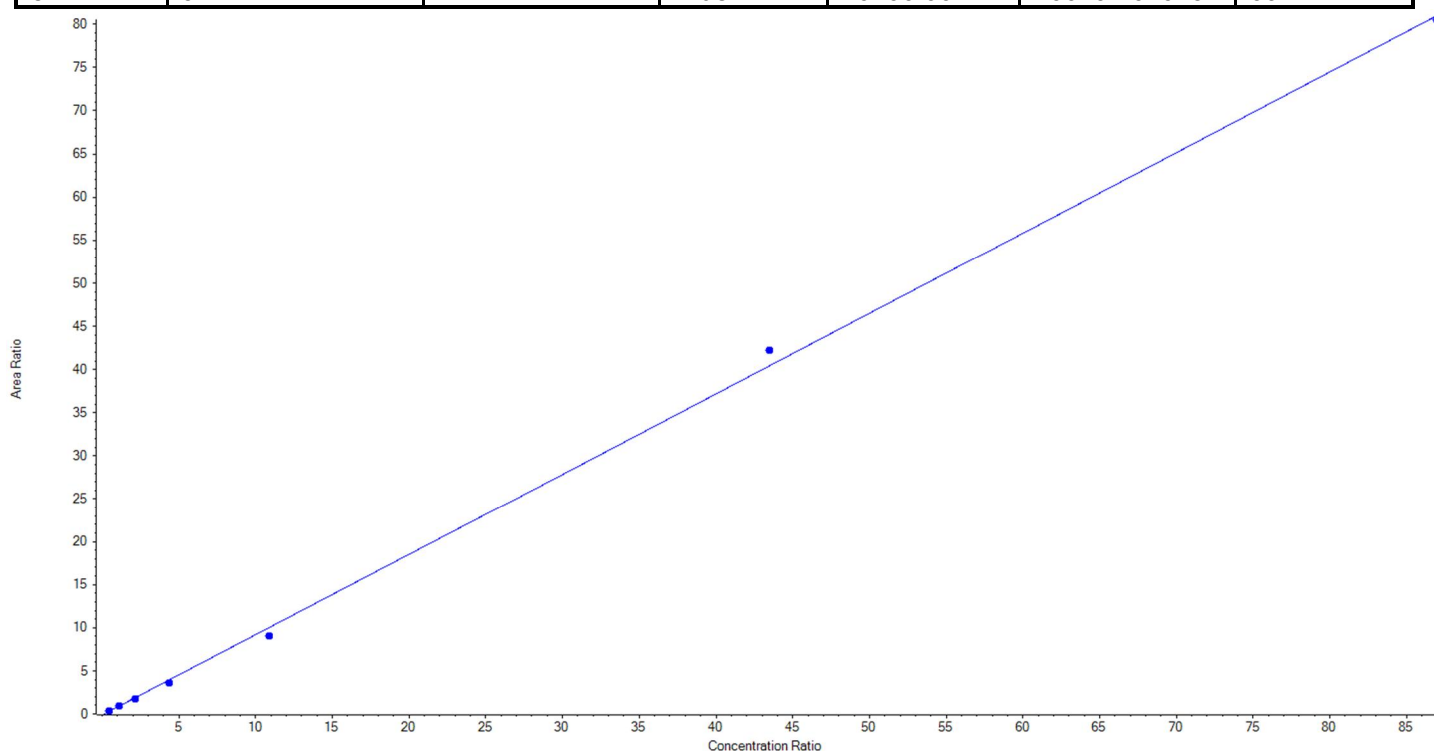
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Analyte Name	PFBS_2	Data File	18-0501-515-520-500.wiff
MRM Transition	298.9 / 99.0	Result Table	18-0500_BASE_A
Internal Standard	13C3-PFBS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.93255x + -0.12994$ ($r = 0.99907$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	124.006251	122.8
3	JY39	L2	True	252.50	251.390877	99.6
4	JY40	L3	True	505.00	457.925956	90.7
5	JY41	L4	True	1010.00	933.624261	92.4
6	JY42	L5	True	2525.00	2287.352093	90.6
7	JY43	L6	True	10100.00	10559.938920	104.6
8	JY44	L7	True	20200.00	20079.261643	99.4





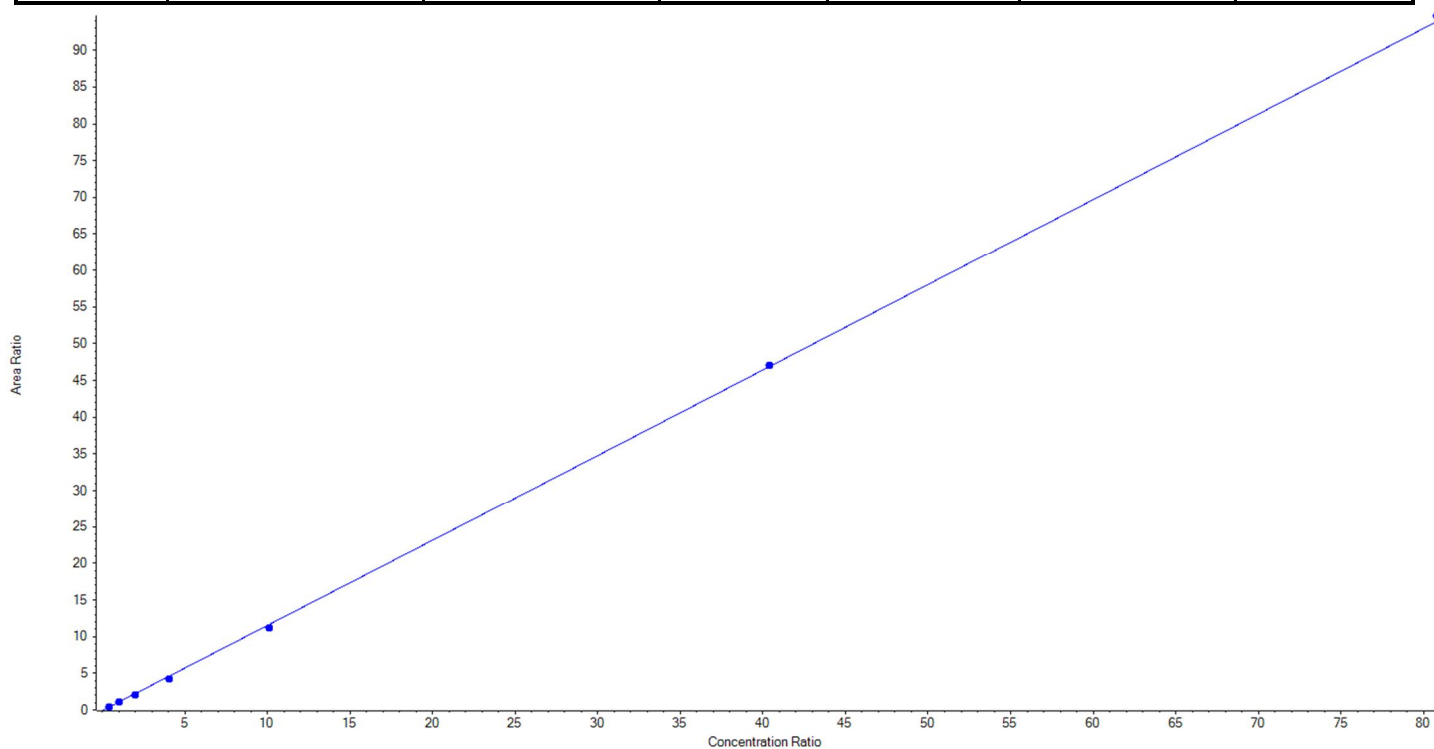
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Created with Analyst Reporter
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Analyte Name	PFHxA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	313.0 / 269.0	Result Table	18-0500_BASE_A
Internal Standard	13C5-PFHxA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.16342x + -0.10965$ ($r = 0.99970$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	117.846366	116.7
3	JY39	L2	True	252.50	259.195130	102.7
4	JY40	L3	True	505.00	465.851790	92.3
5	JY41	L4	True	1010.00	919.737382	91.1
6	JY42	L5	True	2525.00	2428.348557	96.2
7	JY43	L6	True	10100.00	10136.988023	100.4
8	JY44	L7	True	20200.00	20365.532752	100.8





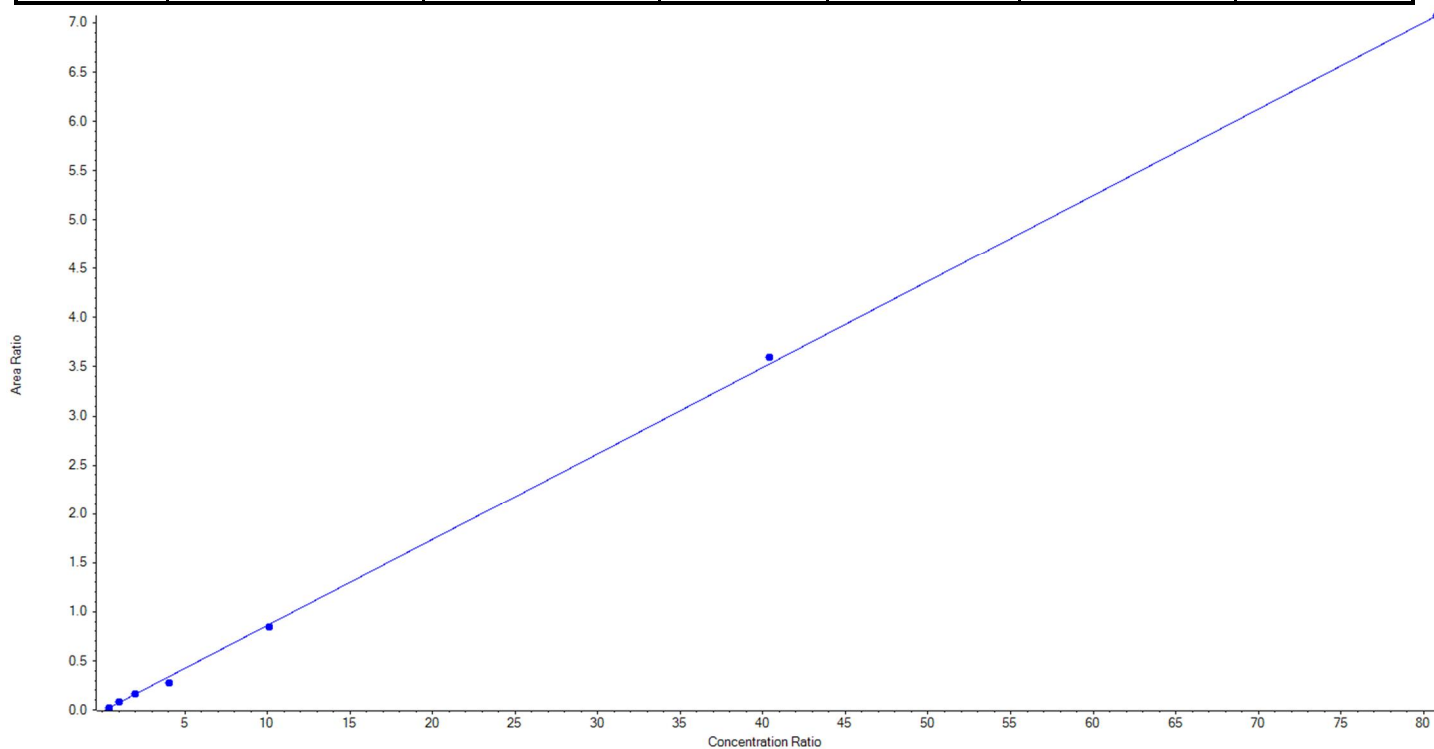
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Analyte Name	PFHxA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	313.0 / 119.0	Result Table	18-0500_BASE_A
Internal Standard	13C5-PFHxA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.08772 x + -0.01589$ ($r = 0.99944$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	108.429840	107.4
3	JY39	L2	True	252.50	269.130230	106.6
4	JY40	L3	True	505.00	521.629051	103.3
5	JY41	L4	True	1010.00	839.959766	83.2
6	JY42	L5	True	2525.00	2467.526138	97.7
7	JY43	L6	True	10100.00	10292.222124	101.9
8	JY44	L7	True	20200.00	20194.602851	100.0





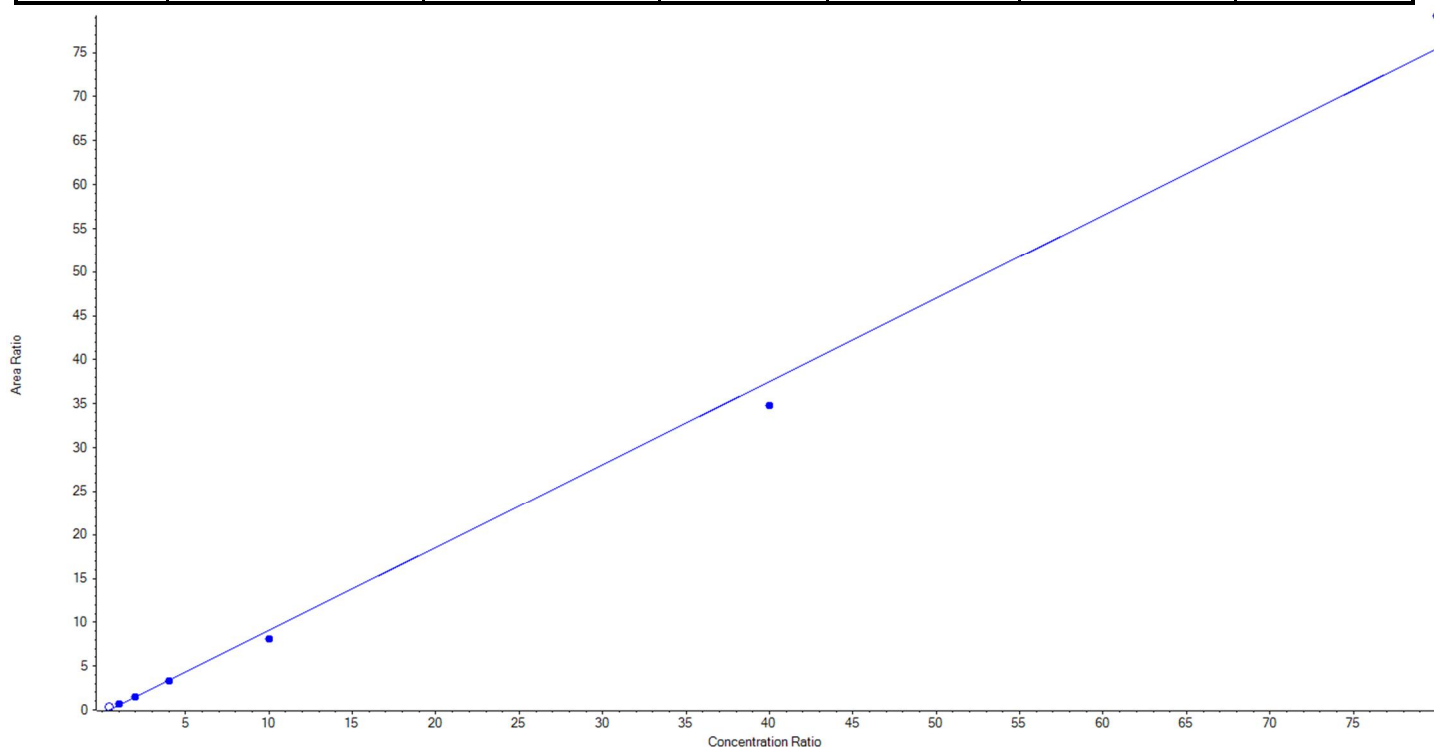
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Analyte Name	PFHpA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	363.0 / 319.0	Result Table	18-0500_BASE_A
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.94822 x + -0.40079$ ($r = 0.99770$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	183.037265	183.0
3	JY39	L2	True	250.00	289.678245	115.9
4	JY40	L3	True	500.00	493.381350	98.7
5	JY41	L4	True	1000.00	984.594709	98.5
6	JY42	L5	True	2500.00	2235.657765	89.4
7	JY43	L6	True	10000.00	9266.642157	92.7
8	JY44	L7	True	20000.00	20980.045774	104.9





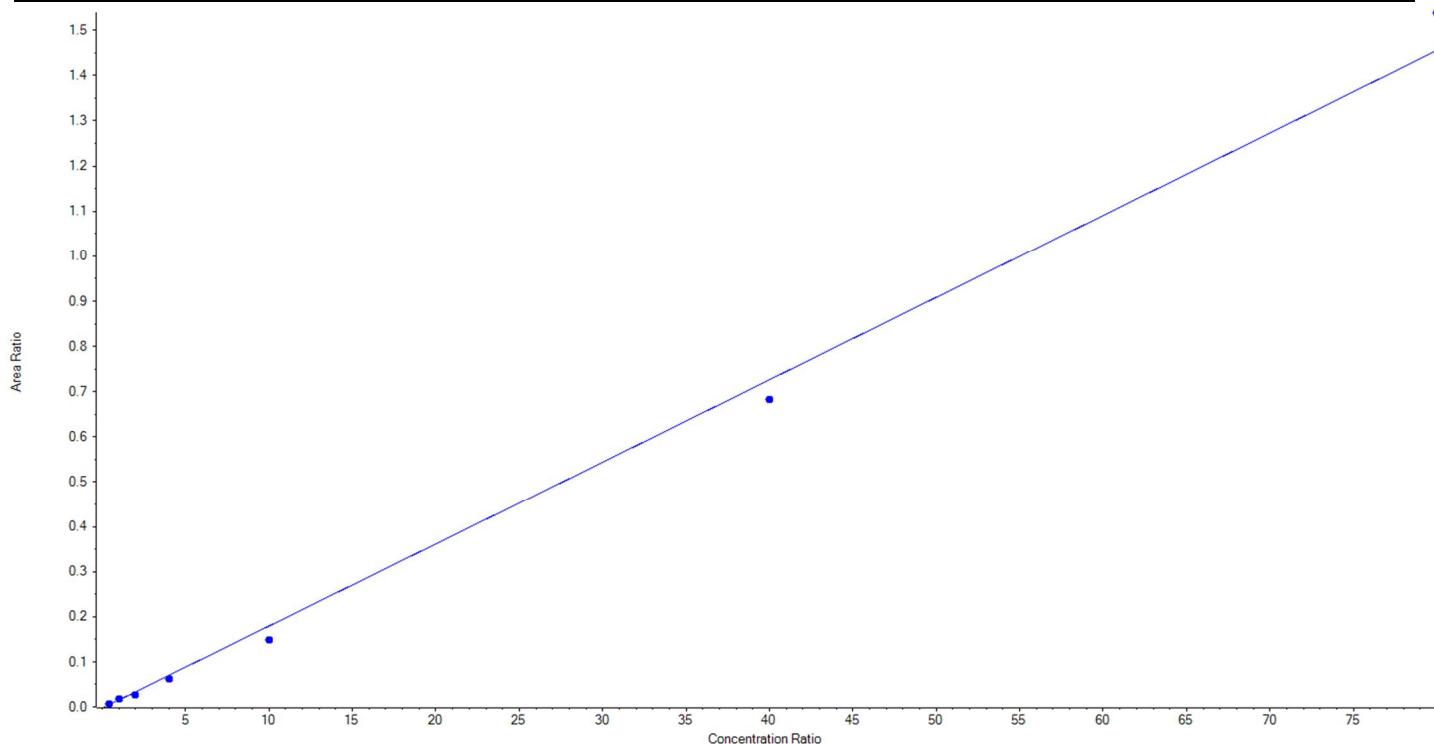
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Analyte Name	PFHpA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	363.0 / 169.0	Result Table	18-0500_BASE_A
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.01823 x + -0.00296$ ($r = 0.99671$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	126.881979	126.9
3	JY39	L2	True	250.00	291.012163	116.4
4	JY40	L3	True	500.00	419.166669	83.8
5	JY41	L4	True	1000.00	899.978240	90.0
6	JY42	L5	True	2500.00	2081.185199	83.3
7	JY43	L6	True	10000.00	9395.142275	94.0
8	JY44	L7	True	20000.00	21136.633475	105.7





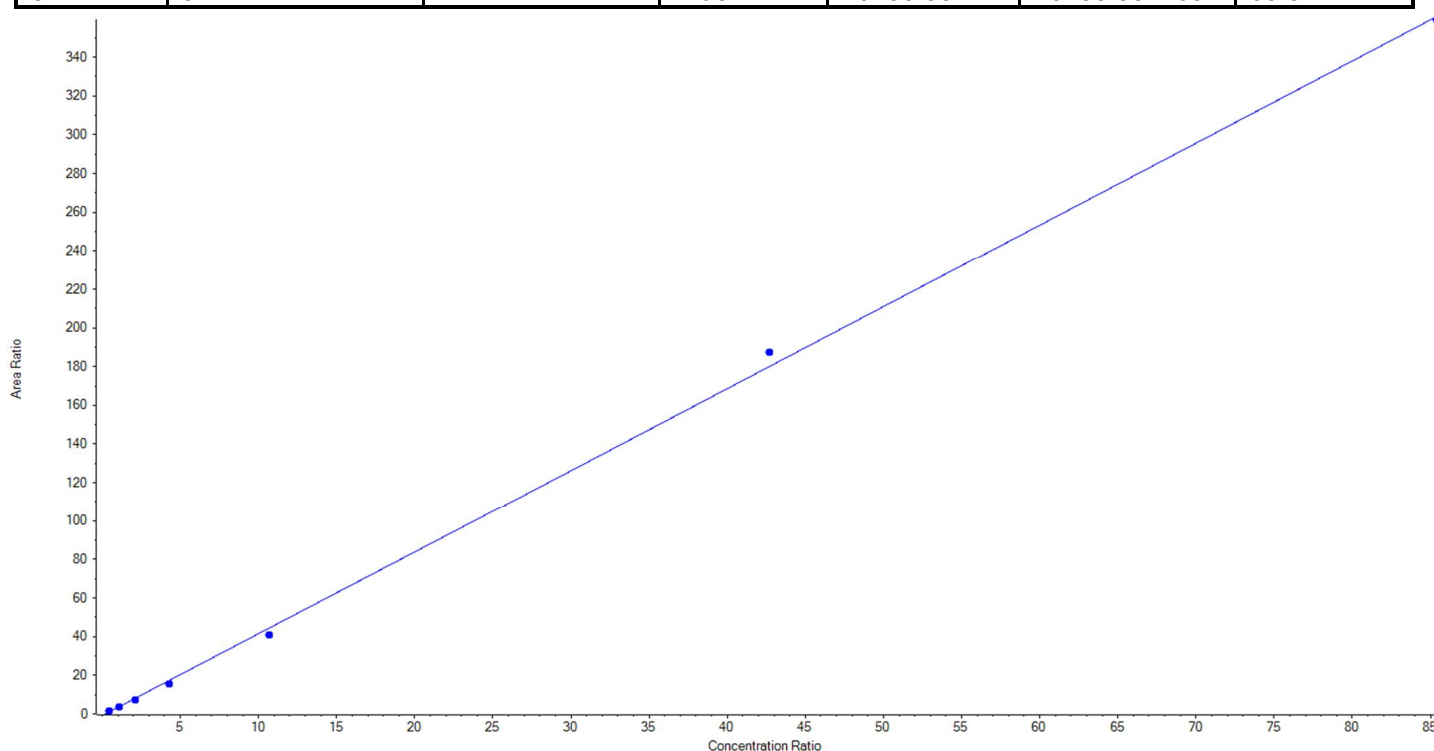
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Analyte Name	PFHxS_1	Data File	18-0501-515-520-500.wiff
MRM Transition	399.0 / 80.0	Result Table	18-0500_BASE_A
Internal Standard	13C3-PFHxS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 4.23537 x + -0.84536$ ($r = 0.99917$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	126.099371	124.9
3	JY39	L2	True	252.50	246.750083	97.7
4	JY40	L3	True	505.00	455.053362	90.1
5	JY41	L4	True	1010.00	928.278420	91.9
6	JY42	L5	True	2525.00	2316.855490	91.8
7	JY43	L6	True	10100.00	10517.109004	104.1
8	JY44	L7	True	20200.00	20103.354269	99.5





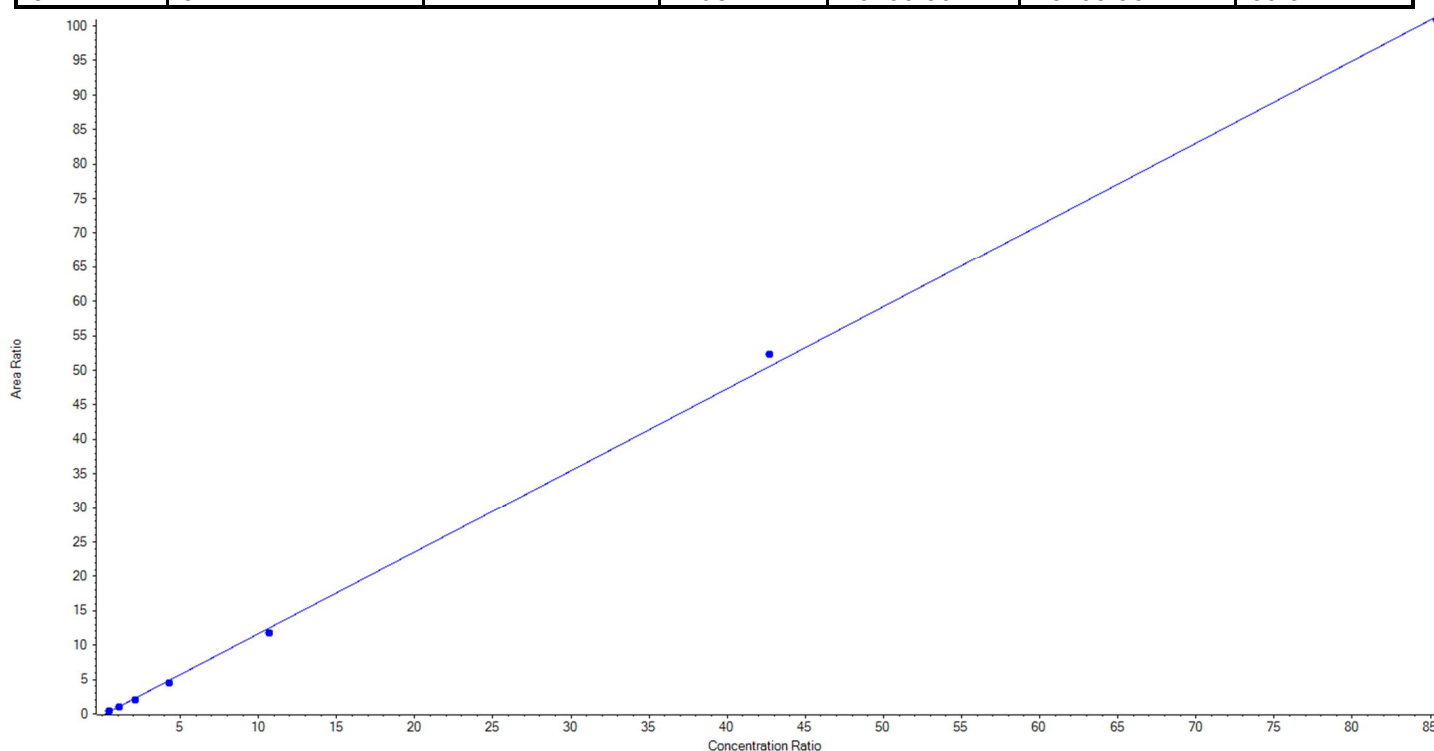
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Analyte Name	PFHxS_2	Data File	18-0501-515-520-500.wiff
MRM Transition	399.0 / 99.0	Result Table	18-0500_BASE_A
Internal Standard	13C3-PFHxS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.18953x + -0.23223$ ($r = 0.99941$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	125.405816	124.2
3	JY39	L2	True	252.50	238.832101	94.6
4	JY40	L3	True	505.00	462.800440	91.6
5	JY41	L4	True	1010.00	934.199524	92.5
6	JY42	L5	True	2525.00	2375.949764	94.1
7	JY43	L6	True	10100.00	10452.350229	103.5
8	JY44	L7	True	20200.00	20103.962127	99.5





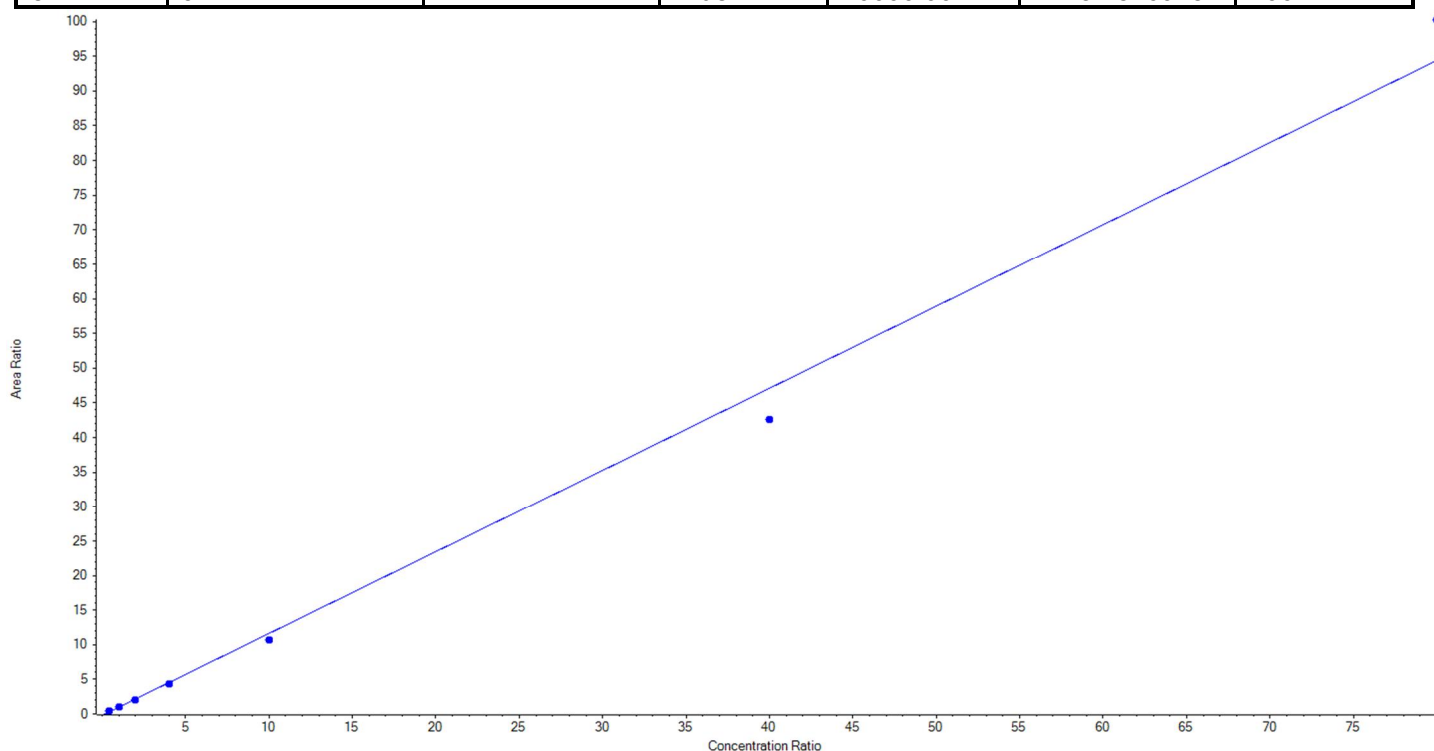
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Analyte Name	PFOA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	413.0 / 369.0	Result Table	18-0500_BASE_A
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.18259x + -0.20416$ ($r = 0.99688$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	124.723500	124.7
3	JY39	L2	True	250.00	250.507586	100.2
4	JY40	L3	True	500.00	455.668756	91.1
5	JY41	L4	True	1000.00	957.408716	95.7
6	JY42	L5	True	2500.00	2291.377116	91.7
7	JY43	L6	True	10000.00	9038.437378	90.4
8	JY44	L7	True	20000.00	21231.876948	106.2





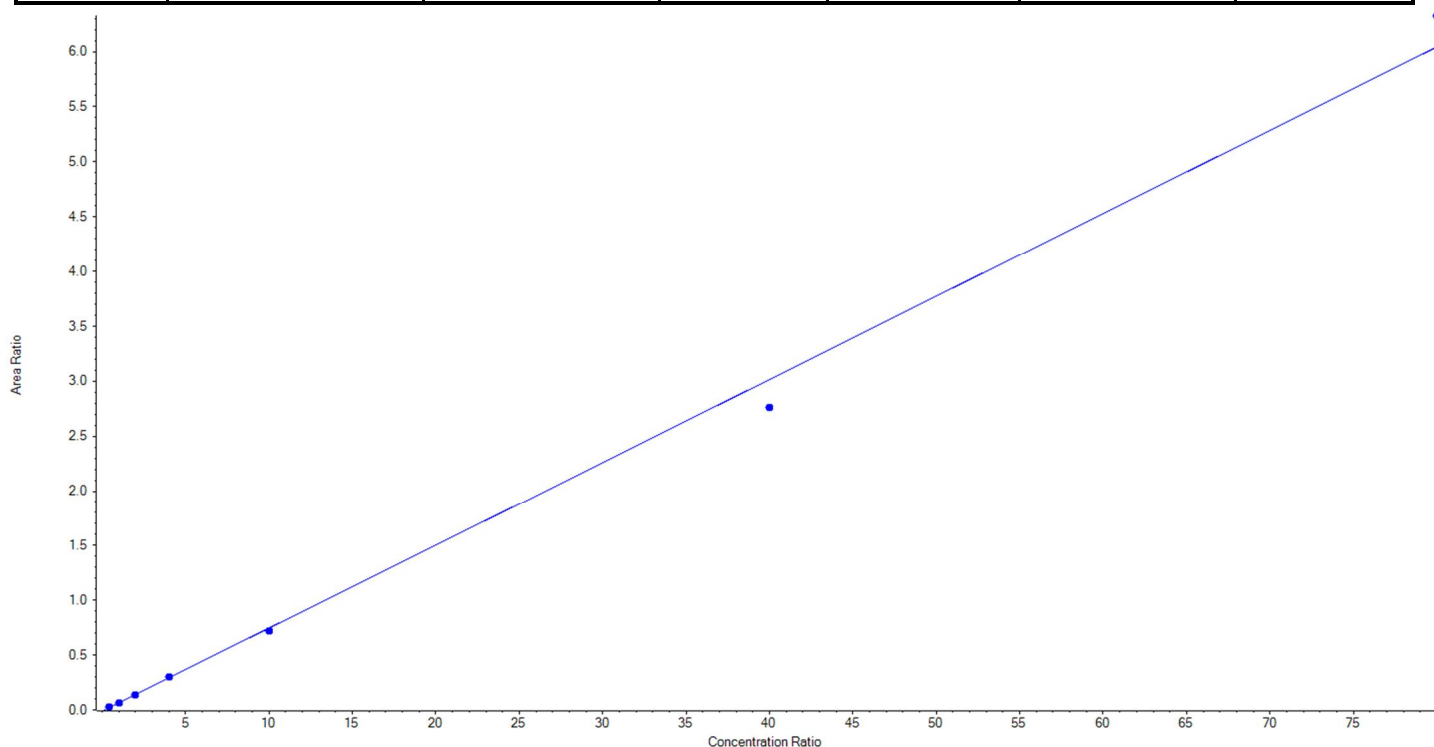
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Analyte Name	PFOA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	413.0 / 169.0	Result Table	18-0500_BASE_A
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.07565x + -0.01028$ ($r = 0.99809$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	115.729454	115.7
3	JY39	L2	True	250.00	235.595736	94.2
4	JY40	L3	True	500.00	480.697290	96.1
5	JY41	L4	True	1000.00	1013.337499	101.3
6	JY42	L5	True	2500.00	2405.851339	96.2
7	JY43	L6	True	10000.00	9166.209412	91.7
8	JY44	L7	True	20000.00	20932.579270	104.7





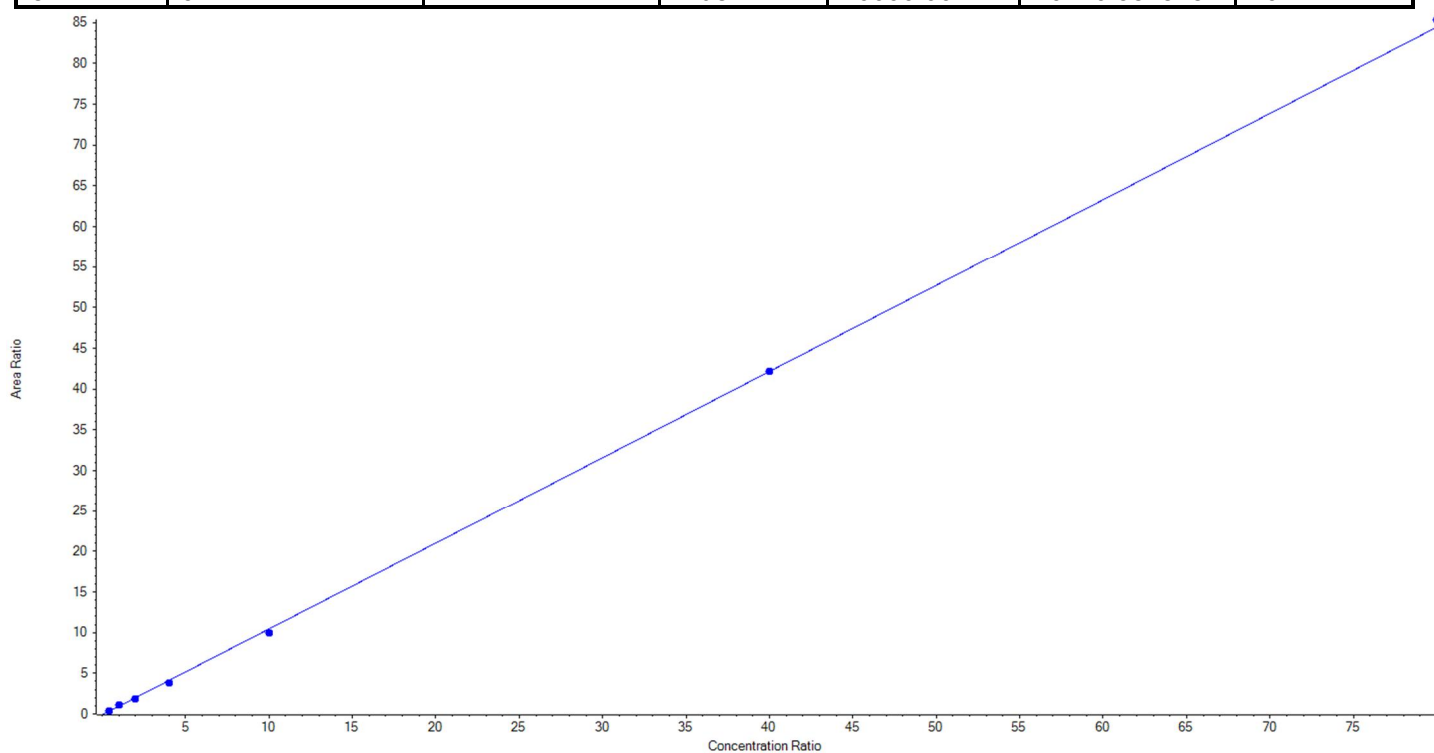
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Analyte Name	PFNA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	463.0 / 419.0	Result Table	18-0500_BASE_A
Internal Standard	13C9-PFNA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.05685x + -0.11971$ ($r = 0.99968$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	107.015449	107.0
3	JY39	L2	True	250.00	278.560077	111.4
4	JY40	L3	True	500.00	464.832649	93.0
5	JY41	L4	True	1000.00	927.907689	92.8
6	JY42	L5	True	2500.00	2371.276802	94.9
7	JY43	L6	True	10000.00	9990.022487	99.9
8	JY44	L7	True	20000.00	20210.384848	101.1





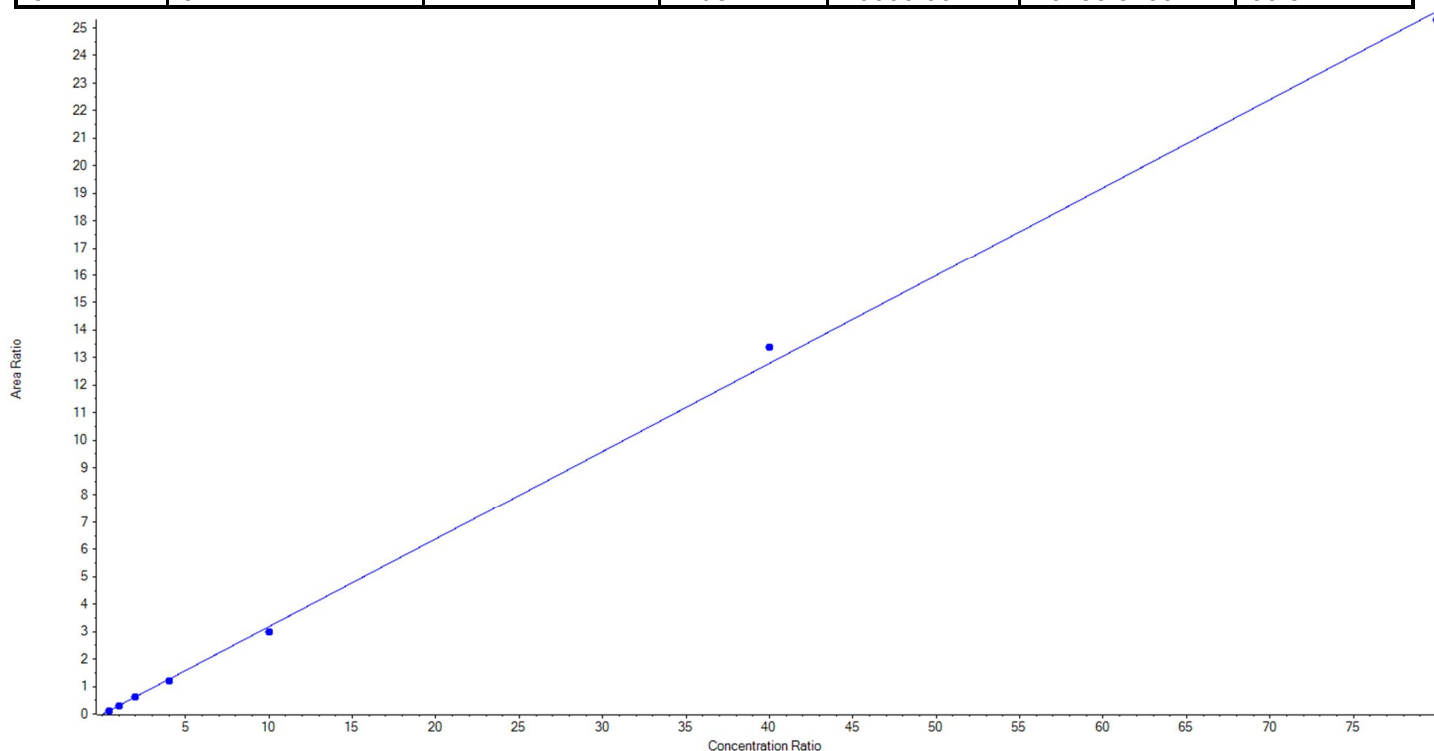
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MRM Transition	463.0 / 219.0	Result Table	18-0500_BASE_A
Internal Standard	13C9-PFNA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.32026x + -0.01897$ ($r = 0.99944$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	107.867314	107.9
3	JY39	L2	True	250.00	253.733268	101.5
4	JY40	L3	True	500.00	495.088887	99.0
5	JY41	L4	True	1000.00	944.716102	94.5
6	JY42	L5	True	2500.00	2348.525773	93.9
7	JY43	L6	True	10000.00	10441.723314	104.4
8	JY44	L7	True	20000.00	19758.345342	98.8





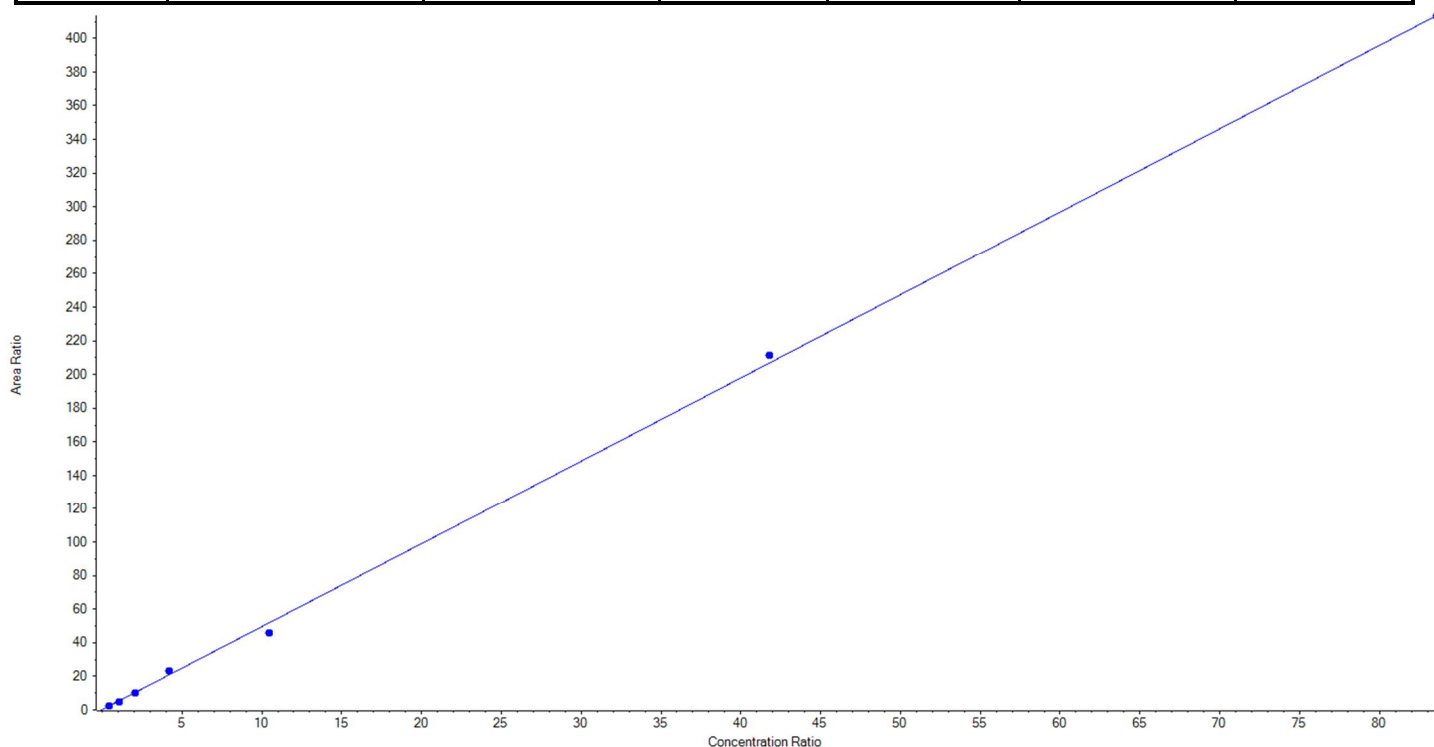
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Analyte Name	PFOS_1	Data File	18-0501-515-520-500.wiff
MRM Transition	499.0 / 80.0	Result Table	18-0500_BASE_A
Internal Standard	13C8-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 4.94550x + 0.15650$ ($r = 0.99918$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	108.675584	108.7
3	JY39	L2	True	250.00	234.616933	93.9
4	JY40	L3	True	500.00	479.887763	96.0
5	JY41	L4	True	1000.00	1108.586887	110.9
6	JY42	L5	True	2500.00	2213.074605	88.5
7	JY43	L6	True	10000.00	10218.525269	102.2
8	JY44	L7	True	20000.00	19986.632959	99.9





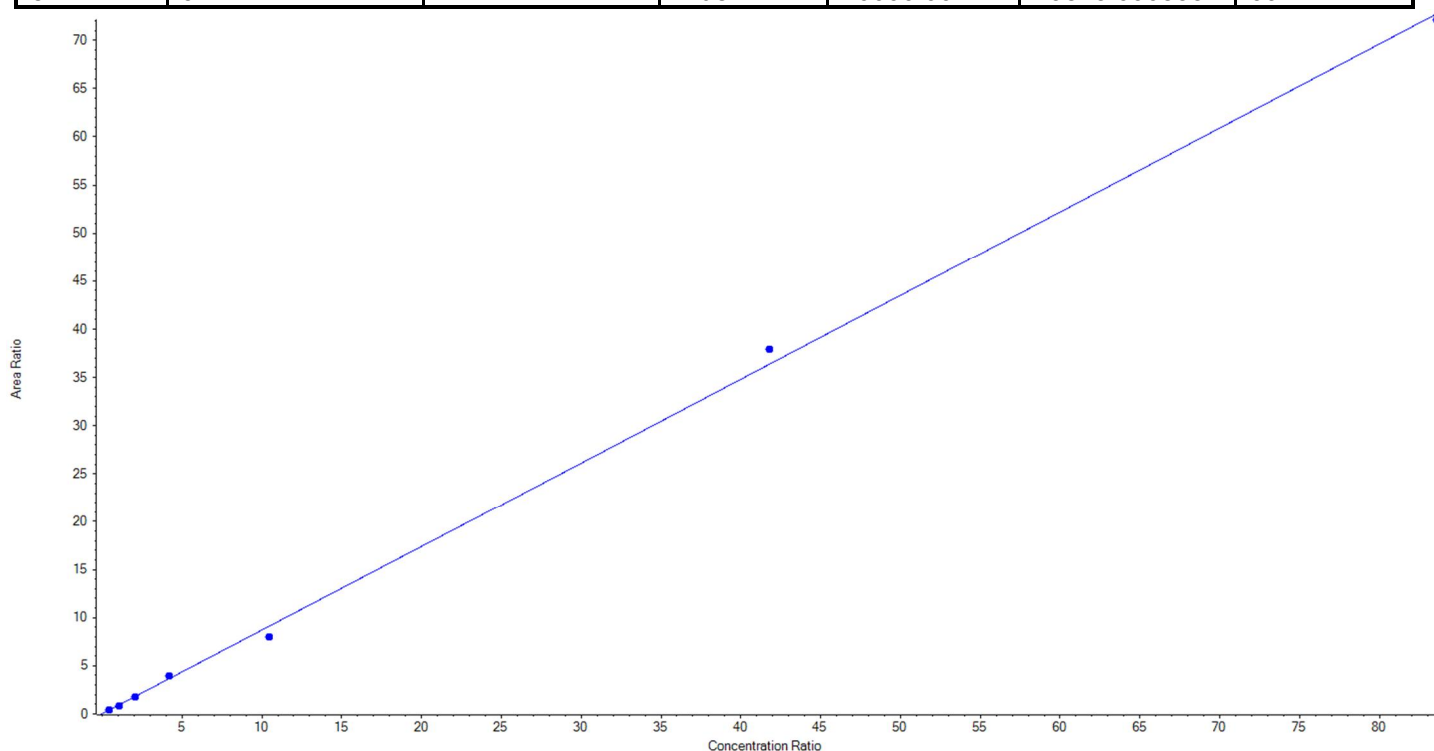
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Analyte Name	PFOS_2	Data File	18-0501-515-520-500.wiff
MRM Transition	499.0 / 99.0	Result Table	18-0500_BASE_A
Internal Standard	13C8-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.86986 x + 0.01336$ ($r = 0.99881$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	117.347383	117.4
3	JY39	L2	True	250.00	217.248927	86.9
4	JY40	L3	True	500.00	477.582506	95.5
5	JY41	L4	True	1000.00	1091.956540	109.2
6	JY42	L5	True	2500.00	2190.256613	87.6
7	JY43	L6	True	10000.00	10430.517196	104.3
8	JY44	L7	True	20000.00	19825.090835	99.1





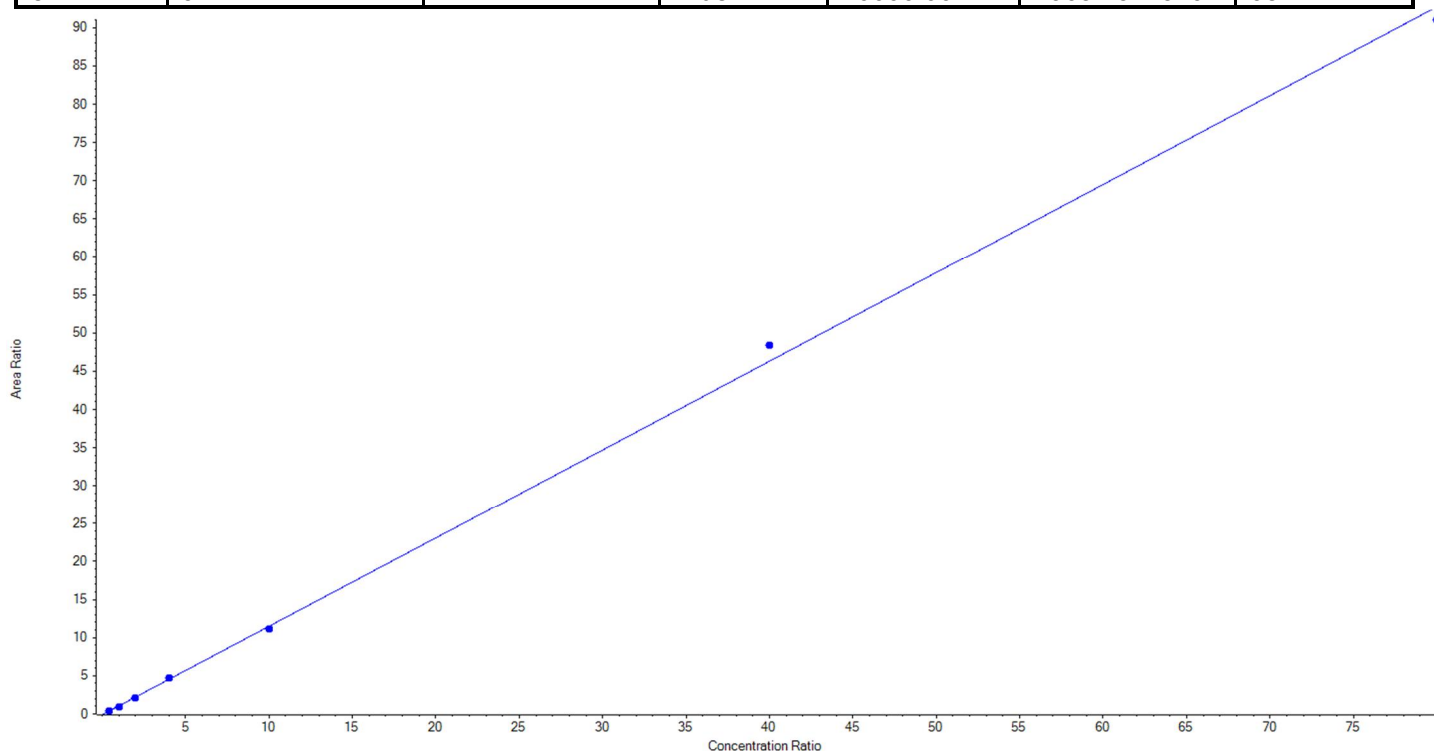
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Analyte Name	PFDA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	513.0 / 469.0	Result Table	18-0500_BASE_A
Internal Standard	13C6-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.16034 x + -0.10710$ ($r = 0.99947$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	110.198423	110.2
3	JY39	L2	True	250.00	231.107869	92.4
4	JY40	L3	True	500.00	470.043896	94.0
5	JY41	L4	True	1000.00	1035.018294	103.5
6	JY42	L5	True	2500.00	2432.445932	97.3
7	JY43	L6	True	10000.00	10438.811237	104.4
8	JY44	L7	True	20000.00	19632.374349	98.2





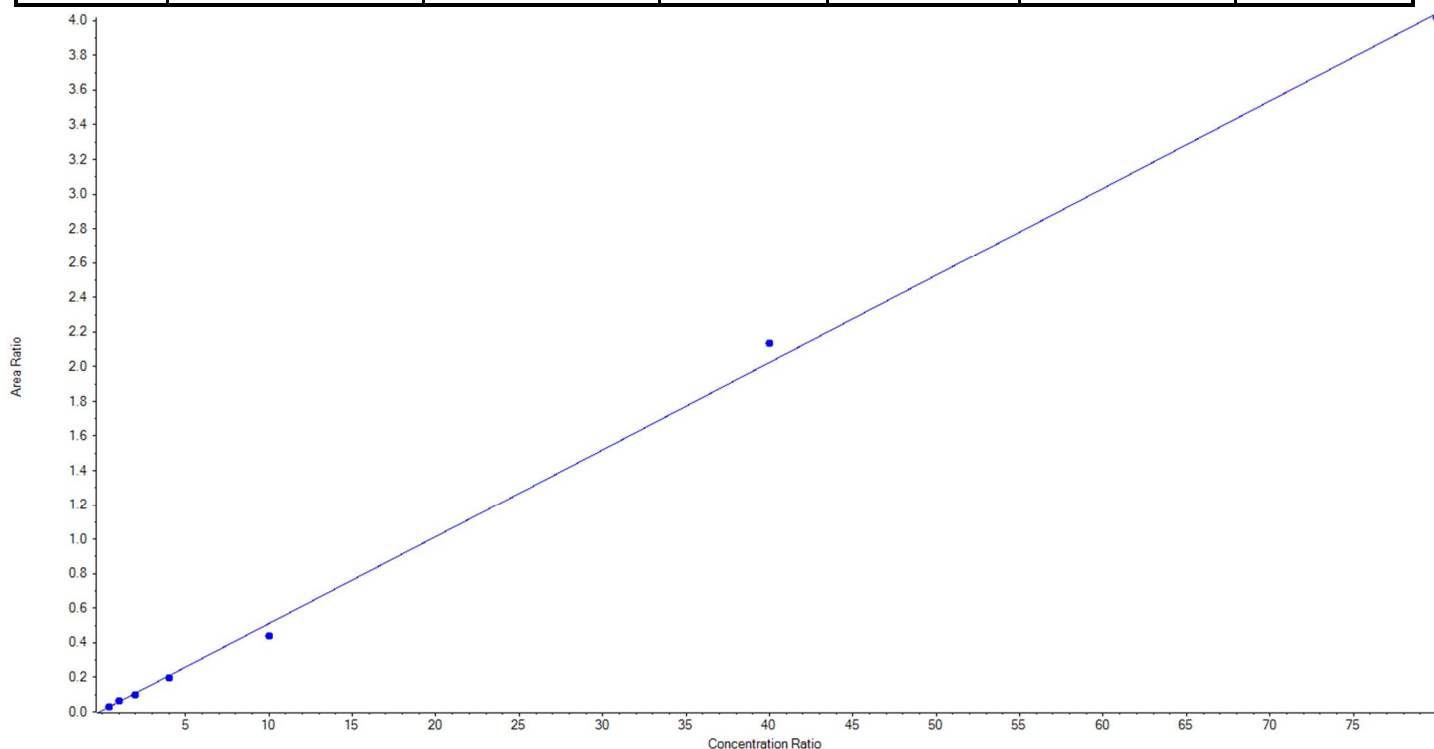
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Analyte Name	PFDA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	513.0 / 219.0	Result Table	18-0500_BASE_A
Internal Standard	13C6-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.05043x + 0.00732$ ($r = 0.99845$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	114.079000	114.1
3	JY39	L2	True	250.00	275.419951	110.2
4	JY40	L3	True	500.00	457.576231	91.5
5	JY41	L4	True	1000.00	940.050222	94.0
6	JY42	L5	True	2500.00	2132.114826	85.3
7	JY43	L6	True	10000.00	10558.871916	105.6
8	JY44	L7	True	20000.00	19871.887855	99.4





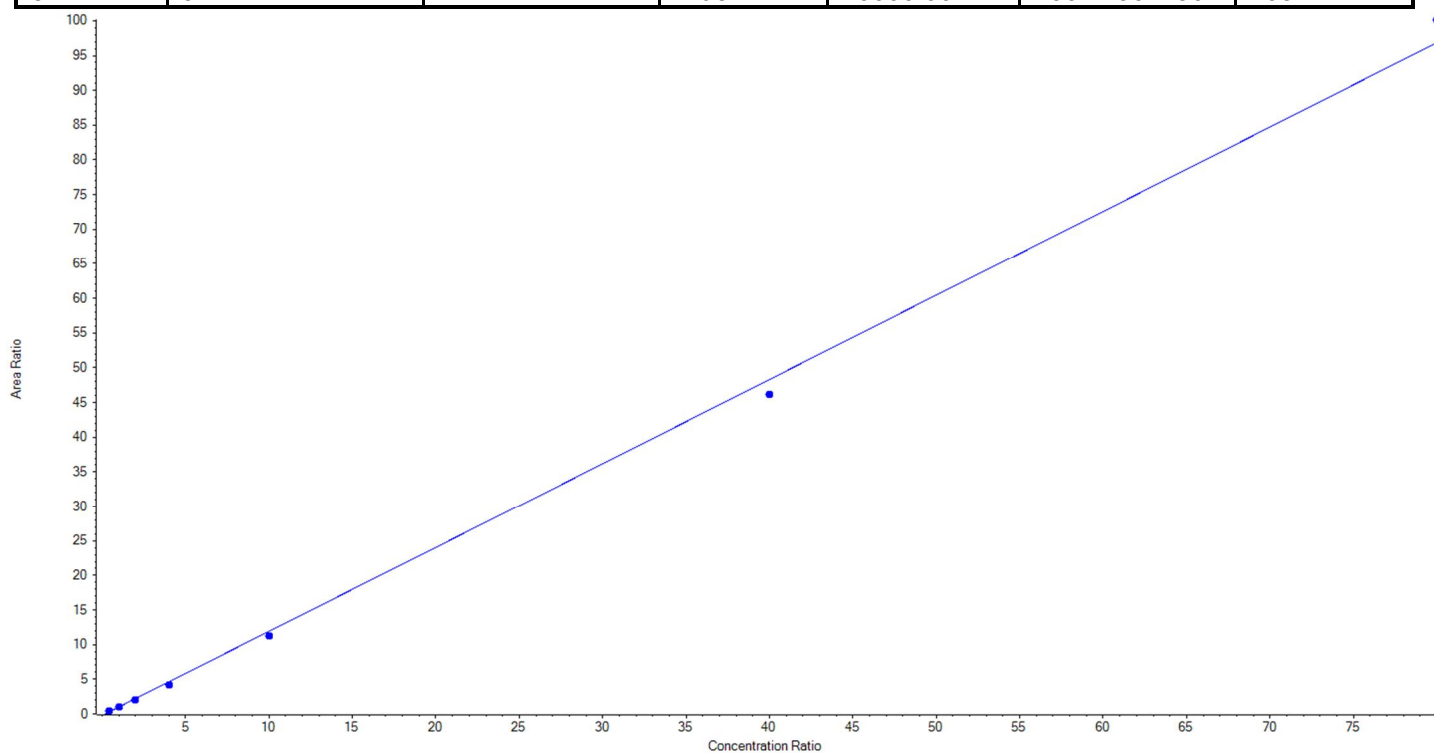
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Analyte Name	PFUnA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	563.0 / 519.0	Result Table	18-0500_BASE_A
Internal Standard	13C7-PFUnA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.21353 x + -0.22259$ ($r = 0.99899$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	122.943043	122.9
3	JY39	L2	True	250.00	246.726851	98.7
4	JY40	L3	True	500.00	463.660604	92.7
5	JY41	L4	True	1000.00	919.395673	91.9
6	JY42	L5	True	2500.00	2369.453411	94.8
7	JY43	L6	True	10000.00	9555.457961	95.6
8	JY44	L7	True	20000.00	20672.362456	103.4





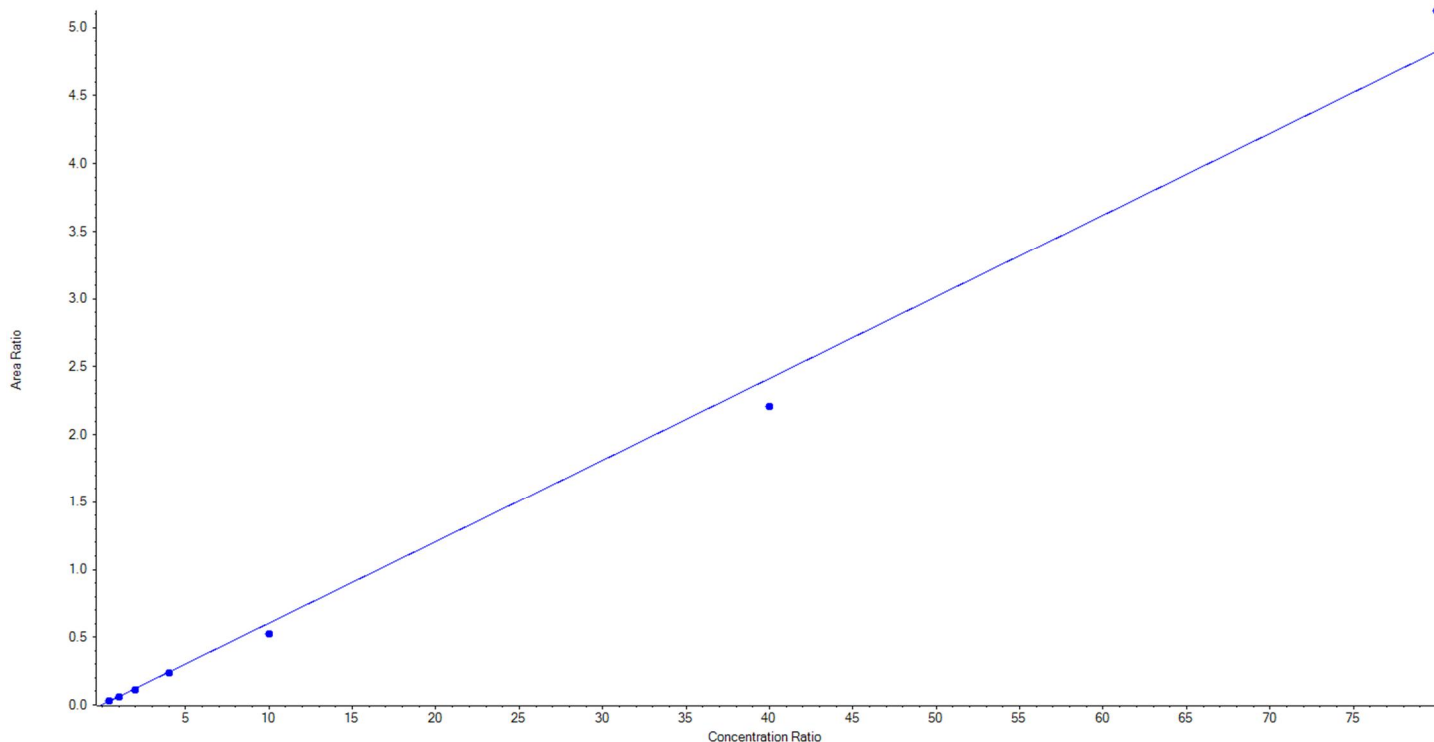
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Analyte Name	PFUnA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	563.0 / 269.0	Result Table	18-0500_BASE_A
Internal Standard	13C7-PFUnA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.06032 x + 9.82959e-4$ ($r = 0.99675$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	129.206562	129.2
3	JY39	L2	True	250.00	241.347698	96.5
4	JY40	L3	True	500.00	467.242328	93.5
5	JY41	L4	True	1000.00	968.076678	96.8
6	JY42	L5	True	2500.00	2157.204163	86.3
7	JY43	L6	True	10000.00	9155.089249	91.6
8	JY44	L7	True	20000.00	21231.833322	106.2





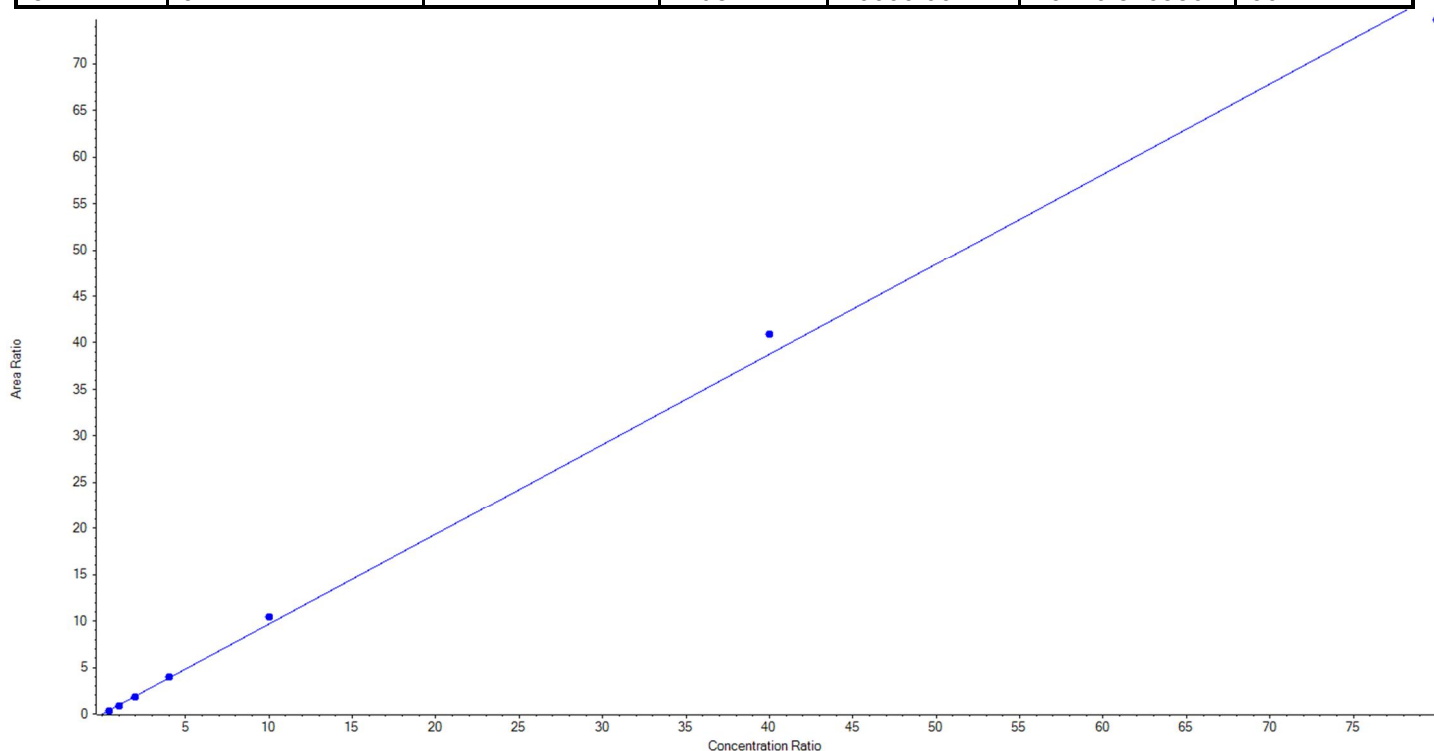
Calibration Summary Report

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Analyte Name	PFDoA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	613.0 / 569.0	Result Table	18-0500_BASE_A
Internal Standard	13C2-PFDoA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.96946 x + -0.01373$ ($r = 0.99883$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	98.610714	98.6
3	JY39	L2	True	250.00	233.920658	93.6
4	JY40	L3	True	500.00	475.852120	95.2
5	JY41	L4	True	1000.00	1032.761138	103.3
6	JY42	L5	True	2500.00	2688.000463	107.5
7	JY43	L6	True	10000.00	10550.038320	105.5
8	JY44	L7	True	20000.00	19270.816586	96.4





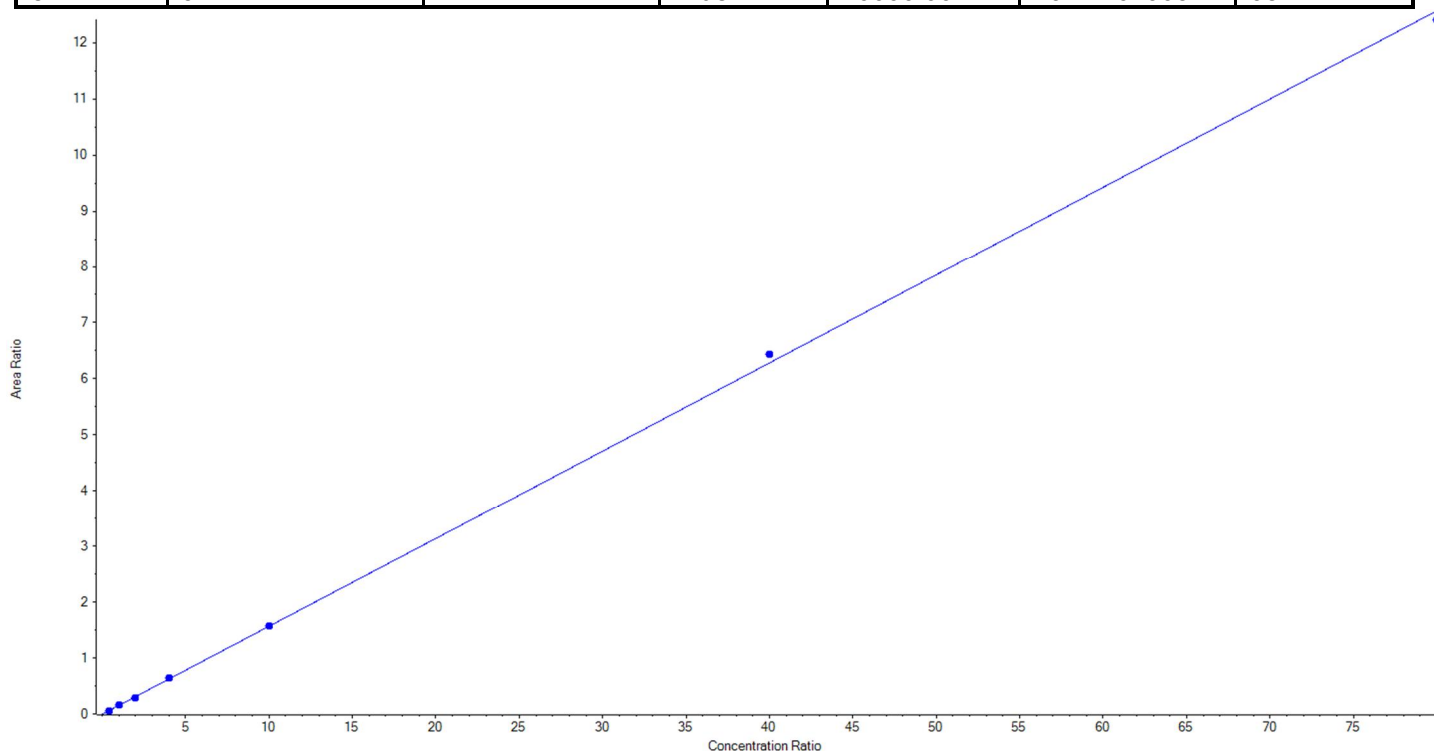
Calibration Summary Report

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Printed: 30/08/2018 2:45:08 PM

Analyte Name	PFDaA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	613.0 / 319.0	Result Table	18-0500_BASE_A
Internal Standard	13C2-PFDaA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.15718x + -0.00485$ ($r = 0.99982$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	100.020562	100.0
3	JY39	L2	True	250.00	250.671630	100.3
4	JY40	L3	True	500.00	475.157931	95.0
5	JY41	L4	True	1000.00	1031.153986	103.1
6	JY42	L5	True	2500.00	2511.466237	100.5
7	JY43	L6	True	10000.00	10239.500617	102.4
8	JY44	L7	True	20000.00	19742.029037	98.7





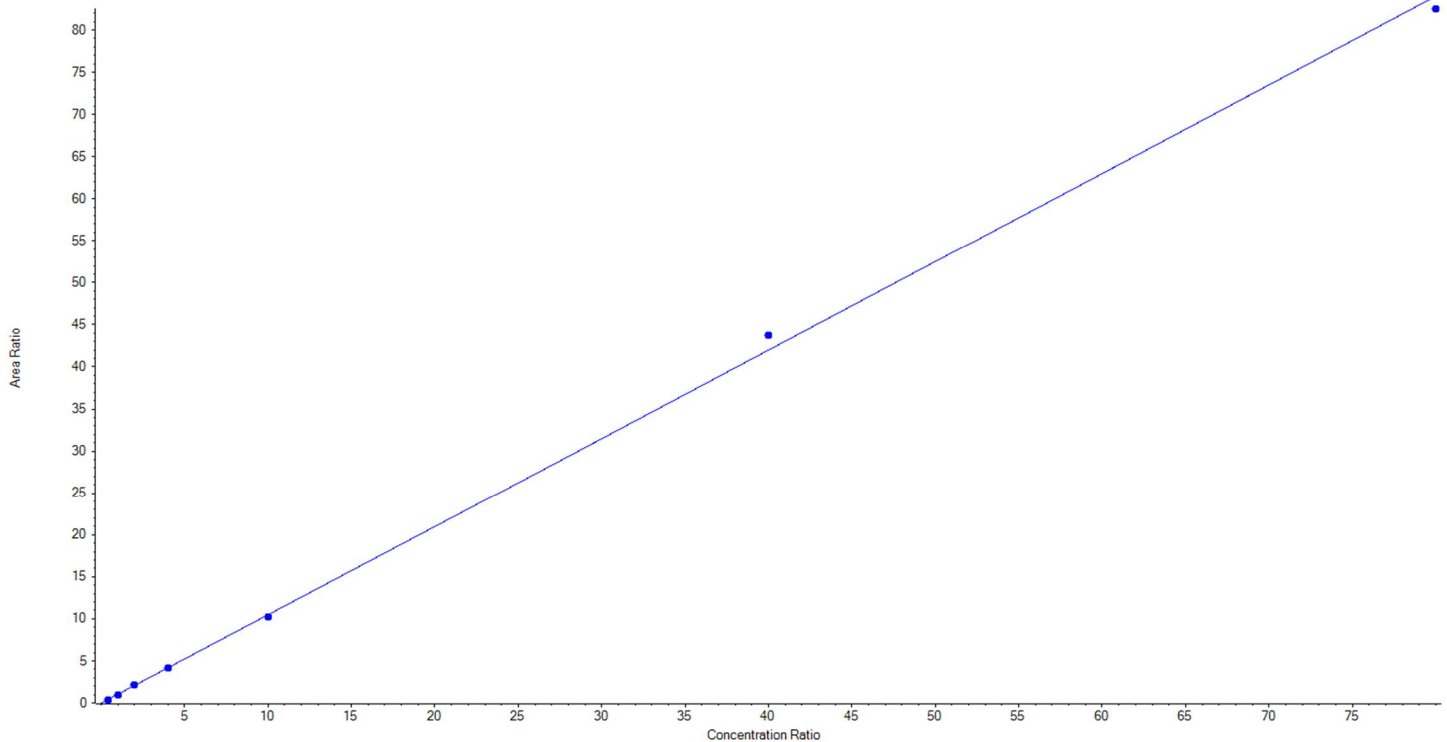
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Analyte Name	PFTTrDA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	663.0 / 619.0	Result Table	18-0500_BASE_A
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.05021x + -0.02316$ ($r = 0.99959$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	103.989990	104.0
3	JY39	L2	True	250.00	237.901063	95.2
4	JY40	L3	True	500.00	506.941023	101.4
5	JY41	L4	True	1000.00	989.873487	99.0
6	JY42	L5	True	2500.00	2452.401261	98.1
7	JY43	L6	True	10000.00	10416.702985	104.2
8	JY44	L7	True	20000.00	19642.190190	98.2





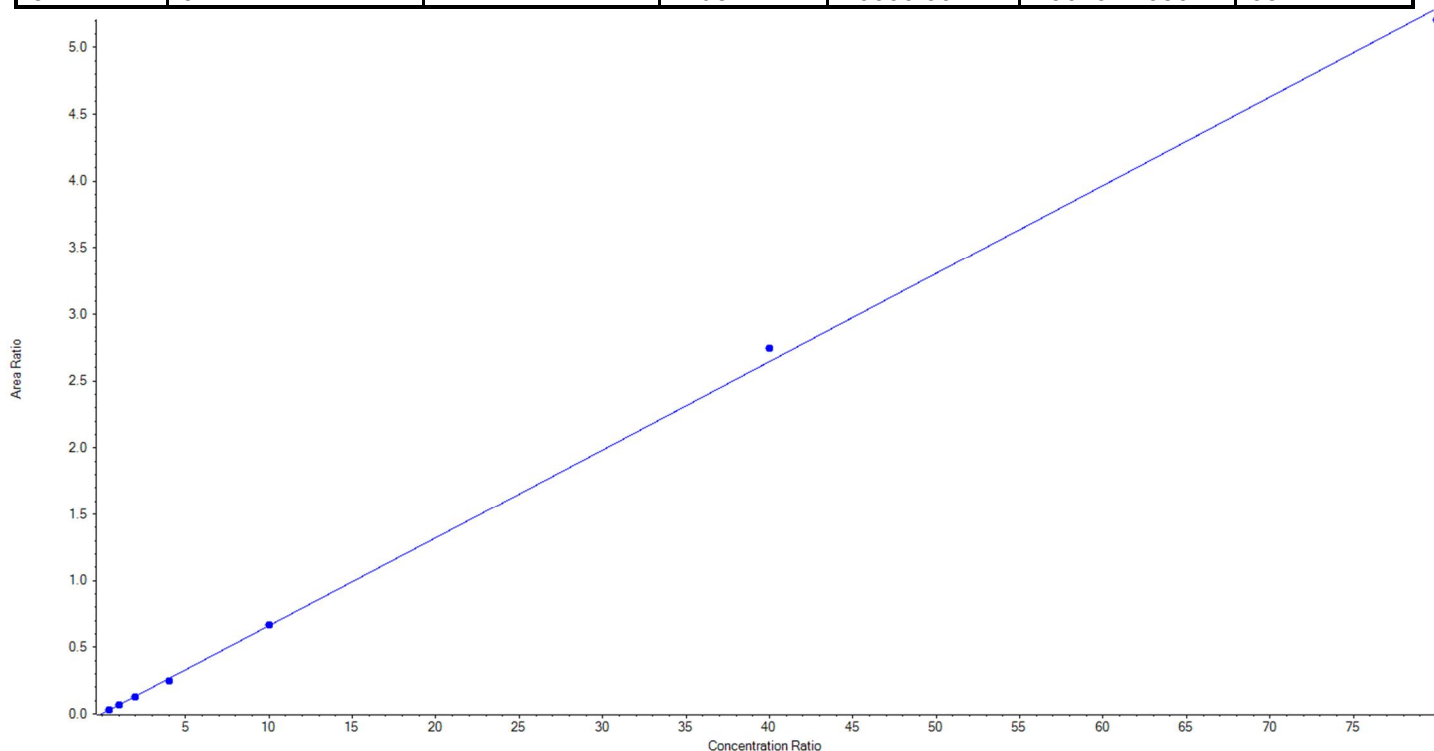
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Analyte Name	PFTrDA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	663.0 / 169.0	Result Table	18-0500_BASE_A
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.06614 x + 4.21658e-4$ ($r = 0.99959$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	108.287462	108.3
3	JY39	L2	True	250.00	250.336593	100.1
4	JY40	L3	True	500.00	472.911739	94.6
5	JY41	L4	True	1000.00	938.882600	93.9
6	JY42	L5	True	2500.00	2523.167722	100.9
7	JY43	L6	True	10000.00	10379.703023	103.8
8	JY44	L7	True	20000.00	19676.710861	98.4





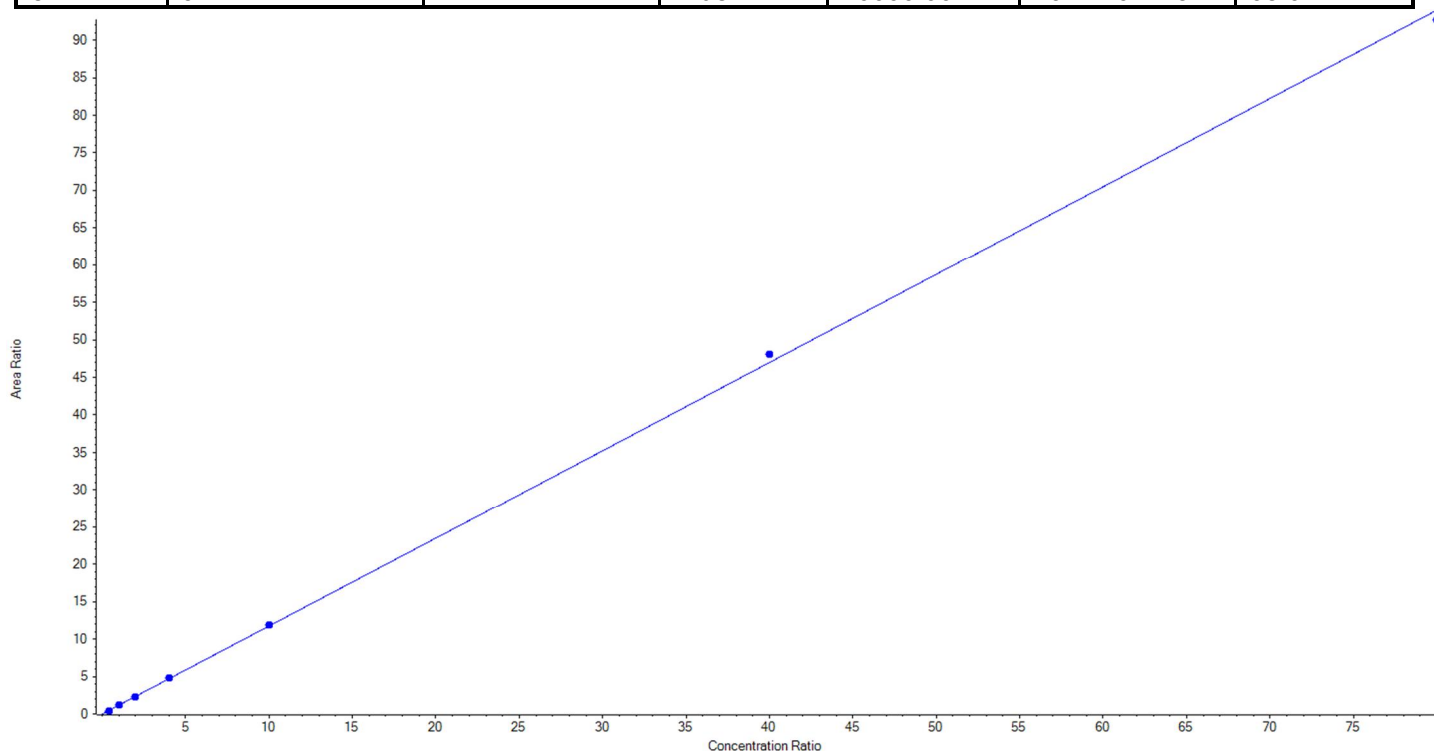
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Analyte Name	PFTeDA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	713.0 / 669.0	Result Table	18-0500_BASE_A
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.17488x + -0.00776$ ($r = 0.99984$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	98.523721	98.5
3	JY39	L2	True	250.00	248.858327	99.5
4	JY40	L3	True	500.00	490.541916	98.1
5	JY41	L4	True	1000.00	1012.450240	101.3
6	JY42	L5	True	2500.00	2540.117327	101.6
7	JY43	L6	True	10000.00	10235.461016	102.4
8	JY44	L7	True	20000.00	19724.047452	98.6





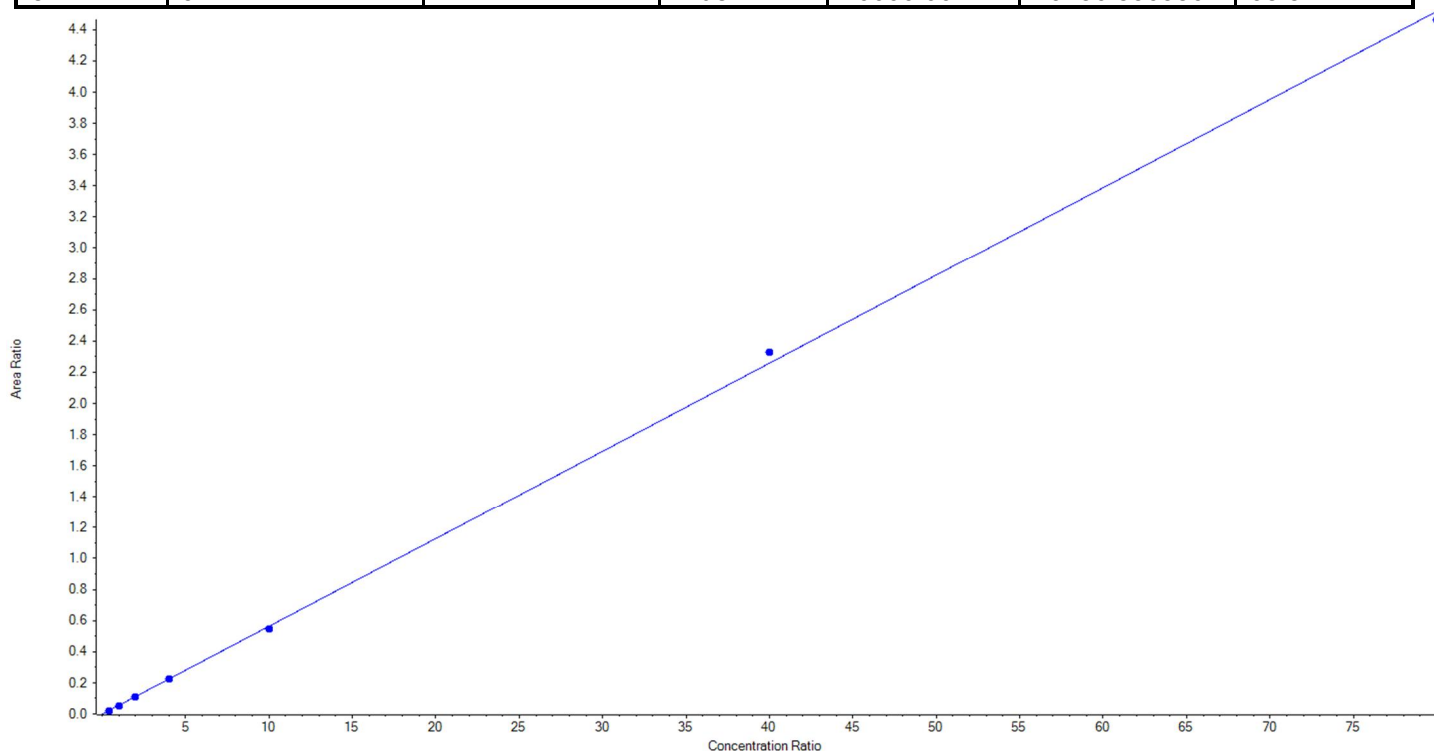
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Analyte Name	PFTeDA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	713.0 / 169.0	Result Table	18-0500_BASE_A
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.05649x + -0.00122$ ($r = 0.99976$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	103.942641	103.9
3	JY39	L2	True	250.00	243.654642	97.5
4	JY40	L3	True	500.00	499.075940	99.8
5	JY41	L4	True	1000.00	993.942996	99.4
6	JY42	L5	True	2500.00	2435.881968	97.4
7	JY43	L6	True	10000.00	10316.645427	103.2
8	JY44	L7	True	20000.00	19756.856386	98.8





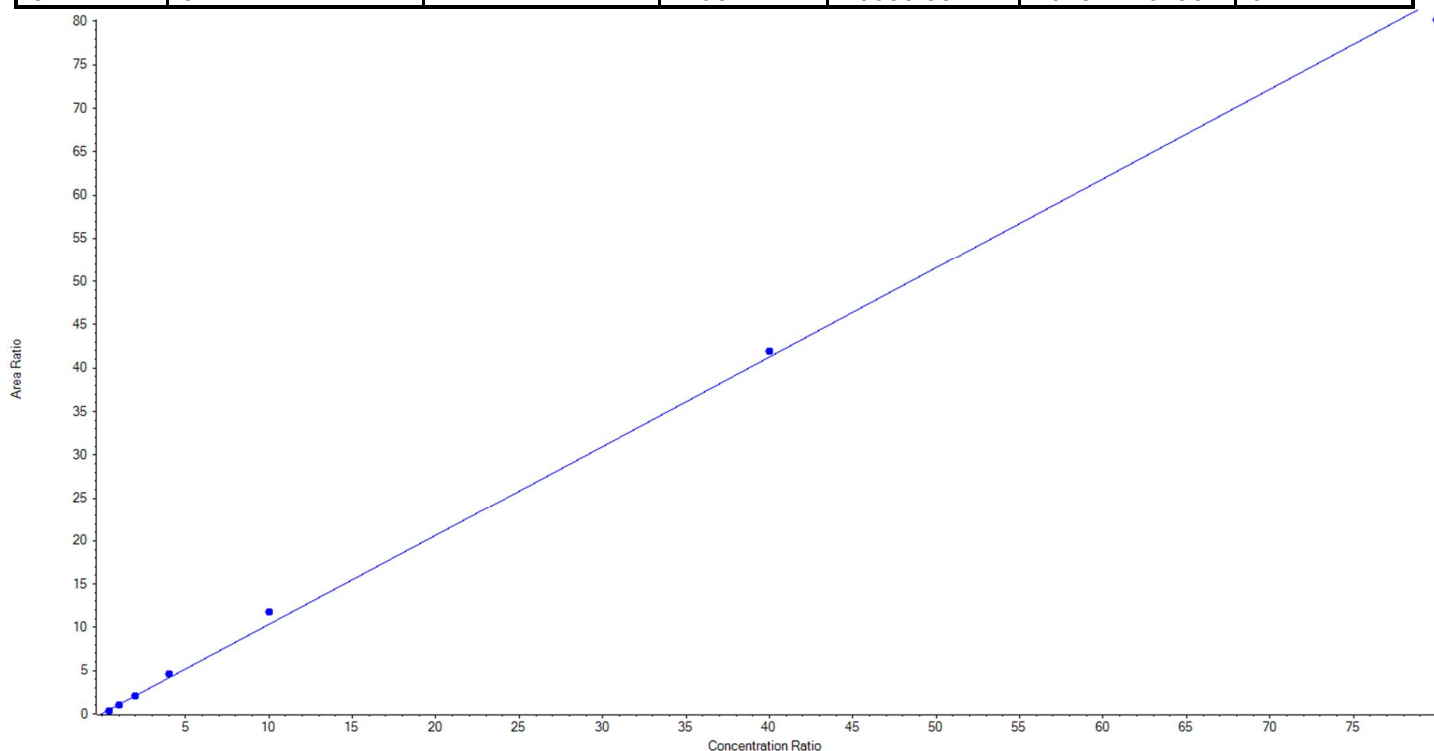
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Analyte Name	NMeFOSAA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	570.0 / 419.0	Result Table	18-0500_BASE_A
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.03070 x + 0.04450$ ($r = 0.99877$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	83.446543	83.5
3	JY39	L2	True	250.00	244.399054	97.8
4	JY40	L3	True	500.00	483.064727	96.6
5	JY41	L4	True	1000.00	1097.700385	109.8
6	JY42	L5	True	2500.00	2838.922966	113.6
7	JY43	L6	True	10000.00	10168.320127	101.7
8	JY44	L7	True	20000.00	19434.146196	97.2





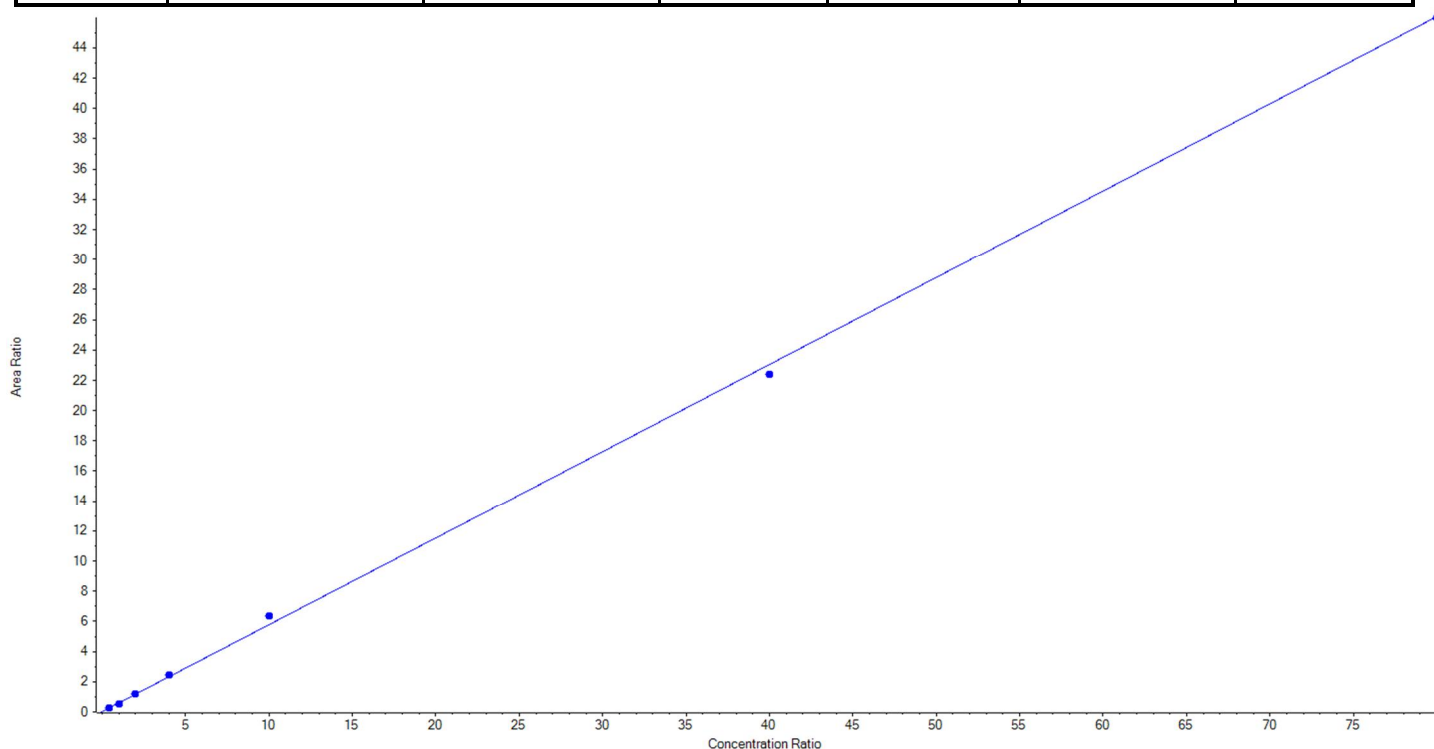
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Analyte Name	NMeFOSAA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	570.0 / 512.0	Result Table	18-0500_BASE_A
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.57549x + 0.02501$ ($r = 0.99932$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	94.256719	94.3
3	JY39	L2	True	250.00	226.726746	90.7
4	JY40	L3	True	500.00	502.520187	100.5
5	JY41	L4	True	1000.00	1068.138462	106.8
6	JY42	L5	True	2500.00	2765.525131	110.6
7	JY43	L6	True	10000.00	9729.906041	97.3
8	JY44	L7	True	20000.00	19962.926715	99.8





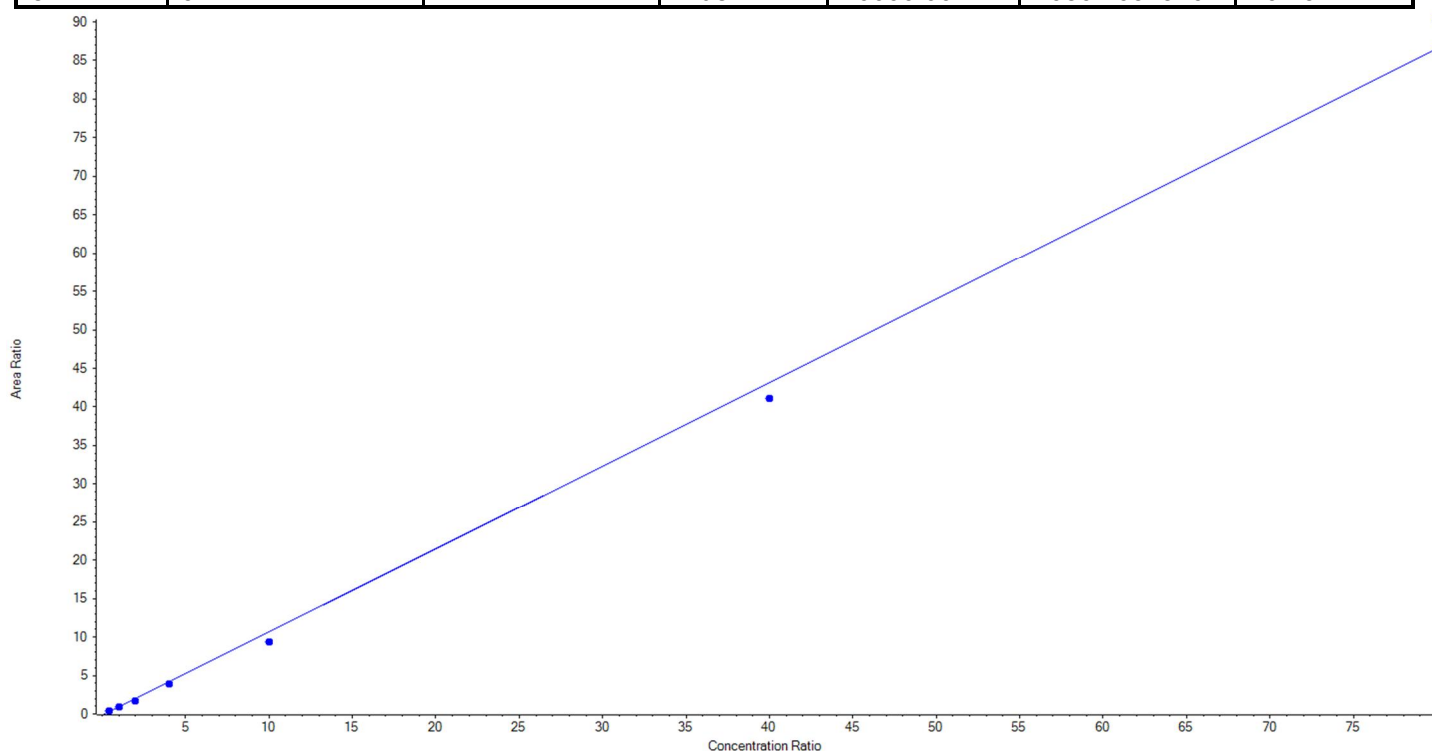
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Analyte Name	NEtFOSAA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	584.0 / 419.0	Result Table	18-0500_BASE_A
Internal Standard	d5-EtFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.08361 x + -0.17934$ ($r = 0.99815$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	127.151255	127.2
3	JY39	L2	True	250.00	265.679934	106.3
4	JY40	L3	True	500.00	423.940233	84.8
5	JY41	L4	True	1000.00	937.778212	93.8
6	JY42	L5	True	2500.00	2212.318765	88.5
7	JY43	L6	True	10000.00	9520.499075	95.2
8	JY44	L7	True	20000.00	20862.632526	104.3





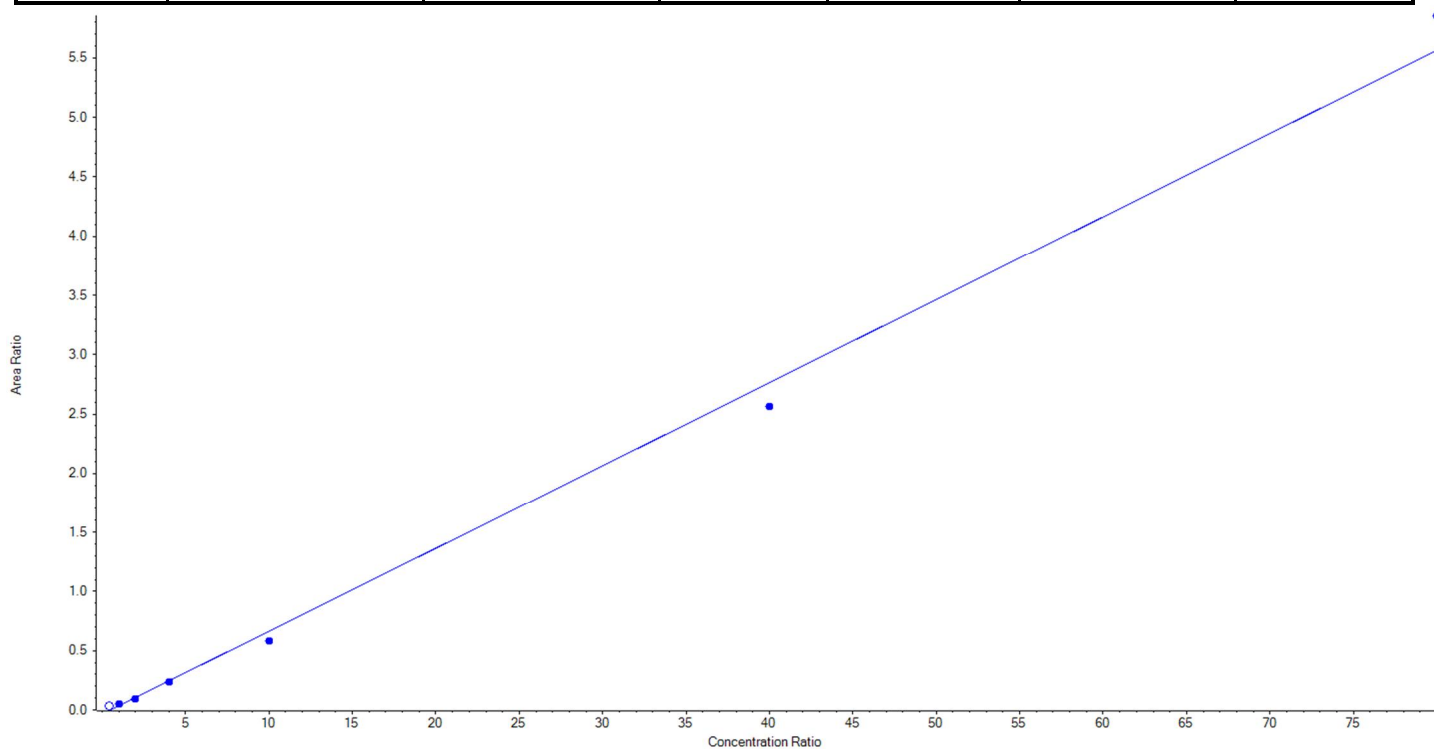
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Analyte Name	NEtFOSAA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	584.0 / 483.0	Result Table	18-0500_BASE_A
Internal Standard	d5-EtFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.06998x + -0.03555$ ($r = 0.99717$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	236.281227	236.3
3	JY39	L2	True	250.00	319.753372	127.9
4	JY40	L3	True	500.00	443.979478	88.8
5	JY41	L4	True	1000.00	974.254801	97.4
6	JY42	L5	True	2500.00	2197.277628	87.9
7	JY43	L6	True	10000.00	9282.499347	92.8
8	JY44	L7	True	20000.00	21032.235373	105.2





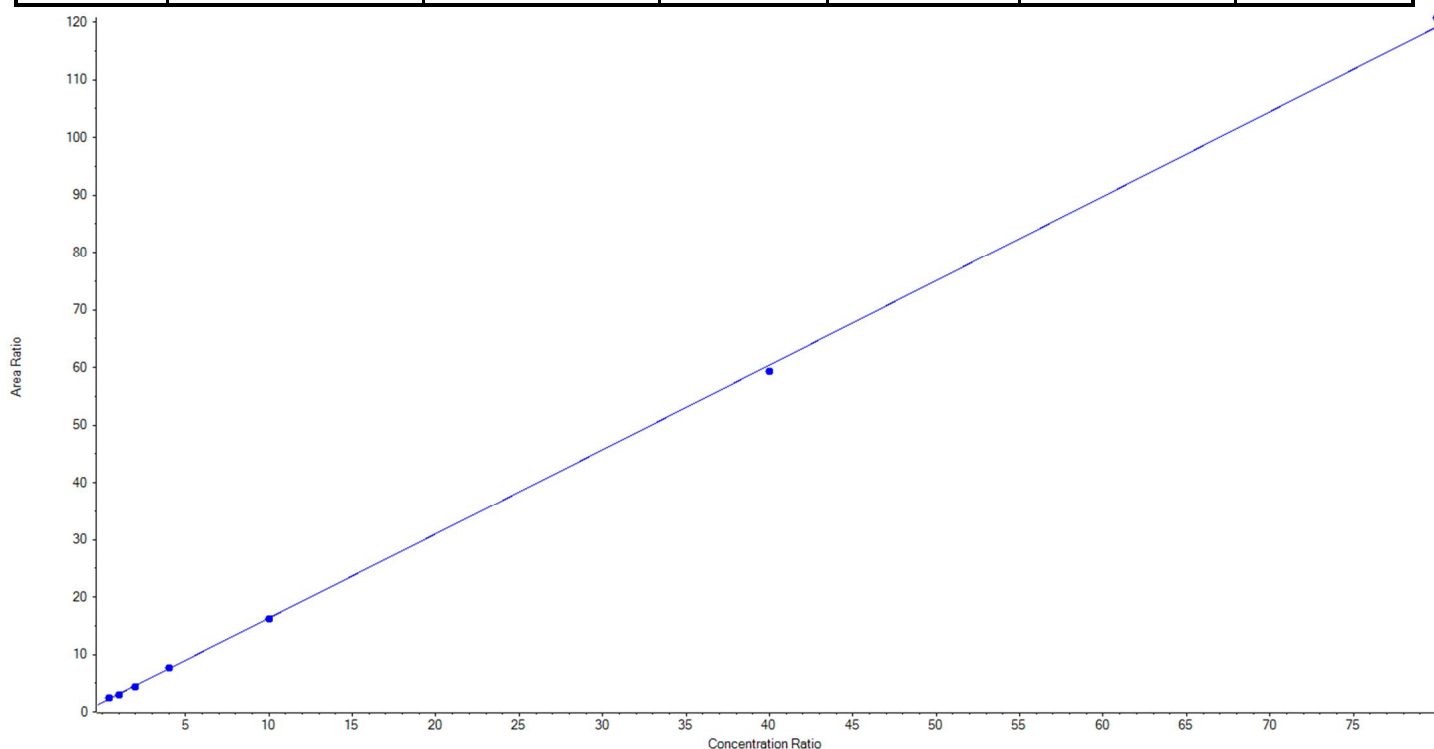
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Analyte Name	PFBA	Data File	18-0501-515-520-500.wiff
MRM Transition	213.0 / 169.0	Result Table	18-0500_BASE_A
Internal Standard	13C4-PFBA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:36:54 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.46946 x + 1.63390$ ($r = 0.99961$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	124.856664	124.9
3	JY39	L2	True	250.00	211.435722	84.6
4	JY40	L3	True	500.00	452.995070	90.6
5	JY41	L4	True	1000.00	1019.166566	101.9
6	JY42	L5	True	2500.00	2465.258691	98.6
7	JY43	L6	True	10000.00	9812.318480	98.1
8	JY44	L7	True	20000.00	20263.968808	101.3





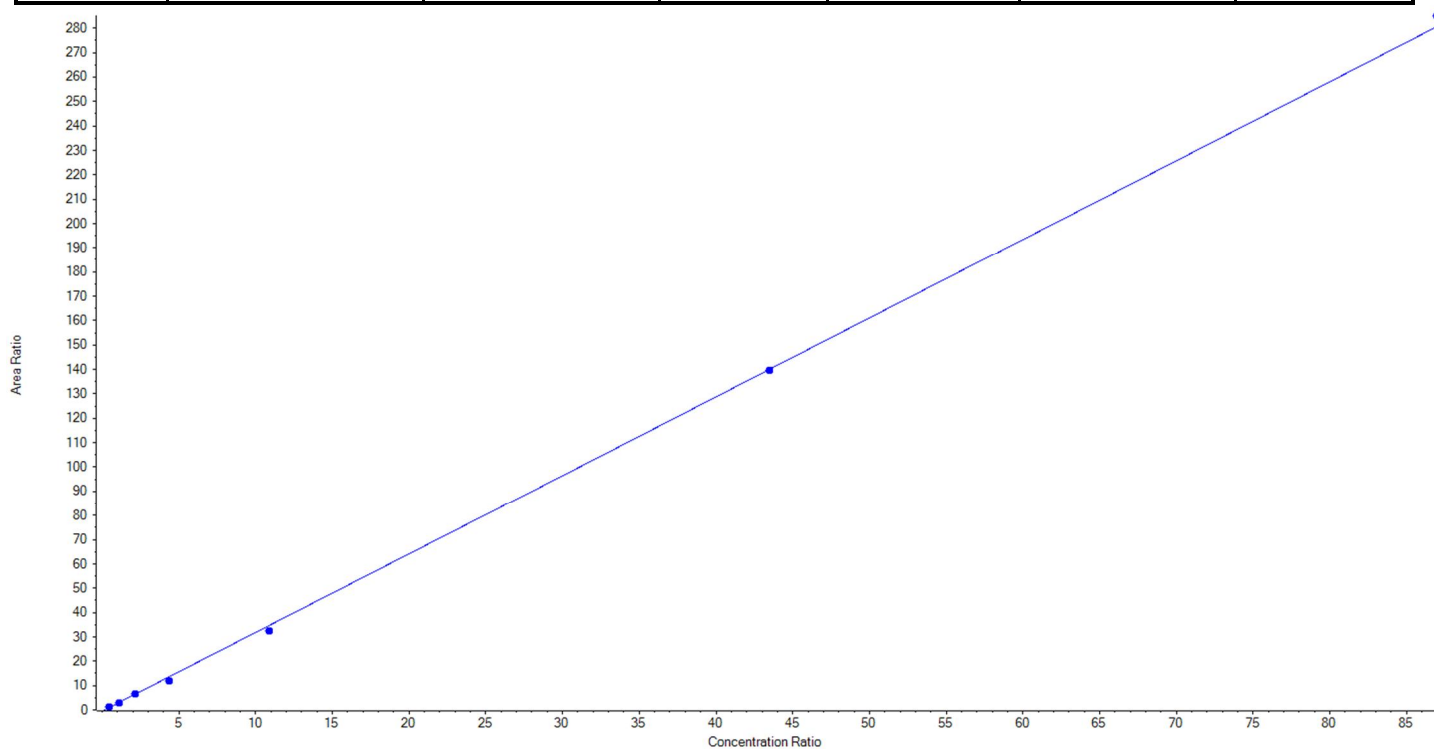
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Analyte Name	PFBS_1	Data File	18-0511_18-0517.wiff
MRM Transition	298.9 / 80.0	Result Table	18-0500_BASE_R
Internal Standard	13C3-PFBS	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 3.23171 x + -0.49806$ ($r = 0.99947$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	101.00	119.143551	118.0
17	JY39	L2	True	252.50	254.701746	100.9
18	JY40	L3	True	505.00	497.430653	98.5
19	JY41	L4	True	1010.00	890.457094	88.2
20	JY42	L5	True	2525.00	2357.071583	93.4
21	JY43	L6	True	10100.00	10057.514027	99.6
22	JY44	L7	True	20200.00	20517.181346	101.6





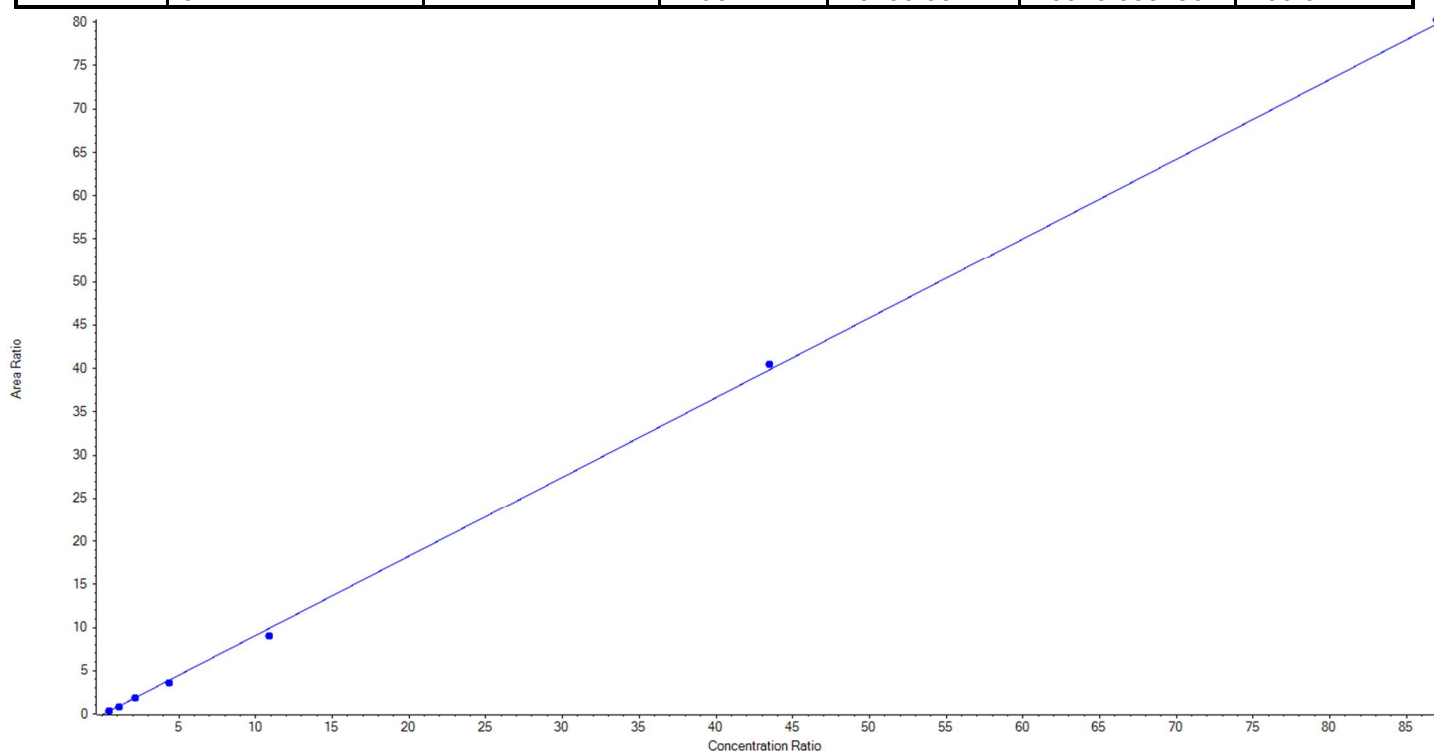
Calibration Summary Report

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Analyte Name	PFBS_2	Data File	18-0511_18-0517.wiff
MRM Transition	298.9 / 99.0	Result Table	18-0500_BASE_R
Internal Standard	13C3-PFBS	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.91866x + -0.11165$ ($r = 0.99952$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	101.00	117.630528	116.5
17	JY39	L2	True	252.50	244.365287	96.8
18	JY40	L3	True	505.00	510.228071	101.0
19	JY41	L4	True	1010.00	928.235183	91.9
20	JY42	L5	True	2525.00	2313.575234	91.6
21	JY43	L6	True	10100.00	10262.777442	101.6
22	JY44	L7	True	20200.00	20316.688256	100.6





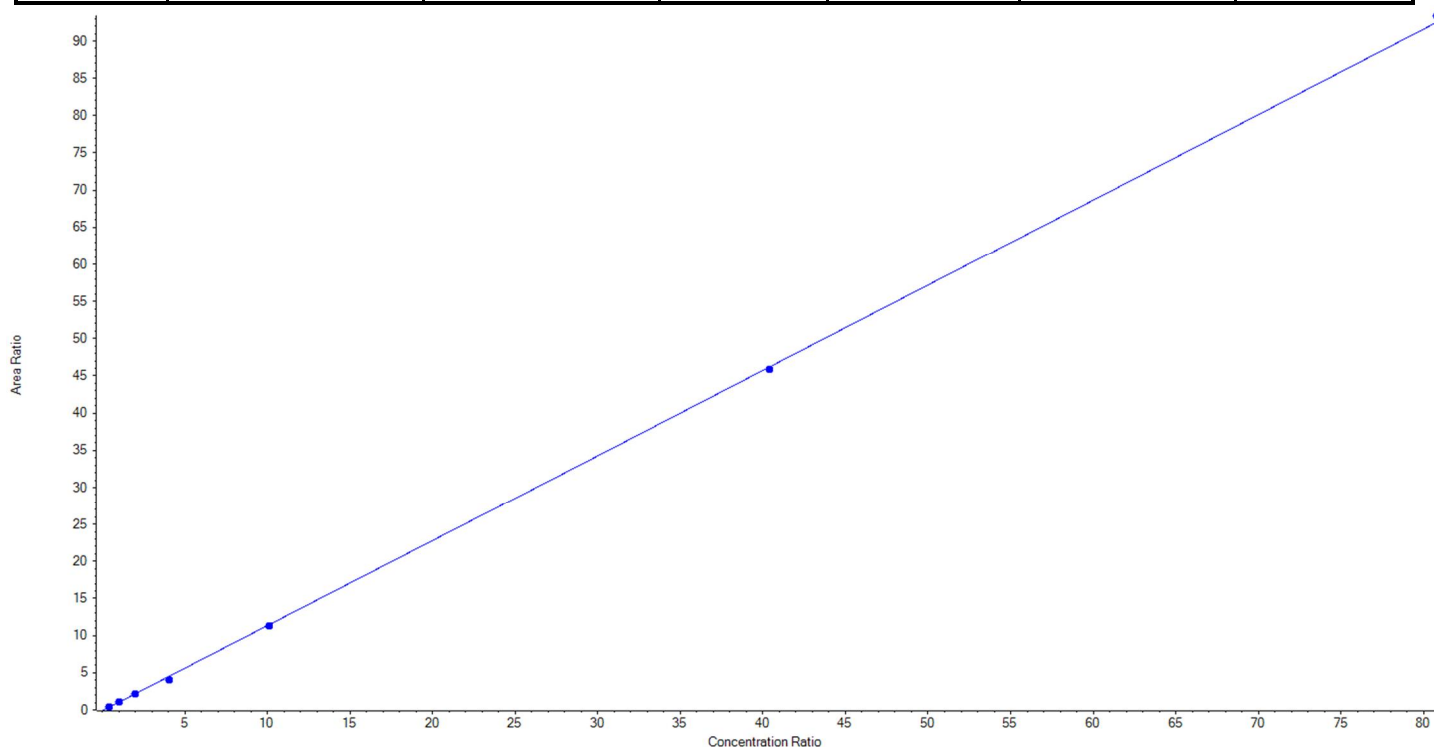
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Analyte Name	PFHxA_1	Data File	18-0511_18-0517.wiff
MRM Transition	313.0 / 269.0	Result Table	18-0500_BASE_R
Internal Standard	13C5-PFHxA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.14644 x + -0.12526$ ($r = 0.99979$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	101.00	114.255254	113.1
17	JY39	L2	True	252.50	248.825405	98.5
18	JY40	L3	True	505.00	498.762780	98.8
19	JY41	L4	True	1010.00	916.052278	90.7
20	JY42	L5	True	2525.00	2487.580680	98.5
21	JY43	L6	True	10100.00	10042.691010	99.4
22	JY44	L7	True	20200.00	20385.332592	100.9





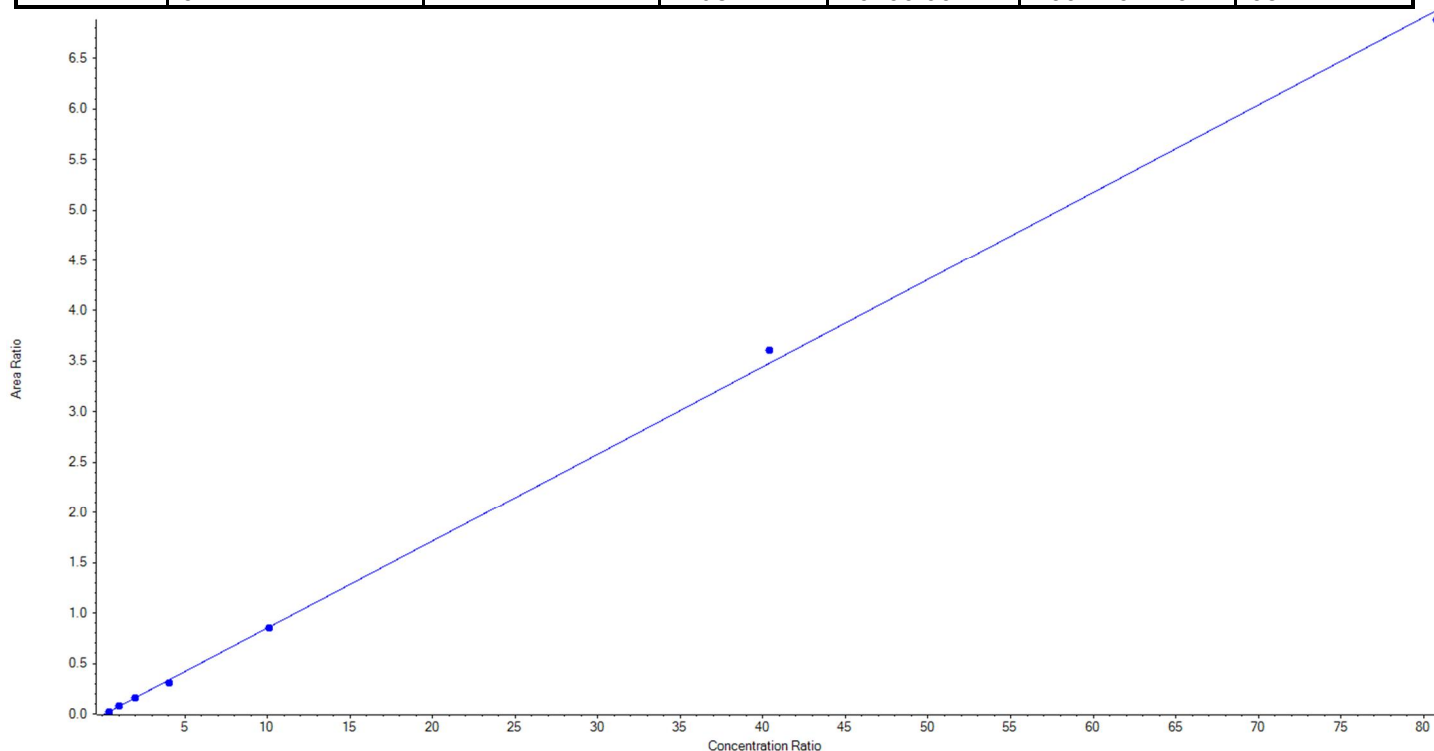
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Analyte Name	PFHxA_2	Data File	18-0511_18-0517.wiff
MRM Transition	313.0 / 119.0	Result Table	18-0500_BASE_R
Internal Standard	13C5-PFHxA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.08646 x + -0.01325$ ($r = 0.99955$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	101.00	100.073175	99.1
17	JY39	L2	True	252.50	280.317758	111.0
18	JY40	L3	True	505.00	491.197324	97.3
19	JY41	L4	True	1010.00	917.039732	90.8
20	JY42	L5	True	2525.00	2514.854222	99.6
21	JY43	L6	True	10100.00	10462.405295	103.6
22	JY44	L7	True	20200.00	19927.612494	98.7





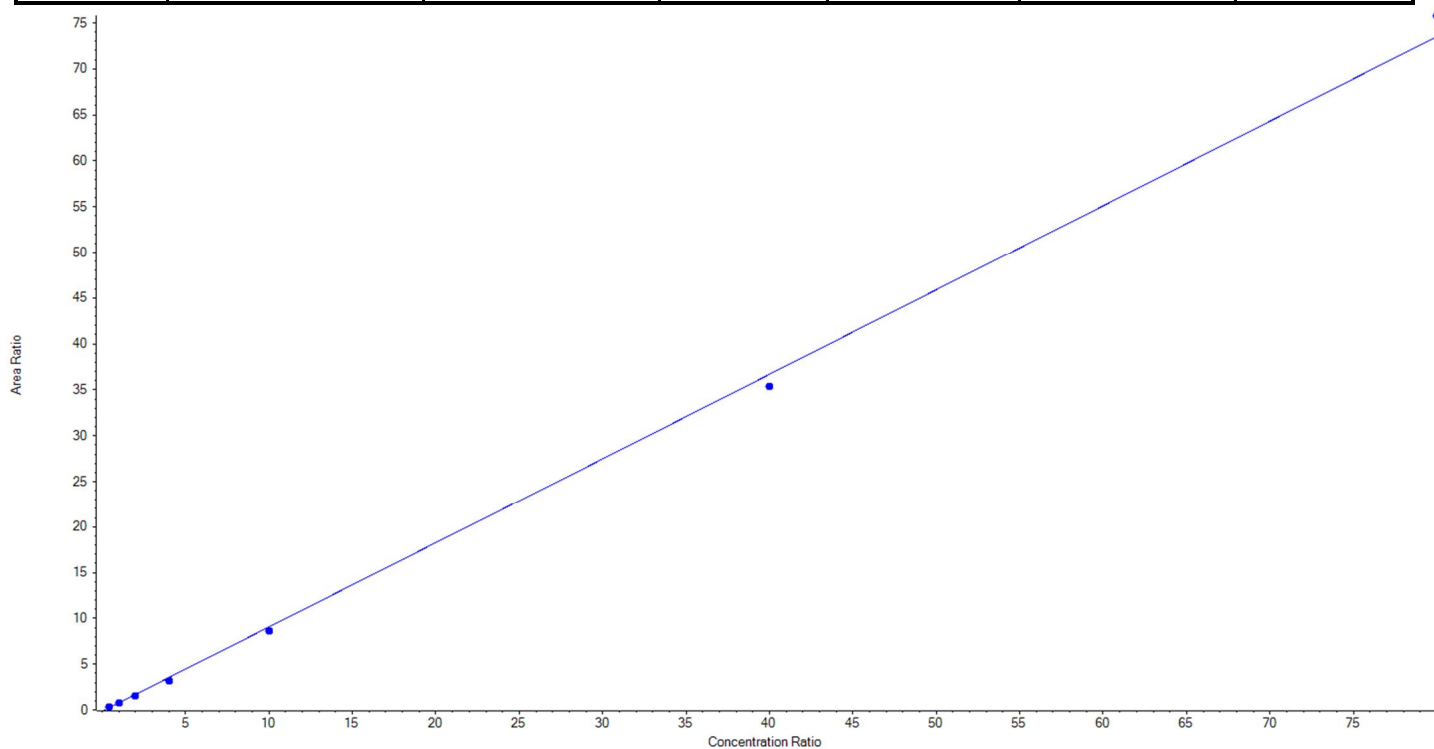
Calibration Summary Report

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Analyte Name	PFHpA_1	Data File	18-0511_18-0517.wiff
MRM Transition	363.0 / 319.0	Result Table	18-0500_BASE_R
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.92088x + -0.14757$ ($r = 0.99907$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	124.537268	124.5
17	JY39	L2	True	250.00	251.461407	100.6
18	JY40	L3	True	500.00	453.046919	90.6
19	JY41	L4	True	1000.00	897.053998	89.7
20	JY42	L5	True	2500.00	2378.797571	95.2
21	JY43	L6	True	10000.00	9637.193632	96.4
22	JY44	L7	True	20000.00	20607.909205	103.0





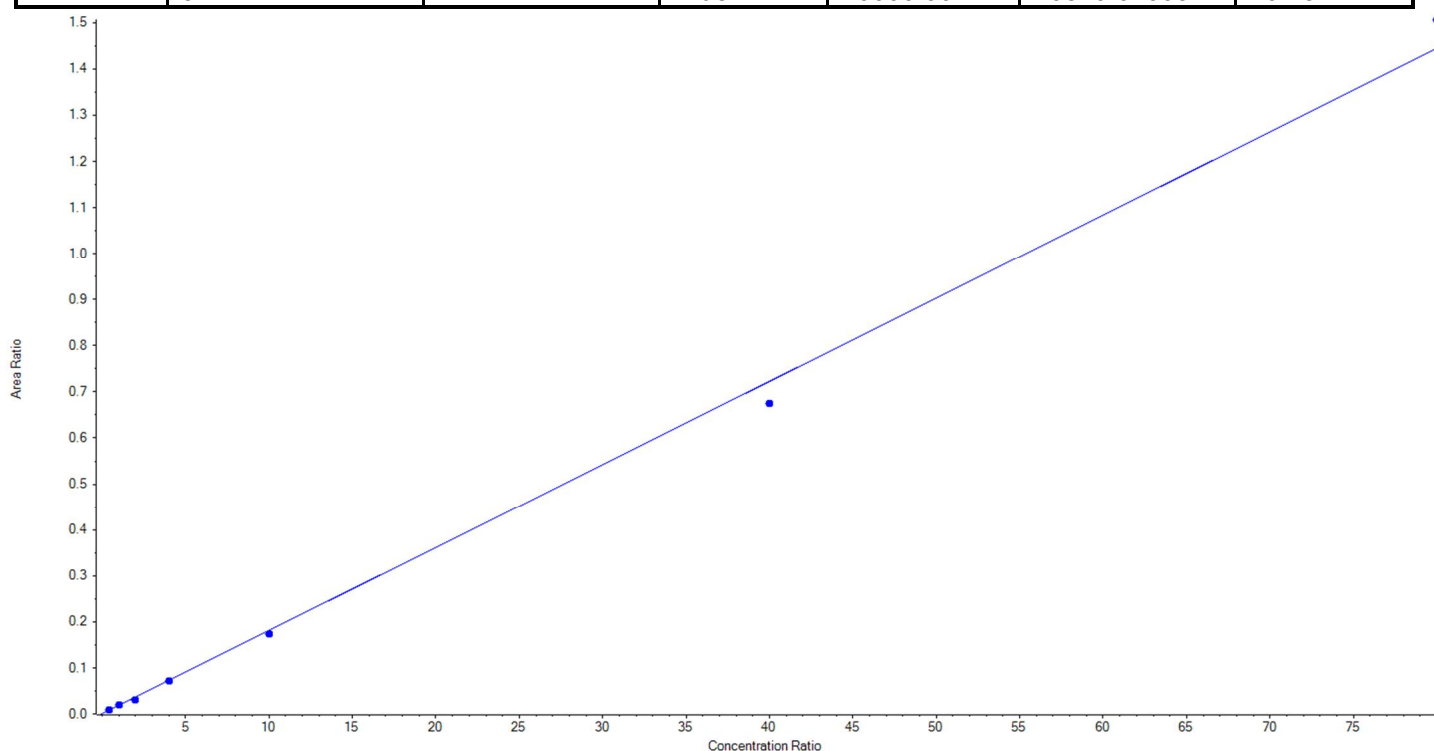
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Analyte Name	PFHpA_2	Data File	18-0511_18-0517.wiff
MRM Transition	363.0 / 169.0	Result Table	18-0500_BASE_R
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.01805x + 7.13759e-4$ ($r = 0.99827$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	124.809303	124.8
17	JY39	L2	True	250.00	253.944317	101.6
18	JY40	L3	True	500.00	405.808337	81.2
19	JY41	L4	True	1000.00	987.656245	98.8
20	JY42	L5	True	2500.00	2405.202025	96.2
21	JY43	L6	True	10000.00	9322.939718	93.2
22	JY44	L7	True	20000.00	20849.640054	104.3





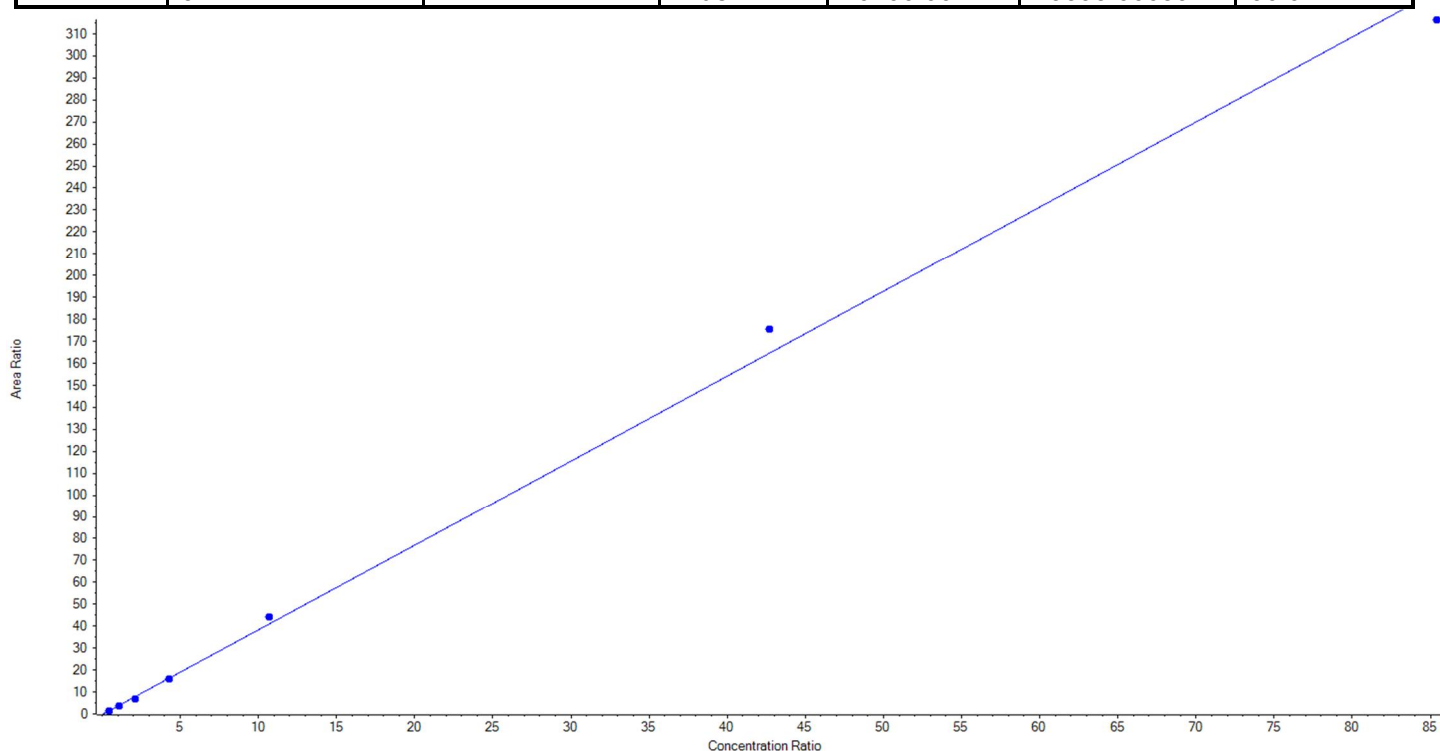
Calibration Summary Report

Created with Analyst Reporter
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Analyte Name	PFHxS_1	Data File	18-0511_18-0517.wiff
MRM Transition	399.0 / 80.0	Result Table	18-0500_BASE_R
Internal Standard	13C3-PFHxS	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 3.86052 x + -0.26493$ ($r = 0.99837$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	101.00	106.833074	105.8
17	JY39	L2	True	252.50	247.811371	98.1
18	JY40	L3	True	505.00	438.291325	86.8
19	JY41	L4	True	1010.00	993.703461	98.4
20	JY42	L5	True	2525.00	2730.783046	108.2
21	JY43	L6	True	10100.00	10780.411132	106.7
22	JY44	L7	True	20200.00	19395.666591	96.0





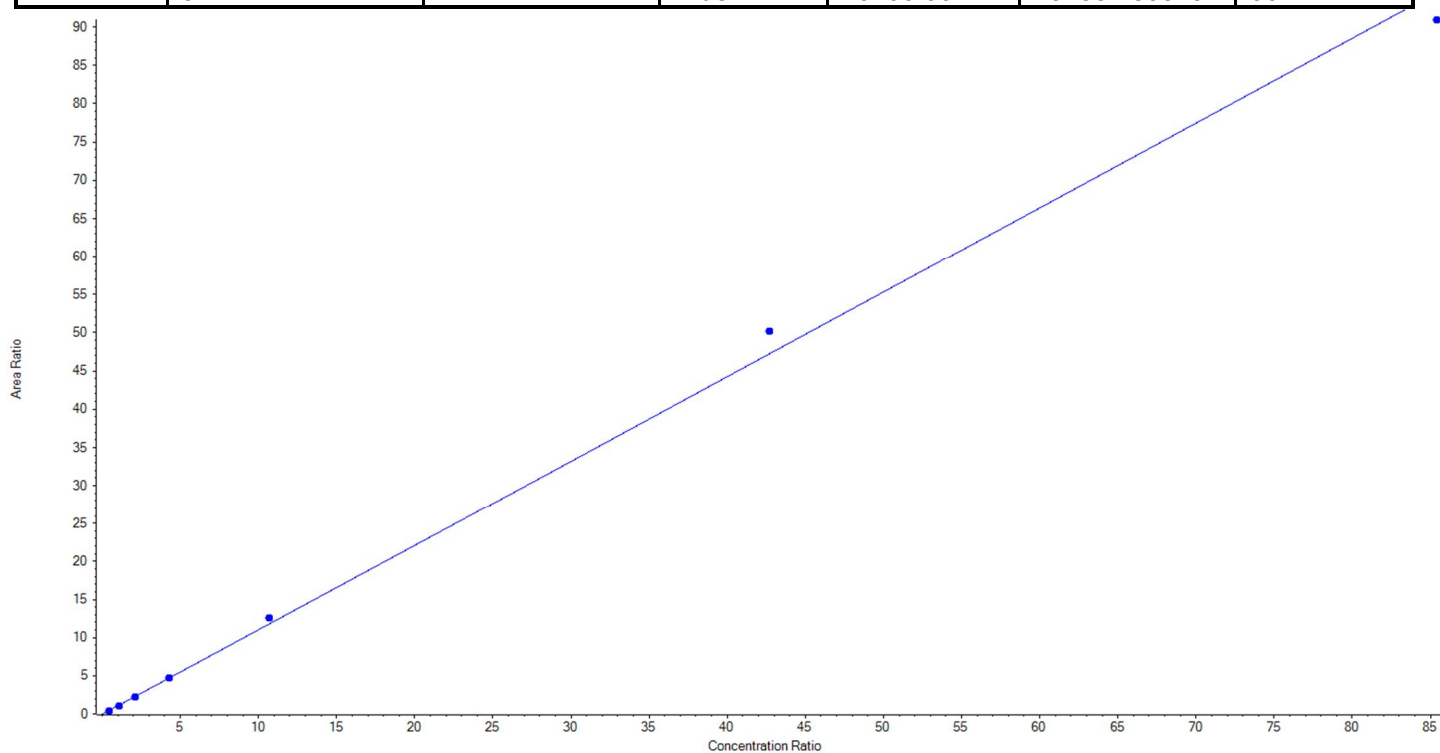
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Analyte Name	PFHxS_2	Data File	18-0511_18-0517.wiff
MRM Transition	399.0 / 99.0	Result Table	18-0500_BASE_R
Internal Standard	13C3-PFHxS	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.10734 x + -0.05053$ ($r = 0.99873$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	101.00	99.387183	98.4
17	JY39	L2	True	252.50	244.724335	96.9
18	JY40	L3	True	505.00	475.019404	94.1
19	JY41	L4	True	1010.00	1024.638250	101.5
20	JY42	L5	True	2525.00	2697.465775	106.8
21	JY43	L6	True	10100.00	10719.084226	106.1
22	JY44	L7	True	20200.00	19433.180829	96.2





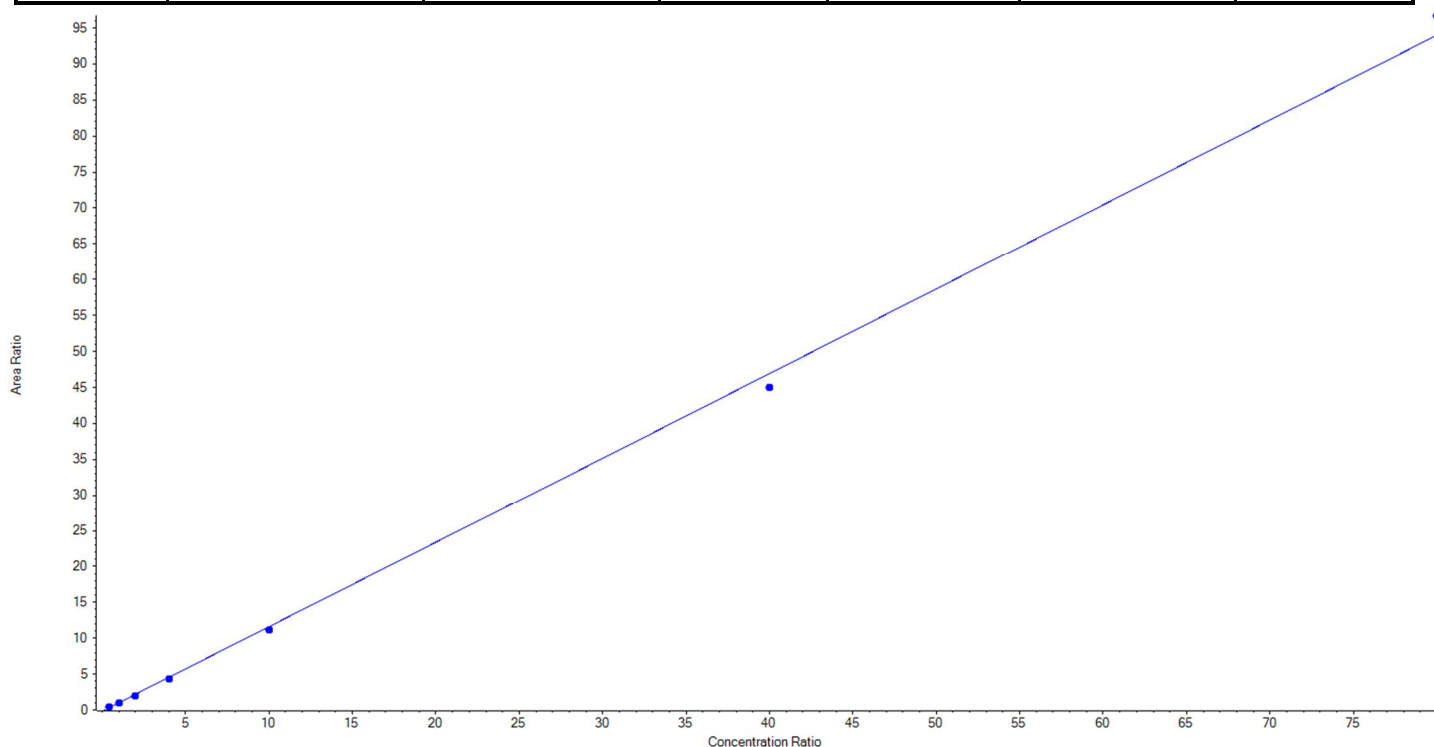
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Analyte Name	PFOA_1	Data File	18-0511_18-0517.wiff
MRM Transition	413.0 / 369.0	Result Table	18-0500_BASE_R
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.17689x + -0.16720$ ($r = 0.99925$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	122.378104	122.4
17	JY39	L2	True	250.00	239.701480	95.9
18	JY40	L3	True	500.00	455.994933	91.2
19	JY41	L4	True	1000.00	952.338996	95.2
20	JY42	L5	True	2500.00	2412.042978	96.5
21	JY43	L6	True	10000.00	9597.796282	96.0
22	JY44	L7	True	20000.00	20569.747227	102.9





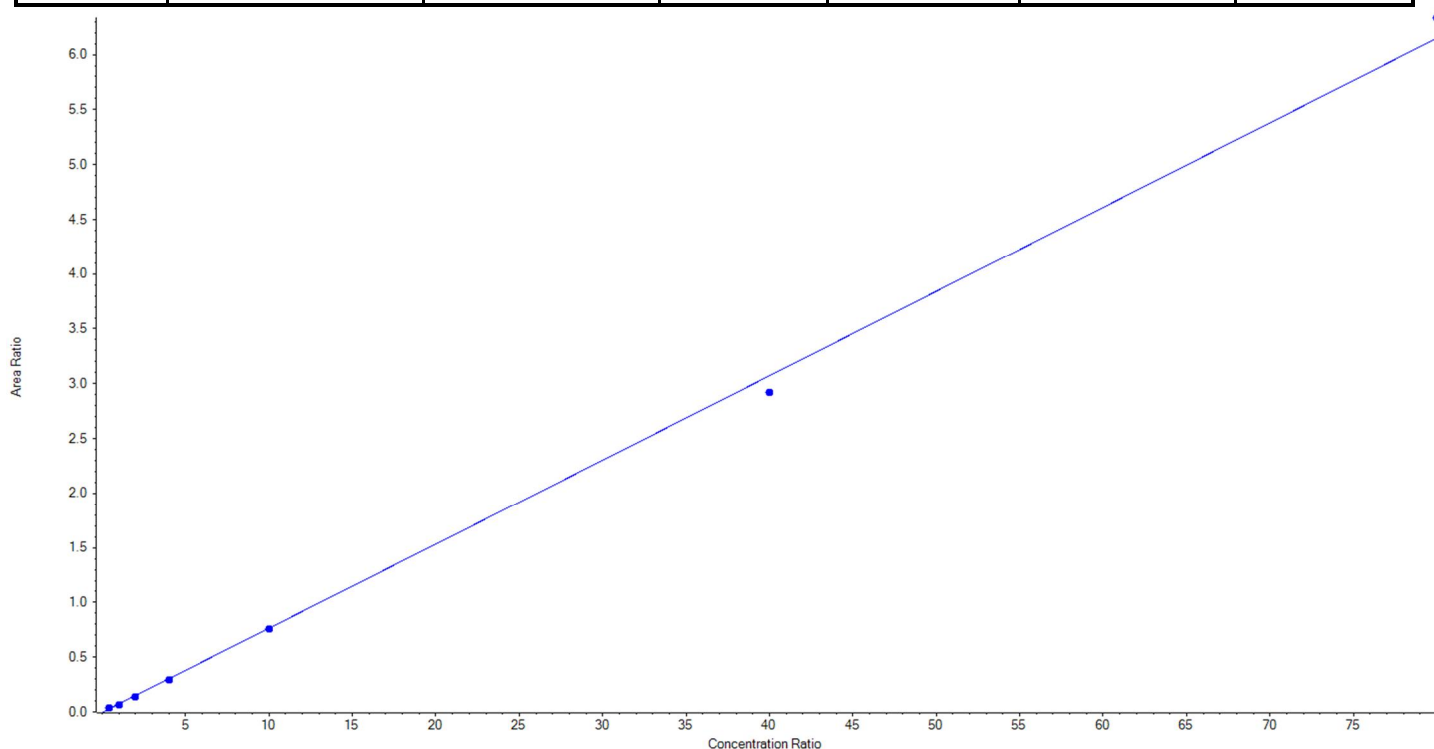
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Analyte Name	PFOA_2	Data File	18-0511_18-0517.wiff
MRM Transition	413.0 / 169.0	Result Table	18-0500_BASE_R
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.07693x + -0.00494$ ($r = 0.99912$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	122.370347	122.4
17	JY39	L2	True	250.00	235.359733	94.1
18	JY40	L3	True	500.00	453.174945	90.6
19	JY41	L4	True	1000.00	954.512338	95.5
20	JY42	L5	True	2500.00	2485.031465	99.4
21	JY43	L6	True	10000.00	9500.104415	95.0
22	JY44	L7	True	20000.00	20599.446756	103.0





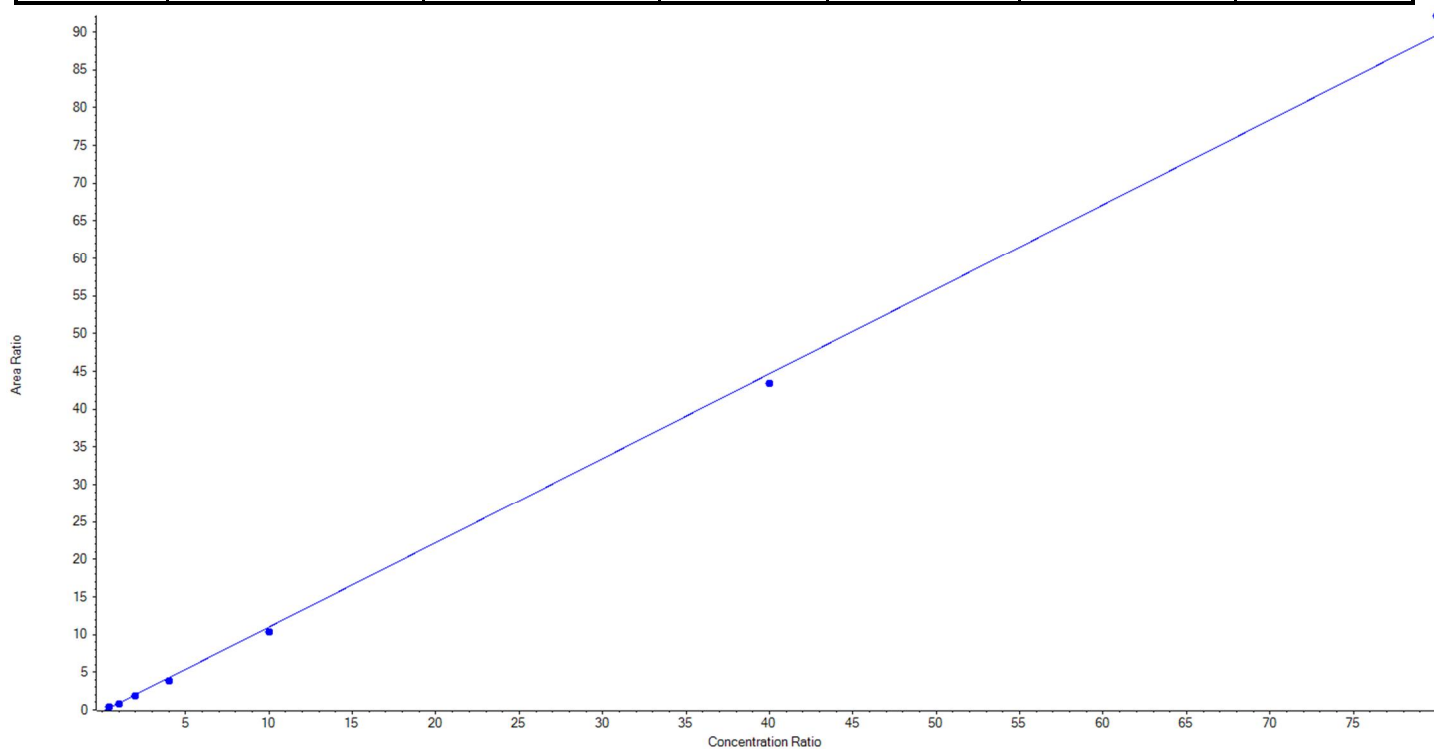
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Analyte Name	PFNA_1	Data File	18-0511_18-0517.wiff
MRM Transition	463.0 / 419.0	Result Table	18-0500_BASE_R
Internal Standard	13C9-PFNA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.12264 x + -0.22701$ ($r = 0.99915$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	127.095747	127.1
17	JY39	L2	True	250.00	242.088156	96.8
18	JY40	L3	True	500.00	457.523481	91.5
19	JY41	L4	True	1000.00	907.339887	90.7
20	JY42	L5	True	2500.00	2349.574991	94.0
21	JY43	L6	True	10000.00	9703.083553	97.0
22	JY44	L7	True	20000.00	20563.294185	102.8





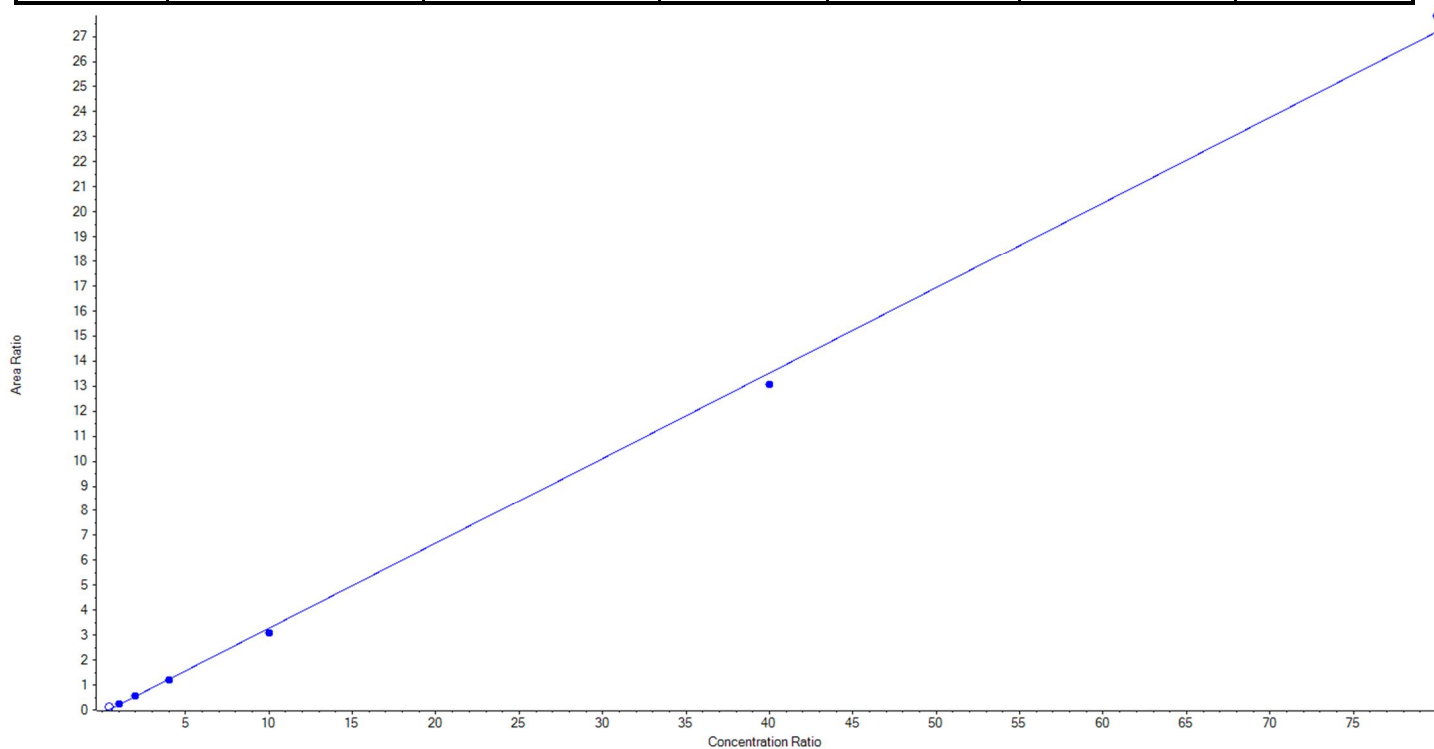
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Analyte Name	PFNA_2	Data File	18-0511_18-0517.wiff
MRM Transition	463.0 / 219.0	Result Table	18-0500_BASE_R
Internal Standard	13C9-PFNA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.34158x + -0.13919$ ($r = 0.99946$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	False	100.00	182.660313	182.7
17	JY39	L2	True	250.00	271.700105	108.7
18	JY40	L3	True	500.00	501.320099	100.3
19	JY41	L4	True	1000.00	974.387409	97.4
20	JY42	L5	True	2500.00	2364.139055	94.6
21	JY43	L6	True	10000.00	9671.873659	96.7
22	JY44	L7	True	20000.00	20466.579673	102.3





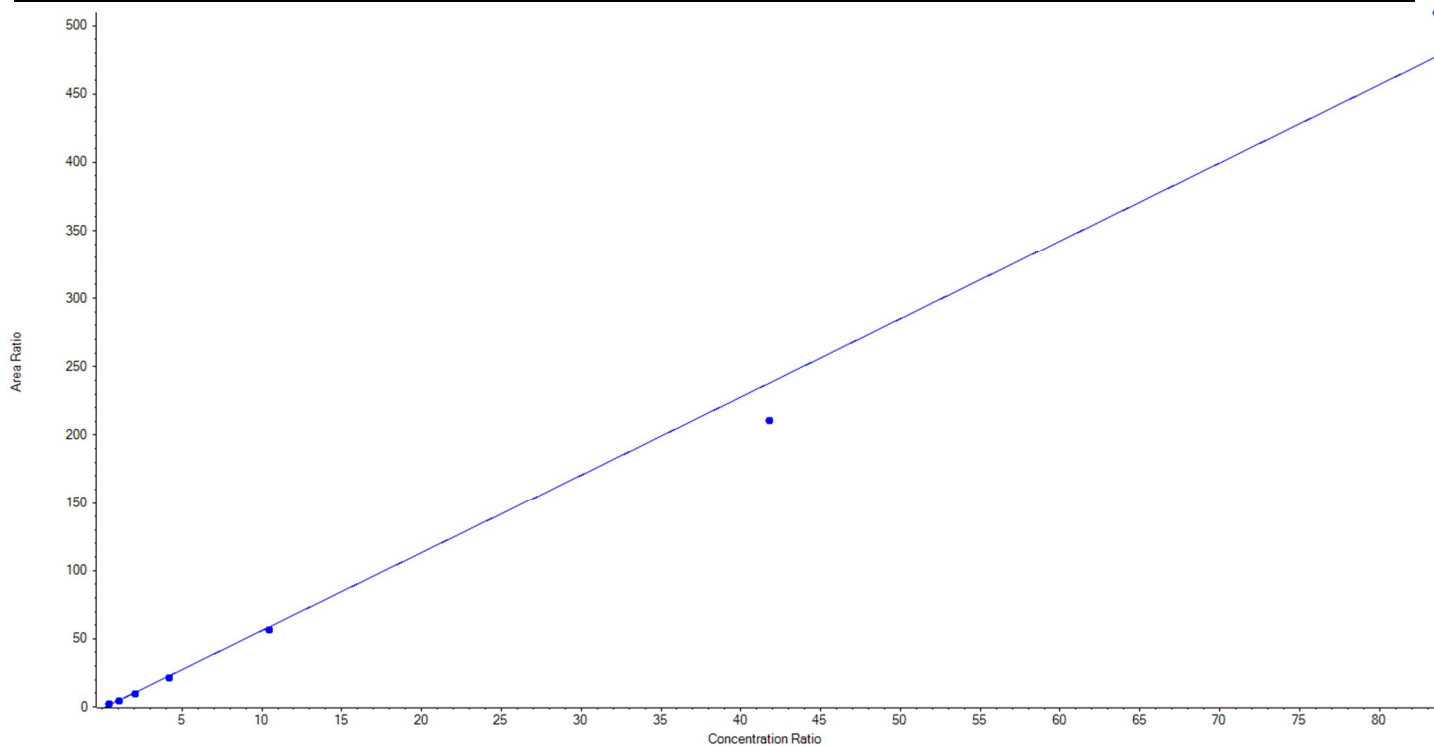
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Analyte Name	PFOS_1	Data File	18-0511_18-0517.wiff
MRM Transition	499.0 / 80.0	Result Table	18-0500_BASE_R
Internal Standard	13C8-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 5.72547 x + -1.25038$ ($r = 0.99619$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	128.920274	128.9
17	JY39	L2	True	250.00	235.031735	94.0
18	JY40	L3	True	500.00	457.419001	91.5
19	JY41	L4	True	1000.00	938.240867	93.8
20	JY42	L5	True	2500.00	2416.896980	96.7
21	JY43	L6	True	10000.00	8843.162110	88.4
22	JY44	L7	True	20000.00	21330.329034	106.7





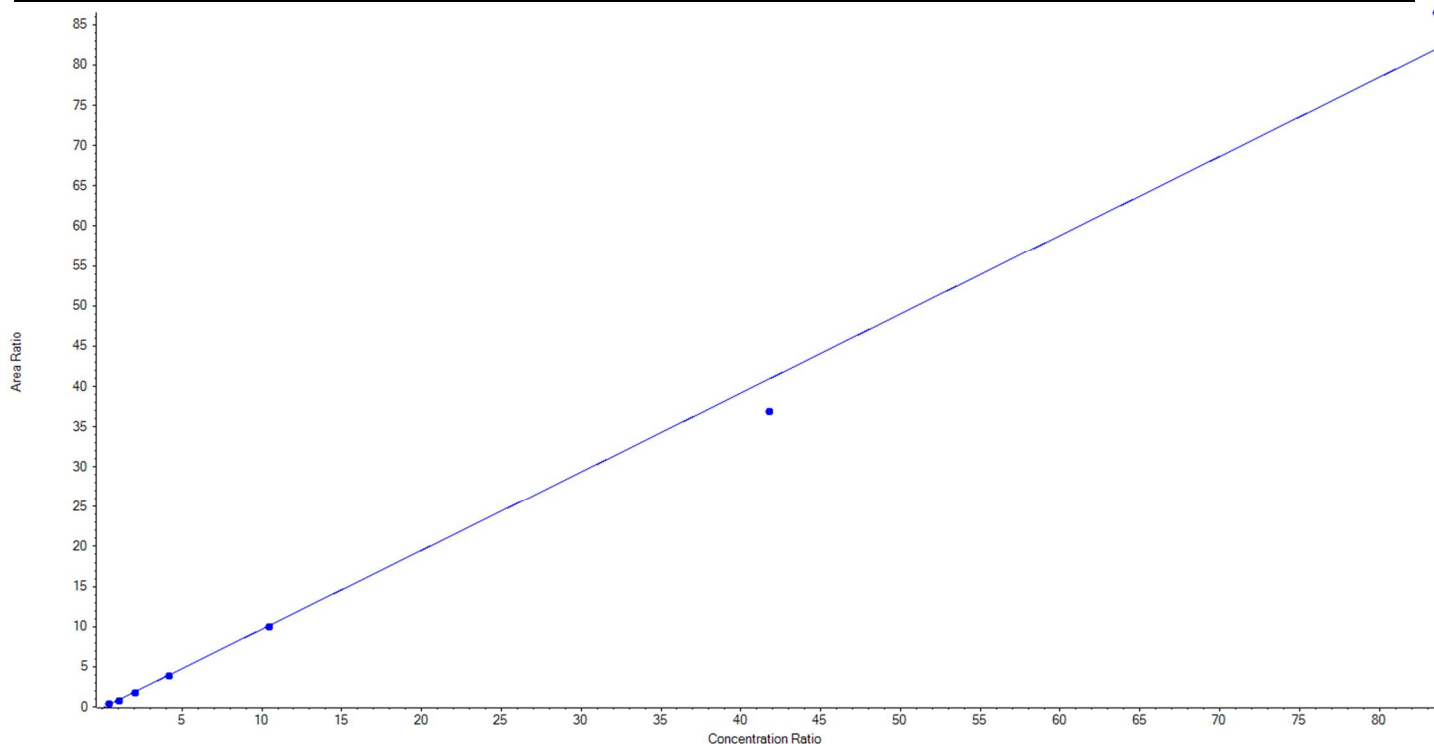
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Analyte Name	PFOS_2	Data File	18-0511_18-0517.wiff
MRM Transition	499.0 / 99.0	Result Table	18-0500_BASE_R
Internal Standard	13C8-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.98272 x + -0.14044$ ($r = 0.99726$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	128.697842	128.7
17	JY39	L2	True	250.00	212.082162	84.8
18	JY40	L3	True	500.00	469.669636	93.9
19	JY41	L4	True	1000.00	985.018915	98.5
20	JY42	L5	True	2500.00	2463.595659	98.5
21	JY43	L6	True	10000.00	9006.993858	90.1
22	JY44	L7	True	20000.00	21083.941928	105.4





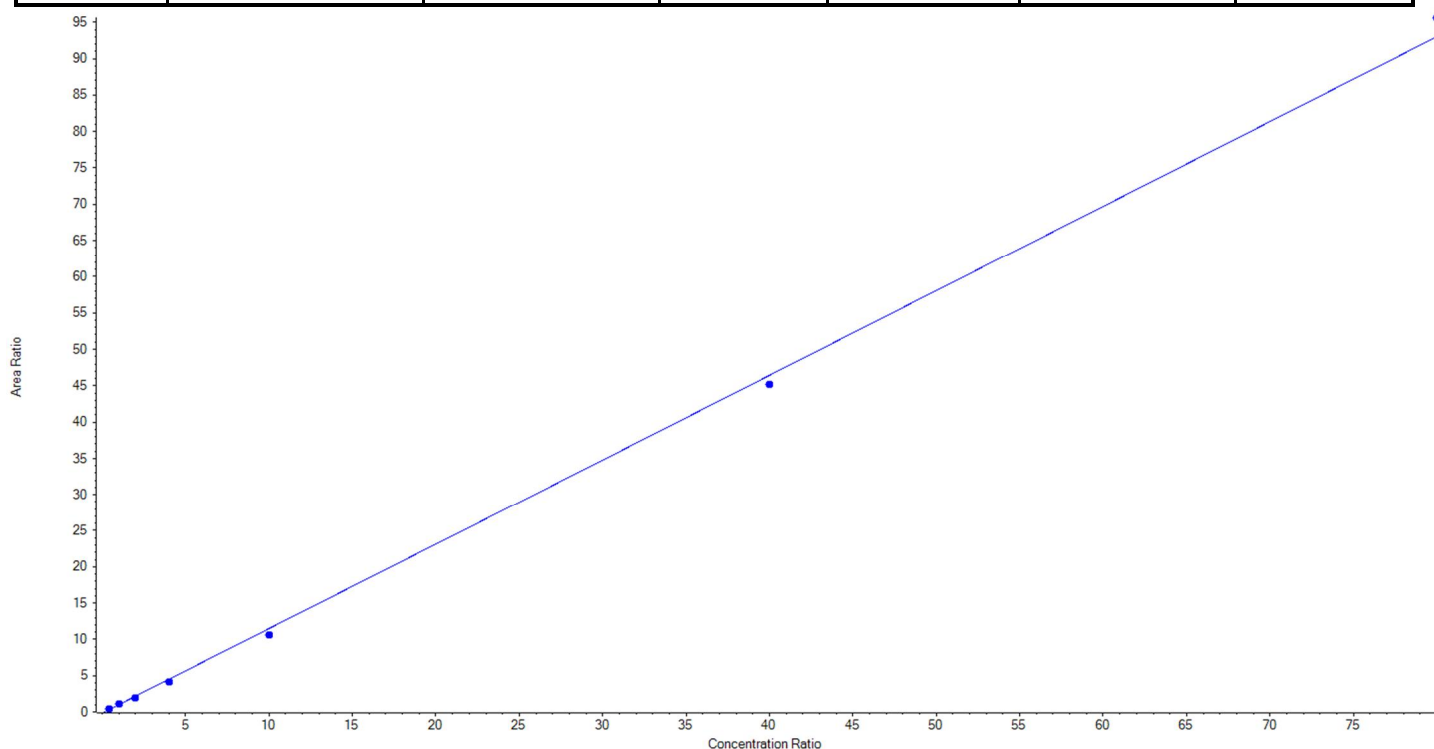
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Analyte Name	PFDA_1	Data File	18-0511_18-0517.wiff
MRM Transition	513.0 / 469.0	Result Table	18-0500_BASE_R
Internal Standard	13C6-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.16463x + -0.16116$ ($r = 0.99919$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	121.392810	121.4
17	JY39	L2	True	250.00	257.200209	102.9
18	JY40	L3	True	500.00	453.274700	90.7
19	JY41	L4	True	1000.00	923.260952	92.3
20	JY42	L5	True	2500.00	2318.858099	92.8
21	JY43	L6	True	10000.00	9722.336100	97.2
22	JY44	L7	True	20000.00	20553.677130	102.8





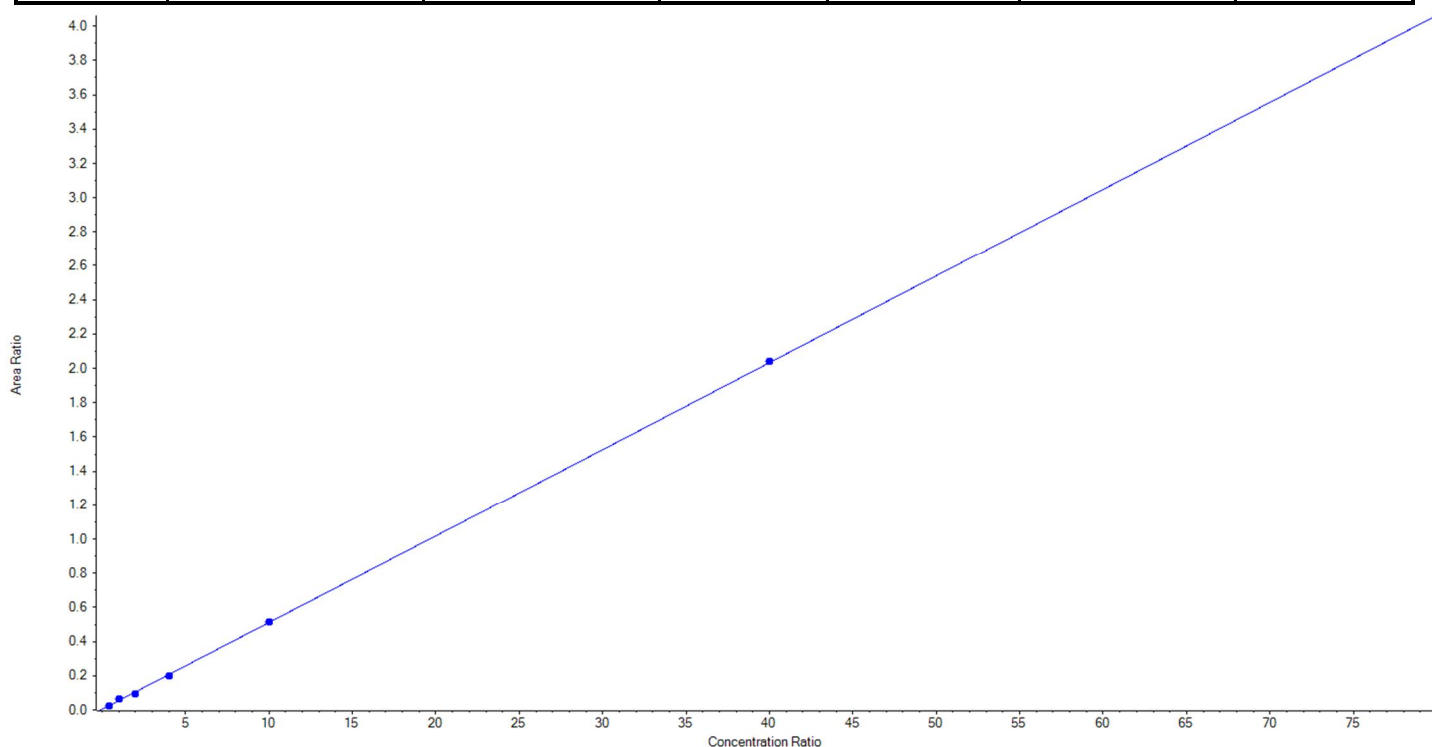
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Analyte Name	PFDA_2	Data File	18-0511_18-0517.wiff
MRM Transition	513.0 / 219.0	Result Table	18-0500_BASE_R
Internal Standard	13C6-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.05073 x + 0.00420$ ($r = 0.99974$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	94.190347	94.2
17	JY39	L2	True	250.00	296.354444	118.5
18	JY40	L3	True	500.00	444.891179	89.0
19	JY41	L4	True	1000.00	970.218567	97.0
20	JY42	L5	True	2500.00	2524.611014	101.0
21	JY43	L6	True	10000.00	10036.934036	100.4
22	JY44	L7	True	20000.00	19982.800414	99.9





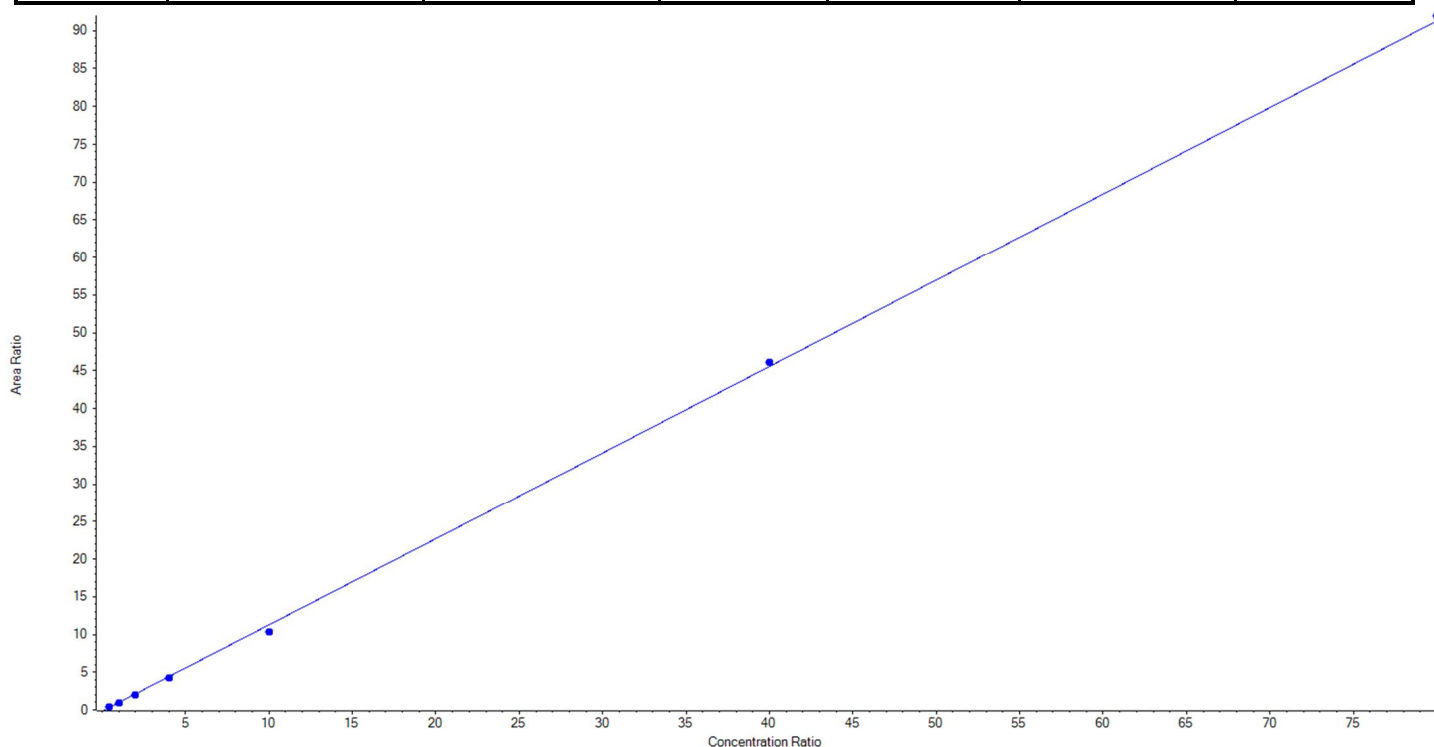
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Analyte Name	PFUnA_1	Data File	18-0511_18-0517.wiff
MRM Transition	563.0 / 519.0	Result Table	18-0500_BASE_R
Internal Standard	13C7-PFUnA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.14304 x + -0.15953$ ($r = 0.99960$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	119.016261	119.0
17	JY39	L2	True	250.00	241.564481	96.6
18	JY40	L3	True	500.00	467.741523	93.6
19	JY41	L4	True	1000.00	970.107575	97.0
20	JY42	L5	True	2500.00	2300.335601	92.0
21	JY43	L6	True	10000.00	10105.857543	101.1
22	JY44	L7	True	20000.00	20145.377016	100.7





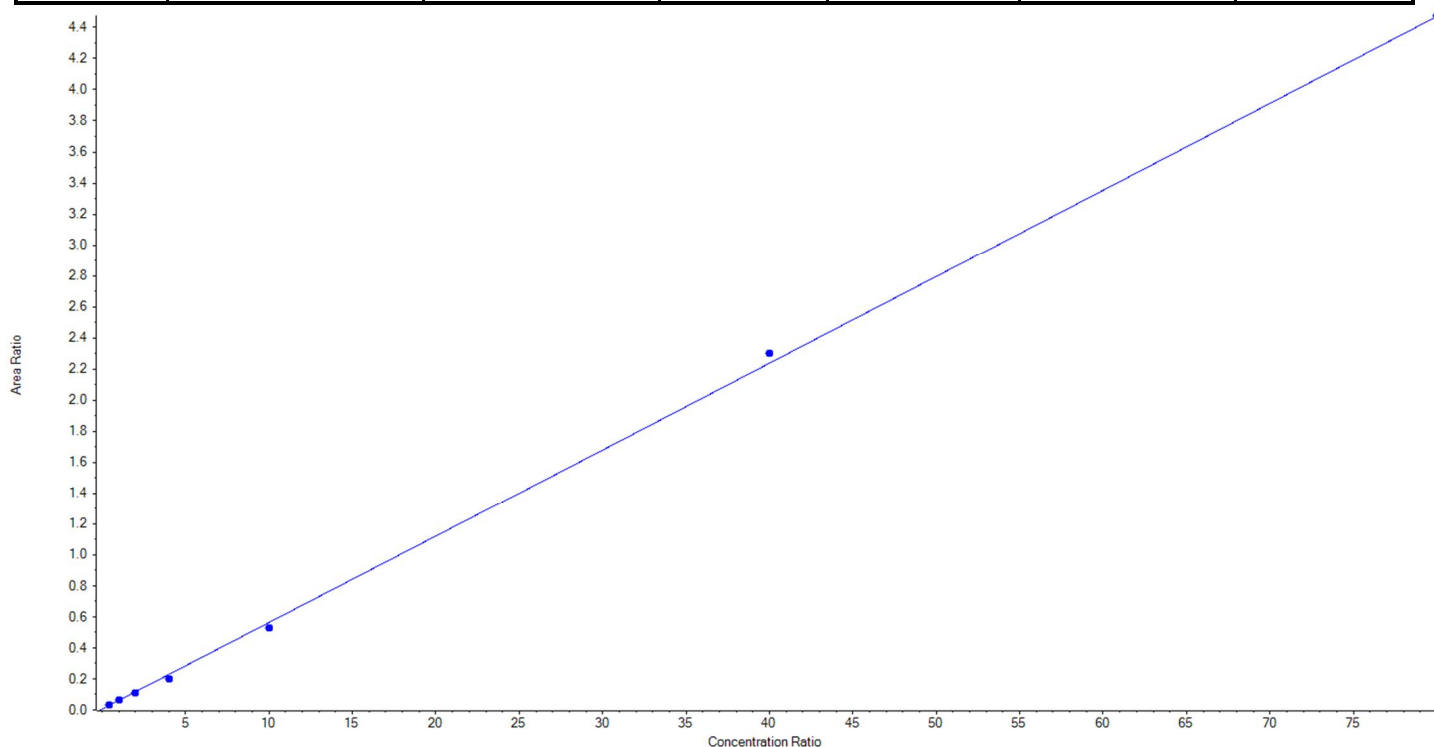
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Analyte Name	PFUnA_2	Data File	18-0511_18-0517.wiff
MRM Transition	563.0 / 269.0	Result Table	18-0500_BASE_R
Internal Standard	13C7-PFUnA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.05580 x + 0.00547$ ($r = 0.99929$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	113.798412	113.8
17	JY39	L2	True	250.00	276.385634	110.6
18	JY40	L3	True	500.00	465.429835	93.1
19	JY41	L4	True	1000.00	862.672395	86.3
20	JY42	L5	True	2500.00	2335.268906	93.4
21	JY43	L6	True	10000.00	10280.229409	102.8
22	JY44	L7	True	20000.00	20016.215408	100.1





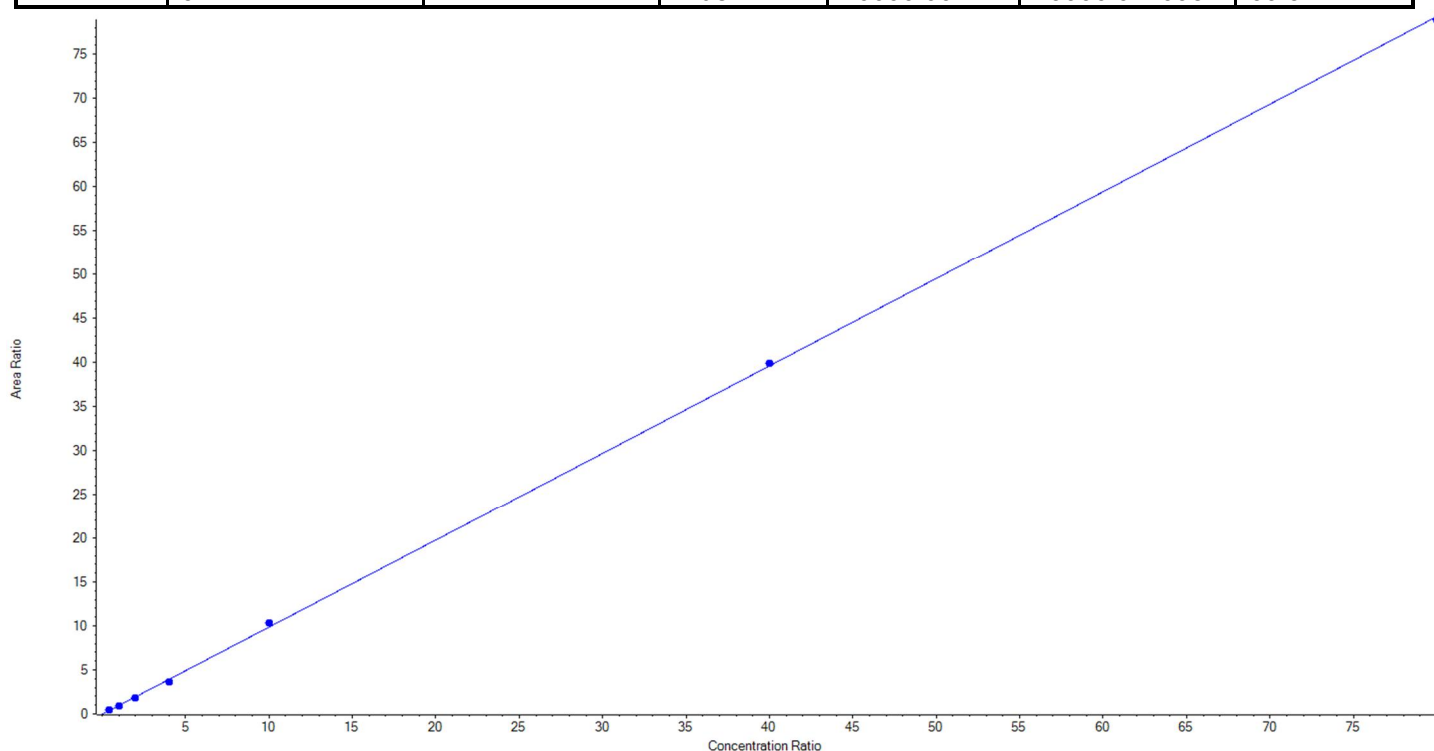
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Analyte Name	PFDoA_1	Data File	18-0511_18-0517.wiff
MRM Transition	613.0 / 569.0	Result Table	18-0500_BASE_R
Internal Standard	13C2-PFDoA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.99139x + -0.04305$ ($r = 0.99975$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	112.133275	112.1
17	JY39	L2	True	250.00	241.700657	96.7
18	JY40	L3	True	500.00	459.119430	91.8
19	JY41	L4	True	1000.00	942.059622	94.2
20	JY42	L5	True	2500.00	2624.559975	105.0
21	JY43	L6	True	10000.00	10064.415944	100.6
22	JY44	L7	True	20000.00	19906.011098	99.5





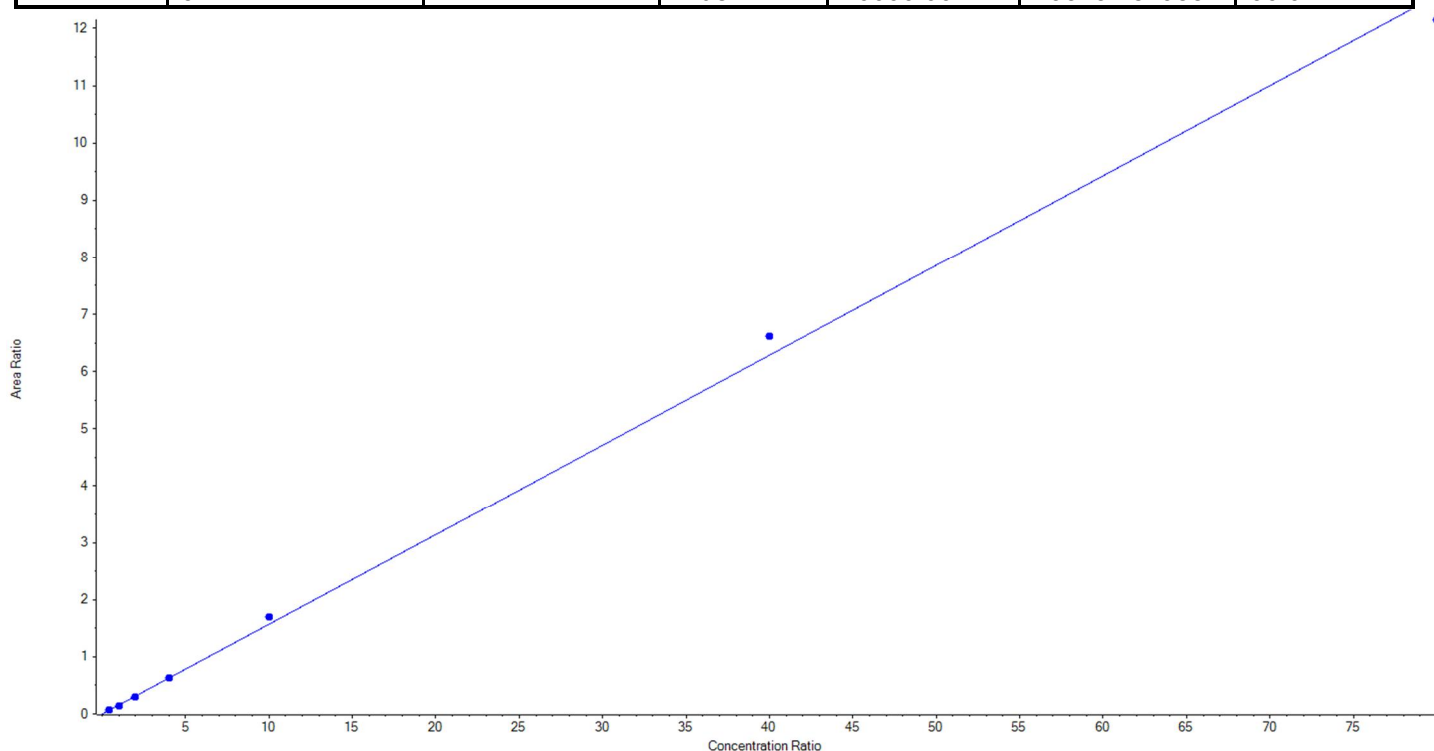
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Analyte Name	PFDaA_2	Data File	18-0511_18-0517.wiff
MRM Transition	613.0 / 319.0	Result Table	18-0500_BASE_R
Internal Standard	13C2-PFDaA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.15717 x + -0.00138$ ($r = 0.99889$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	105.358138	105.4
17	JY39	L2	True	250.00	217.554942	87.0
18	JY40	L3	True	500.00	488.393595	97.7
19	JY41	L4	True	1000.00	1001.753233	100.2
20	JY42	L5	True	2500.00	2700.462708	108.0
21	JY43	L6	True	10000.00	10512.989394	105.1
22	JY44	L7	True	20000.00	19323.487988	96.6





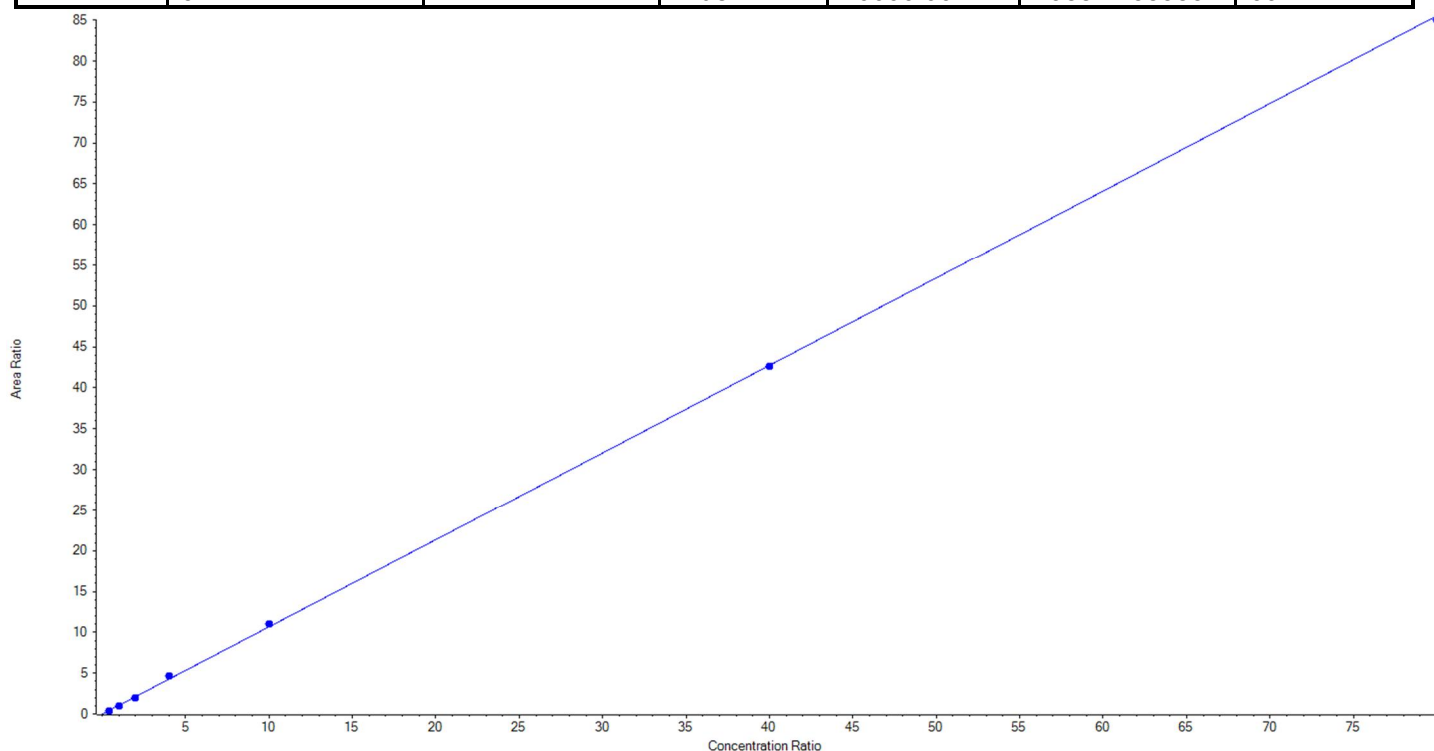
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Analyte Name	PFTTrDA_1	Data File	18-0511_18-0517.wiff
MRM Transition	663.0 / 619.0	Result Table	18-0500_BASE_R
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.06914x + -0.02151$ ($r = 0.99980$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	97.925055	97.9
17	JY39	L2	True	250.00	242.562278	97.0
18	JY40	L3	True	500.00	470.354028	94.1
19	JY41	L4	True	1000.00	1080.349090	108.0
20	JY42	L5	True	2500.00	2592.613859	103.7
21	JY43	L6	True	10000.00	9981.757307	99.8
22	JY44	L7	True	20000.00	19884.438383	99.4





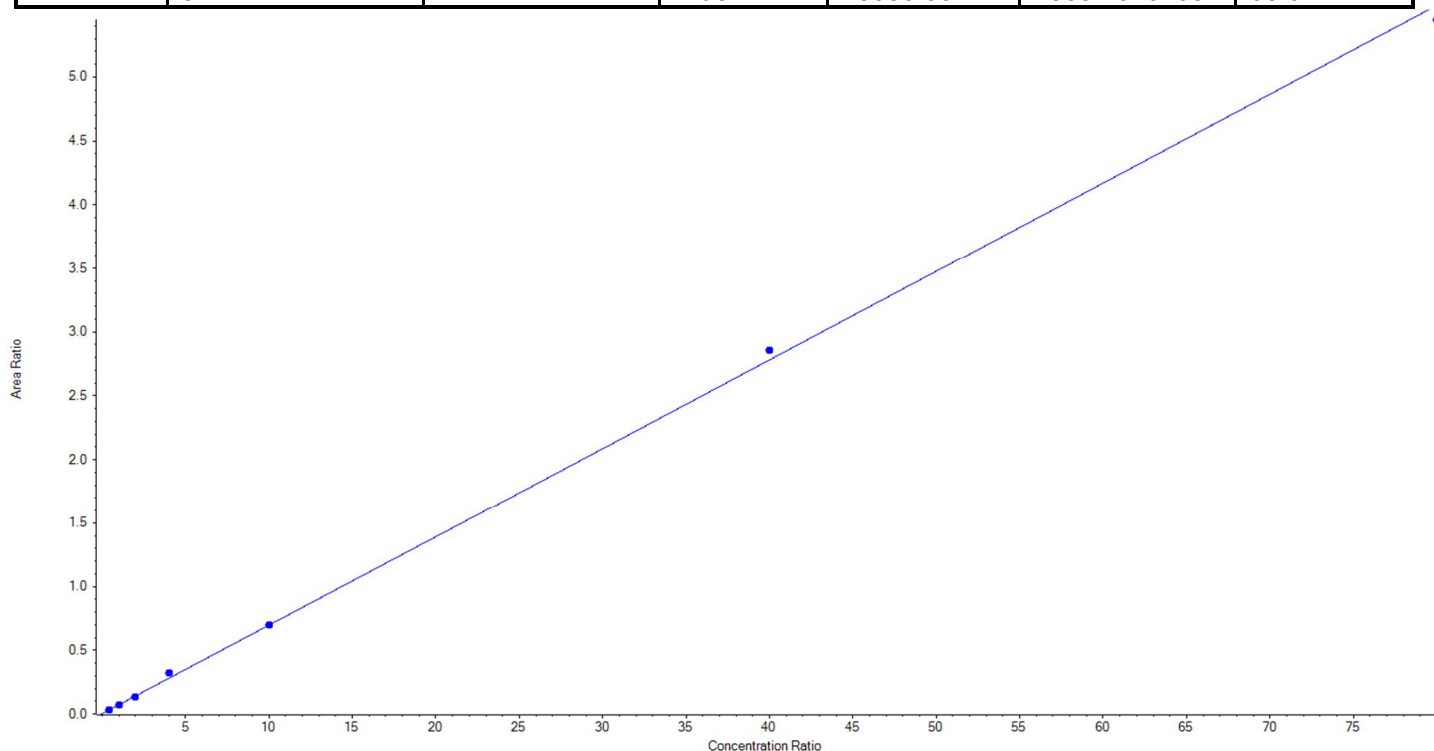
Calibration Summary Report

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Analyte Name	PFTrDA_2	Data File	18-0511_18-0517.wiff
MRM Transition	663.0 / 169.0	Result Table	18-0500_BASE_R
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.06946x + 0.00211$ ($r = 0.99934$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	94.524748	94.5
17	JY39	L2	True	250.00	232.598312	93.0
18	JY40	L3	True	500.00	479.459843	95.9
19	JY41	L4	True	1000.00	1150.265021	115.0
20	JY42	L5	True	2500.00	2518.035578	100.7
21	JY43	L6	True	10000.00	10284.090238	102.8
22	JY44	L7	True	20000.00	19591.026260	98.0





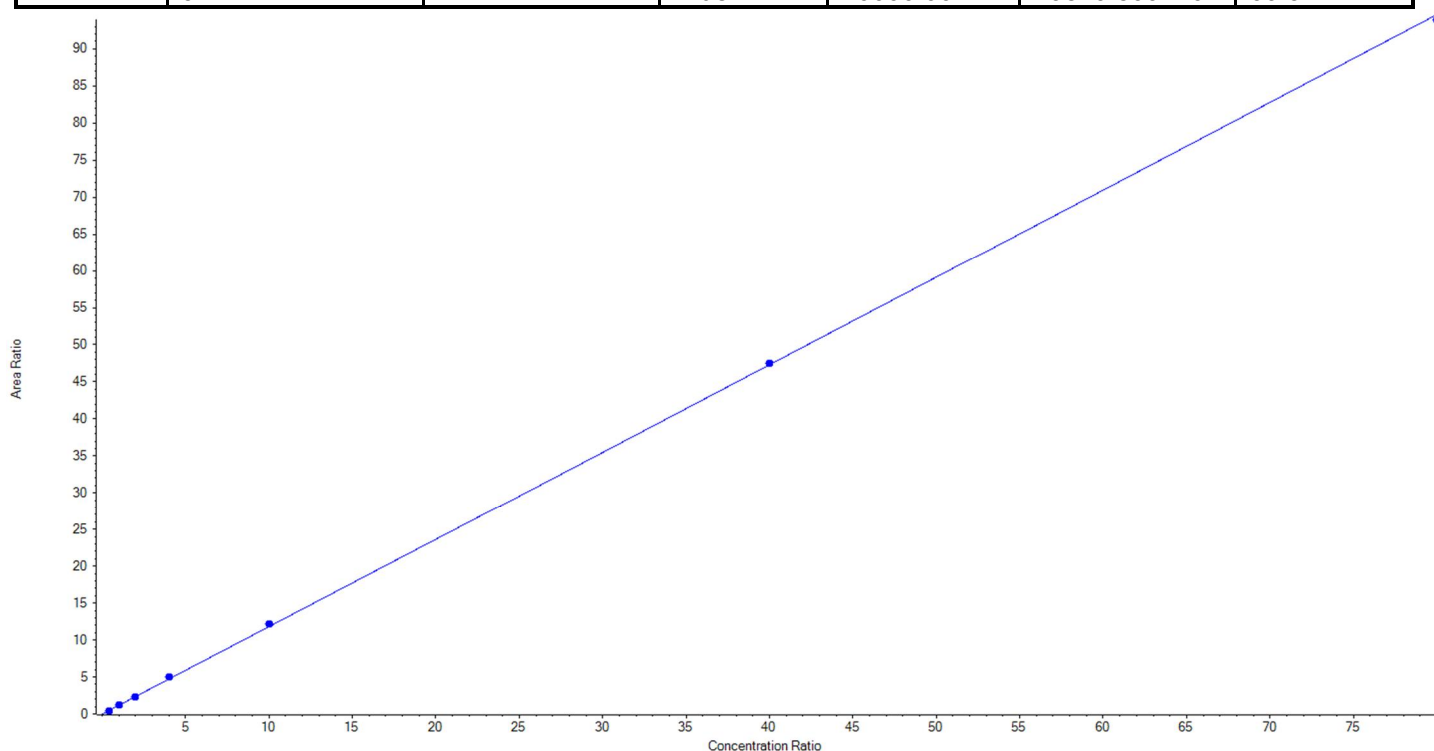
Calibration Summary Report

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Analyte Name	PFTeDA_1	Data File	18-0511_18-0517.wiff
MRM Transition	713.0 / 669.0	Result Table	18-0500_BASE_R
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.18280x + -0.01271$ ($r = 0.99988$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	97.781779	97.8
17	JY39	L2	True	250.00	247.418581	99.0
18	JY40	L3	True	500.00	477.243455	95.5
19	JY41	L4	True	1000.00	1050.613295	105.1
20	JY42	L5	True	2500.00	2574.027828	103.0
21	JY43	L6	True	10000.00	10053.015953	100.5
22	JY44	L7	True	20000.00	19849.899110	99.3





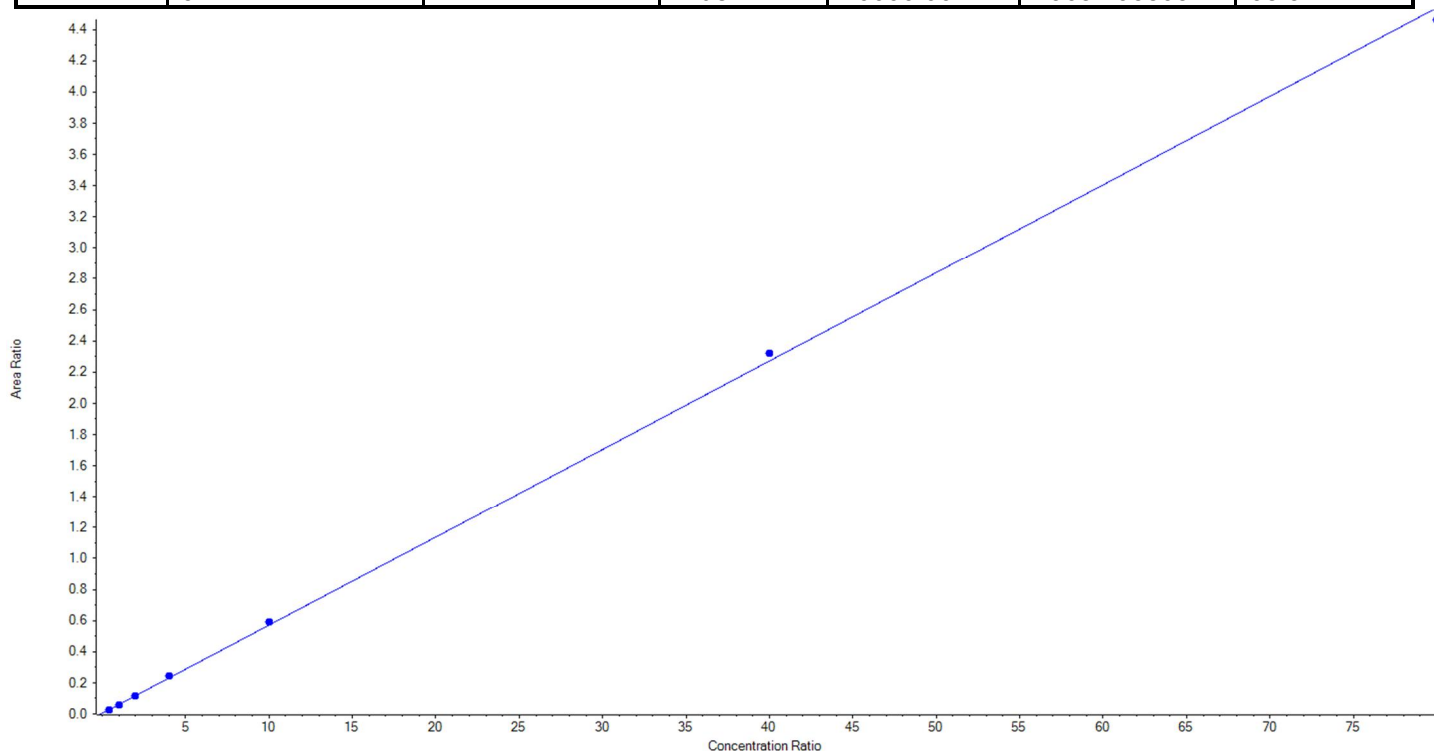
Calibration Summary Report

Created with Analyst Reporter
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Analyte Name	PFTeDA_2	Data File	18-0511_18-0517.wiff
MRM Transition	713.0 / 169.0	Result Table	18-0500_BASE_R
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.05669x + 0.00398$ ($r = 0.99969$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	94.772432	94.8
17	JY39	L2	True	250.00	245.531266	98.2
18	JY40	L3	True	500.00	480.829524	96.2
19	JY41	L4	True	1000.00	1071.559211	107.2
20	JY42	L5	True	2500.00	2580.328361	103.2
21	JY43	L6	True	10000.00	10219.041173	102.2
22	JY44	L7	True	20000.00	19657.938034	98.3





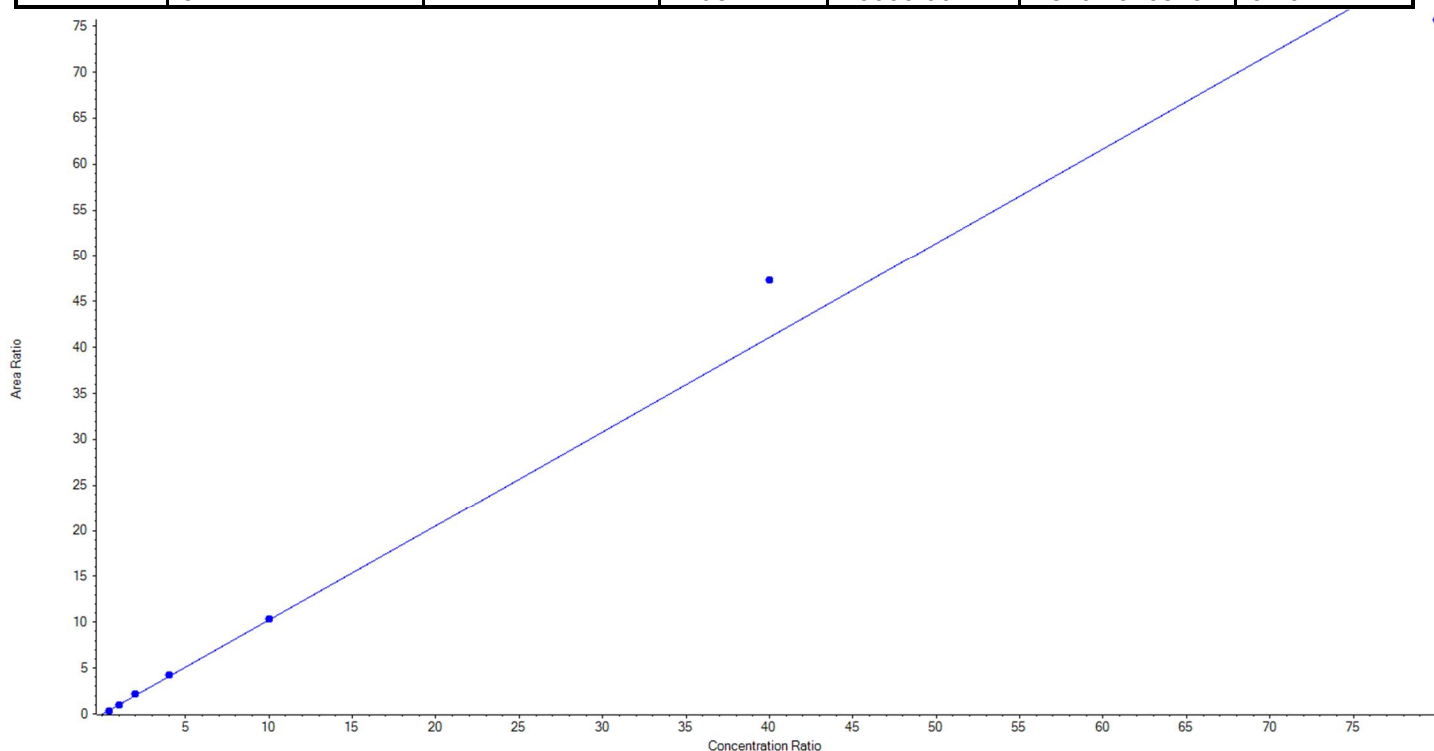
Calibration Summary Report

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Analyte Name	NMeFOSAA_1	Data File	18-0511_18-0517.wiff
MRM Transition	570.0 / 419.0	Result Table	18-0500_BASE_R
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.02819x + -0.03840$ ($r = 0.99425$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	82.782049	82.8
17	JY39	L2	True	250.00	235.752361	94.3
18	JY40	L3	True	500.00	551.603355	110.3
19	JY41	L4	True	1000.00	1048.742817	104.9
20	JY42	L5	True	2500.00	2514.949799	100.6
21	JY43	L6	True	10000.00	11508.642791	115.1
22	JY44	L7	True	20000.00	18407.526829	92.0





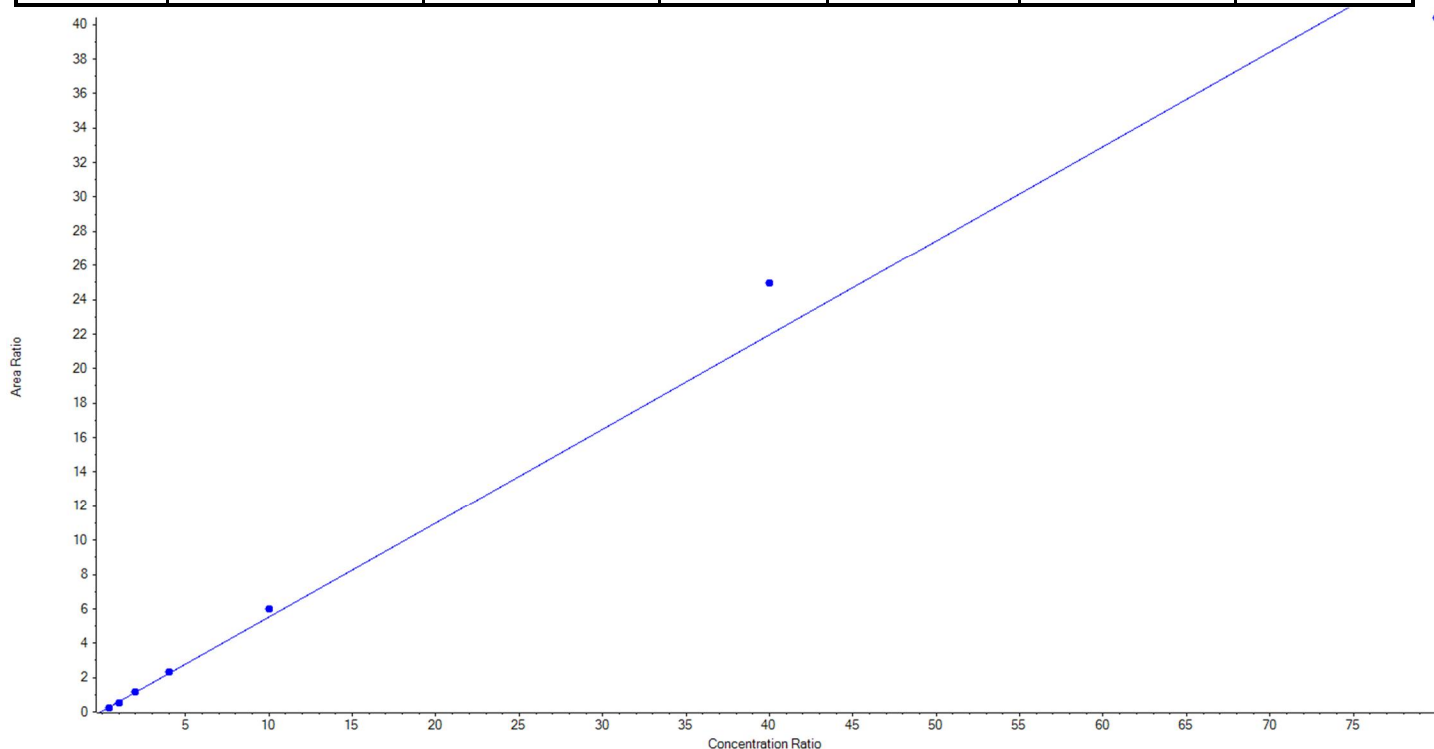
Calibration Summary Report

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Analyte Name	NMeFOSAA_2	Data File	18-0511_18-0517.wiff
MRM Transition	570.0 / 512.0	Result Table	18-0500_BASE_R
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.54797 x + 0.04389$ ($r = 0.99469$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	True	100.00	88.329106	88.3
17	JY39	L2	True	250.00	228.950311	91.6
18	JY40	L3	True	500.00	508.283885	101.7
19	JY41	L4	True	1000.00	1045.973992	104.6
20	JY42	L5	True	2500.00	2702.270084	108.1
21	JY43	L6	True	10000.00	11372.965311	113.7
22	JY44	L7	True	20000.00	18403.227310	92.0





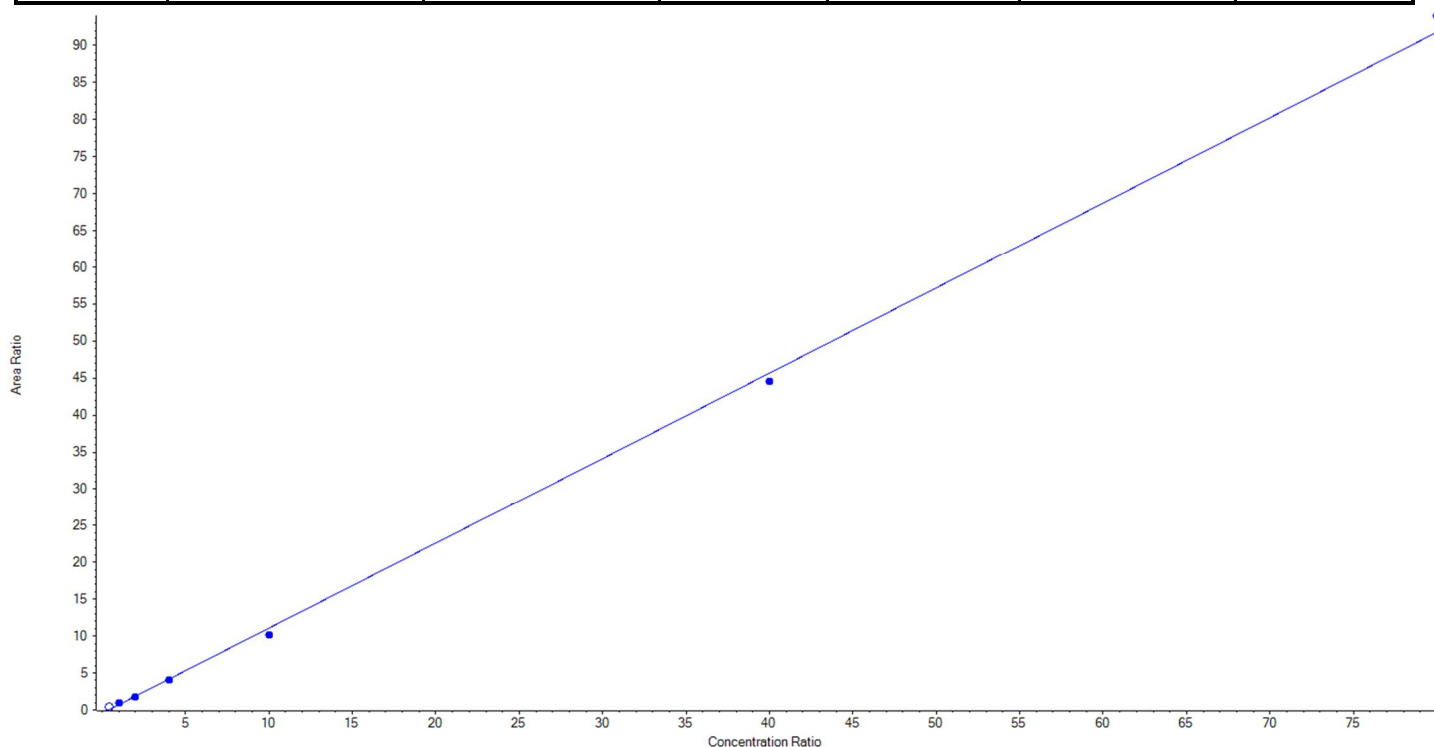
Calibration Summary Report

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Analyte Name	NEtFOSAA_1	Data File	18-0511_18-0517.wiff
MRM Transition	584.0 / 419.0	Result Table	18-0500_BASE_R
Internal Standard	d5-EtFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.15271 x + -0.44500$ ($r = 0.99924$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	False	100.00	183.838274	183.8
17	JY39	L2	True	250.00	291.768822	116.7
18	JY40	L3	True	500.00	475.784135	95.2
19	JY41	L4	True	1000.00	967.249045	96.7
20	JY42	L5	True	2500.00	2288.284973	91.5
21	JY43	L6	True	10000.00	9748.955119	97.5
22	JY44	L7	True	20000.00	20477.957906	102.4





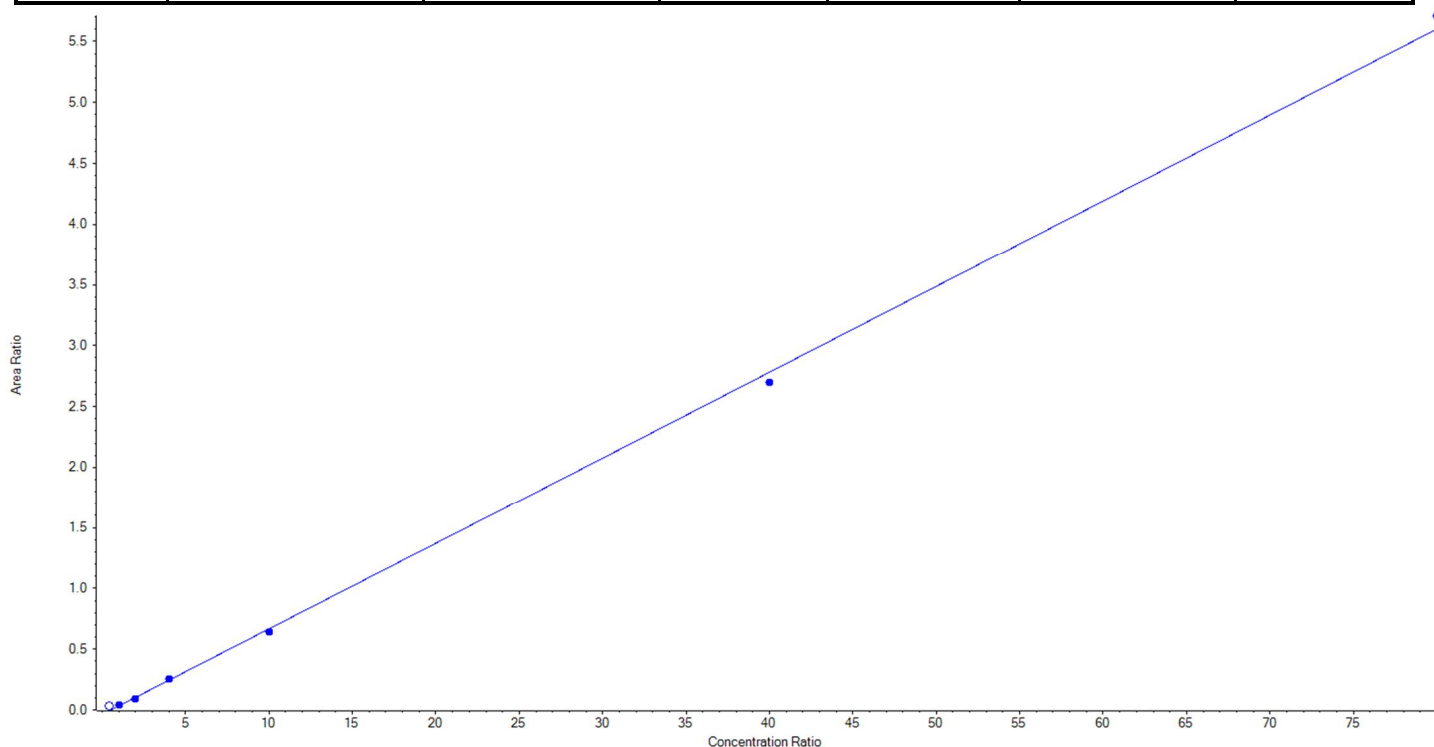
Calibration Summary Report

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Analyte Name	NEtFOSAA_2	Data File	18-0511_18-0517.wiff
MRM Transition	584.0 / 483.0	Result Table	18-0500_BASE_R
Internal Standard	d5-EtFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.07048x + -0.03780$ ($r = 0.99947$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	False	100.00	257.659715	257.7
17	JY39	L2	True	250.00	283.436437	113.4
18	JY40	L3	True	500.00	441.128614	88.2
19	JY41	L4	True	1000.00	1029.079847	102.9
20	JY42	L5	True	2500.00	2414.680611	96.6
21	JY43	L6	True	10000.00	9699.224188	97.0
22	JY44	L7	True	20000.00	20382.450304	101.9





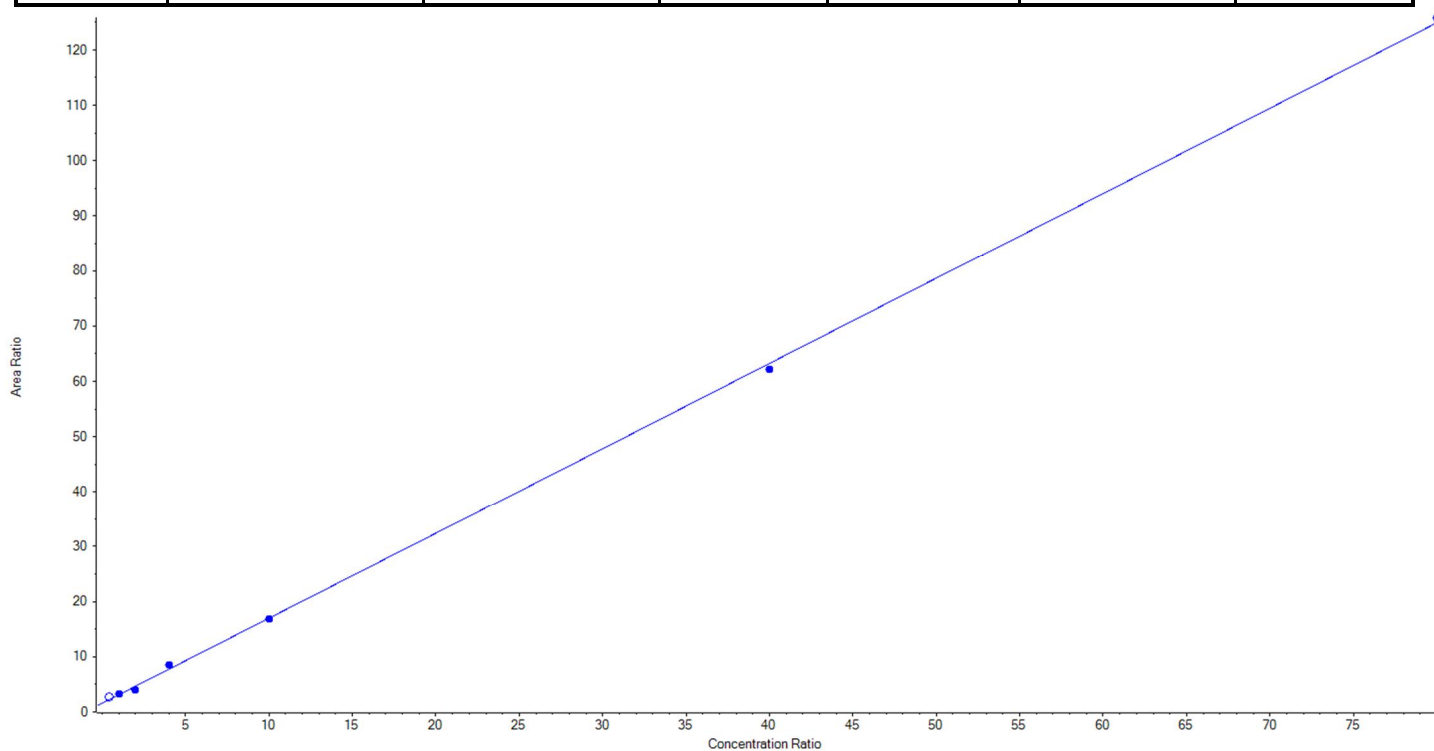
Calibration Summary Report

Created with Analyst Reporter
Printed: 30/08/2018 2:08:31 PM

Analyte Name	PFBA	Data File	18-0511_18-0517.wiff
MRM Transition	213.0 / 169.0	Result Table	18-0500_BASE_R
Internal Standard	13C4-PFBA	Instrument Name	QTRAP 5500
Acquisition Date	8/28/2018 7:53:59 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.54145x + 1.57832$ ($r = 0.99925$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
16	JY38	L1	False	100.00	199.494040	199.5
17	JY39	L2	True	250.00	269.760043	107.9
18	JY40	L3	True	500.00	400.763360	80.2
19	JY41	L4	True	1000.00	1136.820309	113.7
20	JY42	L5	True	2500.00	2485.081441	99.4
21	JY43	L6	True	10000.00	9814.029596	98.1
22	JY44	L7	True	20000.00	20143.545251	100.7



Sample Name	JY38	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:36:54	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.56	PFBS	0.309	0.294	ü
PFHxA_1	313.0 / 269.0	1.88	PFHxA			
PFHxA_2	313.0 / 119.0	1.88	PFHxA	0.051	0.071	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.28	PFHpA	0.021	0.020	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.282	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.064	0.066	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.358	0.316	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.183	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.075	0.051	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.086	0.058	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.157	0.161	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.070	0.064	ü
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.49	PFTeDA	0.049	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.623	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.74	NEtFOSAA	0.082	0.060	ü
PFBA	213.0 / 169.0	1.17				

Sample Name	JY39	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:47:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.289	0.294	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.072	0.071	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.026	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.271	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.062	0.066	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.289	0.316	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.160	0.174	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.065	0.051	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.061	0.058	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.171	0.161	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.068	0.064	ü
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.046	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.520	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.056	0.060	ü
PFBA	213.0 / 169.0	1.17				

Sample Name	JY40	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:58:41	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.295	0.294	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.081	0.071	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.019	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.287	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.069	0.066	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.333	0.316	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.174	0.174	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.048	0.051	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.056	0.058	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.161	0.161	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.060	0.064	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.049	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.580	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.054	0.060	ü
PFBA	213.0 / 169.0	1.17				

Sample Name	JY41	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:09:34	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.56	PFBS	0.283	0.294	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.067	0.071	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.019	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.283	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.069	0.066	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.313	0.316	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.173	0.174	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.042	0.051	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.055	0.058	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.161	0.161	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.060	0.064	ü
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.047	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.544	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.061	0.060	ü
PFBA	213.0 / 169.0	1.17				

Sample Name	JY42	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:20:26	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.292	0.294	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.076	0.071	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.018	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.288	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.068	0.066	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.302	0.316	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.174	0.174	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.039	0.051	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.046	0.058	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.151	0.161	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.065	0.064	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.046	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.544	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.062	0.060	ü
PFBA	213.0 / 169.0	1.16				

Sample Name	JY43	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:31:18	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.56	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.295	0.294	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.076	0.071	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.279	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.065	0.066	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.317	0.316	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	0.044	0.051	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.048	0.058	ü
PFDaA_1	613.0 / 569.0	4.01	PFDaA			
PFDaA_2	613.0 / 319.0	4.01	PFDaA	0.157	0.161	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.063	0.064	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.048	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.56	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.56	NMeFOSAA	0.534	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.062	0.060	ü
PFBA	213.0 / 169.0	1.16				

Sample Name	JY44	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:42:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.297	0.294	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.075	0.071	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.019	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.281	0.282	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.063	0.066	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.296	0.316	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.174	0.174	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.044	0.051	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	PFUnA	0.051	0.058	ü
PFDaA_1	613.0 / 569.0	4.01	PFDaA			
PFDaA_2	613.0 / 319.0	4.00	PFDaA	0.166	0.161	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.063	0.064	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.048	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.574	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.72	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.72	NEtFOSAA	0.065	0.060	ü
PFBA	213.0 / 169.0	1.16				

Sample Name	JY38	Injection Vial	16
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:04:50	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.305	0.291	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.34	PFHxA	0.054	0.073	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	PFHpA	0.031	0.023	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.281	0.291	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.080	0.069	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.321	0.297	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.212	0.181	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.39	PFDA	0.058	0.050	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	3.71	PFUnA	0.080	0.058	ü
PFDaA_1	613.0 / 569.0	4.00	PFDaA			
PFDaA_2	613.0 / 319.0	3.99	PFDaA	0.162	0.162	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.24	PFTrDA	0.071	0.067	ü
PFTeDA_1	713.0 / 669.0	4.45	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.45	PFTeDA	0.057	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.786	0.583	ü
NEtFOSAA_1	584.0 / 419.0	3.71	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	NEtFOSAA	0.087	0.057	
PFBA	213.0 / 169.0	1.11				

Sample Name	JY39	Injection Vial	17
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:15:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.281	0.291	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.082	0.073	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.025	0.023	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.290	0.291	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.070	0.069	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.270	0.297	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.167	0.181	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.062	0.050	ü
PFUnA_1	563.0 / 519.0	3.71	PFUnA			
PFUnA_2	563.0 / 269.0	3.71	PFUnA	0.071	0.058	ü
PFDaA_1	613.0 / 569.0	4.00	PFDaA			
PFDaA_2	613.0 / 319.0	4.00	PFDaA	0.148	0.162	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.24	PFTrDA	0.066	0.067	ü
PFTeDA_1	713.0 / 669.0	4.45	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.45	PFTeDA	0.052	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.586	0.583	ü
NEtFOSAA_1	584.0 / 419.0	3.71	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.72	NEtFOSAA	0.047	0.057	ü
PFBA	213.0 / 169.0	1.13				

Sample Name	JY40	Injection Vial	18
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:26:32	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.297	0.291	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.072	0.073	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.023	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.316	0.291	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.068	0.069	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.299	0.297	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.185	0.181	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.048	0.050	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	PFUnA	0.055	0.058	ü
PFDaA_1	613.0 / 569.0	4.00	PFDaA			
PFDaA_2	613.0 / 319.0	4.00	PFDaA	0.172	0.162	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.24	PFTrDA	0.068	0.067	ü
PFTeDA_1	713.0 / 669.0	4.45	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.45	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.519	0.583	ü
NEtFOSAA_1	584.0 / 419.0	3.71	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	NEtFOSAA	0.050	0.057	ü
PFBA	213.0 / 169.0	1.14				

Sample Name	JY41	Injection Vial	19
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:37:24	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.299	0.291	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.075	0.073	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.023	0.023	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.298	0.291	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.067	0.069	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.310	0.297	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.184	0.181	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.049	0.050	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	3.71	PFUnA	0.046	0.058	ü
PFDaA_1	613.0 / 569.0	4.00	PFDaA			
PFDaA_2	613.0 / 319.0	4.00	PFDaA	0.170	0.162	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.24	PFTrDA	0.070	0.067	ü
PFTeDA_1	713.0 / 669.0	4.45	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.45	PFTeDA	0.050	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.547	0.583	ü
NEtFOSAA_1	584.0 / 419.0	3.71	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.72	NEtFOSAA	0.063	0.057	ü
PFBA	213.0 / 169.0	1.14				

Sample Name	JY42	Injection Vial	20
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:48:15	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.280	0.291	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.076	0.073	ü
PFHpA_1	363.0 / 319.0	2.24	PFHpA			
PFHpA_2	363.0 / 169.0	2.24	PFHpA	0.020	0.023	ü
PFHxS_1	399.0 / 80.0	2.26	PFHxS			
PFHxS_2	399.0 / 99.0	2.26	PFHxS	0.284	0.291	ü
PFOA_1	413.0 / 369.0	2.64	PFOA			
PFOA_2	413.0 / 169.0	2.64	PFOA	0.068	0.069	ü
PFNA_1	463.0 / 419.0	3.03	PFNA			
PFNA_2	463.0 / 219.0	3.03	PFNA	0.299	0.297	ü
PFOS_1	499.0 / 80.0	3.03	PFOS			
PFOS_2	499.0 / 99.0	3.03	PFOS	0.176	0.181	ü
PFDA_1	513.0 / 469.0	3.38	PFDA			
PFDA_2	513.0 / 219.0	3.38	PFDA	0.049	0.050	ü
PFUnA_1	563.0 / 519.0	3.70	PFUnA			
PFUnA_2	563.0 / 269.0	3.70	PFUnA	0.051	0.058	ü
PFDaA_1	613.0 / 569.0	3.98	PFDaA			
PFDaA_2	613.0 / 319.0	3.98	PFDaA	0.164	0.162	ü
PFTrDA_1	663.0 / 619.0	4.22	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.22	PFTrDA	0.063	0.067	ü
PFTeDA_1	713.0 / 669.0	4.44	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.44	PFTeDA	0.048	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.54	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.53	NMeFOSAA	0.579	0.583	ü
NEtFOSAA_1	584.0 / 419.0	3.70	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.70	NEtFOSAA	0.064	0.057	ü
PFBA	213.0 / 169.0	1.14				

Sample Name	JY43	Injection Vial	21
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T20:59:08	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.291	ü
PFHxA_1	313.0 / 269.0	1.84	PFHxA			
PFHxA_2	313.0 / 119.0	1.84	PFHxA	0.079	0.073	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.019	0.023	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.285	0.291	ü
PFOA_1	413.0 / 369.0	2.65	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.065	0.069	ü
PFNA_1	463.0 / 419.0	3.04	PFNA			
PFNA_2	463.0 / 219.0	3.04	PFNA	0.302	0.297	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.175	0.181	ü
PFDA_1	513.0 / 469.0	3.39	PFDA			
PFDA_2	513.0 / 219.0	3.39	PFDA	0.045	0.050	ü
PFUnA_1	563.0 / 519.0	3.71	PFUnA			
PFUnA_2	563.0 / 269.0	3.71	PFUnA	0.050	0.058	ü
PFDaA_1	613.0 / 569.0	3.99	PFDaA			
PFDaA_2	613.0 / 319.0	3.99	PFDaA	0.166	0.162	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.24	PFTrDA	0.067	0.067	ü
PFTeDA_1	713.0 / 669.0	4.45	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.45	PFTeDA	0.049	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.528	0.583	ü
NEtFOSAA_1	584.0 / 419.0	3.71	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	NEtFOSAA	0.061	0.057	ü
PFBA	213.0 / 169.0	1.14				

Sample Name	JY44	Injection Vial	22
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:09:59	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
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	0.282	0.291	ü
PFHxA_1	313.0 / 269.0	1.85	PFHxA			
PFHxA_2	313.0 / 119.0	1.85	PFHxA	0.074	0.073	ü
PFHpA_1	363.0 / 319.0	2.25	PFHpA			
PFHpA_2	363.0 / 169.0	2.25	PFHpA	0.020	0.023	ü
PFHxS_1	399.0 / 80.0	2.27	PFHxS			
PFHxS_2	399.0 / 99.0	2.27	PFHxS	0.288	0.291	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.65	PFOA	0.066	0.069	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.302	0.297	ü
PFOS_1	499.0 / 80.0	3.05	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.170	0.181	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.043	0.050	ü
PFUnA_1	563.0 / 519.0	3.71	PFUnA			
PFUnA_2	563.0 / 269.0	3.71	PFUnA	0.049	0.058	ü
PFDaA_1	613.0 / 569.0	4.00	PFDaA			
PFDaA_2	613.0 / 319.0	3.99	PFDaA	0.154	0.162	ü
PFTrDA_1	663.0 / 619.0	4.24	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.23	PFTrDA	0.064	0.067	ü
PFTeDA_1	713.0 / 669.0	4.45	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.45	PFTeDA	0.048	0.050	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.534	0.583	ü
NEtFOSAA_1	584.0 / 419.0	3.71	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.71	NEtFOSAA	0.061	0.057	ü
PFBA	213.0 / 169.0	1.14				

Sample Name	JY45 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T00:03:55	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.55	945.317305	1010.00	93.60
PFBS_2	298.9 / 99.0	1.55	935.514031	1010.00	92.63
PFHxA_1	313.0 / 269.0	1.86	923.318126	1010.00	91.42
PFHxA_2	313.0 / 119.0	1.86	976.518151	1010.00	96.68
PFHpA_1	363.0 / 319.0	2.26	915.508298	1000.00	91.55
PFHpA_2	363.0 / 169.0	2.27	790.761915	1000.00	79.08
PFHxS_1	399.0 / 80.0	2.28	965.455677	1010.00	95.59
PFHxS_2	399.0 / 99.0	2.28	995.242077	1010.00	98.54
PFOA_1	413.0 / 369.0	2.67	918.699957	1000.00	91.87
PFOA_2	413.0 / 169.0	2.67	955.460599	1000.00	95.55
PFNA_1	463.0 / 419.0	3.05	945.837479	1000.00	94.58
PFNA_2	463.0 / 219.0	3.05	977.984830	1000.00	97.80
PFOS_1	499.0 / 80.0	3.05	835.338725	1000.00	83.53
PFOS_2	499.0 / 99.0	3.05	883.759256	1000.00	88.38
PFDA_1	513.0 / 469.0	3.40	993.565292	1000.00	99.36
PFDA_2	513.0 / 219.0	3.41	898.454706	1000.00	89.85
PFUnA_1	563.0 / 519.0	3.73	945.238689	1000.00	94.52
PFUnA_2	563.0 / 269.0	3.73	853.408516	1000.00	85.34
PFDoA_1	613.0 / 569.0	4.01	1005.730822	1000.00	100.57
PFDoA_2	613.0 / 319.0	4.01	983.797996	1000.00	98.38
PFTTrDA_1	663.0 / 619.0	4.25	1016.995563	1000.00	101.70
PFTTrDA_2	663.0 / 169.0	4.25	1017.066538	1000.00	101.71
PFTeDA_1	713.0 / 669.0	4.47	1006.665369	1000.00	100.67
PFTeDA_2	713.0 / 169.0	4.47	964.000724	1000.00	96.40
NMeFOSAA_1	570.0 / 419.0	3.56	1038.070101	1000.00	103.81
NMeFOSAA_2	570.0 / 512.0	3.56	1030.221581	1000.00	103.02
NEtFOSAA_1	584.0 / 419.0	3.72	932.896900	1000.00	93.29
NEtFOSAA_2	584.0 / 483.0	3.72	992.807735	1000.00	99.28
PFBA	213.0 / 169.0	1.17	932.851946	1000.00	93.29

Sample Name	JY42 CCV	Injection Vial	38
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:02:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.55	2632.698149	2525.00	104.27
PFBS_2	298.9 / 99.0	1.55	2629.163632	2525.00	104.13
PFHxA_1	313.0 / 269.0	1.86	2773.254653	2525.00	109.83
PFHxA_2	313.0 / 119.0	1.86	2673.395167	2525.00	105.88
PFHpA_1	363.0 / 319.0	2.26	2107.090305	2500.00	84.28
PFHpA_2	363.0 / 169.0	2.26	2394.034106	2500.00	95.76
PFHxS_1	399.0 / 80.0	2.28	2459.194498	2525.00	97.39
PFHxS_2	399.0 / 99.0	2.28	2412.304661	2525.00	95.54
PFOA_1	413.0 / 369.0	2.66	2290.634212	2500.00	91.63
PFOA_2	413.0 / 169.0	2.66	2351.499400	2500.00	94.06
PFNA_1	463.0 / 419.0	3.05	2450.064985	2500.00	98.00
PFNA_2	463.0 / 219.0	3.05	2451.927030	2500.00	98.08
PFOS_1	499.0 / 80.0	3.04	2376.576536	2500.00	95.06
PFOS_2	499.0 / 99.0	3.04	2402.769604	2500.00	96.11
PFDA_1	513.0 / 469.0	3.40	2413.882726	2500.00	96.56
PFDA_2	513.0 / 219.0	3.40	2416.808757	2500.00	96.67
PFUnA_1	563.0 / 519.0	3.72	2386.400763	2500.00	95.46
PFUnA_2	563.0 / 269.0	3.72	2171.743398	2500.00	86.87
PFDoA_1	613.0 / 569.0	4.00	2541.861858	2500.00	101.67
PFDoA_2	613.0 / 319.0	4.00	2592.319057	2500.00	103.69
PFTTrDA_1	663.0 / 619.0	4.25	2549.148161	2500.00	101.97
PFTTrDA_2	663.0 / 169.0	4.25	2604.881254	2500.00	104.20
PFTeDA_1	713.0 / 669.0	4.47	2513.784627	2500.00	100.55
PFTeDA_2	713.0 / 169.0	4.47	2442.231780	2500.00	97.69
NMeFOSAA_1	570.0 / 419.0	3.55	2492.751041	2500.00	99.71
NMeFOSAA_2	570.0 / 512.0	3.55	2380.120387	2500.00	95.20
NEtFOSAA_1	584.0 / 419.0	3.72	2653.899480	2500.00	106.16
NEtFOSAA_2	584.0 / 483.0	3.72	2532.714032	2500.00	101.31
PFBA	213.0 / 169.0	1.16	2308.516872	2500.00	92.34

Sample Name	JY41 CCV	Injection Vial	46
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:40:38	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.55	1045.035737	1010.00	103.47
PFBS_2	298.9 / 99.0	1.55	1034.084270	1010.00	102.38
PFHxA_1	313.0 / 269.0	1.86	1034.046916	1010.00	102.38
PFHxA_2	313.0 / 119.0	1.86	1043.126148	1010.00	103.28
PFHpA_1	363.0 / 319.0	2.25	944.093451	1000.00	94.41
PFHpA_2	363.0 / 169.0	2.25	964.454229	1000.00	96.45
PFHxS_1	399.0 / 80.0	2.27	968.676582	1010.00	95.91
PFHxS_2	399.0 / 99.0	2.27	954.204725	1010.00	94.48
PFOA_1	413.0 / 369.0	2.65	944.867186	1000.00	94.49
PFOA_2	413.0 / 169.0	2.65	895.448197	1000.00	89.54
PFNA_1	463.0 / 419.0	3.04	960.424992	1000.00	96.04
PFNA_2	463.0 / 219.0	3.04	960.791914	1000.00	96.08
PFOS_1	499.0 / 80.0	3.04	1046.151446	1000.00	104.62
PFOS_2	499.0 / 99.0	3.04	1030.798386	1000.00	103.08
PFDA_1	513.0 / 469.0	3.39	943.222576	1000.00	94.32
PFDA_2	513.0 / 219.0	3.39	866.268108	1000.00	86.63
PFUnA_1	563.0 / 519.0	3.71	922.774975	1000.00	92.28
PFUnA_2	563.0 / 269.0	3.70	1003.316077	1000.00	100.33
PFDoA_1	613.0 / 569.0	3.99	1038.554705	1000.00	103.86
PFDoA_2	613.0 / 319.0	3.99	998.658194	1000.00	99.87
PFTTrDA_1	663.0 / 619.0	4.24	1057.936564	1000.00	105.79
PFTTrDA_2	663.0 / 169.0	4.24	1091.130829	1000.00	109.11
PFTeDA_1	713.0 / 669.0	4.46	1012.857374	1000.00	101.29
PFTeDA_2	713.0 / 169.0	4.45	1069.452128	1000.00	106.95
NMeFOSAA_1	570.0 / 419.0	3.54	1279.387236	1000.00	127.94
NMeFOSAA_2	570.0 / 512.0	3.54	1294.528690	1000.00	129.45
NEtFOSAA_1	584.0 / 419.0	3.70	824.462970	1000.00	82.45
NEtFOSAA_2	584.0 / 483.0	3.71	851.513995	1000.00	85.15
PFBA	213.0 / 169.0	1.16	1241.361787	1000.00	124.14

Sample Name	JY45 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T00:03:55	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C4-PFBA	217.0 / 172.0	1.17	256.423433	250.00	102.57
13C2-PFDoA	615.0 / 570.0	4.00	236.412962	250.00	94.57
d3-MeFOSAA	573.0 / 419.0	3.55	229.007354	250.00	91.60
d5-EtFOSAA	589.0 / 419.0	3.71	244.394489	250.00	97.76
13C5-PFHxA	318.0 / 273.0	1.85	257.007980	250.00	102.80
13C4-PFHpA	367.0 / 322.0	2.25	257.575529	250.00	103.03
13C8-PFOA	421.0 / 376.0	2.66	253.920137	250.00	101.57
13C9-PFNA	472.0 / 427.0	3.04	266.243110	250.00	106.50
13C6-PFDA	519.0 / 474.0	3.39	253.349129	250.00	101.34
13C7-PFUnA	570.0 / 525.0	3.71	245.125330	250.00	98.05
13C2-PFTeDA	715.0 / 670.0	4.47	231.378794	250.00	92.55
13C3-PFBS	302.0 / 99.0	1.53	214.031789	232.25	92.16
13C3-PFHxS	402.0 / 99.0	2.27	204.130881	236.50	86.31
13C8-PFOS	507.0 / 99.0	3.03	237.268489	239.50	99.07

Sample Name	JY42 CCV	Injection Vial	38
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:02:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C4-PFBA	217.0 / 172.0	1.16	245.196843	250.00	98.08
13C2-PFDoA	615.0 / 570.0	3.99	260.396935	250.00	104.16
d3-MeFOSAA	573.0 / 419.0	3.55	272.635552	250.00	109.05
d5-EtFOSAA	589.0 / 419.0	3.71	226.675426	250.00	90.67
13C5-PFHxA	318.0 / 273.0	1.85	246.708303	250.00	98.68
13C4-PFHpA	367.0 / 322.0	2.25	244.690747	250.00	97.88
13C8-PFOA	421.0 / 376.0	2.65	263.709916	250.00	105.48
13C9-PFNA	472.0 / 427.0	3.04	257.313486	250.00	102.93
13C6-PFDA	519.0 / 474.0	3.39	273.403566	250.00	109.36
13C7-PFUnA	570.0 / 525.0	3.70	254.913233	250.00	101.97
13C2-PFTeDA	715.0 / 670.0	4.46	260.143023	250.00	104.06
13C3-PFBS	302.0 / 99.0	1.53	207.246442	232.25	89.23
13C3-PFHxS	402.0 / 99.0	2.27	221.264607	236.50	93.56
13C8-PFOS	507.0 / 99.0	3.03	241.729320	239.50	100.93

Sample Name	JY41 CCV	Injection Vial	46
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T07:40:38	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C4-PFBA	217.0 / 172.0	1.16	242.929035	250.00	97.17
13C2-PFDoA	615.0 / 570.0	3.98	241.616856	250.00	96.65
d3-MeFOSAA	573.0 / 419.0	3.53	203.401243	250.00	81.36
d5-EtFOSAA	589.0 / 419.0	3.69	295.605155	250.00	118.24
13C5-PFHxA	318.0 / 273.0	1.84	251.148906	250.00	100.46
13C4-PFHpA	367.0 / 322.0	2.24	250.673692	250.00	100.27
13C8-PFOA	421.0 / 376.0	2.64	255.942348	250.00	102.38
13C9-PFNA	472.0 / 427.0	3.03	260.283573	250.00	104.11
13C6-PFDA	519.0 / 474.0	3.38	264.297912	250.00	105.72
13C7-PFUnA	570.0 / 525.0	3.69	253.122689	250.00	101.25
13C2-PFTeDA	715.0 / 670.0	4.45	235.846081	250.00	94.34
13C3-PFBS	302.0 / 99.0	1.53	199.706162	232.25	85.99
13C3-PFHxS	402.0 / 99.0	2.26	222.467806	236.50	94.07
13C8-PFOS	507.0 / 99.0	3.02	227.975939	239.50	95.19

Sample Name	JY45 ICC	Injection Vial	24
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.53	899.175195	1010.00	89.03
PFBS_2	298.9 / 99.0	1.53	941.677693	1010.00	93.24
PFHxA_1	313.0 / 269.0	1.85	926.144086	1010.00	91.70
PFHxA_2	313.0 / 119.0	1.85	881.587461	1010.00	87.29
PFHpA_1	363.0 / 319.0	2.25	884.166721	1000.00	88.42
PFHpA_2	363.0 / 169.0	2.25	874.558078	1000.00	87.46
PFHxS_1	399.0 / 80.0	2.27	908.144091	1010.00	89.92
PFHxS_2	399.0 / 99.0	2.27	981.070873	1010.00	97.14
PFOA_1	413.0 / 369.0	2.66	907.407600	1000.00	90.74
PFOA_2	413.0 / 169.0	2.65	869.229245	1000.00	86.92
PFNA_1	463.0 / 419.0	3.05	940.578444	1000.00	94.06
PFNA_2	463.0 / 219.0	3.05	1027.633915	1000.00	102.76
PFOS_1	499.0 / 80.0	3.04	910.670434	1000.00	91.07
PFOS_2	499.0 / 99.0	3.04	947.472421	1000.00	94.75
PFDA_1	513.0 / 469.0	3.40	944.839755	1000.00	94.48
PFDA_2	513.0 / 219.0	3.40	837.447659	1000.00	83.74
PFUnA_1	563.0 / 519.0	3.71	862.618951	1000.00	86.26
PFUnA_2	563.0 / 269.0	3.71	941.076705	1000.00	94.11
PFDoA_1	613.0 / 569.0	4.00	951.418801	1000.00	95.14
PFDoA_2	613.0 / 319.0	4.00	955.108572	1000.00	95.51
PFTTrDA_1	663.0 / 619.0	4.24	964.723863	1000.00	96.47
PFTTrDA_2	663.0 / 169.0	4.23	984.141074	1000.00	98.41
PFTeDA_1	713.0 / 669.0	4.45	1005.572055	1000.00	100.56
PFTeDA_2	713.0 / 169.0	4.45	946.095490	1000.00	94.61
NMeFOSAA_1	570.0 / 419.0	3.55	1068.319683	1000.00	106.83
NMeFOSAA_2	570.0 / 512.0	3.55	930.744436	1000.00	93.07
NEtFOSAA_1	584.0 / 419.0	3.71	950.891484	1000.00	95.09
NEtFOSAA_2	584.0 / 483.0	3.71	1072.173371	1000.00	107.22
PFBA	213.0 / 169.0	1.14	1083.124444	1000.00	108.31

Sample Name	JY41 CCV	Injection Vial	19
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.53	946.628592	1010.00	93.73
PFBS_2	298.9 / 99.0	1.53	975.673279	1010.00	96.60
PFHxA_1	313.0 / 269.0	1.84	969.967166	1010.00	96.04
PFHxA_2	313.0 / 119.0	1.84	1059.647323	1010.00	104.92
PFHpA_1	363.0 / 319.0	2.25	919.580754	1000.00	91.96
PFHpA_2	363.0 / 169.0	2.24	921.904422	1000.00	92.19
PFHxS_1	399.0 / 80.0	2.27	965.200946	1010.00	95.56
PFHxS_2	399.0 / 99.0	2.27	996.954633	1010.00	98.71
PFOA_1	413.0 / 369.0	2.65	932.514474	1000.00	93.25
PFOA_2	413.0 / 169.0	2.65	899.481477	1000.00	89.95
PFNA_1	463.0 / 419.0	3.04	1002.187874	1000.00	100.22
PFNA_2	463.0 / 219.0	3.04	1099.931508	1000.00	109.99
PFOS_1	499.0 / 80.0	3.04	1039.681997	1000.00	103.97
PFOS_2	499.0 / 99.0	3.04	1109.527969	1000.00	110.95
PFDA_1	513.0 / 469.0	3.39	957.117269	1000.00	95.71
PFDA_2	513.0 / 219.0	3.39	772.627526	1000.00	77.26
PFUnA_1	563.0 / 519.0	3.71	941.759513	1000.00	94.18
PFUnA_2	563.0 / 269.0	3.71	1119.267675	1000.00	111.93
PFDoA_1	613.0 / 569.0	3.99	966.412096	1000.00	96.64
PFDoA_2	613.0 / 319.0	3.99	920.893085	1000.00	92.09
PFTTrDA_1	663.0 / 619.0	4.23	987.761338	1000.00	98.78
PFTTrDA_2	663.0 / 169.0	4.23	929.522754	1000.00	92.95
PFTeDA_1	713.0 / 669.0	4.45	1012.400917	1000.00	101.24
PFTeDA_2	713.0 / 169.0	4.45	971.566409	1000.00	97.16
NMeFOSAA_1	570.0 / 419.0	3.55	1077.774773	1000.00	107.78
NMeFOSAA_2	570.0 / 512.0	3.54	995.090103	1000.00	99.51
NEtFOSAA_1	584.0 / 419.0	3.71	961.362287	1000.00	96.14
NEtFOSAA_2	584.0 / 483.0	3.70	1063.459152	1000.00	106.35
PFBA	213.0 / 169.0	1.14	1163.278486	1000.00	116.33

Sample Name	JY42 CCV	Injection Vial	20
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:46:39	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.54	2591.790173	2525.00	102.65
PFBS_2	298.9 / 99.0	1.54	2585.310488	2525.00	102.39
PFHxA_1	313.0 / 269.0	1.84	2486.211609	2525.00	98.46
PFHxA_2	313.0 / 119.0	1.84	2399.592339	2525.00	95.03
PFHpA_1	363.0 / 319.0	2.25	2143.523387	2500.00	85.74
PFHpA_2	363.0 / 169.0	2.25	2058.088760	2500.00	82.32
PFHxS_1	399.0 / 80.0	2.27	2485.428979	2525.00	98.43
PFHxS_2	399.0 / 99.0	2.27	2418.105170	2525.00	95.77
PFOA_1	413.0 / 369.0	2.65	2301.727409	2500.00	92.07
PFOA_2	413.0 / 169.0	2.64	2240.850501	2500.00	89.63
PFNA_1	463.0 / 419.0	3.04	2274.392560	2500.00	90.98
PFNA_2	463.0 / 219.0	3.04	2379.666505	2500.00	95.19
PFOS_1	499.0 / 80.0	3.03	2028.427880	2500.00	81.14
PFOS_2	499.0 / 99.0	3.03	2261.241648	2500.00	90.45
PFDA_1	513.0 / 469.0	3.39	2279.529303	2500.00	91.18
PFDA_2	513.0 / 219.0	3.38	2015.461396	2500.00	80.62
PFUnA_1	563.0 / 519.0	3.70	2344.244090	2500.00	93.77
PFUnA_2	563.0 / 269.0	3.70	2544.118392	2500.00	101.76
PFDoA_1	613.0 / 569.0	3.98	2616.737723	2500.00	104.67
PFDoA_2	613.0 / 319.0	3.98	2564.614197	2500.00	102.58
PFTTrDA_1	663.0 / 619.0	4.23	2554.381911	2500.00	102.18
PFTTrDA_2	663.0 / 169.0	4.22	2592.748585	2500.00	103.71
PFTeDA_1	713.0 / 669.0	4.44	2529.377308	2500.00	101.18
PFTeDA_2	713.0 / 169.0	4.44	2525.911432	2500.00	101.04
NMeFOSAA_1	570.0 / 419.0	3.54	2598.914045	2500.00	103.96
NMeFOSAA_2	570.0 / 512.0	3.54	2380.294157	2500.00	95.21
NEtFOSAA_1	584.0 / 419.0	3.70	2330.063885	2500.00	93.20
NEtFOSAA_2	584.0 / 483.0	3.70	2526.944041	2500.00	101.08
PFBA	213.0 / 169.0	1.14	2382.833799	2500.00	95.31

Sample Name	JY45 ICC	Injection Vial	24
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-28T21:31:41	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C4-PFBA	217.0 / 172.0	1.15	262.377969	250.00	104.95
13C2-PFDoA	615.0 / 570.0	3.98	248.752108	250.00	99.50
d3-MeFOSAA	573.0 / 419.0	3.54	264.705112	250.00	105.88
d5-EtFOSAA	589.0 / 419.0	3.70	258.928916	250.00	103.57
13C5-PFHxA	318.0 / 273.0	1.83	246.400463	250.00	98.56
13C4-PFHpA	367.0 / 322.0	2.24	249.461907	250.00	99.78
13C8-PFOA	421.0 / 376.0	2.65	248.412724	250.00	99.37
13C9-PFNA	472.0 / 427.0	3.03	242.923118	250.00	97.17
13C6-PFDA	519.0 / 474.0	3.38	247.738674	250.00	99.10
13C7-PFUnA	570.0 / 525.0	3.70	272.508574	250.00	109.00
13C2-PFTeDA	715.0 / 670.0	4.45	246.047020	250.00	98.42
13C3-PFBS	302.0 / 99.0	1.52	234.521477	232.25	100.98
13C3-PFHxS	402.0 / 99.0	2.26	254.132400	236.50	107.46
13C8-PFOS	507.0 / 99.0	3.03	232.038491	239.25	96.99

Sample Name	JY41 CCV	Injection Vial	19
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T00:58:01	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C4-PFBA	217.0 / 172.0	1.15	271.412518	250.00	108.57
13C2-PFDoA	615.0 / 570.0	3.98	256.816850	250.00	102.73
d3-MeFOSAA	573.0 / 419.0	3.54	313.321471	250.00	125.33
d5-EtFOSAA	589.0 / 419.0	3.70	315.369701	250.00	126.15
13C5-PFHxA	318.0 / 273.0	1.83	262.660478	250.00	105.06
13C4-PFHpA	367.0 / 322.0	2.23	261.866304	250.00	104.75
13C8-PFOA	421.0 / 376.0	2.64	255.735525	250.00	102.29
13C9-PFNA	472.0 / 427.0	3.03	256.758811	250.00	102.70
13C6-PFDA	519.0 / 474.0	3.38	266.766660	250.00	106.71
13C7-PFUnA	570.0 / 525.0	3.69	261.998938	250.00	104.80
13C2-PFTeDA	715.0 / 670.0	4.44	255.833059	250.00	102.33
13C3-PFBS	302.0 / 99.0	1.52	264.603165	232.25	113.93
13C3-PFHxS	402.0 / 99.0	2.26	281.168493	236.50	118.89
13C8-PFOS	507.0 / 99.0	3.02	273.786335	239.25	114.44

Sample Name	JY42 CCV	Injection Vial	20
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-29T02:46:39	Data File	18-0511_18-0517.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_R
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C4-PFBA	217.0 / 172.0	1.15	272.192259	250.00	108.88
13C2-PFDoA	615.0 / 570.0	3.97	239.812449	250.00	95.92
d3-MeFOSAA	573.0 / 419.0	3.53	288.293967	250.00	115.32
d5-EtFOSAA	589.0 / 419.0	3.69	279.953763	250.00	111.98
13C5-PFHxA	318.0 / 273.0	1.83	236.852067	250.00	94.74
13C4-PFHpA	367.0 / 322.0	2.24	222.708022	250.00	89.08
13C8-PFOA	421.0 / 376.0	2.64	248.521328	250.00	99.41
13C9-PFNA	472.0 / 427.0	3.02	235.745910	250.00	94.30
13C6-PFDA	519.0 / 474.0	3.37	266.202359	250.00	106.48
13C7-PFUnA	570.0 / 525.0	3.69	252.992241	250.00	101.20
13C2-PFTeDA	715.0 / 670.0	4.44	244.980626	250.00	97.99
13C3-PFBS	302.0 / 99.0	1.52	211.637892	232.25	91.13
13C3-PFHxS	402.0 / 99.0	2.26	231.837538	236.50	98.03
13C8-PFOS	507.0 / 99.0	3.02	262.389888	239.25	109.67

Sample Name	JY45 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T00:03:55	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	471977.28	945.317305	439.4	false
PFBS_2	298.9 / 99.0	1.55	137817.48	935.514031	245.3	false
PFHxA_1	313.0 / 269.0	1.86	361850.29	923.318126	61.5	false
PFHxA_2	313.0 / 119.0	1.86	28236.47	976.518151	62.8	false
PFHpA_1	363.0 / 319.0	2.26	321110.09	915.508298	130.6	false
PFHpA_2	363.0 / 169.0	2.27	5718.08	790.761915	106.0	false
PFHxS_1	399.0 / 80.0	2.28	475710.02	965.455677	280.5	false
PFHxS_2	399.0 / 99.0	2.28	138090.54	995.242077	595.8	false
PFOA_1	413.0 / 369.0	2.67	432964.90	918.699957	242.8	false
PFOA_2	413.0 / 169.0	2.67	29150.56	955.460599	155.6	false
PFNA_1	463.0 / 419.0	3.05	427938.76	945.837479	279.6	true
PFNA_2	463.0 / 219.0	3.05	136131.21	977.984830	322.9	false
PFOS_1	499.0 / 80.0	3.05	663393.11	835.338725	242.7	true
PFOS_2	499.0 / 99.0	3.05	122846.93	883.759256	364.1	false
PFDA_1	513.0 / 469.0	3.40	518015.17	993.565292	343.0	false
PFDA_2	513.0 / 219.0	3.41	21682.87	898.454706	172.0	false
PFUnA_1	563.0 / 519.0	3.73	513657.73	945.238689	227.0	false
PFUnA_2	563.0 / 269.0	3.73	24340.58	853.408516	164.8	true
PFDoA_1	613.0 / 569.0	4.01	482306.74	1005.730822	233.1	false
PFDoA_2	613.0 / 319.0	4.01	76159.29	983.797996	206.3	false
PFTrDA_1	663.0 / 619.0	4.25	458900.12	1016.995563	304.9	false
PFTrDA_2	663.0 / 169.0	4.25	29104.92	1017.066538	254.6	false
PFTeDA_1	713.0 / 669.0	4.47	510091.48	1006.665369	628.7	false
PFTeDA_2	713.0 / 169.0	4.47	23391.32	964.000724	361.4	false
NMeFOSAA_1	570.0 / 419.0	3.56	85978.48	1038.070101	656.1	false
NMeFOSAA_2	570.0 / 512.0	3.56	47649.73	1030.221581	401.3	false
NEtFOSAA_1	584.0 / 419.0	3.72	93212.32	932.896900	545.1	false
NEtFOSAA_2	584.0 / 483.0	3.72	5846.35	992.807735	145.7	false
PFBA	213.0 / 169.0	1.17	710407.76	932.851946	406.5	true

Sample Summary

Client: Tetra Tech Inc.

SDG: 18-0520

Project/Site: Former Naval Air Station, Brunswick, Maine

CTO: WE21

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Receipt Date
CR635PB-FS	Procedural Blank	WATER	8/22/2018	8/22/2018
CR636LCS-FS	Laboratory Control Sample	WATER	8/22/2018	8/22/2018
J7401-FS	NASB-BLL15-GW-FB01-080918	QC	8/9/2018	8/10/2018

QA/QC Summary
Batch 18-0520

Project:	CTO-WE21: Former Naval Air Station, Brunswick, Maine
Parameters:	PFAS
Laboratory:	Battelle, Norwell, MA
Matrix:	QC
Data Set:	DP-18-0234
Analytical SOP:	5-369
Method Reference:	PFAS to QSM 5.1 Table B-15

Sample Custody		
Collection Date	Receipt Date	Temp (°C)
8/9/2018	8/10/2018	0.9
Corrective Actions	None.	
Sample Storage	The water samples were stored refrigerated until extraction.	
Related samples	This FRB sample is related to the field samples in SDG 18-0500.	

METHOD SUMMARIES	
Sample Preparation	Water samples were spiked with surrogates in the original sample container from the field. The water was extracted using a weak ion exchange solid phase extraction (SPE) cartridge and eluted from the SPE with 0.4% NH ₃ in methanol. Extracts were split and 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	None.
Analysis	PFAS were measured by liquid chromatography tandem mass spectrometry (LC-MS/MS) in the multiple reaction monitoring (MRM). An initial calibration consisting of representative target analytes, labelled analogs, and internal standards was analyzed prior to analysis to demonstrate the linear range of analysis. Calibration verification was performed at the beginning and end of 10 injections and at the end of each sequence. Target PFAS were quantified using the isotope dilution method. Samples are reported in ng/L concentrations.
Analysis Comments	Samples analyzed on Sciex 5500 LC-MS/MS. There were no detected results above the LOQ with ion ratios above 50% RPD.

Holding Times	Extraction Date(s)	Analysis Date(s)
	8/22/2018	8/24 – 25/2018

Procedural Blank (PB)	A PB was prepared with this analytical batch to ensure the sample extraction and analysis methods are free of contamination.
≤ ½ the LOQ Samples >10x PB	One exceedance noted. PFOA in the LCS sample is “B” qualified as it was spiked at the 2x the LOQ and was detected at a concentration less than 10x the concentration in the blank. Note that the blank is less than ½ the LOQ and does not fail blank criteria.

QA/QC Summary
Batch 18-0520

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.
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.
Initial Calibration (ICAL)	The LC-MS/MS was calibrated with multi-level calibration curve for all compounds using linear or quadratic curve fitting.
+/- 30% of true value, $R^2 \geq 0.99$	No exceedances noted.
	No comments.
Independent Calibration Check (ICC)	The independent check was run after each initial calibration to verify the calibration. This standard is from a different source than the ICAL.
+/- 30% of true value	No exceedances noted.
	No comments.
Continuing Calibration Verification (CCV)	Continuing calibration standards were run at the beginning and end of 10 injections and at the end of the sequence to ensure that initial calibration is still valid.
+/- 30% of true value	No exceedances noted.
	No comments.
Instrument Blank (IB)	Immediately following the highest standard analyzed and daily prior to sample analysis.
$\leq \frac{1}{2}$ the LOQ	No exceedances noted.
	No comments.



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project Number: 100122108-CTOWE21
 Preparation Batch: 18-0520
 Data Set: DP-18-0234
 Test Code: Master_369

QC Parameter:	Exceed:	Justification:
Procedural Blank	0	None
PB Measurement Quality Objective	1	PFOA was detected at less than ten times the blank concentration in the LCS. Integrations and prep records were verified. DMS 8/29/2018
Laboratory Control Sample	0	None
Matrix Spike / Matrix Spike Duplicate Recovery	NA	NA
Matrix Spike / Matrix Spike Duplicate Precision	NA	NA
Extracted Internal Standard Analytes (Surrogates)	0	None
Instrument Calibration	0	None
Instrument Blank	0	None
Independent Calibration Check	0	None
Continuing Calibration Verification	0	None



It can be done

**BATTELLE - NORWELL OPERATIONS
MISCELLANEOUS DOCUMENTATION FORM**

Project Title: CTO-WE21: Former Naval Air Station, B **Data Set Number:** DP-18-0234
Project Number: 100122108-CTOWE21 **Prep Batch Number:** 18-0520
Entered By: Denise Schumitz **Entered On:** 08/29/2018
Test Code (Matrix Type): Master_369(L)

Samples that were manually integrated are noted on the quant reports with the comment (TRUE).
DMS 8/29/2018

JY38 is not being used for PFHpA in this method. There is no impact on the data once this point is removed from the calibration.
DMS 8/29/2018

Task Leader Approval:

Supervisor Approval:

PM Approval:

Digitally signed by Jonathan Thorn
Date: 2018.08.29 16:17:16 -04'00'



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	JY46 IB			
Battelle ID	JY46 IB_08/24/2018			
Sample Type	IB			
Collection Date	NA			
Extraction Date	NA			
Analysis Date	08/24/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	Water			
Sample Size	0.250			
Size Unit-Basis	NA			
Units	ng/L	MDL	LOD	LOQ
PFBA	0.50 U	0.14	0.50	5.00
PFHxA	0.50 U	0.19	0.50	5.00
PFHpA	0.50 U	0.16	0.50	5.00
PFOA	0.50 U	0.18	0.50	5.00
PFNA	1.00 U	0.26	1.00	5.00
PFDA	0.50 U	0.16	0.50	5.00
PFUnA	1.00 U	0.29	1.00	5.00
PFDoA	0.50 U	0.18	0.50	5.00
PFTTrDA	0.50 U	0.15	0.50	5.00
PFTeDA	1.00 U	0.25	1.00	5.00
NMeFOSAA	2.00 U	0.56	2.00	5.00
NEtFOSAA	1.00 U	0.49	1.00	5.00
PFBS	0.50 U	0.13	0.50	5.00
PFHxS	0.40 U	0.11	0.40	5.00
PFOS	0.50 U	0.19	0.50	5.00

Surrogate Recoveries (%)

13C4-PFBA	103
13C5-PFHxA	101
13C4-PFHpA	100
13C8-PFOA	106
13C9-PFNA	99
13C6-PFDA	111
13C7-PFUnA	103
13C2-PFDoA	108
13C2-PFTeDA	99
d3-MeFOSAA	101
d5-EtFOSAA	123
13C3-PFBS	100
13C3-PFHxS	99
13C8-PFOS	103



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	Procedural Blank			
Battelle ID	CR635PB-FS			
Sample Type	PB			
Collection Date	08/22/2018			
Extraction Date	08/22/2018			
Analysis Date	08/25/2018			
Analytical Instrument	Sciex 5500 LC/MS/MS			
% Moisture	NA			
Matrix	WATER			
Sample Size	0.250			
Size Unit-Basis	L			
Units	ng/L	MDL	LOD	LOQ
PFBA	0.98 J	0.14	0.50	5.00
PFHxA	0.50 U	0.19	0.50	5.00
PFHpA	0.50 U	0.16	0.50	5.00
PFOA	1.27 J	0.18	0.50	5.00
PFNA	1.00 U	0.26	1.00	5.00
PFDA	0.50 U	0.16	0.50	5.00
PFUnA	1.00 U	0.29	1.00	5.00
PFDoA	0.50 U	0.18	0.50	5.00
PFTTrDA	0.50 U	0.15	0.50	5.00
PFTeDA	1.00 U	0.25	1.00	5.00
NMeFOSAA	2.00 U	0.56	2.00	5.00
NEtFOSAA	1.00 U	0.49	1.00	5.00
PFBS	0.50 U	0.13	0.50	5.00
PFHxS	0.40 U	0.11	0.40	5.00
PFOS	0.21 J	0.19	0.50	5.00

Surrogate Recoveries (%)

13C4-PFBA	68
13C5-PFHxA	84
13C4-PFHpA	83
13C8-PFOA	79
13C9-PFNA	85
13C6-PFDA	81
13C7-PFUnA	76
13C2-PFDoA	76
13C2-PFTeDA	76
d3-MeFOSAA	79
d5-EtFOSAA	79
13C3-PFBS	88
13C3-PFHxS	88
13C8-PFOS	86



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21

Client ID	Laboratory Control Sample					
Battelle ID	CR636LCS-FS					
Sample Type	LCS					
Collection Date	08/22/2018					
Extraction Date	08/22/2018					
Analysis Date	08/25/2018					
Analytical Instrument	Sciex 5500 LC/MS/MS					
% Moisture	NA					
Matrix	WATER					
Sample Size	0.250					
Size Unit-Basis	L					
Units	ng/L	Target	Recovery	Qual	Control Limits	
					Lower	Upper
PFBA	12.36	10.00	124		61	139
PFHxA	10.45	10.10	103		51	137
PFHpA	10.26	10.00	103		48	136
PFOA	11.43 B	10.00	114		49	141
PFNA	10.84	10.00	108		58	122
PFDA	10.35	10.00	104		59	135
PFUnA	9.54	10.00	95		64	134
PFDoA	10.87	10.00	109		75	131
PFTTrDA	11.83	10.00	118		42	148
PFTeDA	11.14	10.00	111		42	158
NMeFOSAA	11.81	10.00	118		50	146
NEtFOSAA	11.31	10.00	113		51	131
PFBS	10.38	10.10	103		56	134
PFHxS	10.50	10.10	104		52	128
PFOS	10.76	10.00	108		40	144

Surrogate Recoveries (%)

13C4-PFBA	75
13C5-PFHxA	85
13C4-PFHpA	94
13C8-PFOA	88
13C9-PFNA	87
13C6-PFDA	84
13C7-PFUnA	86
13C2-PFDoA	83
13C2-PFTeDA	78
d3-MeFOSAA	92
d5-EtFOSAA	82
13C3-PFBS	95
13C3-PFHxS	92
13C8-PFOS	92



Glossary of Data Qualifiers

Flag: Application:

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



Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21
 Preparation Batch: 18-0520
 Data Set: DP-18-0234

	CR635PB-FS (Procedural Blank)	CR636LCS-FS (Laboratory Control Sample)	J7401-FS (NASB-BLL15-GW-FB01-080918)
PFBA	L	L	L
PFHxA	-	L	-
PFHpA	-	L	-
PFOA	L	L	L
PFNA	-	L	-
PFDA	-	L	-
PFUnA	-	L	-
PFDaA	-	L	-
PFTrDA	-	L	-
PFTeDA	-	L	-
NMeFOSAA	-	L	-
NEtFOSAA	-	L	-
PFBS	-	L	-
PFHxS	-	L/Br	-
PFOS	L/Br	L/Br	L/Br

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

Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/24/18 23:20	13C3-PFBA	62,099.81	31,049.91	93,149.72

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/24/18 22:36	13C3-PFBA	55,737.70	31,049.91	93,149.72	
JY39	L2	8/24/18 22:47	13C3-PFBA	54,856.95	31,049.91	93,149.72	
JY40	L3	8/24/18 22:58	13C3-PFBA	57,614.29	31,049.91	93,149.72	
JY41	L4	8/24/18 23:09	13C3-PFBA	57,883.97	31,049.91	93,149.72	
JY42	L5	8/24/18 23:20	13C3-PFBA	62,099.81	31,049.91	93,149.72	
JY43	L6	8/24/18 23:31	13C3-PFBA	58,707.76	31,049.91	93,149.72	
JY44	L7	8/24/18 23:42	13C3-PFBA	56,480.01	31,049.91	93,149.72	
JY46 IB	Instrument Blank	8/24/18 23:53	13C3-PFBA	55,663.08	31,049.91	93,149.72	
JY45 ICC	ICC	8/25/18 0:03	13C3-PFBA	59,885.14	31,049.91	93,149.72	
CR635PB-FS(3)	Procedural Blank	8/25/18 1:09	13C3-PFBA	63,890.01	31,049.91	93,149.72	
CR636LCS-FS(3)	Laboratory Control Sample	8/25/18 1:20	13C3-PFBA	54,125.02	31,049.91	93,149.72	
J7401-FS(3)	NASB-BLL15-GW-FB01-080918	8/25/18 1:30	13C3-PFBA	47,260.33	31,049.91	93,149.72	
JY41 CCV	CCV	8/25/18 1:41	13C3-PFBA	53,615.03	31,049.91	93,149.72	

Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/24/18 23:20	13C2-PFOA	92,608.08	46,304.04	138,912.12

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/24/18 22:36	13C2-PFOA	89,686.34	46,304.04	138,912.12	
JY39	L2	8/24/18 22:47	13C2-PFOA	90,381.96	46,304.04	138,912.12	
JY40	L3	8/24/18 22:58	13C2-PFOA	87,326.72	46,304.04	138,912.12	
JY41	L4	8/24/18 23:09	13C2-PFOA	89,865.42	46,304.04	138,912.12	
JY42	L5	8/24/18 23:20	13C2-PFOA	92,608.08	46,304.04	138,912.12	
JY43	L6	8/24/18 23:31	13C2-PFOA	91,795.08	46,304.04	138,912.12	
JY44	L7	8/24/18 23:42	13C2-PFOA	91,050.54	46,304.04	138,912.12	
JY46 IB	Instrument Blank	8/24/18 23:53	13C2-PFOA	86,993.18	46,304.04	138,912.12	
JY45 ICC	ICC	8/25/18 0:03	13C2-PFOA	94,996.84	46,304.04	138,912.12	
CR635PB-FS(3)	Procedural Blank	8/25/18 1:09	13C2-PFOA	87,794.17	46,304.04	138,912.12	
CR636LCS-FS(3)	Laboratory Control Sample	8/25/18 1:20	13C2-PFOA	76,087.27	46,304.04	138,912.12	
J7401-FS(3)	NASB-BLL15-GW-FB01-080918	8/25/18 1:30	13C2-PFOA	76,320.12	46,304.04	138,912.12	
JY41 CCV	CCV	8/25/18 1:41	13C2-PFOA	88,803.80	46,304.04	138,912.12	

Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/24/18 23:20	13C2-PFDA	105,936.28	52,968.14	158,904.42

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/24/18 22:36	13C2-PFDA	101,703.93	52,968.14	158,904.42	
JY39	L2	8/24/18 22:47	13C2-PFDA	104,669.39	52,968.14	158,904.42	
JY40	L3	8/24/18 22:58	13C2-PFDA	99,261.32	52,968.14	158,904.42	
JY41	L4	8/24/18 23:09	13C2-PFDA	100,506.14	52,968.14	158,904.42	
JY42	L5	8/24/18 23:20	13C2-PFDA	105,936.28	52,968.14	158,904.42	
JY43	L6	8/24/18 23:31	13C2-PFDA	113,124.25	52,968.14	158,904.42	
JY44	L7	8/24/18 23:42	13C2-PFDA	103,798.12	52,968.14	158,904.42	
JY46 IB	Instrument Blank	8/24/18 23:53	13C2-PFDA	98,444.02	52,968.14	158,904.42	
JY45 ICC	ICC	8/25/18 0:03	13C2-PFDA	113,766.69	52,968.14	158,904.42	
CR635PB-FS(3)	Procedural Blank	8/25/18 1:09	13C2-PFDA	106,743.63	52,968.14	158,904.42	
CR636LCS-FS(3)	Laboratory Control Sample	8/25/18 1:20	13C2-PFDA	91,207.27	52,968.14	158,904.42	
J7401-FS(3)	NASB-BLL15-GW-FB01-080918	8/25/18 1:30	13C2-PFDA	84,986.73	52,968.14	158,904.42	
JY41 CCV	CCV	8/25/18 1:41	13C2-PFDA	107,120.62	52,968.14	158,904.42	

Project Client: Tetra Tech
 Project Name: CTO-WE21: Former Naval Air Station, Brunswick, Maine
 Project No.: 100122108-CTOWE21



Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper
JY42	L5	8/24/18 23:20	13C4-PFOS	32,248.02	16,124.01	48,372.03

Sample Name	Sample ID	Analysis Date	Analyte	Area	Lower	Upper	Qualifier
JY38	L1	8/24/18 22:36	13C4-PFOS	33,175.18	16,124.01	48,372.03	
JY39	L2	8/24/18 22:47	13C4-PFOS	31,211.04	16,124.01	48,372.03	
JY40	L3	8/24/18 22:58	13C4-PFOS	31,393.82	16,124.01	48,372.03	
JY41	L4	8/24/18 23:09	13C4-PFOS	31,692.96	16,124.01	48,372.03	
JY42	L5	8/24/18 23:20	13C4-PFOS	32,248.02	16,124.01	48,372.03	
JY43	L6	8/24/18 23:31	13C4-PFOS	32,619.41	16,124.01	48,372.03	
JY44	L7	8/24/18 23:42	13C4-PFOS	28,605.63	16,124.01	48,372.03	
JY46 IB	Instrument Blank	8/24/18 23:53	13C4-PFOS	30,847.94	16,124.01	48,372.03	
JY45 ICC	ICC	8/25/18 0:03	13C4-PFOS	37,275.00	16,124.01	48,372.03	
CR635PB-FS(3)	Procedural Blank	8/25/18 1:09	13C4-PFOS	28,851.79	16,124.01	48,372.03	
CR636LCS-FS(3)	Laboratory Control Sample	8/25/18 1:20	13C4-PFOS	24,552.30	16,124.01	48,372.03	
J7401-FS(3)	NASB-BLL15-GW-FB01-080918	8/25/18 1:30	13C4-PFOS	26,359.53	16,124.01	48,372.03	
JY41 CCV	CCV	8/25/18 1:41	13C4-PFOS	30,502.51	16,124.01	48,372.03	

Sample Name	JY44	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 11:42:11 PM	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0520_Base
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
PFBS_1	298.9 / 80.0	1.55	55	>10
PFBS_2	298.9 / 99.0	1.55	51	>10
PFHxA_1	313.0 / 269.0	1.86	25	>10
PFHxA_2	313.0 / 119.0	1.86	26	>10
PFHpA_1	363.0 / 319.0	2.26	29	>10
PFHpA_2	363.0 / 169.0	2.26	30	>10
PFHxS_1	399.0 / 80.0	2.28	48	>10
PFHxS_2	399.0 / 99.0	2.28	46	>10
PFOA_1	413.0 / 369.0	2.66	49	>10
PFOA_2	413.0 / 169.0	2.66	36	>10
PFNA_1	463.0 / 419.0	3.05	33	>10
PFNA_2	463.0 / 219.0	3.05	31	>10
PFOS_1	499.0 / 80.0	3.04	31	>10
PFOS_2	499.0 / 99.0	3.04	52	>10
PFDA_1	513.0 / 469.0	3.40	46	>10
PFDA_2	513.0 / 219.0	3.40	39	>10
PFUnA_1	563.0 / 519.0	3.72	30	>10
PFUnA_2	563.0 / 269.0	3.72	57	>10
PFDaA_1	613.0 / 569.0	4.01	32	>10
PFDaA_2	613.0 / 319.0	4.00	38	>10
PFTrDA_1	663.0 / 619.0	4.25	64	>10
PFTrDA_2	663.0 / 169.0	4.25	37	>10
PFTeDA_1	713.0 / 669.0	4.47	86	>10
PFTeDA_2	713.0 / 169.0	4.47	49	>10
NMeFOSAA_1	570.0 / 419.0	3.55	48	>10
NMeFOSAA_2	570.0 / 512.0	3.55	34	>10
NEtFOSAA_1	584.0 / 419.0	3.72	36	>10
NEtFOSAA_2	584.0 / 483.0	3.72	25	>10
PFBA	213.0 / 169.0	1.16	45	>10

Sample Name	JY44	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 11:42:11 PM	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0520_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Spectra Acquisition Rate	Passing Range
13C4-PFBA	217.0 / 172.0	1.16	44	>10
13C2-PFDoA	615.0 / 570.0	3.99	41	>10
d3-MeFOSAA	573.0 / 419.0	3.55	35	>10
d5-EtFOSAA	589.0 / 419.0	3.71	23	>10
13C5-PFHxA	318.0 / 273.0	1.85	37	>10
13C4-PFHpA	367.0 / 322.0	2.25	37	>10
13C8-PFOA	421.0 / 376.0	2.65	34	>10
13C9-PFNA	472.0 / 427.0	3.03	35	>10
13C6-PFDA	519.0 / 474.0	3.38	33	>10
13C7-PFUnA	570.0 / 525.0	3.71	37	>10
13C2-PFTeDA	715.0 / 670.0	4.46	42	>10
13C3-PFBS	302.0 / 99.0	1.53	33	>10
13C3-PFHxS	402.0 / 99.0	2.27	33	>10
13C8-PFOS	507.0 / 99.0	3.03	25	>10



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

Analyte	CAS No.	Average (ng/L)	ST DEV	3 Sigma	n
PFBA	375-22-4	12.40	2.18	6.54	11
PFPeA	2706-90-3	10.73	1.51	4.53	9
PFHxA	307-24-4	10.07	1.25	3.75	30
PFHpA	375-85-9	9.51	1.71	5.13	30
PFOA	335-67-1	10.06	1.60	4.80	31
PFNA	375-95-1	9.70	1.23	3.69	30
PFDA	335-76-2	10.04	1.43	4.29	30
PFUnA	2058-94-8	9.95	1.45	4.35	30
PFDoA	307-55-1	11.03	1.28	3.84	30
PFTTrDA	72629-94-8	11.52	1.50	4.50	30
PFTeDA	376-06-7	10.92	2.07	6.21	30
NMeFOSAA	2355-31-9	10.21	2.04	6.12	30
NEtFOSAA	2991-50-6	9.60	1.70	5.10	30
PFOSA	754-91-6	9.74	1.14	3.42	3
PFBS	375-73-5	10.25	1.55	4.65	31
PFPeS	BDO-2114	9.80	0.96	2.88	4
PFHxS	355-46-4	9.90	1.52	4.56	30
PFHpS	375-99-6	10.96	0.96	2.88	9
PFOS	1763-23-1	10.16	1.47	4.41	30
PFNS	98789-57-2	9.34	1.10	3.30	4
PFDS	2806-15-7	10.13	1.88	5.64	9
4:2FTS	BDO-2205	11.03	1.26	3.78	9
6:2FTS	27619-97-2	12.52	2.91	8.73	9
8:2FTS	39108-34-4	12.11	2.54	7.62	9

BATTELLE DETECTION LIMITS FOR PFAS IN NON-POTABLE WATER

Analytical SOP 5-369
Extraction SOP 5-370

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

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

Analytes on NELAP and ELAP QSM 5.1 Scope of accreditation

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

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

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

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

¹ – extracted internal standard (surrogate)

² – injection internal standard



Non-Potable Water Calibration to Sample Equivalents

ICAL (ng/L)	PIV (mL)	DF ¹	Sample Size (L)	Sample Equivalent (ng/L) ²
25	0.5	2	0.250	0.1
50	0.5	2	0.250	0.2
100	0.5	2	0.250	0.4
250	0.5	2	0.250	1.0
500	0.5	2	0.250	2.0
1,000	0.5	2	0.250	4.0
2,500	0.5	2	0.250	10.0
10,000	0.5	2	0.250	40.0
20,000	0.5	2	0.250	80.0

¹ - base level dilution as part of the extraction procedure

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

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

PRE PM PPG PERFORMANCE EVALUATION:

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

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

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

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

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

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

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

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

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

Appendix ZEFPM003-2L

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

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

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

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

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

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

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

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

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QTRAP 5500

LC/MS/MS Detector System

Appendix ZEFPM003-2L

PREVENTIVE MAINTENANCE CHECKLIST:

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

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

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

- Pump down overnight if possible. N/A

- Perform Maintenance on Turbo V source.

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

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

Appendix ZEFPM003-2L

POST PM PPG PERFORMANCE TESTS:

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

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

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

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

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

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

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

Transmission Efficiency: 21.10% (≥ 10.0%)

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

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

Appendix ZEFPM003-2L

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

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

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

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

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

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

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

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

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

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

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

Appendix ZEFPM003-2L

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

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

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

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

REVIEW:

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

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

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



It can be done

**BATTELLE - NORWELL OPERATIONS
SAMPLE PREPARATION RECORDS**

<u>Project Title(s)</u>	<u>Project No.(s)</u>
CTO-WE21: Former Naval Air Station, Brunswick, Maine	100122108- CTOWE21
18-0520	
CTO-WE21: Former Naval Air Station, Brunswick, Maine	
QC	
SOP Numbers (see workplan for modifications)	
ExtractionSOP No.	5-370

This Batch Contains The Following Samples:
CR635PB-FS CR636LCS-FS J7401-FS

Laboratory Preparation Records
COMPLETE AND VALIDATED

Prep Task Leader: Stephanie Schultz

Approved By:	Date	Initials
Denise Schumitz	08/29/2018	DMS



It can be done

**BATTELLE - NORWELL OPERATIONS
LIQUID SAMPLE ID FORM**

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.(s)

100122108-
CTOWE21

18-0520

CTO-WE21: Former Naval Air Station, Brunswick, Maine

QC

Sample ID	Description	Volume (mL)	Bottles	*	Date Initials
CR635PB-FS	Procedural Blank	250.0	NA	--	08/22/18 SAS
CR636LCS-FS	Laboratory Control Sample	250.0	NA	--	08/22/18 SAS
J7401-FS	NASB-BLL15-GW-FB01-080918	265.0	1	C	08/22/18 SAS

Comments:

Samples Assigned By

Stephanie Schultz

Date : August 22, 2018

* - "C" = Sample is Consumed



It can be done

BATTELLE - NORWELL OPERATIONS SURROGATE SPIKE FORM

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine

Project No.(s)

100122108-
CTOWE21

18-0520

CTO-WE21: Former Naval Air Station, Brunswick, Maine

QC

Sample ID	Standard ID	Type	Vial No.	Vol Added (uL)	Date Spiked/ Spiked By	Witn'd By	Comment
CR635PB-FS	JY28	SIS	1	50	08/22/18 SAS	JCT	NA
CR636LCS-FS	JY28	SIS	1	50	08/22/18 SAS	JCT	NA
CR636LCS-FS	JZ27	LCS/MS	1	50	08/22/18 SAS	JCT	NA
J7401-FS	JY28	SIS	1	50	08/22/18 SAS	JCT	NA

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
JY28	Pipette	B814659662
JZ27	Pipette	B814659662



It can be done

BATTELLE - NORWELL OPERATIONS INTERNAL STANDARD SPIKING FORM

Project Title(s)

CTO-WE21: Former Naval Air Station, Brunswick, Maine 100122108-

Project No.(s)

CTOWE21

18-0520**CTO-WE21: Former Naval Air Station, Brunswick, Maine****QC****(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
CR635PB-FS(3)	475	25	JY26	25	1	500	2.000	08/23/18 SAS	MRM
CR636LCS-FS(3)	475	25	JY26	25	1	500	2.000	08/23/18 SAS	MRM
J7401-FS(3)	475	25	JY26	25	1	500	2.000	08/23/18 SAS	MRM

Syringes/Pipettes Used:

Std ID	Type	Syr/Pip
JY26	Pipette	B814659662

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

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

Vial	Laboratory Sample ID	Client Sample ID	Acquisition Date	Acquisition Method	Data File
1	MEOH		8/24/2018 10:26:02 PM	5-0369.dam	18-0501-515-520-500.wiff
2	JY38	L1	8/24/2018 10:36:54 PM	5-0369.dam	18-0501-515-520-500.wiff
3	JY39	L2	8/24/2018 10:47:47 PM	5-0369.dam	18-0501-515-520-500.wiff
4	JY40	L3	8/24/2018 10:58:41 PM	5-0369.dam	18-0501-515-520-500.wiff
5	JY41	L4	8/24/2018 11:09:34 PM	5-0369.dam	18-0501-515-520-500.wiff
6	JY42	L5	8/24/2018 11:20:26 PM	5-0369.dam	18-0501-515-520-500.wiff
7	JY43	L6	8/24/2018 11:31:18 PM	5-0369.dam	18-0501-515-520-500.wiff
8	JY44	L7	8/24/2018 11:42:11 PM	5-0369.dam	18-0501-515-520-500.wiff
9	JY46 IB	Instrument Blank	8/24/2018 11:53:03 PM	5-0369.dam	18-0501-515-520-500.wiff
10	JY45 ICC	ICC	8/25/2018 12:03:55 AM	5-0369.dam	18-0501-515-520-500.wiff
11	JX29 BRANCH	Branch Standard	8/25/2018 12:14:48 AM	5-0369.dam	18-0501-515-520-500.wiff
14	MEOH		8/25/2018 12:58:20 AM	5-0369.dam	18-0501-515-520-500.wiff
15	CR635PB-FS(3)	Procedural Blank	8/25/2018 1:09:11 AM	5-0369.dam	18-0501-515-520-500.wiff
16	CR636LCS-FS(3)	Laboratory Control Sample	8/25/2018 1:20:03 AM	5-0369.dam	18-0501-515-520-500.wiff
17	J7401-FS(3)	NASB-BLL15-GW-FB01-080918	8/25/2018 1:30:55 AM	5-0369.dam	18-0501-515-520-500.wiff
18	JY41 CCV	CCV	8/25/2018 1:41:46 AM	5-0369.dam	18-0501-515-520-500.wiff



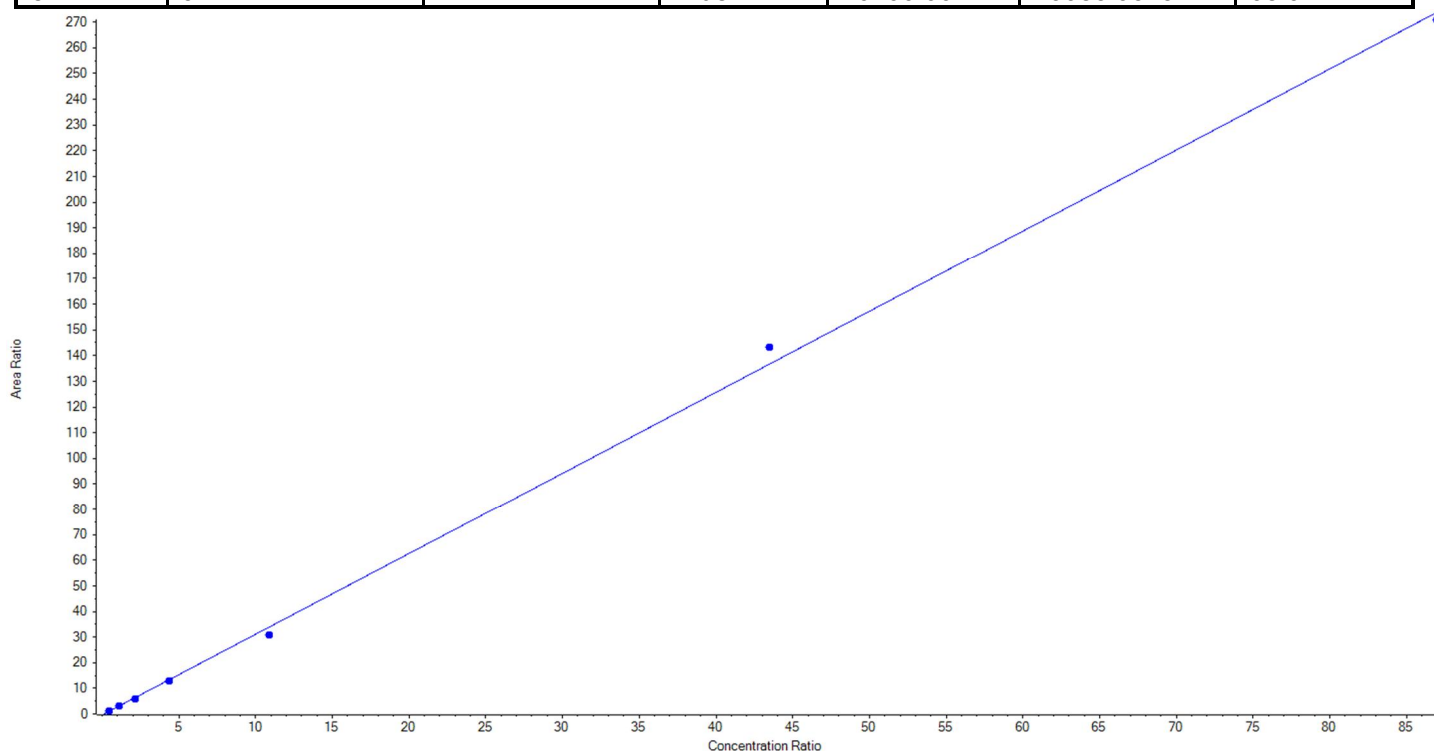
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Created with Analyst Reporter
Printed: 29/08/2018 2:23:59 PM

Analyte Name	PFBS_1	Data File	18-0501-515-520-500.wiff
MRM Transition	298.9 / 80.0	Result Table	18-0520_Base
Internal Standard	13C3-PFBS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 3.15281x + -0.41358$ ($r = 0.99916$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	118.174563	117.0
3	JY39	L2	True	252.50	254.441490	100.8
4	JY40	L3	True	505.00	456.707111	90.4
5	JY41	L4	True	1010.00	973.620829	96.4
6	JY42	L5	True	2525.00	2311.981236	91.6
7	JY43	L6	True	10100.00	10594.642449	104.9
8	JY44	L7	True	20200.00	19983.932322	98.9





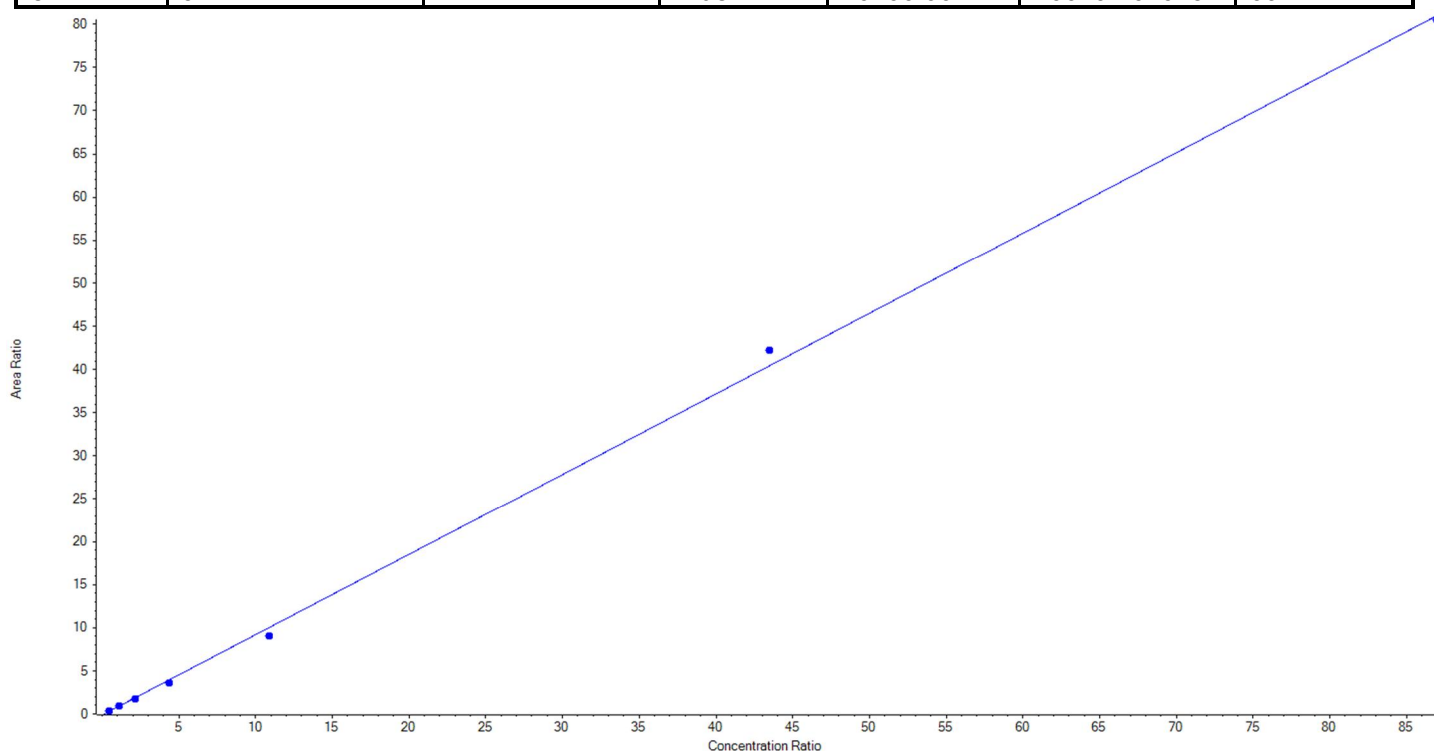
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Analyte Name	PFBS_2	Data File	18-0501-515-520-500.wiff
MRM Transition	298.9 / 99.0	Result Table	18-0520_Base
Internal Standard	13C3-PFBS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.93255x + -0.12994$ ($r = 0.99907$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	124.006251	122.8
3	JY39	L2	True	252.50	251.390877	99.6
4	JY40	L3	True	505.00	457.925956	90.7
5	JY41	L4	True	1010.00	933.624261	92.4
6	JY42	L5	True	2525.00	2287.352093	90.6
7	JY43	L6	True	10100.00	10559.938920	104.6
8	JY44	L7	True	20200.00	20079.261643	99.4





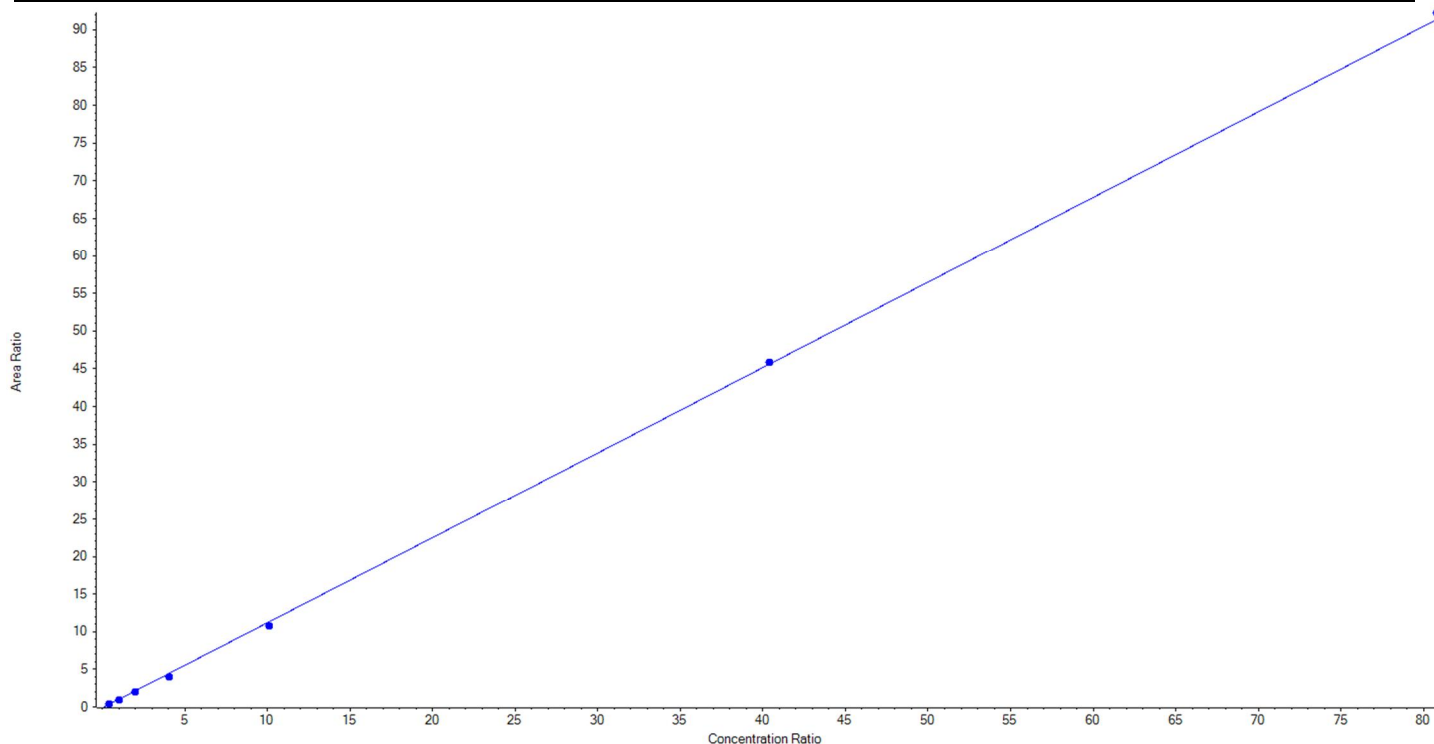
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 2:23:59 PM

Analyte Name	PFHxA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	313.0 / 269.0	Result Table	18-0520_Base
Internal Standard	13C5-PFHxA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.13247 x + -0.13932$ ($r = 0.99960$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	125.508479	124.3
3	JY39	L2	True	252.50	243.109429	96.3
4	JY40	L3	True	505.00	464.496945	92.0
5	JY41	L4	True	1010.00	916.327219	90.7
6	JY42	L5	True	2525.00	2407.633843	95.4
7	JY43	L6	True	10100.00	10145.632957	100.5
8	JY44	L7	True	20200.00	20390.791129	100.9





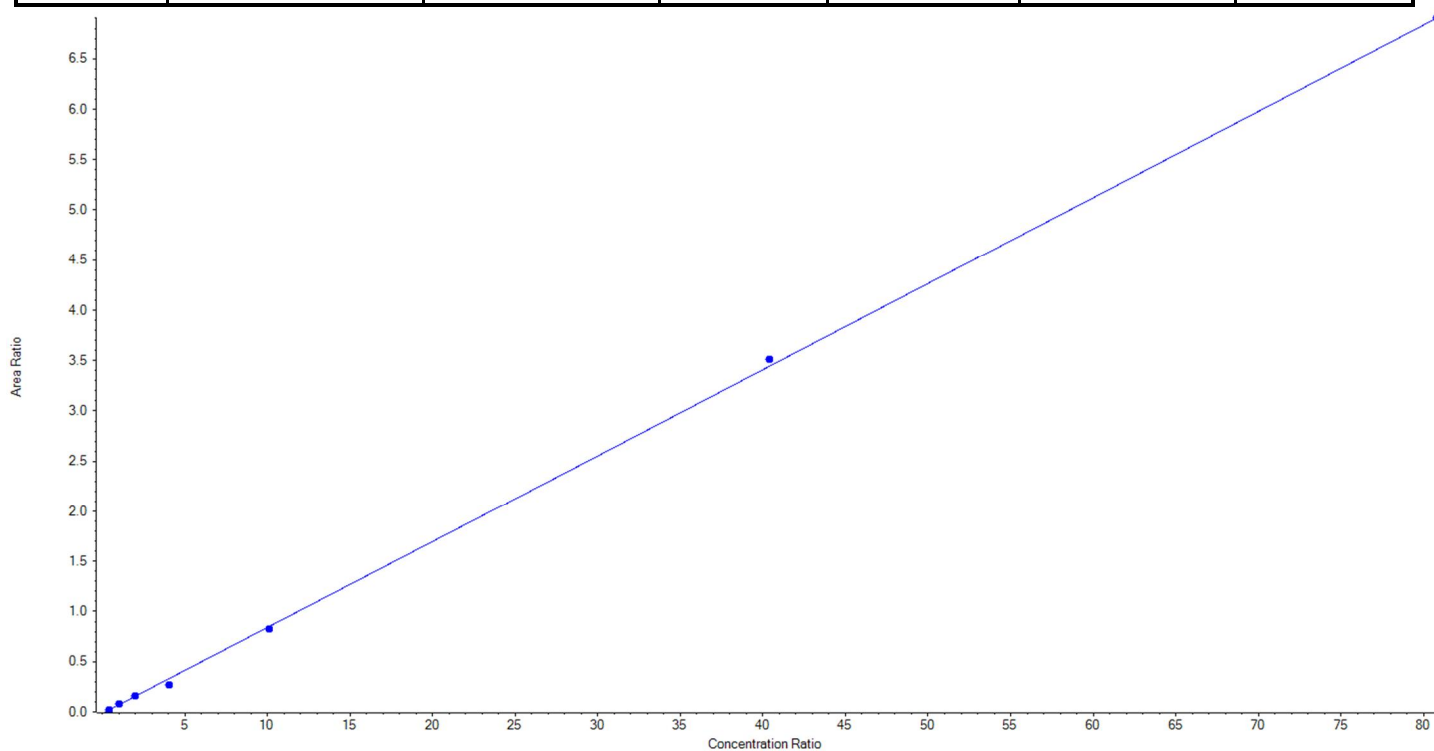
Calibration Summary Report

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Analyte Name	PFHxA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	313.0 / 119.0	Result Table	18-0520_Base
Internal Standard	13C5-PFHxA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.08563x + -0.01582$ ($r = 0.99943$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	109.463725	108.4
3	JY39	L2	True	252.50	269.034709	106.6
4	JY40	L3	True	505.00	518.403953	102.7
5	JY41	L4	True	1010.00	839.466188	83.1
6	JY42	L5	True	2525.00	2458.325809	97.4
7	JY43	L6	True	10100.00	10293.584410	101.9
8	JY44	L7	True	20200.00	20205.221206	100.0





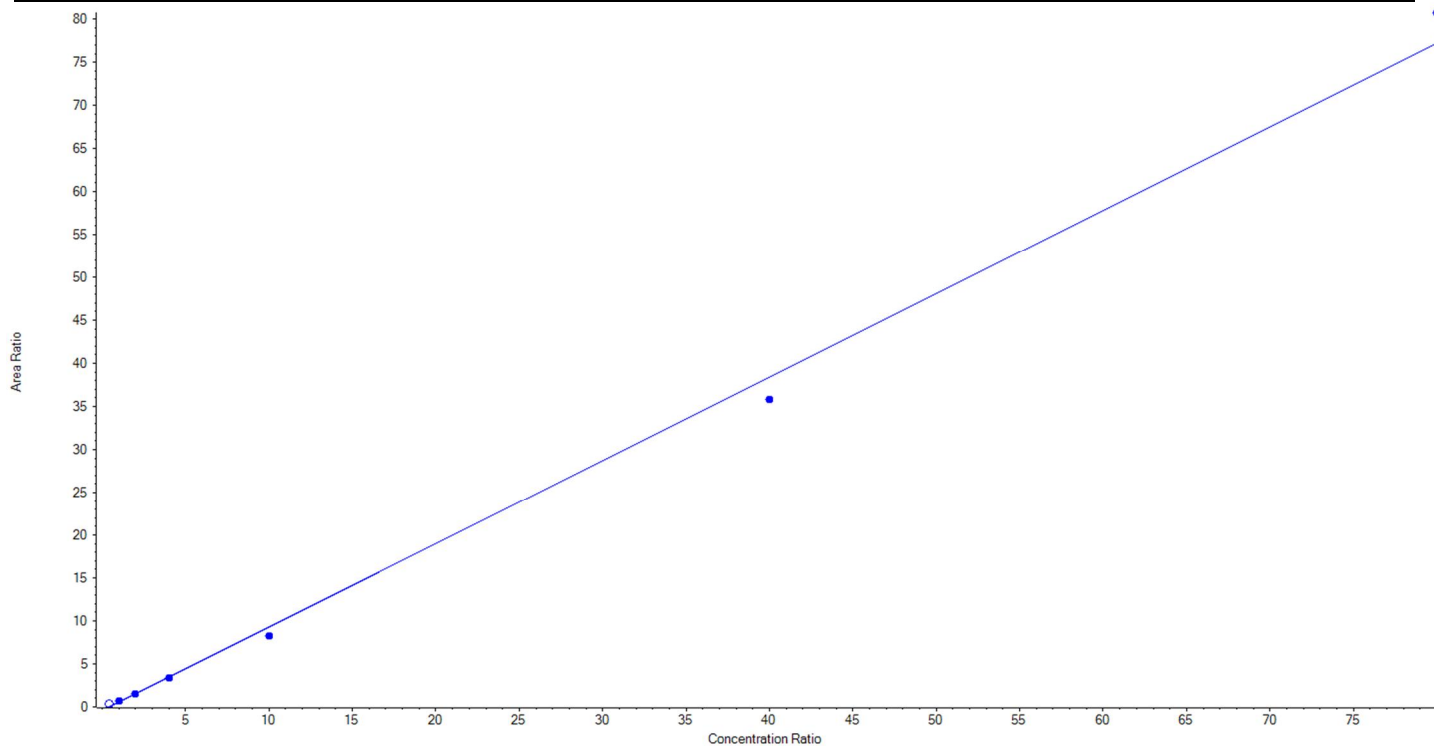
Calibration Summary Report

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Analyte Name	PFHpA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	363.0 / 319.0	Result Table	18-0520_Base
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.96991x + -0.40464$ ($r = 0.99800$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	182.558218	182.6
3	JY39	L2	True	250.00	289.794362	115.9
4	JY40	L3	True	500.00	491.393934	98.3
5	JY41	L4	True	1000.00	980.976708	98.1
6	JY42	L5	True	2500.00	2245.594351	89.8
7	JY43	L6	True	10000.00	9334.164109	93.3
8	JY44	L7	True	20000.00	20908.076537	104.5





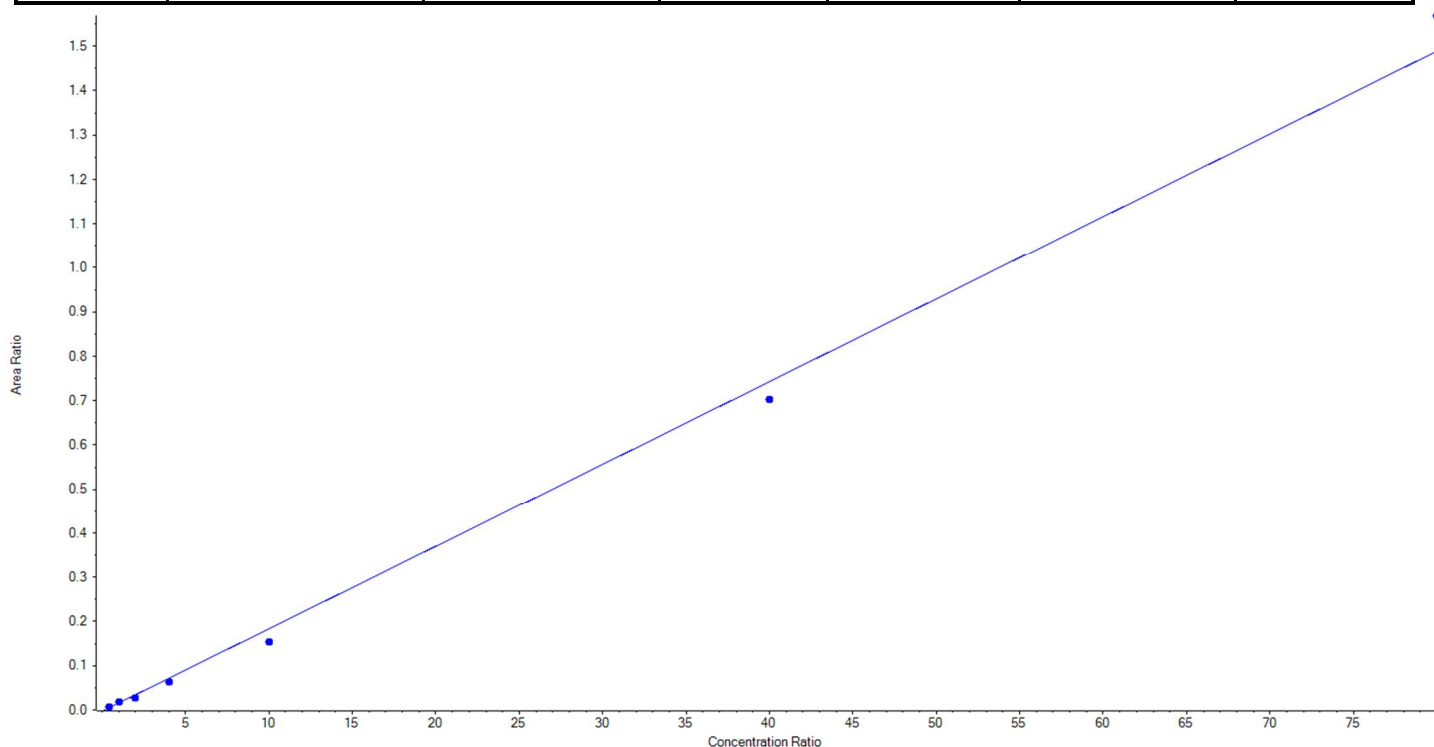
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Analyte Name	PFHpA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	363.0 / 169.0	Result Table	18-0520_Base
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.01865x + -0.00294$ ($r = 0.99699$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	126.607387	126.6
3	JY39	L2	True	250.00	291.760656	116.7
4	JY40	L3	True	500.00	417.285946	83.5
5	JY41	L4	True	1000.00	896.485634	89.7
6	JY42	L5	True	2500.00	2090.680566	83.6
7	JY43	L6	True	10000.00	9463.895250	94.6
8	JY44	L7	True	20000.00	21063.284561	105.3





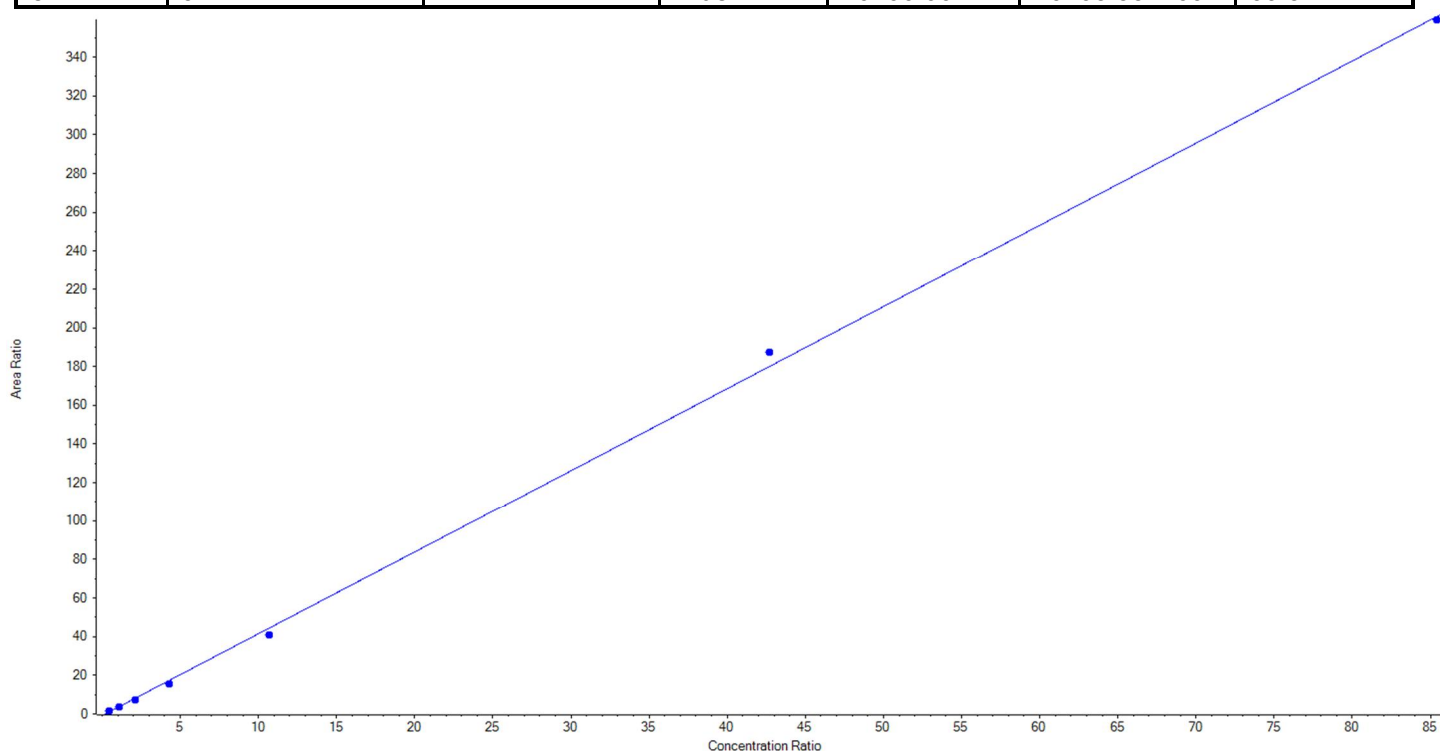
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Analyte Name	PFHxS_1	Data File	18-0501-515-520-500.wiff
MRM Transition	399.0 / 80.0	Result Table	18-0520_Base
Internal Standard	13C3-PFHxS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 4.23537 x + -0.84536$ ($r = 0.99917$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	126.099371	124.9
3	JY39	L2	True	252.50	246.750083	97.7
4	JY40	L3	True	505.00	455.053362	90.1
5	JY41	L4	True	1010.00	928.278420	91.9
6	JY42	L5	True	2525.00	2316.855490	91.8
7	JY43	L6	True	10100.00	10517.109004	104.1
8	JY44	L7	True	20200.00	20103.354269	99.5





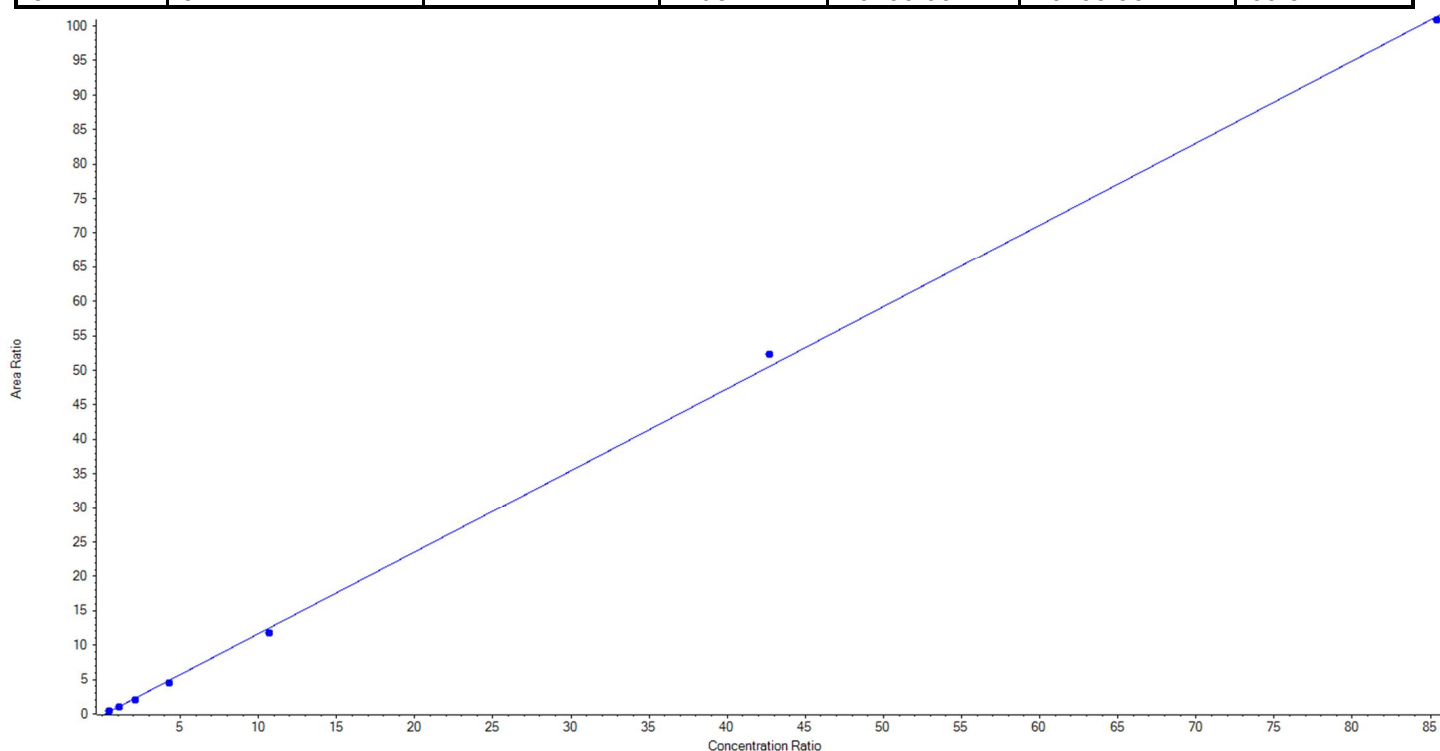
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Analyte Name	PFHxS_2	Data File	18-0501-515-520-500.wiff
MRM Transition	399.0 / 99.0	Result Table	18-0520_Base
Internal Standard	13C3-PFHxS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.18953x + -0.23223$ ($r = 0.99941$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	101.00	125.405816	124.2
3	JY39	L2	True	252.50	238.832101	94.6
4	JY40	L3	True	505.00	462.800440	91.6
5	JY41	L4	True	1010.00	934.199524	92.5
6	JY42	L5	True	2525.00	2375.949764	94.1
7	JY43	L6	True	10100.00	10452.350229	103.5
8	JY44	L7	True	20200.00	20103.962127	99.5





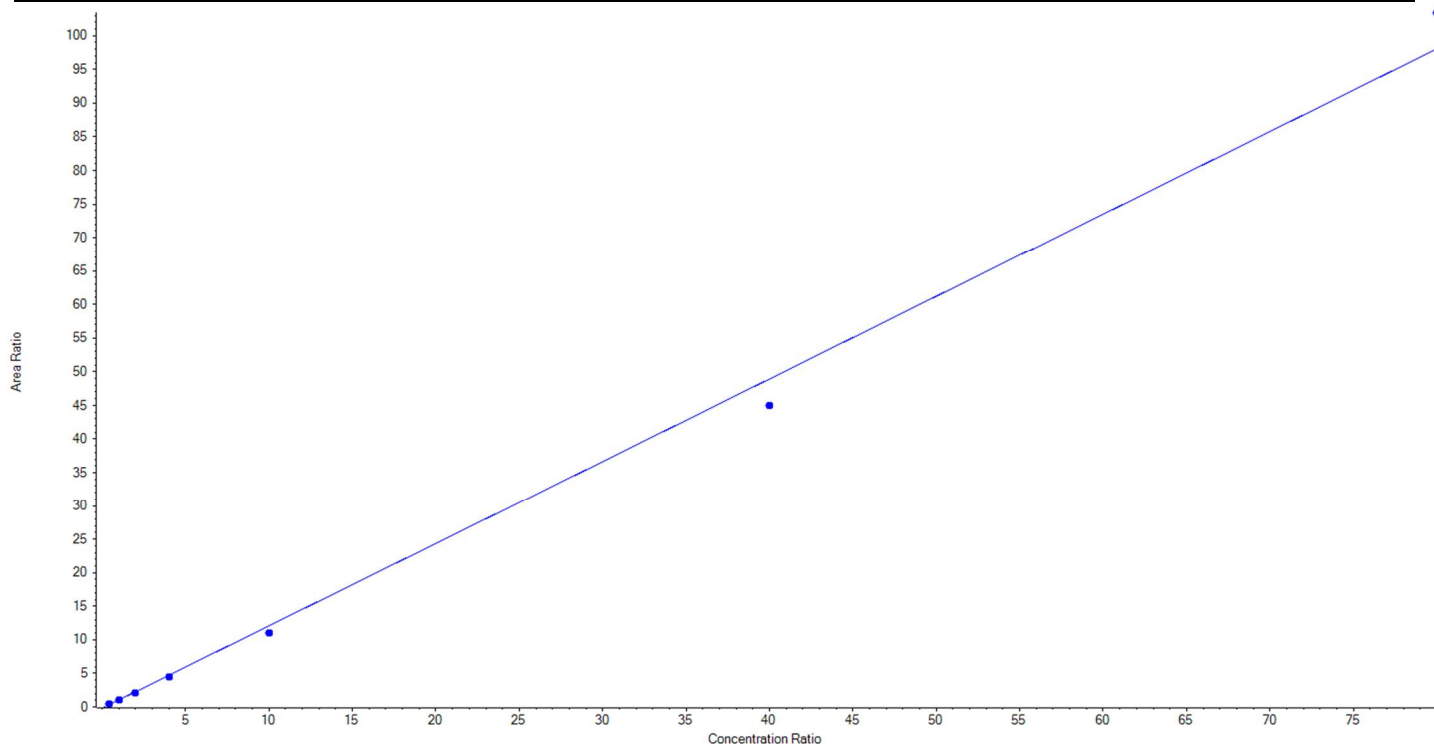
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Analyte Name	PFOA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	413.0 / 369.0	Result Table	18-0520_Base
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.22810 x + -0.19423$ (r = 0.99758) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	123.488647	123.5
3	JY39	L2	True	250.00	251.671145	100.7
4	JY40	L3	True	500.00	458.269834	91.7
5	JY41	L4	True	1000.00	955.748778	95.6
6	JY42	L5	True	2500.00	2280.876737	91.2
7	JY43	L6	True	10000.00	9195.851434	92.0
8	JY44	L7	True	20000.00	21084.093425	105.4





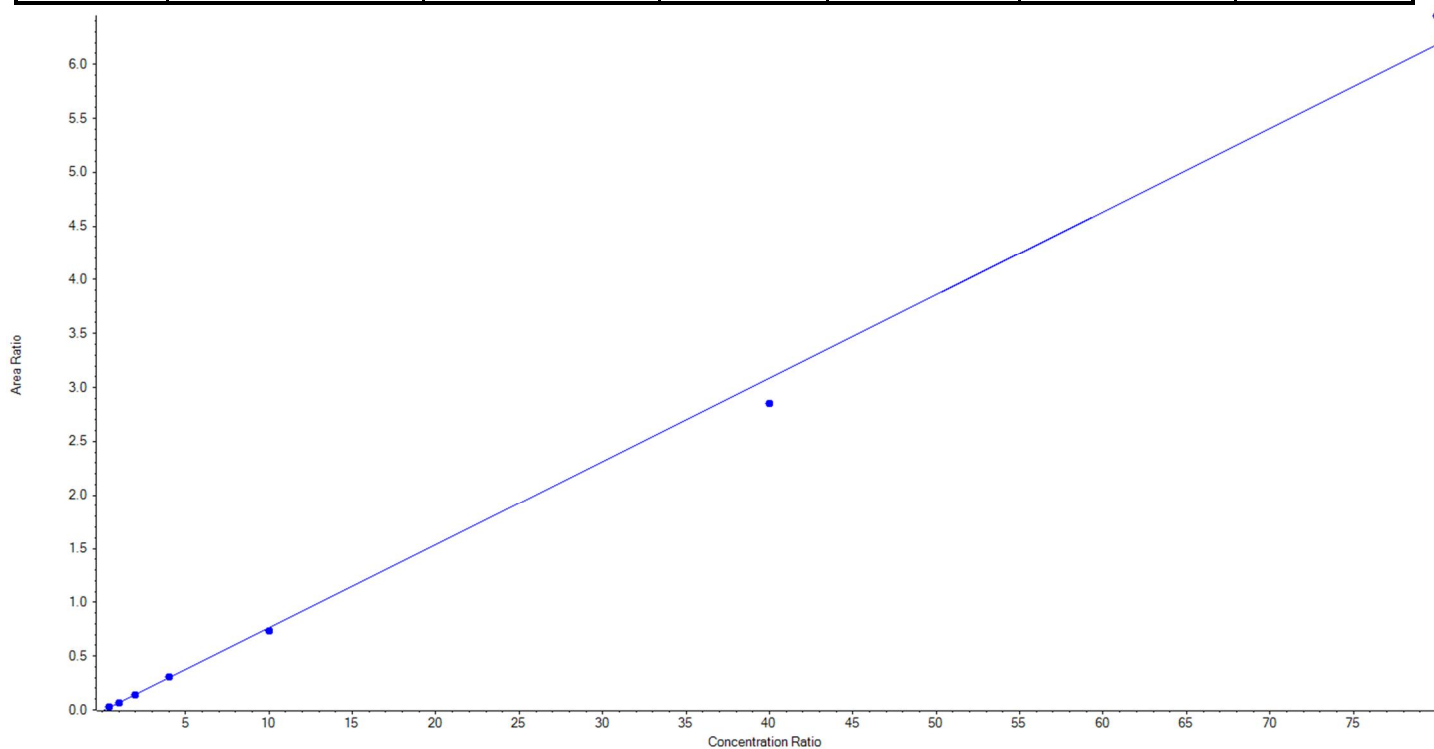
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Analyte Name	PFOA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	413.0 / 169.0	Result Table	18-0520_Base
Internal Standard	13C8-PFOA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.07739x + -0.01016$ ($r = 0.99838$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	115.526510	115.5
3	JY39	L2	True	250.00	236.072750	94.4
4	JY40	L3	True	500.00	478.820620	95.8
5	JY41	L4	True	1000.00	1009.636830	101.0
6	JY42	L5	True	2500.00	2417.165222	96.7
7	JY43	L6	True	10000.00	9233.216753	92.3
8	JY44	L7	True	20000.00	20859.561314	104.3





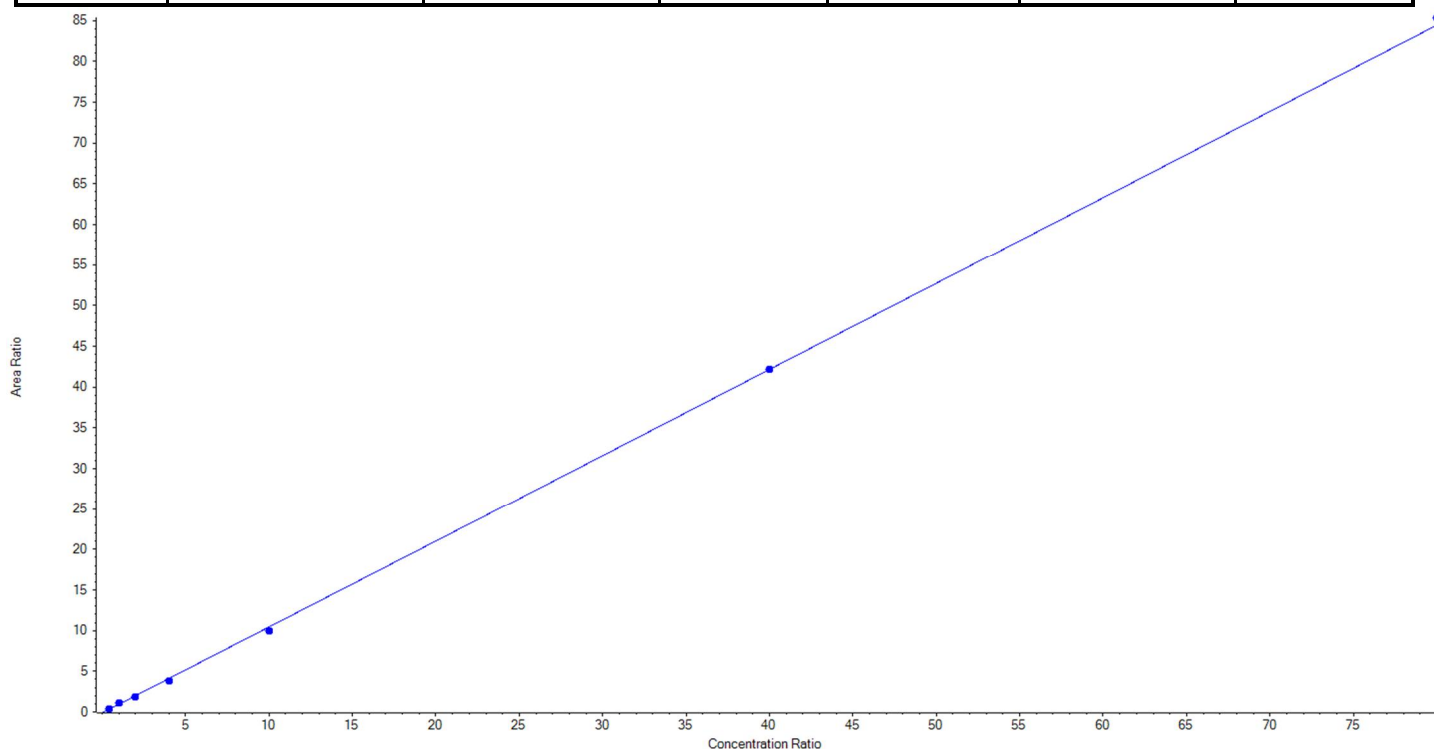
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Analyte Name	PFNA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	463.0 / 419.0	Result Table	18-0520_Base
Internal Standard	13C9-PFNA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.05685x + -0.11971$ ($r = 0.99968$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	107.015449	107.0
3	JY39	L2	True	250.00	278.560077	111.4
4	JY40	L3	True	500.00	464.832649	93.0
5	JY41	L4	True	1000.00	927.907689	92.8
6	JY42	L5	True	2500.00	2371.276802	94.9
7	JY43	L6	True	10000.00	9990.022487	99.9
8	JY44	L7	True	20000.00	20210.384848	101.1





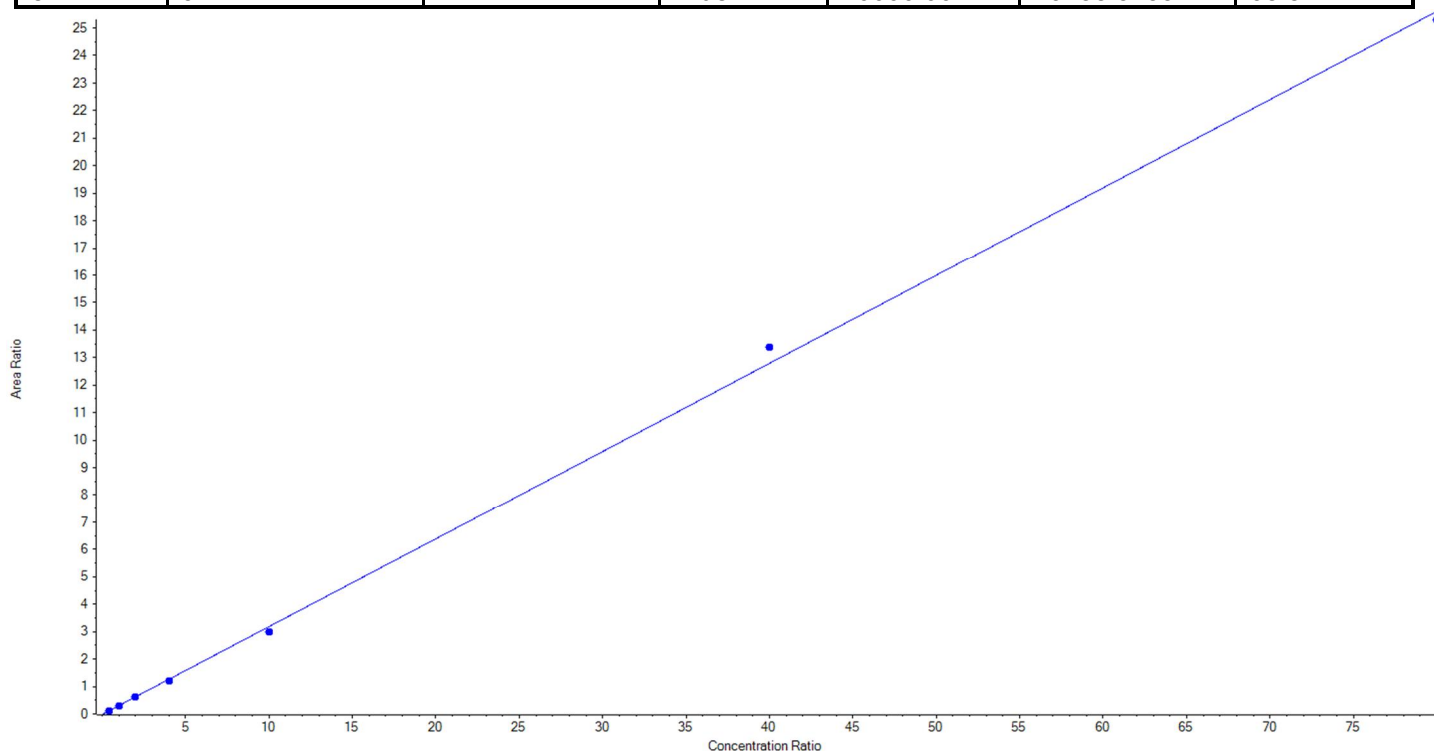
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Analyte Name	PFNA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	463.0 / 219.0	Result Table	18-0520_Base
Internal Standard	13C9-PFNA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.32026x + -0.01897$ ($r = 0.99944$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	107.867314	107.9
3	JY39	L2	True	250.00	253.733268	101.5
4	JY40	L3	True	500.00	495.088887	99.0
5	JY41	L4	True	1000.00	944.716102	94.5
6	JY42	L5	True	2500.00	2348.525773	93.9
7	JY43	L6	True	10000.00	10441.723314	104.4
8	JY44	L7	True	20000.00	19758.345342	98.8





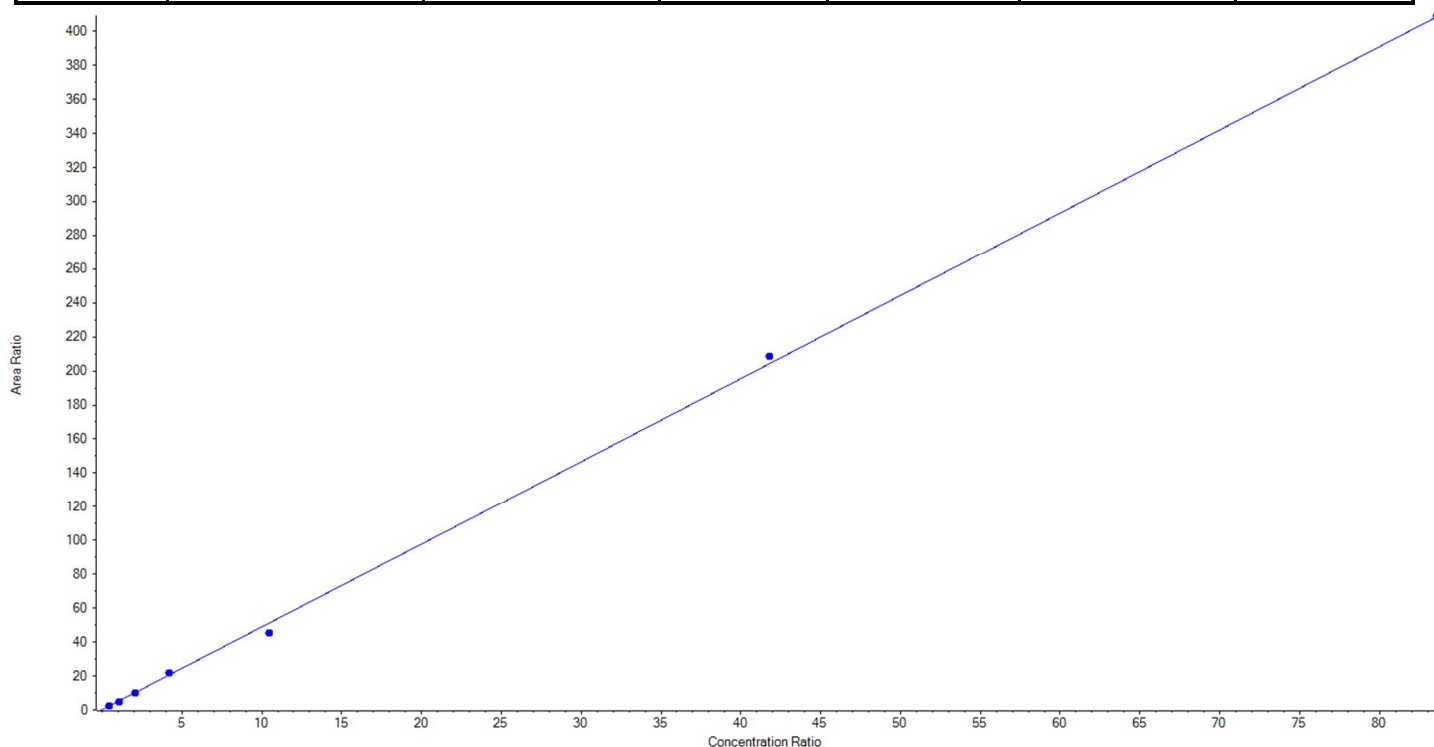
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Analyte Name	PFOS_1	Data File	18-0501-515-520-500.wiff
MRM Transition	499.0 / 80.0	Result Table	18-0520_Base
Internal Standard	13C8-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 4.88434 x + 0.09297$ (r = 0.99923) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	113.148143	113.2
3	JY39	L2	True	250.00	233.073775	93.2
4	JY40	L3	True	500.00	479.111009	95.8
5	JY41	L4	True	1000.00	1072.470671	107.3
6	JY42	L5	True	2500.00	2205.334880	88.2
7	JY43	L6	True	10000.00	10221.075140	102.2
8	JY44	L7	True	20000.00	20025.786383	100.1





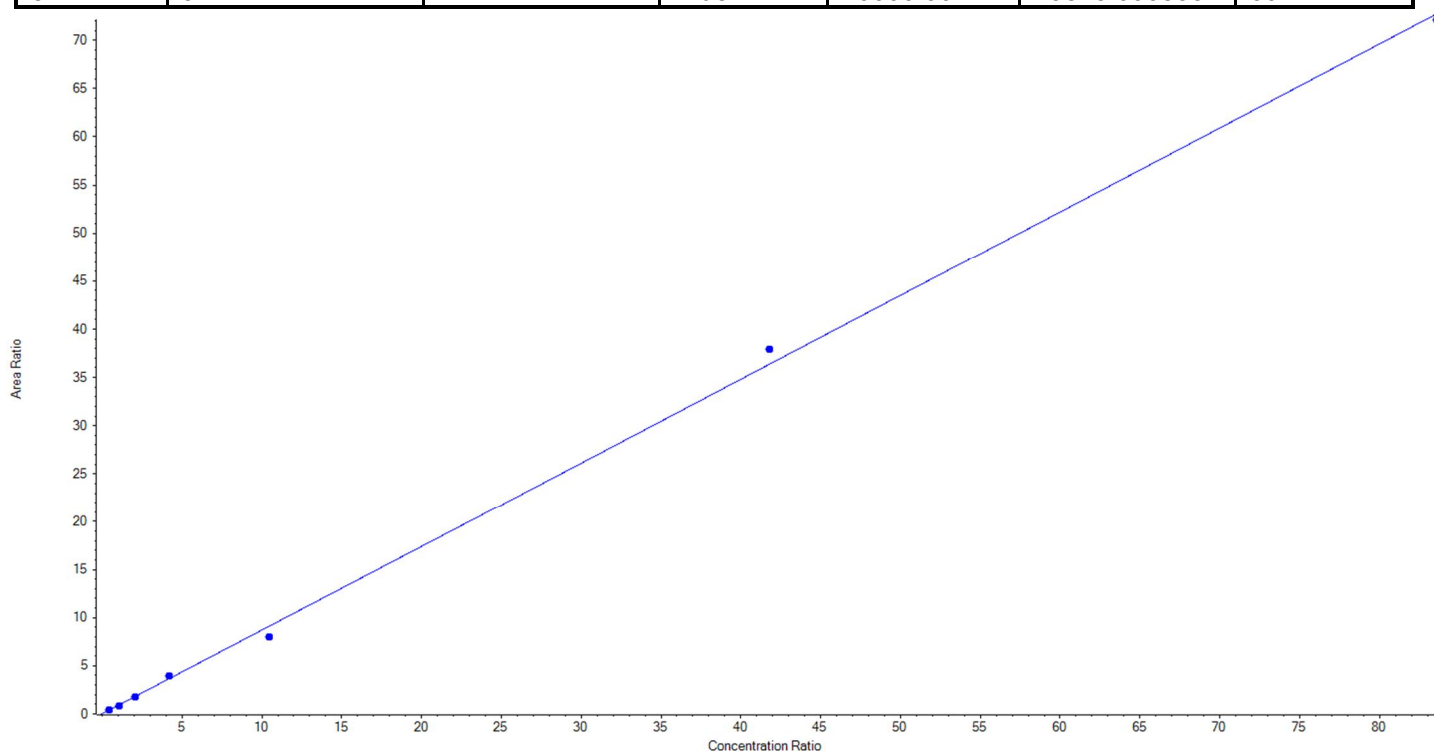
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Analyte Name	PFOS_2	Data File	18-0501-515-520-500.wiff
MRM Transition	499.0 / 99.0	Result Table	18-0520_Base
Internal Standard	13C8-PFOS	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.86986x + 0.01336$ ($r = 0.99881$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	117.347383	117.4
3	JY39	L2	True	250.00	217.248927	86.9
4	JY40	L3	True	500.00	477.582506	95.5
5	JY41	L4	True	1000.00	1091.956540	109.2
6	JY42	L5	True	2500.00	2190.256613	87.6
7	JY43	L6	True	10000.00	10430.517196	104.3
8	JY44	L7	True	20000.00	19825.090835	99.1





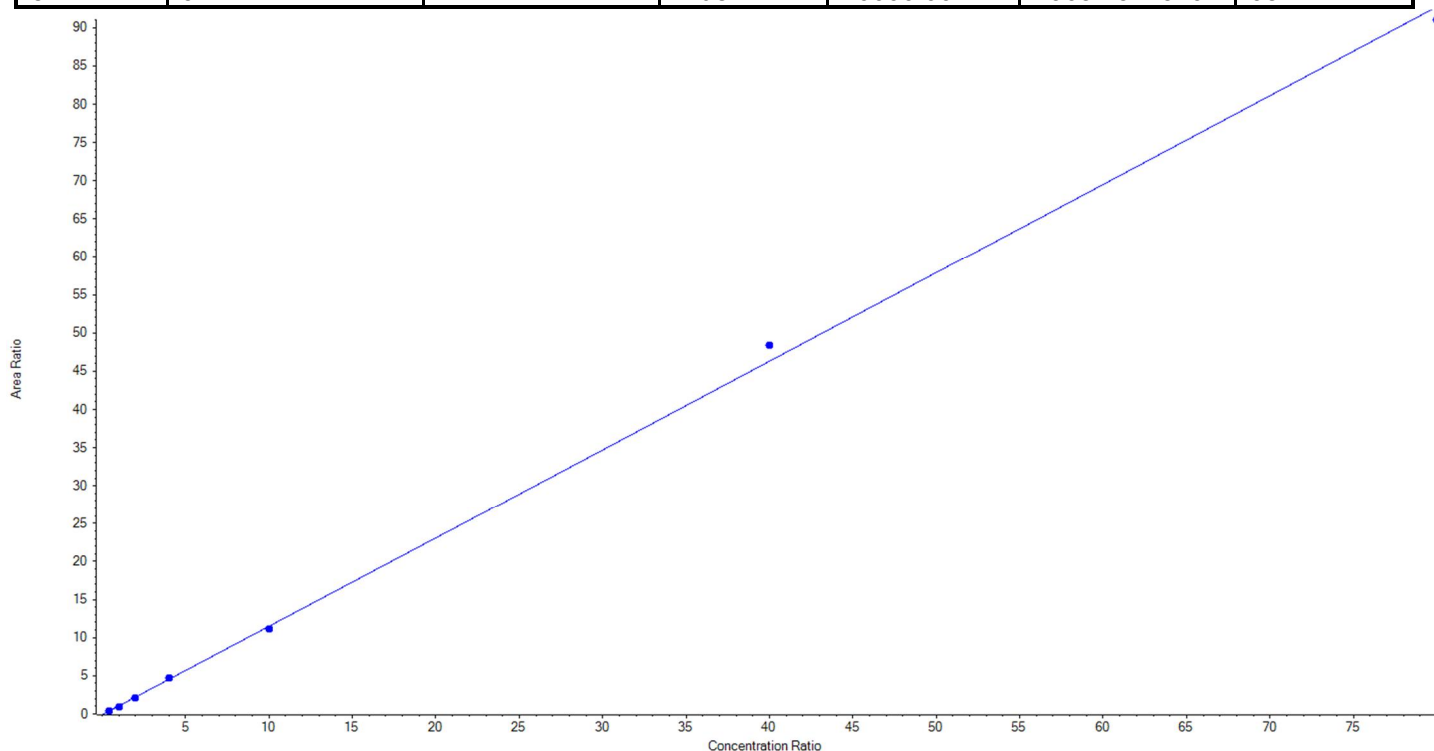
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Analyte Name	PFDA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	513.0 / 469.0	Result Table	18-0520_Base
Internal Standard	13C6-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.16034 x + -0.10710$ ($r = 0.99947$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	110.198423	110.2
3	JY39	L2	True	250.00	231.107869	92.4
4	JY40	L3	True	500.00	470.043896	94.0
5	JY41	L4	True	1000.00	1035.018294	103.5
6	JY42	L5	True	2500.00	2432.445932	97.3
7	JY43	L6	True	10000.00	10438.811237	104.4
8	JY44	L7	True	20000.00	19632.374349	98.2





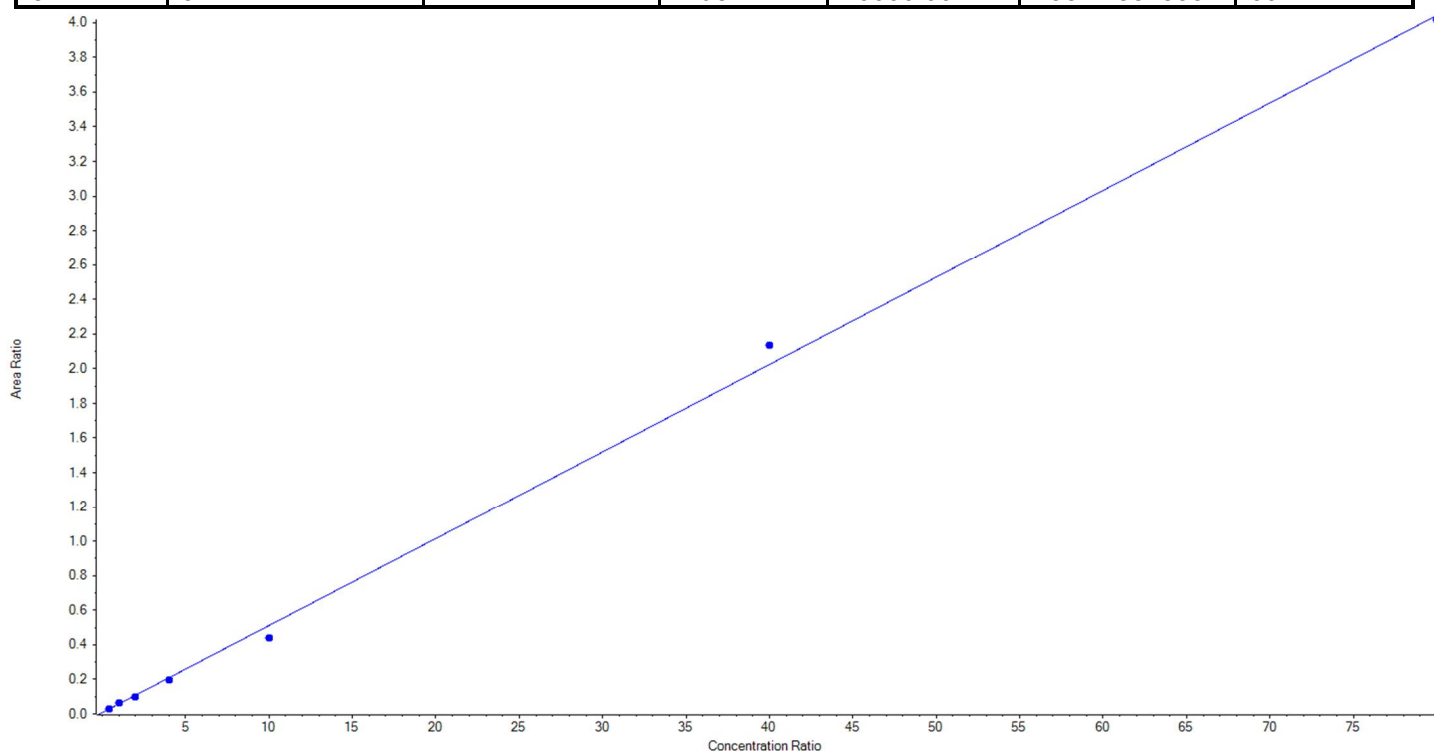
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Analyte Name	PFDA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	513.0 / 219.0	Result Table	18-0520_Base
Internal Standard	13C6-PFDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.05043 x + 0.00732$ ($r = 0.99845$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	114.079000	114.1
3	JY39	L2	True	250.00	275.419951	110.2
4	JY40	L3	True	500.00	457.576231	91.5
5	JY41	L4	True	1000.00	940.050222	94.0
6	JY42	L5	True	2500.00	2132.114826	85.3
7	JY43	L6	True	10000.00	10558.871916	105.6
8	JY44	L7	True	20000.00	19871.887855	99.4





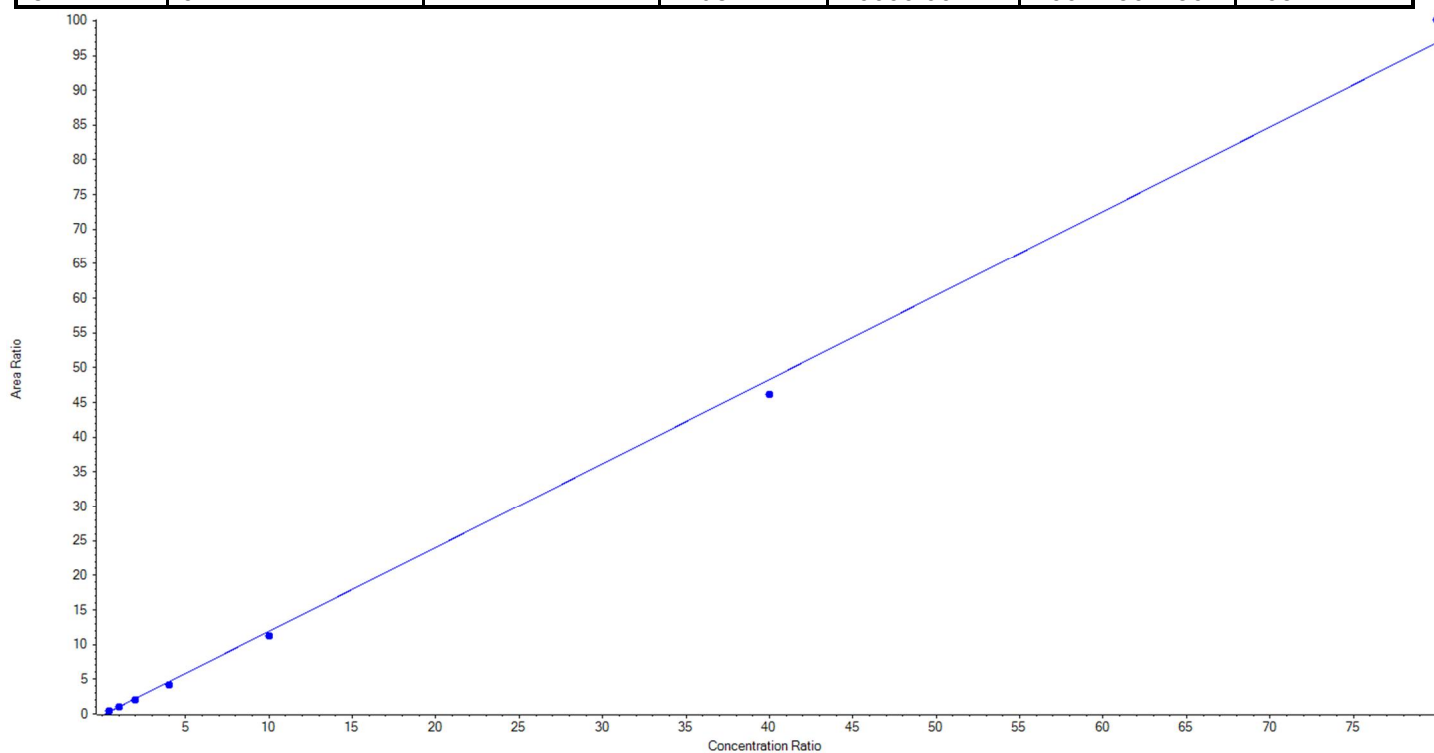
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Analyte Name	PFUnA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	563.0 / 519.0	Result Table	18-0520_Base
Internal Standard	13C7-PFUnA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.21353 x + -0.22259$ ($r = 0.99899$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	122.943043	122.9
3	JY39	L2	True	250.00	246.726851	98.7
4	JY40	L3	True	500.00	463.660604	92.7
5	JY41	L4	True	1000.00	919.395673	91.9
6	JY42	L5	True	2500.00	2369.453411	94.8
7	JY43	L6	True	10000.00	9555.457961	95.6
8	JY44	L7	True	20000.00	20672.362456	103.4





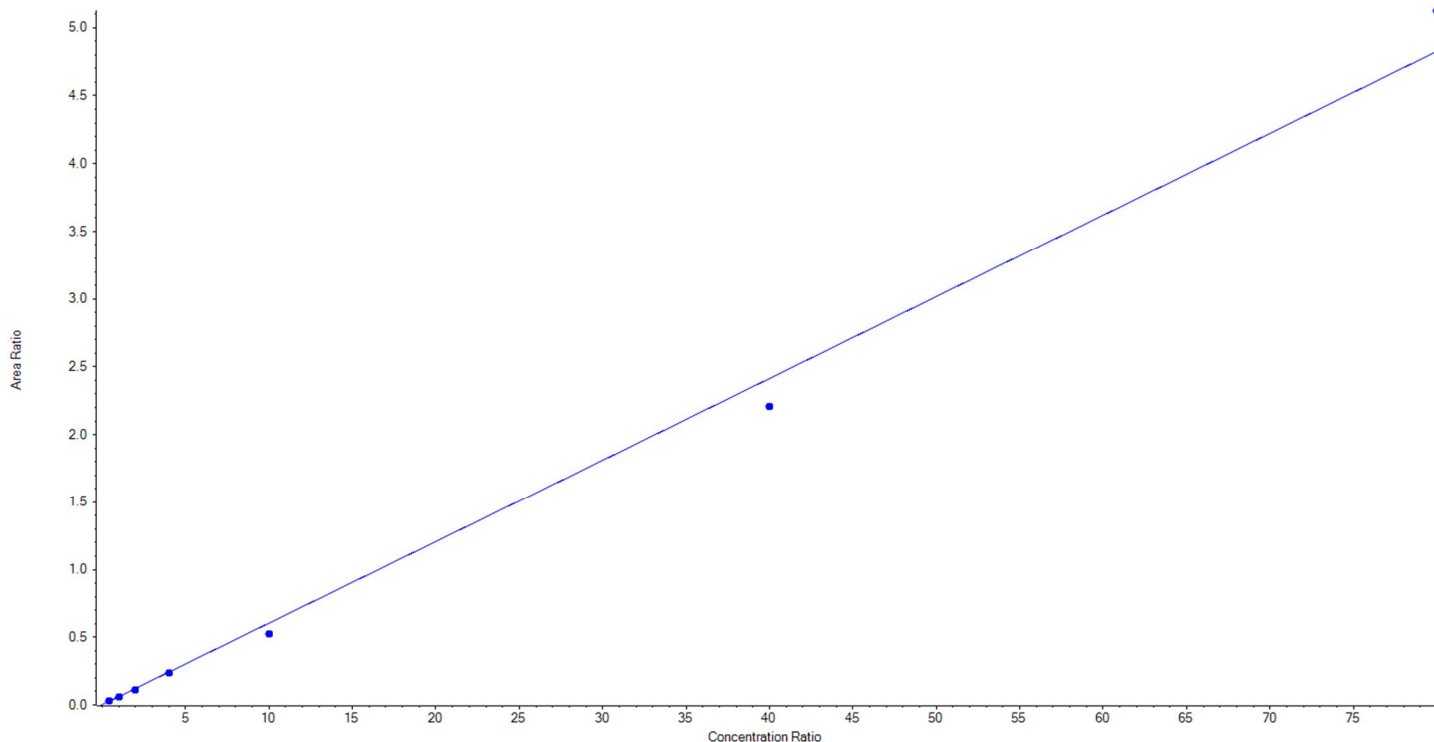
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Analyte Name	PFUnA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	563.0 / 269.0	Result Table	18-0520_Base
Internal Standard	13C7-PFUnA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.06032 x + 9.82959e-4$ ($r = 0.99675$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	129.206562	129.2
3	JY39	L2	True	250.00	241.347698	96.5
4	JY40	L3	True	500.00	467.242328	93.5
5	JY41	L4	True	1000.00	968.076678	96.8
6	JY42	L5	True	2500.00	2157.204163	86.3
7	JY43	L6	True	10000.00	9155.089249	91.6
8	JY44	L7	True	20000.00	21231.833322	106.2





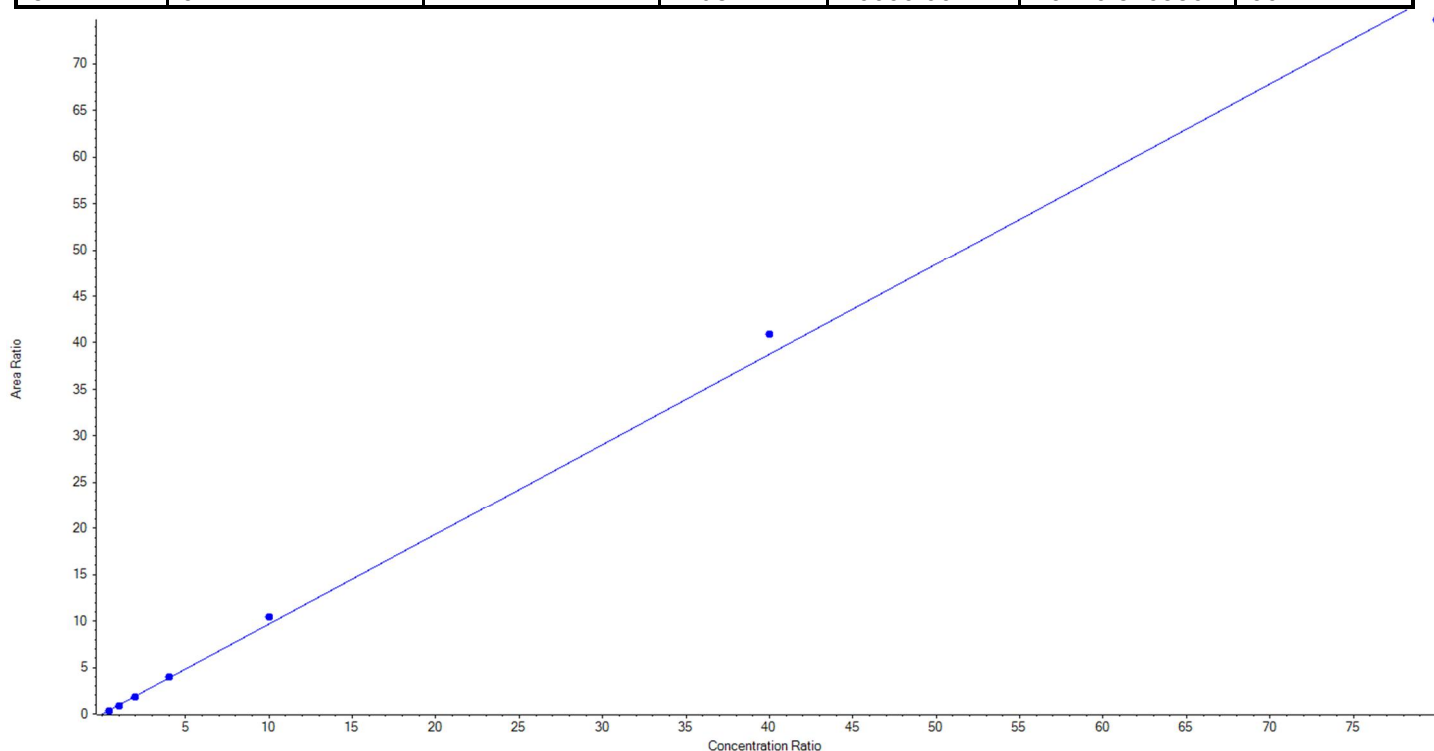
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Analyte Name	PFDoA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	613.0 / 569.0	Result Table	18-0520_Base
Internal Standard	13C2-PFDoA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.96946 x + -0.01373$ ($r = 0.99883$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	98.610714	98.6
3	JY39	L2	True	250.00	233.920658	93.6
4	JY40	L3	True	500.00	475.852120	95.2
5	JY41	L4	True	1000.00	1032.761138	103.3
6	JY42	L5	True	2500.00	2688.000463	107.5
7	JY43	L6	True	10000.00	10550.038320	105.5
8	JY44	L7	True	20000.00	19270.816586	96.4





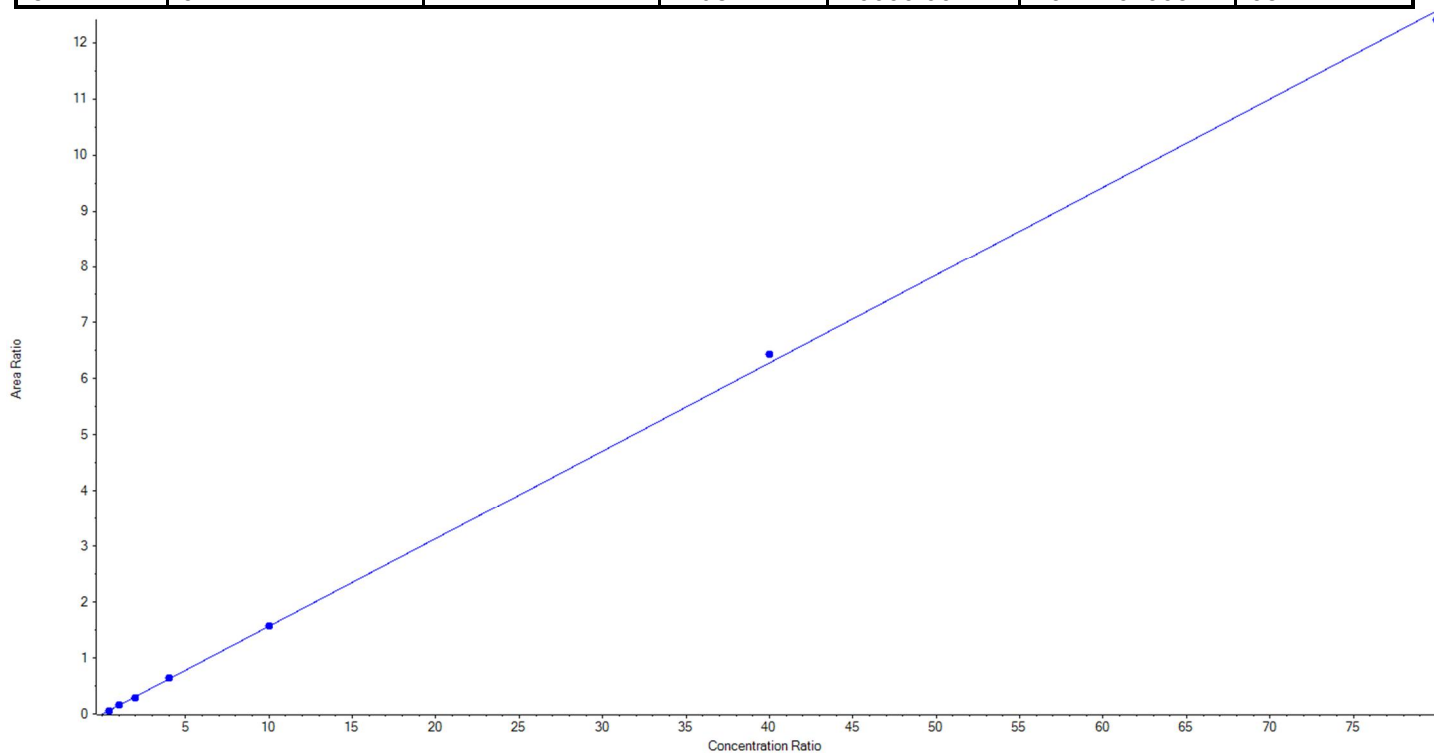
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Analyte Name	PFDaA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	613.0 / 319.0	Result Table	18-0520_Base
Internal Standard	13C2-PFDaA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.15718x + -0.00485$ ($r = 0.99982$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	100.020562	100.0
3	JY39	L2	True	250.00	250.671630	100.3
4	JY40	L3	True	500.00	475.157931	95.0
5	JY41	L4	True	1000.00	1031.153986	103.1
6	JY42	L5	True	2500.00	2511.466237	100.5
7	JY43	L6	True	10000.00	10239.500617	102.4
8	JY44	L7	True	20000.00	19742.029037	98.7





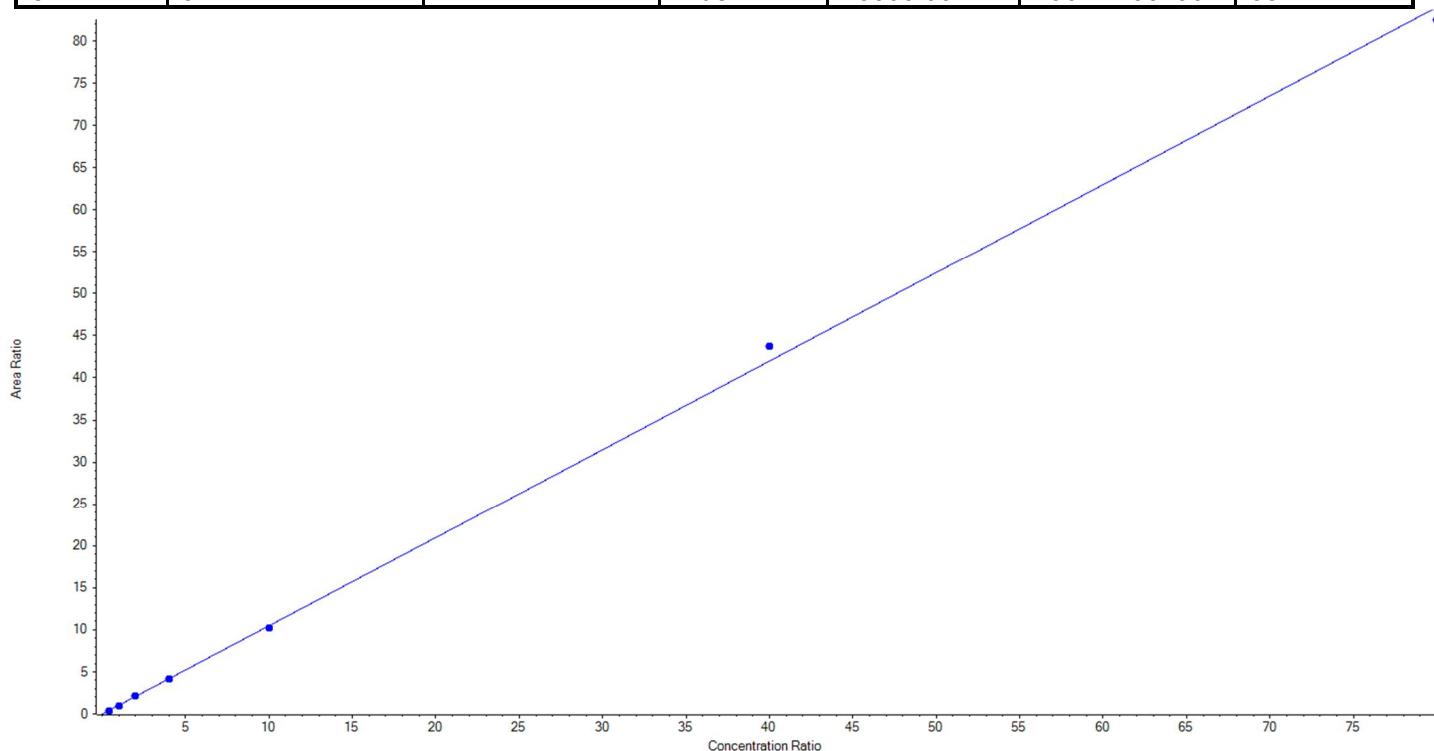
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Analyte Name	PFTTrDA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	663.0 / 619.0	Result Table	18-0520_Base
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.05021 x + -0.02316$ ($r = 0.99959$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	103.989990	104.0
3	JY39	L2	True	250.00	237.901063	95.2
4	JY40	L3	True	500.00	506.941023	101.4
5	JY41	L4	True	1000.00	989.873487	99.0
6	JY42	L5	True	2500.00	2452.401261	98.1
7	JY43	L6	True	10000.00	10416.702985	104.2
8	JY44	L7	True	20000.00	19642.190190	98.2





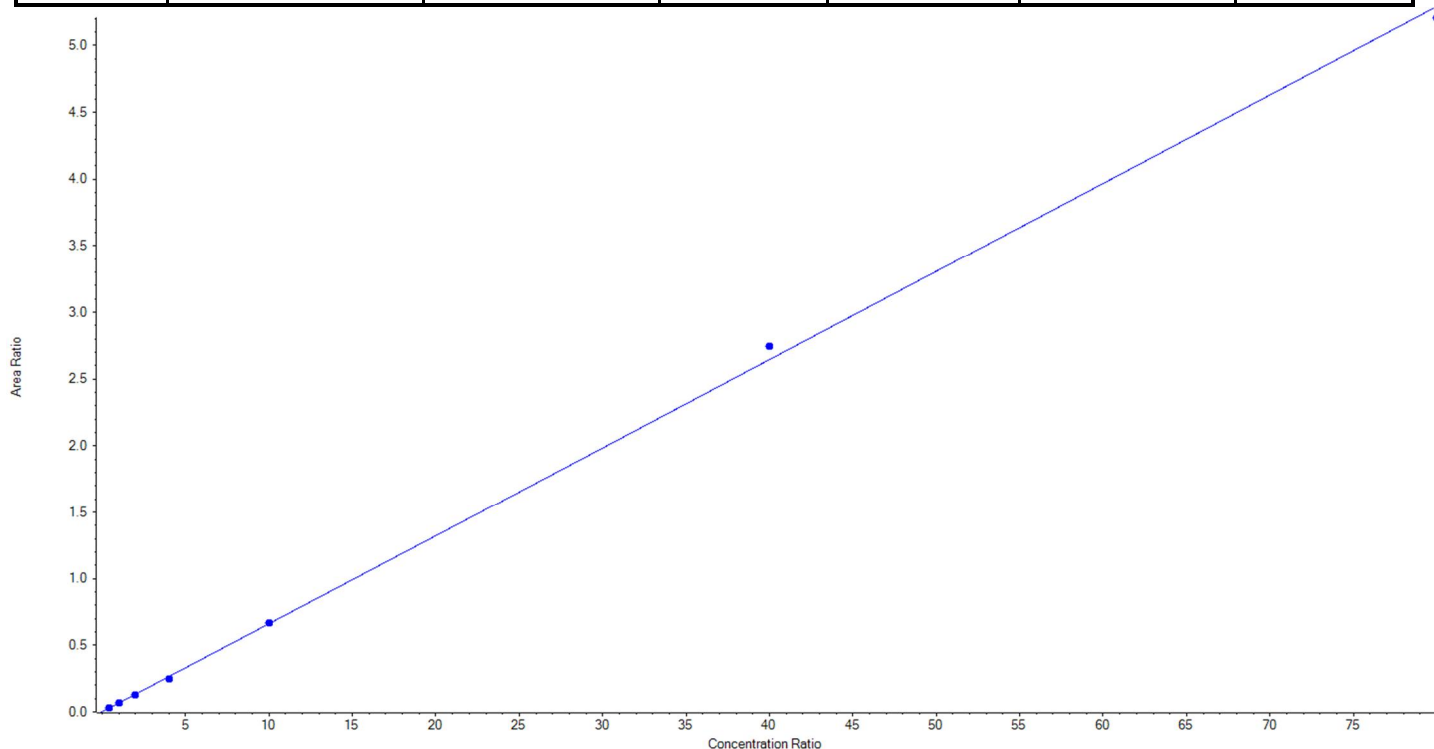
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Analyte Name	PFTTrDA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	663.0 / 169.0	Result Table	18-0520_Base
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.06614 x + 4.21658e-4$ ($r = 0.99959$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	108.287462	108.3
3	JY39	L2	True	250.00	250.336593	100.1
4	JY40	L3	True	500.00	472.911739	94.6
5	JY41	L4	True	1000.00	938.882600	93.9
6	JY42	L5	True	2500.00	2523.167722	100.9
7	JY43	L6	True	10000.00	10379.703023	103.8
8	JY44	L7	True	20000.00	19676.710861	98.4





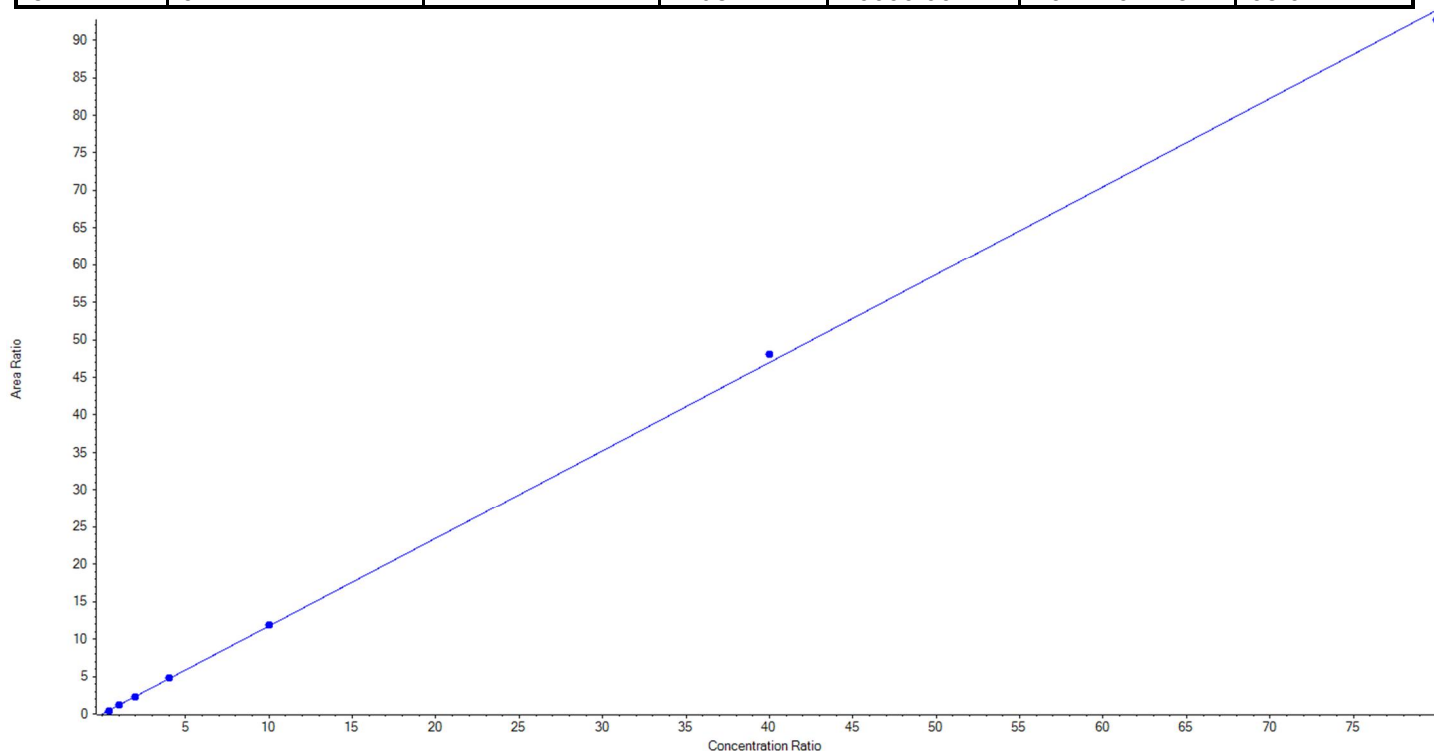
Calibration Summary Report

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Printed: 29/08/2018 2:23:59 PM

Analyte Name	PFTeDA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	713.0 / 669.0	Result Table	18-0520_Base
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.17488x + -0.00776$ ($r = 0.99984$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	98.523721	98.5
3	JY39	L2	True	250.00	248.858327	99.5
4	JY40	L3	True	500.00	490.541916	98.1
5	JY41	L4	True	1000.00	1012.450240	101.3
6	JY42	L5	True	2500.00	2540.117327	101.6
7	JY43	L6	True	10000.00	10235.461016	102.4
8	JY44	L7	True	20000.00	19724.047452	98.6





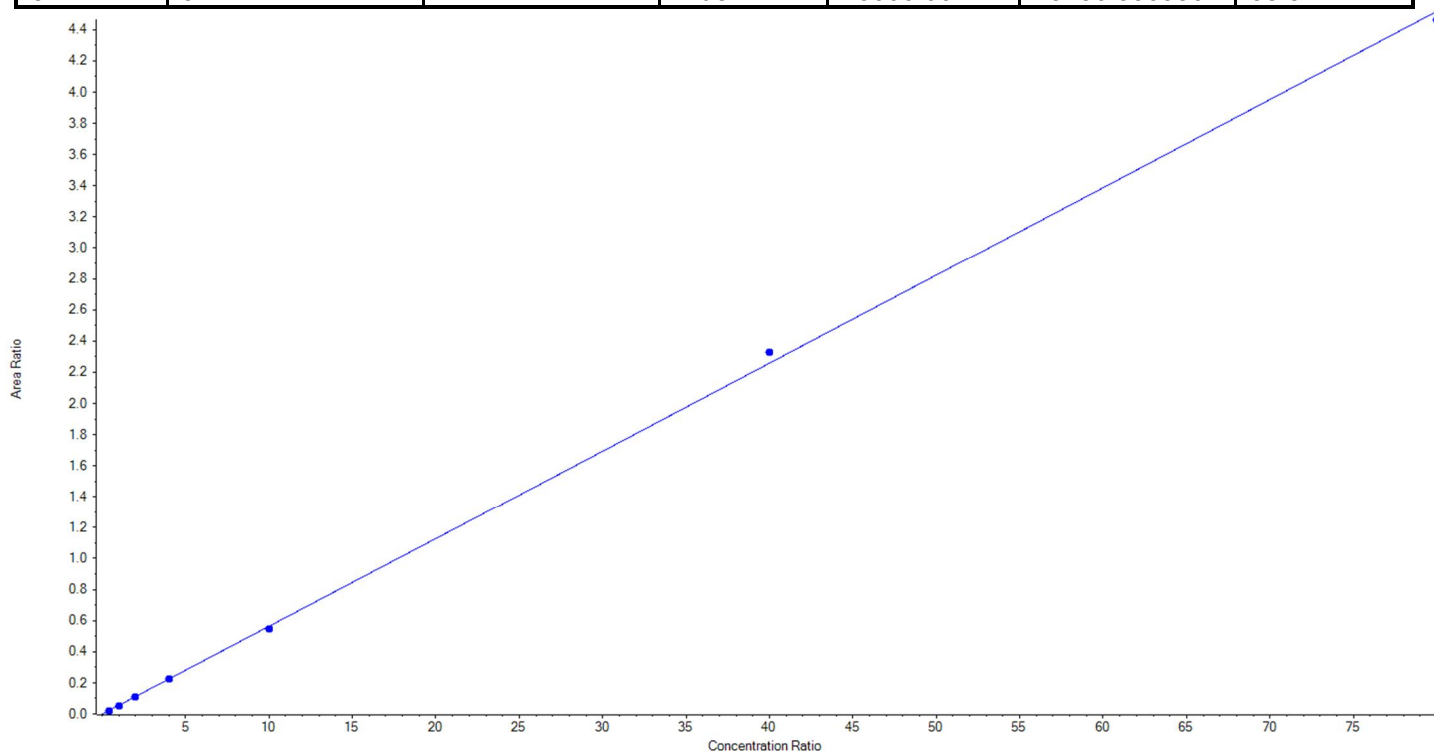
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 2:23:59 PM

Analyte Name	PFTeDA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	713.0 / 169.0	Result Table	18-0520_Base
Internal Standard	13C2-PFTeDA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.05649x + -0.00122$ ($r = 0.99976$) (weighting: 1 / x)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	103.942641	103.9
3	JY39	L2	True	250.00	243.654642	97.5
4	JY40	L3	True	500.00	499.075940	99.8
5	JY41	L4	True	1000.00	993.942996	99.4
6	JY42	L5	True	2500.00	2435.881968	97.4
7	JY43	L6	True	10000.00	10316.645427	103.2
8	JY44	L7	True	20000.00	19756.856386	98.8





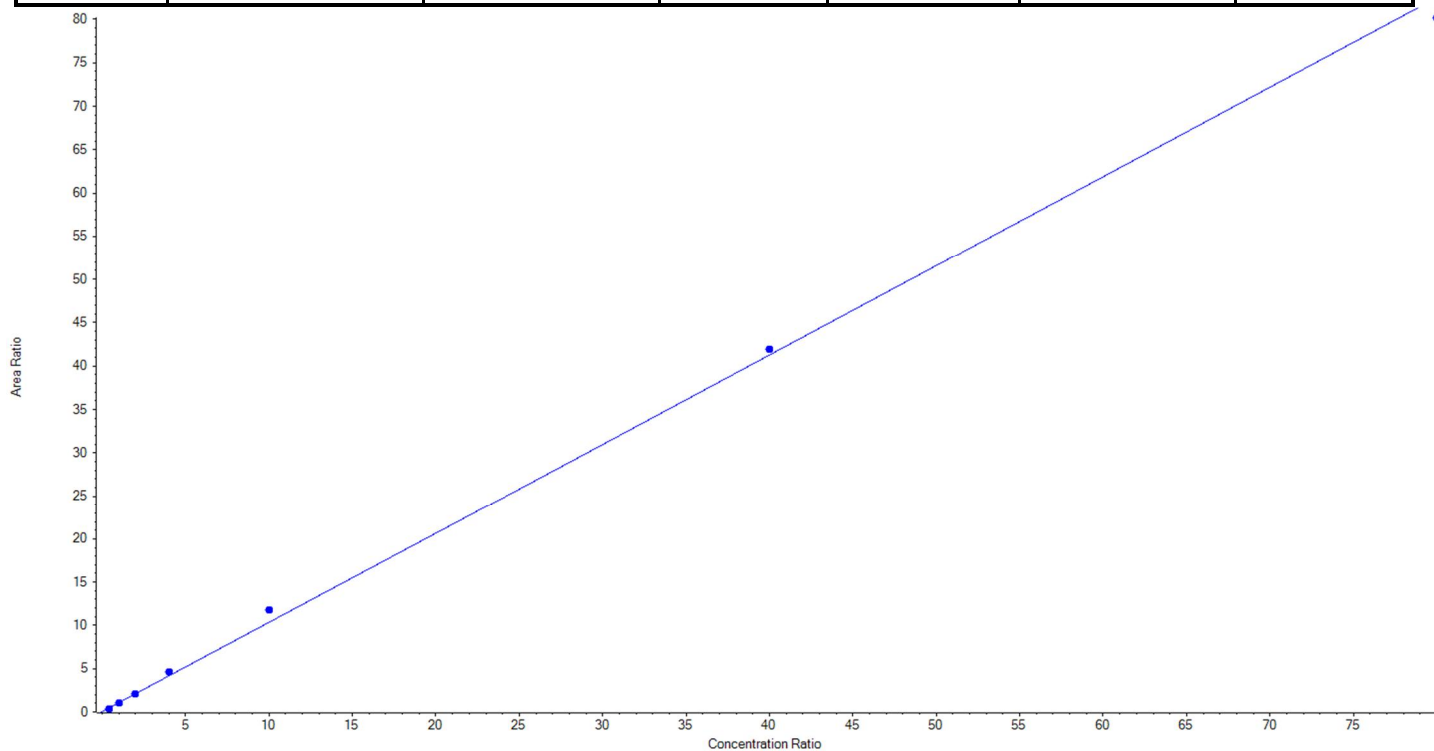
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 2:23:59 PM

Analyte Name	NMeFOSAA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	570.0 / 419.0	Result Table	18-0520_Base
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.03070 x + 0.04450$ ($r = 0.99877$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	83.446543	83.5
3	JY39	L2	True	250.00	244.399054	97.8
4	JY40	L3	True	500.00	483.064727	96.6
5	JY41	L4	True	1000.00	1097.700385	109.8
6	JY42	L5	True	2500.00	2838.922966	113.6
7	JY43	L6	True	10000.00	10168.320127	101.7
8	JY44	L7	True	20000.00	19434.146196	97.2





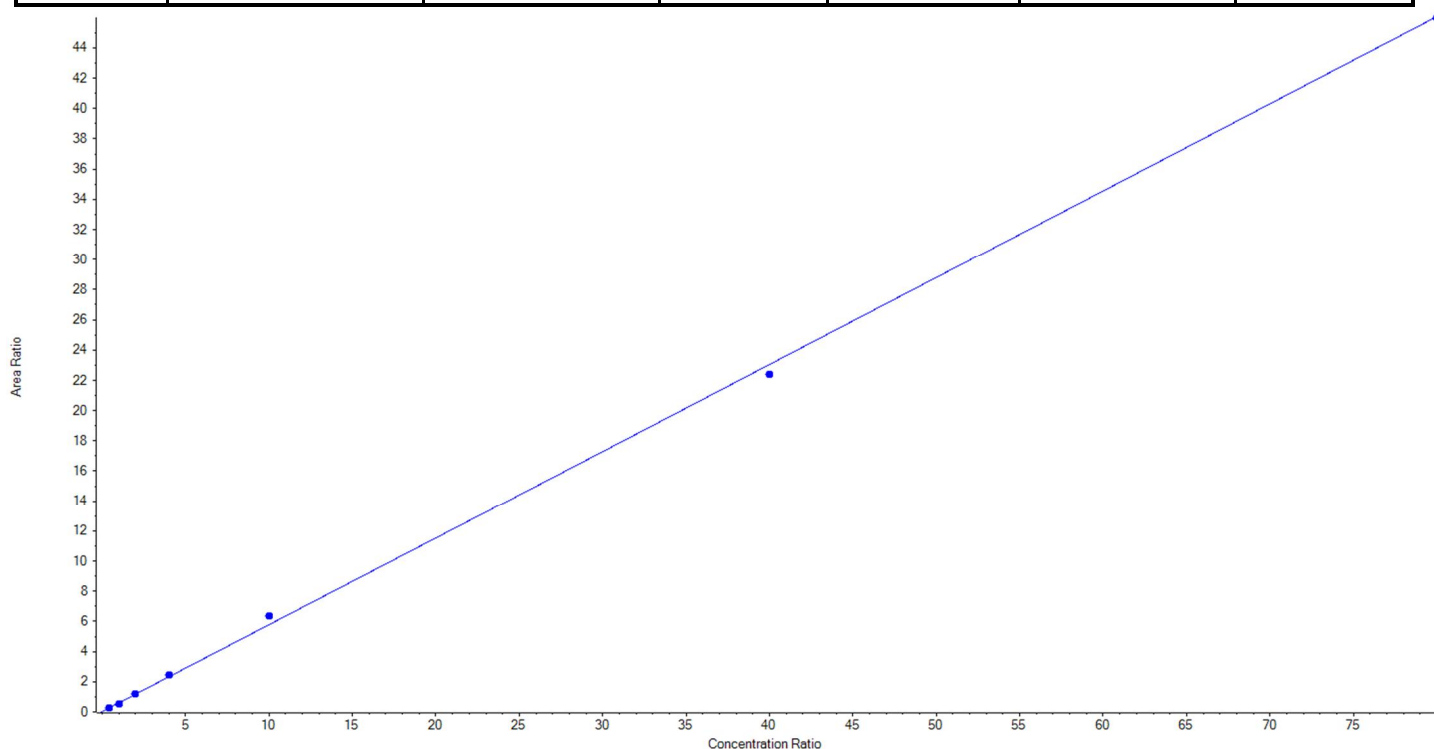
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 2:23:59 PM

Analyte Name	NMeFOSAA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	570.0 / 512.0	Result Table	18-0520_Base
Internal Standard	d3-MeFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.57549x + 0.02501$ ($r = 0.99932$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	94.256719	94.3
3	JY39	L2	True	250.00	226.726746	90.7
4	JY40	L3	True	500.00	502.520187	100.5
5	JY41	L4	True	1000.00	1068.138462	106.8
6	JY42	L5	True	2500.00	2765.525131	110.6
7	JY43	L6	True	10000.00	9729.906041	97.3
8	JY44	L7	True	20000.00	19962.926715	99.8





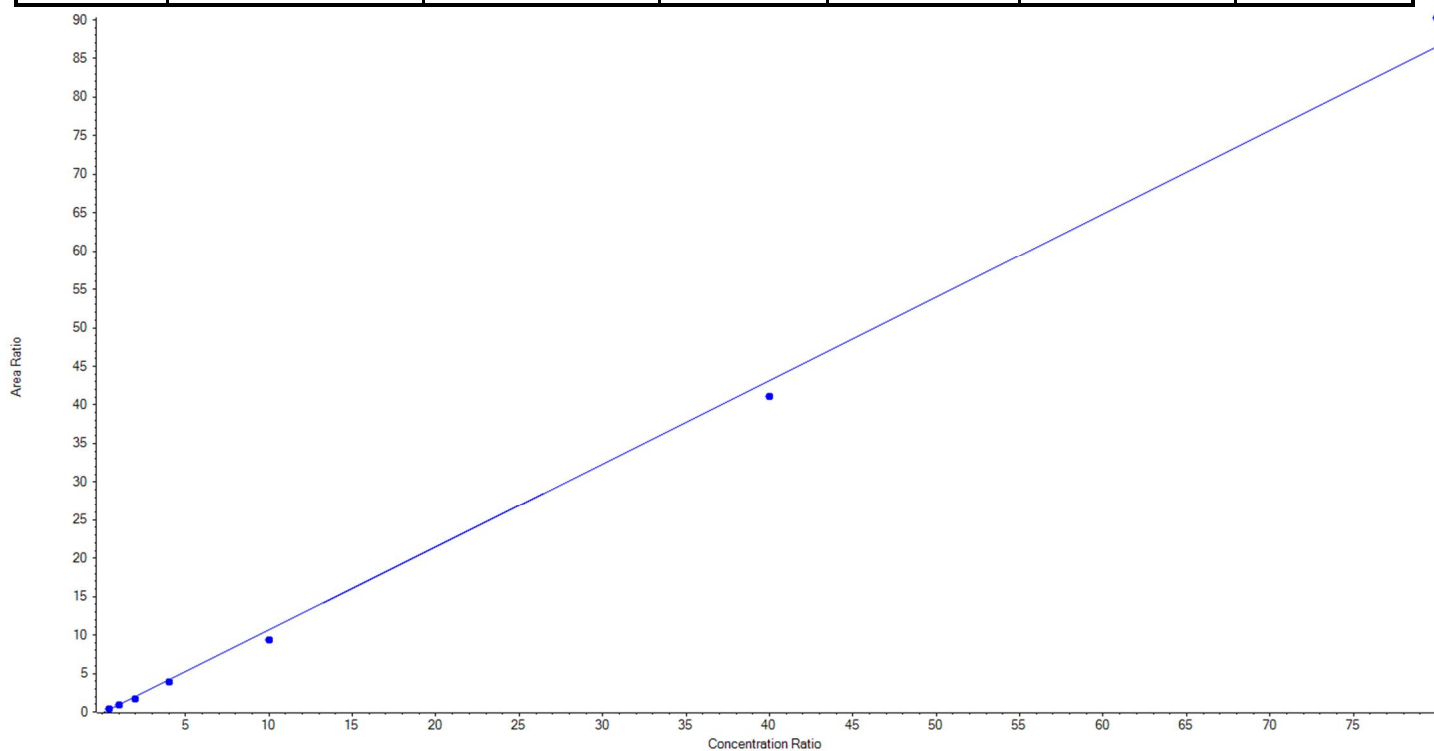
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 2:23:59 PM

Analyte Name	NEtFOSAA_1	Data File	18-0501-515-520-500.wiff
MRM Transition	584.0 / 419.0	Result Table	18-0520_Base
Internal Standard	d5-EtFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 1.08361x + -0.17934$ ($r = 0.99815$) (weighting: $1/x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	True	100.00	127.151255	127.2
3	JY39	L2	True	250.00	265.679934	106.3
4	JY40	L3	True	500.00	423.940233	84.8
5	JY41	L4	True	1000.00	937.778212	93.8
6	JY42	L5	True	2500.00	2212.318765	88.5
7	JY43	L6	True	10000.00	9520.499075	95.2
8	JY44	L7	True	20000.00	20862.632526	104.3





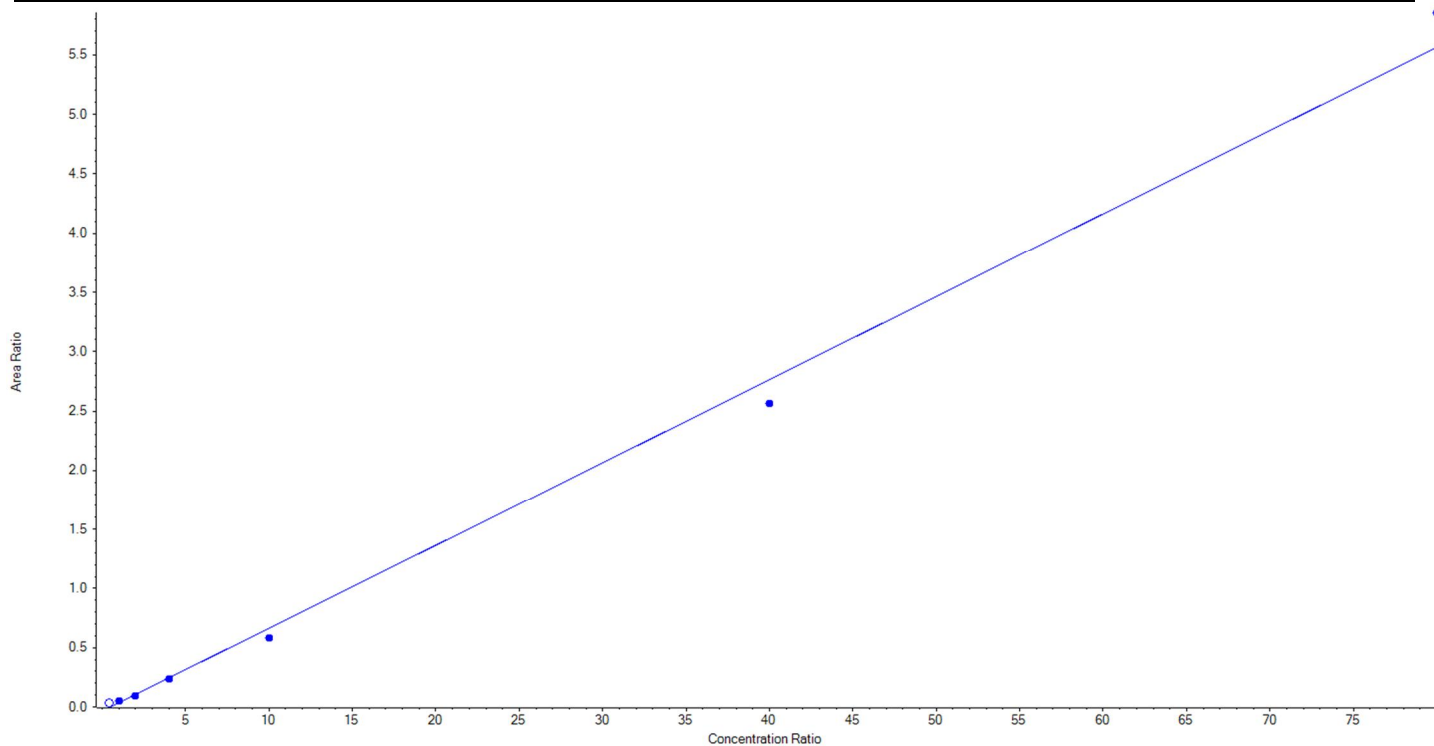
Calibration Summary Report

Created with Analyst Reporter
Printed: 29/08/2018 2:23:59 PM

Analyte Name	NEtFOSAA_2	Data File	18-0501-515-520-500.wiff
MRM Transition	584.0 / 483.0	Result Table	18-0520_Base
Internal Standard	d5-EtFOSAA	Instrument Name	QTRAP 5500
Acquisition Date	8/24/2018 10:26:02 PM	Acquisition Method	5-0369.dam

Regression Equation: $y = 0.06998 x + -0.03555$ ($r = 0.99717$) (weighting: $1 / x$)

Vial	Sample Name	Sample ID	Used for ICAL	Target Conc. (ng/L)	Calculated Conc. (ng/L)	Recovery (%)
2	JY38	L1	False	100.00	236.281227	236.3
3	JY39	L2	True	250.00	319.753372	127.9
4	JY40	L3	True	500.00	443.979478	88.8
5	JY41	L4	True	1000.00	974.254801	97.4
6	JY42	L5	True	2500.00	2197.277628	87.9
7	JY43	L6	True	10000.00	9282.499347	92.8
8	JY44	L7	True	20000.00	21032.235373	105.2



Sample Name	JY38	Injection Vial	2
Sample ID	L1	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:36:54	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0520_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	0.309	0.294	ü
PFHxA_1	313.0 / 269.0	1.88	PFHxA			
PFHxA_2	313.0 / 119.0	1.88	PFHxA	0.051	0.073	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.28	PFHpA	0.021	0.020	ü
PFHxS_1	399.0 / 80.0	2.30	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.282	0.282	ü
PFOA_1	413.0 / 369.0	2.68	PFOA			
PFOA_2	413.0 / 169.0	2.68	PFOA	0.062	0.064	ü
PFNA_1	463.0 / 419.0	3.07	PFNA			
PFNA_2	463.0 / 219.0	3.07	PFNA	0.358	0.316	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.183	0.177	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.075	0.051	ü
PFUnA_1	563.0 / 519.0	3.74	PFUnA			
PFUnA_2	563.0 / 269.0	3.74	PFUnA	0.086	0.058	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.157	0.161	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.070	0.064	ü
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.49	PFTeDA	0.049	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.623	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.74	NEtFOSAA	0.082	0.060	ü
PFBA	213.0 / 169.0	1.17				

Sample Name	JY39	Injection Vial	3
Sample ID	L2	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:47:47	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0520_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	1.55	PFBS	0.289	0.294	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.079	0.073	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.026	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.271	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.060	0.064	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.289	0.316	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.166	0.177	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.065	0.051	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.061	0.058	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.171	0.161	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.068	0.064	ü
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.046	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.520	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.056	0.060	ü
PFBA	213.0 / 169.0	1.17				

Sample Name	JY40	Injection Vial	4
Sample ID	L3	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T22:58:41	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0520_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	1.55	PFBS	0.295	0.294	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.082	0.073	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.019	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.287	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.067	0.064	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.333	0.316	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.177	0.177	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.42	PFDA	0.048	0.051	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.056	0.058	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.161	0.161	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.060	0.064	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.049	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.580	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.054	0.060	ü
PFBA	213.0 / 169.0	1.17				

Sample Name	JY41	Injection Vial	5
Sample ID	L4	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:09:34	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0520_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	0.283	0.294	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.87	PFHxA	0.068	0.073	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.019	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.29	PFHxS	0.283	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.067	0.064	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.313	0.316	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.181	0.177	ü
PFDA_1	513.0 / 469.0	3.42	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.042	0.051	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.055	0.058	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.161	0.161	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.27	PFTrDA	0.060	0.064	ü
PFTeDA_1	713.0 / 669.0	4.49	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.047	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.544	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.061	0.060	ü
PFBA	213.0 / 169.0	1.17				

Sample Name	JY42	Injection Vial	6
Sample ID	L5	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:20:26	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0520_Base
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.292	0.294	ü
PFHxA_1	313.0 / 269.0	1.87	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.077	0.073	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.018	0.020	ü
PFHxS_1	399.0 / 80.0	2.29	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.288	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.067	0.064	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.302	0.316	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.177	0.177	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.039	0.051	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.046	0.058	ü
PFDaA_1	613.0 / 569.0	4.02	PFDaA			
PFDaA_2	613.0 / 319.0	4.02	PFDaA	0.151	0.161	ü
PFTrDA_1	663.0 / 619.0	4.27	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.26	PFTrDA	0.065	0.064	ü
PFTeDA_1	713.0 / 669.0	4.48	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.48	PFTeDA	0.046	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.57	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.57	NMeFOSAA	0.544	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.062	0.060	ü
PFBA	213.0 / 169.0	1.16				

Sample Name	JY43	Injection Vial	7
Sample ID	L6	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:31:18	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0520_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	1.55	PFBS	0.295	0.294	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.077	0.073	ü
PFHpA_1	363.0 / 319.0	2.27	PFHpA			
PFHpA_2	363.0 / 169.0	2.27	PFHpA	0.020	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.279	0.282	ü
PFOA_1	413.0 / 369.0	2.67	PFOA			
PFOA_2	413.0 / 169.0	2.67	PFOA	0.063	0.064	ü
PFNA_1	463.0 / 419.0	3.06	PFNA			
PFNA_2	463.0 / 219.0	3.06	PFNA	0.317	0.316	ü
PFOS_1	499.0 / 80.0	3.06	PFOS			
PFOS_2	499.0 / 99.0	3.06	PFOS	0.182	0.177	ü
PFDA_1	513.0 / 469.0	3.41	PFDA			
PFDA_2	513.0 / 219.0	3.41	PFDA	0.044	0.051	ü
PFUnA_1	563.0 / 519.0	3.73	PFUnA			
PFUnA_2	563.0 / 269.0	3.73	PFUnA	0.048	0.058	ü
PFDaA_1	613.0 / 569.0	4.01	PFDaA			
PFDaA_2	613.0 / 319.0	4.01	PFDaA	0.157	0.161	ü
PFTrDA_1	663.0 / 619.0	4.26	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.063	0.064	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.048	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.56	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.56	NMeFOSAA	0.534	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.73	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.73	NEtFOSAA	0.062	0.060	ü
PFBA	213.0 / 169.0	1.16				

Sample Name	JY44	Injection Vial	8
Sample ID	L7	Injection Volume	10.00
Sample Type	Standard	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-24T23:42:11	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0520_Base
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Ratio Group	Calculated Ion ratio	Expected Ion Ratio	Ratio OK
PFBS_1	298.9 / 80.0	1.55	PFBS			
PFBS_2	298.9 / 99.0	1.55	PFBS	0.297	0.294	ü
PFHxA_1	313.0 / 269.0	1.86	PFHxA			
PFHxA_2	313.0 / 119.0	1.86	PFHxA	0.075	0.073	ü
PFHpA_1	363.0 / 319.0	2.26	PFHpA			
PFHpA_2	363.0 / 169.0	2.26	PFHpA	0.019	0.020	ü
PFHxS_1	399.0 / 80.0	2.28	PFHxS			
PFHxS_2	399.0 / 99.0	2.28	PFHxS	0.281	0.282	ü
PFOA_1	413.0 / 369.0	2.66	PFOA			
PFOA_2	413.0 / 169.0	2.66	PFOA	0.062	0.064	ü
PFNA_1	463.0 / 419.0	3.05	PFNA			
PFNA_2	463.0 / 219.0	3.05	PFNA	0.296	0.316	ü
PFOS_1	499.0 / 80.0	3.04	PFOS			
PFOS_2	499.0 / 99.0	3.04	PFOS	0.176	0.177	ü
PFDA_1	513.0 / 469.0	3.40	PFDA			
PFDA_2	513.0 / 219.0	3.40	PFDA	0.044	0.051	ü
PFUnA_1	563.0 / 519.0	3.72	PFUnA			
PFUnA_2	563.0 / 269.0	3.72	PFUnA	0.051	0.058	ü
PFDaA_1	613.0 / 569.0	4.01	PFDaA			
PFDaA_2	613.0 / 319.0	4.00	PFDaA	0.166	0.161	ü
PFTrDA_1	663.0 / 619.0	4.25	PFTrDA			
PFTrDA_2	663.0 / 169.0	4.25	PFTrDA	0.063	0.064	ü
PFTeDA_1	713.0 / 669.0	4.47	PFTeDA			
PFTeDA_2	713.0 / 169.0	4.47	PFTeDA	0.048	0.048	ü
NMeFOSAA_1	570.0 / 419.0	3.55	NMeFOSAA			
NMeFOSAA_2	570.0 / 512.0	3.55	NMeFOSAA	0.574	0.560	ü
NEtFOSAA_1	584.0 / 419.0	3.72	NEtFOSAA			
NEtFOSAA_2	584.0 / 483.0	3.72	NEtFOSAA	0.065	0.060	ü
PFBA	213.0 / 169.0	1.16				

Sample Name	JY45 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T00:03:55	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0520_Base
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.55	945.317305	1010.00	93.60
PFBS_2	298.9 / 99.0	1.55	935.514031	1010.00	92.63
PFHxA_1	313.0 / 269.0	1.86	955.098649	1010.00	94.56
PFHxA_2	313.0 / 119.0	1.86	1000.164747	1010.00	99.03
PFHpA_1	363.0 / 319.0	2.26	896.029725	1000.00	89.60
PFHpA_2	363.0 / 169.0	2.27	772.698196	1000.00	77.27
PFHxS_1	399.0 / 80.0	2.28	965.455677	1010.00	95.59
PFHxS_2	399.0 / 99.0	2.28	995.242077	1010.00	98.54
PFOA_1	413.0 / 369.0	2.67	882.629871	1000.00	88.26
PFOA_2	413.0 / 169.0	2.67	933.664163	1000.00	93.37
PFNA_1	463.0 / 419.0	3.05	945.837479	1000.00	94.58
PFNA_2	463.0 / 219.0	3.05	977.984830	1000.00	97.80
PFOS_1	499.0 / 80.0	3.05	848.909424	1000.00	84.89
PFOS_2	499.0 / 99.0	3.05	883.759256	1000.00	88.38
PFDA_1	513.0 / 469.0	3.40	993.565292	1000.00	99.36
PFDA_2	513.0 / 219.0	3.41	898.454706	1000.00	89.85
PFUnA_1	563.0 / 519.0	3.73	945.238689	1000.00	94.52
PFUnA_2	563.0 / 269.0	3.73	853.408516	1000.00	85.34
PFDoA_1	613.0 / 569.0	4.01	1005.730822	1000.00	100.57
PFDoA_2	613.0 / 319.0	4.01	983.797996	1000.00	98.38
PFTTrDA_1	663.0 / 619.0	4.25	1016.995563	1000.00	101.70
PFTTrDA_2	663.0 / 169.0	4.25	1017.066538	1000.00	101.71
PFTeDA_1	713.0 / 669.0	4.47	1006.665369	1000.00	100.67
PFTeDA_2	713.0 / 169.0	4.47	964.000724	1000.00	96.40
NMeFOSAA_1	570.0 / 419.0	3.56	1038.070101	1000.00	103.81
NMeFOSAA_2	570.0 / 512.0	3.56	1030.221581	1000.00	103.02
NEtFOSAA_1	584.0 / 419.0	3.72	932.896900	1000.00	93.29
NEtFOSAA_2	584.0 / 483.0	3.72	992.807735	1000.00	99.28
PFBA	213.0 / 169.0	1.17	911.339203	1000.00	91.13

Sample Name	JY41 CCV	Injection Vial	18
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T01:41:46	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0520_Base
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
PFBS_1	298.9 / 80.0	1.55	950.847656	1010.00	94.14
PFBS_2	298.9 / 99.0	1.55	945.017353	1010.00	93.57
PFHxA_1	313.0 / 269.0	1.86	965.269441	1010.00	95.57
PFHxA_2	313.0 / 119.0	1.86	966.044767	1010.00	95.65
PFHpA_1	363.0 / 319.0	2.27	945.477863	1000.00	94.55
PFHpA_2	363.0 / 169.0	2.26	965.196317	1000.00	96.52
PFHxS_1	399.0 / 80.0	2.29	993.450506	1010.00	98.36
PFHxS_2	399.0 / 99.0	2.28	981.879581	1010.00	97.22
PFOA_1	413.0 / 369.0	2.67	929.030152	1000.00	92.90
PFOA_2	413.0 / 169.0	2.67	900.588864	1000.00	90.06
PFNA_1	463.0 / 419.0	3.06	987.821461	1000.00	98.78
PFNA_2	463.0 / 219.0	3.06	945.261294	1000.00	94.53
PFOS_1	499.0 / 80.0	3.06	934.607855	1000.00	93.46
PFOS_2	499.0 / 99.0	3.06	949.403596	1000.00	94.94
PFDA_1	513.0 / 469.0	3.41	978.375017	1000.00	97.84
PFDA_2	513.0 / 219.0	3.41	1043.552710	1000.00	104.36
PFUnA_1	563.0 / 519.0	3.73	832.529989	1000.00	83.25
PFUnA_2	563.0 / 269.0	3.73	853.891854	1000.00	85.39
PFDoA_1	613.0 / 569.0	4.02	998.337174	1000.00	99.83
PFDoA_2	613.0 / 319.0	4.02	1023.050484	1000.00	102.31
PFTTrDA_1	663.0 / 619.0	4.26	983.863398	1000.00	98.39
PFTTrDA_2	663.0 / 169.0	4.26	1029.279993	1000.00	102.93
PFTeDA_1	713.0 / 669.0	4.48	1005.405463	1000.00	100.54
PFTeDA_2	713.0 / 169.0	4.48	969.105595	1000.00	96.91
NMeFOSAA_1	570.0 / 419.0	3.57	1066.027098	1000.00	106.60
NMeFOSAA_2	570.0 / 512.0	3.57	1046.776092	1000.00	104.68
NEtFOSAA_1	584.0 / 419.0	3.73	968.096783	1000.00	96.81
NEtFOSAA_2	584.0 / 483.0	3.73	1041.007902	1000.00	104.10
PFBA	213.0 / 169.0	1.16	987.885594	1000.00	98.79

Sample Name	JY45 ICC	Injection Vial	10
Sample ID	ICC	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T00:03:55	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0520_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C4-PFBA	217.0 / 172.0	1.17	256.423433	250.00	102.57
13C2-PFDoA	615.0 / 570.0	4.00	236.412962	250.00	94.57
d3-MeFOSAA	573.0 / 419.0	3.55	229.007354	250.00	91.60
d5-EtFOSAA	589.0 / 419.0	3.71	244.394489	250.00	97.76
13C5-PFHxA	318.0 / 273.0	1.85	257.007980	250.00	102.80
13C4-PFHpA	367.0 / 322.0	2.25	257.575529	250.00	103.03
13C8-PFOA	421.0 / 376.0	2.66	253.920137	250.00	101.57
13C9-PFNA	472.0 / 427.0	3.04	266.243110	250.00	106.50
13C6-PFDA	519.0 / 474.0	3.39	253.349129	250.00	101.34
13C7-PFUnA	570.0 / 525.0	3.71	245.125330	250.00	98.05
13C2-PFTeDA	715.0 / 670.0	4.47	231.378794	250.00	92.55
13C3-PFBS	302.0 / 99.0	1.53	214.031789	232.25	92.16
13C3-PFHxS	402.0 / 99.0	2.27	204.130881	236.50	86.31
13C8-PFOS	507.0 / 99.0	3.03	237.268489	239.50	99.07

Sample Name	JY41 CCV	Injection Vial	18
Sample ID	CCV	Injection Volume	10.00
Sample Type	Quality Control	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T01:41:46	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0520_SIS
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Conc. (ng/L)	Target Conc. (ng/L)	Recovery (%)
13C4-PFBA	217.0 / 172.0	1.16	261.012832	250.00	104.41
13C2-PFDoA	615.0 / 570.0	4.01	236.565854	250.00	94.63
d3-MeFOSAA	573.0 / 419.0	3.56	243.437952	250.00	97.38
d5-EtFOSAA	589.0 / 419.0	3.72	256.645799	250.00	102.66
13C5-PFHxA	318.0 / 273.0	1.85	248.973663	250.00	99.59
13C4-PFHpA	367.0 / 322.0	2.25	253.470989	250.00	101.39
13C8-PFOA	421.0 / 376.0	2.66	248.455544	250.00	99.38
13C9-PFNA	472.0 / 427.0	3.05	245.332675	250.00	98.13
13C6-PFDA	519.0 / 474.0	3.40	244.197461	250.00	97.68
13C7-PFUnA	570.0 / 525.0	3.72	259.891843	250.00	103.96
13C2-PFTeDA	715.0 / 670.0	4.48	233.166654	250.00	93.27
13C3-PFBS	302.0 / 99.0	1.54	231.035155	232.25	99.48
13C3-PFHxS	402.0 / 99.0	2.28	233.820301	236.50	98.87
13C8-PFOS	507.0 / 99.0	3.04	246.499378	239.50	102.92

Sample Name	J7397-FS(3)	Injection Vial	39
Sample ID	NASB-BLL15-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:24:32	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_BASE_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
PFBS_1	298.9 / 80.0	1.55	215391.41	805.899058	103.1	false
PFBS_2	298.9 / 99.0	1.55	51726.43	661.948742	90.1	false
PFHxA_1	313.0 / 269.0	1.86	237204.49	902.625804	32.7	false
PFHxA_2	313.0 / 119.0	1.86	19598.05	1008.586388	37.5	false
PFHpA_1	363.0 / 319.0	2.26	95578.93	493.815495	31.7	false
PFHpA_2	363.0 / 169.0	2.25	2815.44	635.364124	35.1	false
PFHxS_1	399.0 / 80.0	2.28	1230678.11	3282.986749	236.8	false
PFHxS_2	399.0 / 99.0	2.28	331959.59	3153.845554	317.6	false
PFOA_1	413.0 / 369.0	2.66	530731.98	1771.335165	136.3	false
PFOA_2	413.0 / 169.0	2.63	49450.76	2551.091580	147.7	false
PFNA_1	463.0 / 419.0	3.05	21828.73	105.973949	32.8	false
PFNA_2	463.0 / 219.0	3.05	7114.10	98.324855	35.1	false
PFOS_1	499.0 / 80.0	2.95	307740.61	858.840921	80.7	false
PFOS_2	499.0 / 99.0	3.04	39405.57	627.077468	97.0	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
PFTTrDA_1	663.0 / 619.0	N/A	N/A	N/A	N/A	true
PFTTrDA_2	663.0 / 169.0	N/A	N/A	N/A	N/A	true
PFTeDA_1	713.0 / 669.0	N/A	N/A	N/A	N/A	true
PFTeDA_2	713.0 / 169.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_1	570.0 / 419.0	N/A	N/A	N/A	N/A	true
NMeFOSAA_2	570.0 / 512.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_1	584.0 / 419.0	N/A	N/A	N/A	N/A	true
NEtFOSAA_2	584.0 / 483.0	N/A	N/A	N/A	N/A	true
PFBA	213.0 / 169.0	1.23	2037704.13	15011.278920	167.5	false

PFOA 6.81 ng/L
 $y=1.18259x + -0.20416$
 $((530731.98 / 64922.46)+0.20416 / 1.18259)*250*0.0005^2/ 0.260 = 6.8128 \text{ ng/L}$
 LCS PFOA 123% $12.27/10 * 100 = 122.7\%$
 MS PFOA 87% $31.78-6.81/28.85*100 = 86.55\%$
 MSD PFOA 92% $33.91-6.81/29.41*100 = 92.146\%$
 RPD 5.6 $(87-92)/(87+92/2)*100 = 5.59$

Sample Name	J7397-FS(3)	Injection Vial	39
Sample ID	NASB-BLL15-GW-01-0818	Injection Volume	10.00
Sample Type	Unknown	Instrument Name	QTRAP 5500
Acquisition Date	2018-08-25T06:24:32	Data File	18-0501-515-520-500.wiff
Acquisition Method	5-0369.dam	Result Table	18-0500_SIS_A
Sample Comment			

Results Summary

Analyte	MRM Transition	RT	Area	Conc. (ng/L)	Signal/Noise Ratio	Modified
13C4-PFBA	217.0 / 172.0	1.16	22674.43	20.133286	485.7	false
13C2-PFDoA	615.0 / 570.0	3.99	57815.06	182.481208	524.3	false
d3-MeFOSAA	573.0 / 419.0	3.55	10237.10	237.350111	122.6	false
d5-EtFOSAA	589.0 / 419.0	3.71	9594.22	195.675116	114.3	false
13C5-PFHxA	318.0 / 273.0	1.84	57983.66	279.192982	160.1	false
13C4-PFHpA	367.0 / 322.0	2.25	72538.76	315.165442	427.1	false
13C8-PFOA	421.0 / 376.0	2.65	64922.46	255.309825	532.5	false
13C9-PFNA	472.0 / 427.0	3.04	66493.66	259.790971	563.0	false
13C6-PFDA	519.0 / 474.0	3.39	68030.10	248.314960	727.5	false
13C7-PFUnA	570.0 / 525.0	3.70	65858.13	227.336910	551.2	false
13C2-PFTeDA	715.0 / 670.0	4.46	30344.32	107.712854	1106.8	false
13C3-PFBS	302.0 / 99.0	1.53	20461.71	231.970900	230.5	false
13C3-PFHxS	402.0 / 99.0	2.27	21237.59	301.671994	165.6	false
13C8-PFOS	507.0 / 99.0	3.03	17738.32	226.628552	113.8	false

DODCMD_ID	INSTALLATION_ID	SDG	SITE_NAME	NORM_SITE_NAME	LOCATION_NAME	LOCATION_TYPE_DESC	COORD_X	COORD_Y	CONTRACT_ID	DO_CTO_NUMBER	CONTR_NAME	SAMPLE_NAME	SAMPLE_MATRIX_DESC	SAMPLE_TYPE_DESC	COLLECT_DATE	ANALYTICAL_METHOD	ANALYTICAL_METHOD_GRP_DESC
MID_ATLANTIC	BRUNSWICK_NAS	18-0500	UST 000001	UST 000001	NASB-BLL15-MW04	Monitoring well	3015821.11	389129.63	N6247016D9008	WE21	TETRA TECH, INC.	NASB-BLL15-GW-04-0818	Ground water	Normal (Regular)	9-Aug-18	537	Perfluoroalkyl Compounds
MID_ATLANTIC	BRUNSWICK_NAS	18-0500	UST 000001	UST 000001	NASB-BLL15-MW01	Monitoring well	3015627.83	389165.63	N6247016D9008	WE21	TETRA TECH, INC.	NASB-BLL15-GW-01-0818-D	Ground water	Field duplicate	9-Aug-18	537	Perfluoroalkyl Compounds
MID_ATLANTIC	BRUNSWICK_NAS	18-0500	UST 000001	UST 000001	NASB-CCC-MW02	Monitoring well	3018488.73	389946.03	N6247016D9008	WE21	TETRA TECH, INC.	NASB-CCC-GW-02-0818	Ground water	Normal (Regular)	8-Aug-18	537	Perfluoroalkyl Compounds
MID_ATLANTIC	BRUNSWICK_NAS	18-0500	UST 000001	UST 000001	NASB-BLL15-MW03	Monitoring well	3015747.47	388996.42	N6247016D9008	WE21	TETRA TECH, INC.	NASB-BLL15-GW-03-0818	Ground water	Normal (Regular)	9-Aug-18	537	Perfluoroalkyl Compounds
MID_ATLANTIC	BRUNSWICK_NAS	18-0500							N6247016D9008	WE21	TETRA TECH, INC.	NASB-BLL15-GW-RB01-080918	Water for QC samples	Equipment blank	9-Aug-18	537	Perfluoroalkyl Compounds
MID_ATLANTIC	BRUNSWICK_NAS	18-0500	UST 000001	UST 000001	NASB-CCC-MW01	Monitoring well	3017983.07	389845.96	N6247016D9008	WE21	TETRA TECH, INC.	NASB-CCC-GW-01-0818	Ground water	Normal (Regular)	8-Aug-18	537	Perfluoroalkyl Compounds
MID_ATLANTIC	BRUNSWICK_NAS	18-0500	UST 000001	UST 000001	NASB-BLL15-MW02	Monitoring well	3015693.65	389343.1	N6247016D9008	WE21	TETRA TECH, INC.	NASB-BLL15-GW-02-0818	Ground water	Normal (Regular)	9-Aug-18	537	Perfluoroalkyl Compounds
MID_ATLANTIC	BRUNSWICK_NAS	18-0500	UST 000001	UST 000001	NASB-BLL15-MW01	Monitoring well	3015627.83	389165.63	N6247016D9008	WE21	TETRA TECH, INC.	NASB-BLL15-GW-01-0818	Ground water	Normal (Regular)	9-Aug-18	537	Perfluoroalkyl Compounds