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Naval Facilities Engineering Command

Groundwater Sample Results, Combined Level 2 and Level 4 Laboratory Report, and the Sample Location Report, SDG FA41776

Naval Air Station Corpus Christi
Corpus Christi, Texas

July 2019

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N00216_000611
NAS CORPUS CHRISTI, TX
SSIC 5000-33c

LABORATORY DATA PACKAGE FA41776 NAS CORPUS CHRISTI TX
03/23/2017
SGS ACCUTEST, INC.

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Automated Report

Technical Report for

Resolution Consultants

PFC GW Investigation, NAS Corpus Christi, TX SWMU4

0888817518

SGS Accutest Job Number: FA41776

Sampling Dates: 02/27/17 - 03/02/17

Report to:

Resolution Consultants
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Memphis, TN 38134
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Total number of pages in report: 559

Norm Farmer
Technical Director

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

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Sample Summary

Resolution Consultants

Job No: FA41776

PFC GW Investigation, NAS Corpus Christi, TX SWMU4
Project No: 0888817518

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA41776-1	02/27/17	10:35	EBTM	03/04/17	AQ	Equipment Blank	EB1-DR-0217
FA41776-2	02/27/17	11:20	EBTM	03/04/17	AQ	Equipment Blank	EB1-WC-0217
FA41776-3	03/01/17	13:55	EBTM	03/04/17	AQ	Ground Water	ES-37-0317
FA41776-4	03/01/17	14:05	EBTM	03/04/17	AQ	Field Blank Water	FB1-0317
FA41776-5	03/01/17	16:45	EBTM	03/04/17	AQ	Ground Water	GM-20R-0317
FA41776-6	03/01/17	16:55	EBTM	03/04/17	AQ	Ground Water	DUP1-0317
FA41776-7	03/01/17	17:00	EBTM	03/04/17	AQ	Equipment Blank	EB1-GW-0317
FA41776-8	03/02/17	15:35	EBTM	03/04/17	AQ	Ground Water	RE1-29R-0317
FA41776-9	03/02/17	16:28	EBTM	03/04/17	AQ	Field Blank Water	FB2-0317
FA41776-10	03/02/17	16:45	EBTM	03/04/17	AQ	Ground Water	ES-42R-0317
FA41776-10D	03/02/17	16:45	EBTM	03/04/17	AQ	Water Dup/MSD	ES-42R-0317
FA41776-10S	03/02/17	16:45	EBTM	03/04/17	AQ	Water Matrix Spike	ES-42R-0317
FA41776-11	03/02/17	16:50	EBTM	03/04/17	AQ	Equipment Blank	EB2-GW-0317

SGS Accutest

Sample Summary
(continued)

Resolution Consultants

Job No: FA41776

PFC GW Investigation, NAS Corpus Christi, TX SWMU4
Project No: 0888817518

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA41776-12	03/01/17	14:15	EBTM	03/04/17	AQ	Ground Water	R-2-0317

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Resolution Consultants **Job No:** FA41776

Site: PFC GW Investigation, NAS Corpus Christi, TX SWMU4 **Report Date** 3/22/2017 9:06:59 AM

10 Samples and 2 Field Blanks were collected on/between 02/27/2017 and 03/02/2017 and were received at SGS Accutest Southeast (SASE) on 03/04/2017 properly preserved, at 3.6 Deg. C and intact. These Samples received an SASE job number of FA41776. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Extractables by GCMS By Method EPA 537 MOD

Matrix: AQ **Batch ID:** OP64173

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA41776-10MS, FA41776-10MSD were used as the QC samples indicated.

The following samples were extracted outside of holding time for method EPA 537 MOD: FA41776-1, FA41776-2. Samples extracted beyond hold time; reported results are considered minimum values. Samples were inadvertently missed during extraction.

Matrix Spike Recovery(s) for Perfluorobutanoic acid, PFOSA are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike Duplicate Recovery(s) for Perfluorododecanoic acid, Perfluorooctanesulfonic acid, Perfluorotridecanoic acid, PFOSA are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

Matrix Spike / Matrix Spike Duplicate Recovery(s) for Perfluorohexanesulfonic acid, Perfluorooctanoic acid are outside control limits. Outside control limits due to high level in sample relative to spike amount.

RPD(s) for MSD for Perfluorobutanoic acid are outside control limits for sample OP64173-MSD. Probable cause is due to sample non-homogeneity.

Sample(s) FA41776-12 has surrogates outside control limits. Probable cause is due to matrix interference.

FA41776-12 for d5-NEtFOSAA: Outside control limits due to dilution.

FA41776-12 for 13C2-PFHxA: Outside control limits due to dilution.

FA41776-12 for 13C2-PFDA: Outside control limits due to dilution.

FA41776-12: Dilution required due to matrix interference (internal standard failure).

FA41776-8 for Perfluorooctanoic acid: Reported at 10x dilution in order to bring compound within the range of calibration.

FA41776-10 for Perfluorooctanoic acid, Perfluorohexanesulfonic acid: Reported at 10x dilution in order to bring compound within the range of calibration.

SGS Accutest (SASE) certifies that this report meets the project requirements for analytical data produced for the samples as received at SASE and as stated on the COC. SASE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SASE Quality Manual except as noted above. This report is to be used in its entirety. SASE is not responsible for any assumptions of data quality if partial data packages are used

Narrative prepared by:

_____ Date: March 23, 2017

Lovelie Metzgar, QA Officer (signature on file)

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual Integrations
FA41776-1	MSSEMI	Q32351.D	Perfluorooctanesulfonic acid
FA41776-10	MSSEMI	Q32363.D	Perfluorohexanesulfonic acid, Perfluorooctanoic acid
FA41776-10	MSSEMI	Q32392.D	Perfluoroheptanoic acid, Perfluorononanoic acid, Perfluorooctanesulfonic acid
FA41776-12	MSSEMI	Q32432.D	Perfluoroheptanoic acid, Perfluorohexanesulfonic acid, Perfluorononanoic acid, Perfluorooctanesulfonic acid, Perfluorooctanoic acid
FA41776-2	MSSEMI	Q32352.D	Perfluorooctanesulfonic acid
FA41776-3	MSSEMI	Q32428.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid, Perfluorooctanoic acid
FA41776-5	MSSEMI	Q32429.D	Perfluoroheptanoic acid, Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid, Perfluorooctanoic acid
FA41776-6	MSSEMI	Q32430.D	Perfluoroheptanoic acid, Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid, Perfluorooctanoic acid
FA41776-8	MSSEMI	Q32362.D	Perfluorooctanoic acid
FA41776-8	MSSEMI	Q32391.D	Perfluoroheptanoic acid, Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
FA41776-9	MSSEMI	Q32355.D	Perfluorooctanesulfonic acid
OP64173-MS	MSSEMI	Q32364.D	Perfluorobutanoic acid, Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid, Perfluorooctanoic acid
OP64173-MSD	MSSEMI	Q32365.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid, Perfluorooctanoic acid
SQ853-CC853	MSSEMI	Q32357.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ853-IC853	MSSEMI	Q32338.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ853-IC853	MSSEMI	Q32339.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ853-IC853	MSSEMI	Q32340.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ853-IC853	MSSEMI	Q32341.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ853-IC853	MSSEMI	Q32343.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ853-IC853	MSSEMI	Q32344.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ853-ICC853	MSSEMI	Q32342.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ854-IC854	MSSEMI	Q32377.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid, Perfluorotetradecanoic acid
SQ854-IC854	MSSEMI	Q32378.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ854-IC854	MSSEMI	Q32379.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ854-IC854	MSSEMI	Q32380.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ854-IC854	MSSEMI	Q32382.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ854-IC854	MSSEMI	Q32383.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ854-ICC854	MSSEMI	Q32381.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ855-IC855	MSSEMI	Q32419.D	Perfluorobutanoic acid, Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ855-IC855	MSSEMI	Q32420.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid

SQ855-IC855	MSSEMI	Q32421.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ855-IC855	MSSEMI	Q32422.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ855-IC855	MSSEMI	Q32424.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ855-IC855	MSSEMI	Q32425.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid
SQ855-ICC855	MSSEMI	Q32423.D	Perfluorohexanesulfonic acid, Perfluorooctanesulfonic acid

35 Manual Integrations were found for FA41776

Summary of Hits

Job Number: FA41776
Account: Resolution Consultants
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4
Collected: 02/27/17 thru 03/02/17

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	MQL	SDL	Units	Method
FA41776-1	**EB1-DR-0217**					
No hits reported in this sample.						
FA41776-2	**EB1-WC-0217**					
No hits reported in this sample.						
FA41776-3	**ES-37-0317**					
Perfluorobutanoic acid		0.0117 J	0.015	0.0077	ug/l	EPA 537 MOD
Perfluoropentanoic acid		0.0276	0.015	0.0077	ug/l	EPA 537 MOD
Perfluorohexanoic acid		0.0213	0.015	0.0077	ug/l	EPA 537 MOD
Perfluoroheptanoic acid		0.0115 J	0.015	0.0077	ug/l	EPA 537 MOD
Perfluorooctanoic acid		0.0404	0.015	0.0038	ug/l	EPA 537 MOD
Perfluorobutanesulfonic acid		0.00790 J	0.015	0.0077	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.104	0.015	0.0077	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.0537	0.015	0.0038	ug/l	EPA 537 MOD
FA41776-4	**FB1-0317**					
No hits reported in this sample.						
FA41776-5	**GM-20R-0317**					
Perfluorohexanoic acid		0.0101 J	0.016	0.0080	ug/l	EPA 537 MOD
Perfluorooctanoic acid		0.0307	0.016	0.0040	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.0429	0.016	0.0080	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.00621 J	0.016	0.0040	ug/l	EPA 537 MOD
FA41776-6	**DUP1-0317**					
Perfluorohexanoic acid		0.0108 J	0.015	0.0077	ug/l	EPA 537 MOD
Perfluoroheptanoic acid		0.00828 J	0.015	0.0077	ug/l	EPA 537 MOD
Perfluorooctanoic acid		0.0313	0.015	0.0038	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.0415	0.015	0.0077	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.00650 J	0.015	0.0038	ug/l	EPA 537 MOD
FA41776-7	**EB1-GW-0317**					
No hits reported in this sample.						
FA41776-8	**RE1-29R-0317**					
Perfluorobutanoic acid		0.00982 J	0.016	0.0080	ug/l	EPA 537 MOD

Summary of Hits

Job Number: FA41776
Account: Resolution Consultants
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4
Collected: 02/27/17 thru 03/02/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	MQL	SDL	Units	Method
Perfluoropentanoic acid		0.0548	0.016	0.0080	ug/l	EPA 537 MOD
Perfluorohexanoic acid		0.0766	0.016	0.0080	ug/l	EPA 537 MOD
Perfluoroheptanoic acid		0.0314	0.016	0.0080	ug/l	EPA 537 MOD
Perfluorooctanoic acid		0.511	0.16	0.040	ug/l	EPA 537 MOD
Perfluorobutanesulfonic acid		0.00949 J	0.016	0.0080	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		0.0337	0.016	0.0080	ug/l	EPA 537 MOD
FA41776-9	**FB2-0317**					
No hits reported in this sample.						
FA41776-10	**ES-42R-0317**					
Perfluorobutanoic acid [a]		0.0129 J	0.015	0.0077	ug/l	EPA 537 MOD
Perfluoropentanoic acid		0.0573	0.015	0.0077	ug/l	EPA 537 MOD
Perfluorohexanoic acid		0.309	0.015	0.0077	ug/l	EPA 537 MOD
Perfluoroheptanoic acid		0.0494	0.015	0.0077	ug/l	EPA 537 MOD
Perfluorooctanoic acid		2.10	0.15	0.038	ug/l	EPA 537 MOD
Perfluorononanoic acid		0.00951 J	0.015	0.0038	ug/l	EPA 537 MOD
Perfluorobutanesulfonic acid		0.0189	0.015	0.0077	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid		2.12	0.15	0.077	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid		0.361	0.015	0.0038	ug/l	EPA 537 MOD
FA41776-11	**EB2-GW-0317**					
No hits reported in this sample.						
FA41776-12	**R-2-0317**					
Perfluorohexanoic acid [b]		0.0938 J	0.16	0.080	ug/l	EPA 537 MOD
Perfluorooctanoic acid [b]		0.342	0.16	0.040	ug/l	EPA 537 MOD
Perfluorohexanesulfonic acid [b]		0.374	0.16	0.080	ug/l	EPA 537 MOD
Perfluorooctanesulfonic acid [b]		0.691	0.16	0.040	ug/l	EPA 537 MOD

(a) Associated MS/MSD recovery or RPD outside control limits.
(b) Dilution required due to matrix interference (internal standard failure).

Sample Results

Report of Analysis

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Report of Analysis

Client Sample ID:	EB1-DR-0217		
Lab Sample ID:	FA41776-1	**Date Sampled:**	02/27/17
Matrix:	AQ - Equipment Blank	**Date Received:**	03/04/17
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	PFC GW Investigation, NAS Corpus Christi, TX SWMU4		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Q32351.D	1	03/17/17	NAF	03/15/17	OP64173	SQ853
Run #2							

	Initial Volume	Final Volume
Run #1	130 ml	1.0 ml
Run #2		

PFAA List for State of Texas

CAS No.	Compound	Result	MQL	SDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0077 U	0.015	0.0077	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0077 U	0.015	0.0077	ug/l	
307-24-4	Perfluorohexanoic acid	0.0077 U	0.015	0.0077	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0077 U	0.015	0.0077	ug/l	
335-67-1	Perfluorooctanoic acid	0.0038 U	0.015	0.0038	ug/l	
375-95-1	Perfluorononanoic acid	0.0038 U	0.015	0.0038	ug/l	
335-76-2	Perfluorodecanoic acid	0.0077 U	0.015	0.0077	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0077 U	0.015	0.0077	ug/l	
307-55-1	Perfluorododecanoic acid	0.0077 U	0.015	0.0077	ug/l	
72629-94-8	Perfluorotridecanoic acid	0.0077 U	0.015	0.0077	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.0077 U	0.015	0.0077	ug/l	
PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.0077 U	0.015	0.0077	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0077 U	0.015	0.0077	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0038 U	0.015	0.0038	ug/l	
335-77-3	Perfluorodecanesulfonic acid	0.0077 U	0.015	0.0077	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	0.0077 U	0.015	0.0077	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	99%		61-134%
	13C2-PFDA	97%		62-128%
	d5-EtFOSAA	80%		57-135%

(a) Sample extracted beyond hold time; reported results are considered minimum values.

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	EB1-WC-0217		
Lab Sample ID:	FA41776-2	**Date Sampled:**	02/27/17
Matrix:	AQ - Equipment Blank	**Date Received:**	03/04/17
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	PFC GW Investigation, NAS Corpus Christi, TX SWMU4		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Q32352.D	1	03/17/17	NAF	03/15/17	OP64173	SQ853
Run #2							

	Initial Volume	Final Volume
Run #1	130 ml	1.0 ml
Run #2		

PFAA List for State of Texas

CAS No.	Compound	Result	MQL	SDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0077 U	0.015	0.0077	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0077 U	0.015	0.0077	ug/l	
307-24-4	Perfluorohexanoic acid	0.0077 U	0.015	0.0077	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0077 U	0.015	0.0077	ug/l	
335-67-1	Perfluorooctanoic acid	0.0038 U	0.015	0.0038	ug/l	
375-95-1	Perfluorononanoic acid	0.0038 U	0.015	0.0038	ug/l	
335-76-2	Perfluorodecanoic acid	0.0077 U	0.015	0.0077	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0077 U	0.015	0.0077	ug/l	
307-55-1	Perfluorododecanoic acid	0.0077 U	0.015	0.0077	ug/l	
72629-94-8	Perfluorotridecanoic acid	0.0077 U	0.015	0.0077	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.0077 U	0.015	0.0077	ug/l	
PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.0077 U	0.015	0.0077	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0077 U	0.015	0.0077	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0038 U	0.015	0.0038	ug/l	
335-77-3	Perfluorodecanesulfonic acid	0.0077 U	0.015	0.0077	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	0.0077 U	0.015	0.0077	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	105%		61-134%
	13C2-PFDA	103%		62-128%
	d5-EtFOSAA	89%		57-135%

(a) Sample extracted beyond hold time; reported results are considered minimum values.

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	ES-37-0317		
Lab Sample ID:	FA41776-3	**Date Sampled:**	03/01/17
Matrix:	AQ - Ground Water	**Date Received:**	03/04/17
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	PFC GW Investigation, NAS Corpus Christi, TX SWMU4		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q32428.D	1	03/21/17	NAF	03/15/17	OP64173	SQ855
Run #2							

	Initial Volume	Final Volume
Run #1	130 ml	1.0 ml
Run #2		

PFAA List for State of Texas

CAS No.	Compound	Result	MQL	SDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0117	0.015	0.0077	ug/l	J
2706-90-3	Perfluoropentanoic acid	0.0276	0.015	0.0077	ug/l	
307-24-4	Perfluorohexanoic acid	0.0213	0.015	0.0077	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0115	0.015	0.0077	ug/l	J
335-67-1	Perfluorooctanoic acid	0.0404	0.015	0.0038	ug/l	
375-95-1	Perfluorononanoic acid	0.0038 U	0.015	0.0038	ug/l	
335-76-2	Perfluorodecanoic acid	0.0077 U	0.015	0.0077	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0077 U	0.015	0.0077	ug/l	
307-55-1	Perfluorododecanoic acid	0.0077 U	0.015	0.0077	ug/l	
72629-94-8	Perfluorotridecanoic acid	0.0077 U	0.015	0.0077	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.0077 U	0.015	0.0077	ug/l	
PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.00790	0.015	0.0077	ug/l	J
355-46-4	Perfluorohexanesulfonic acid	0.104	0.015	0.0077	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0537	0.015	0.0038	ug/l	
335-77-3	Perfluorodecanesulfonic acid	0.0077 U	0.015	0.0077	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	0.0077 U	0.015	0.0077	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	96%		61-134%
	13C2-PFDA	104%		62-128%
	d5-EtFOSAA	75%		57-135%

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	FB1-0317		
Lab Sample ID:	FA41776-4	**Date Sampled:**	03/01/17
Matrix:	AQ - Field Blank Water	**Date Received:**	03/04/17
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	PFC GW Investigation, NAS Corpus Christi, TX SWMU4		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q32353.D	1	03/17/17	NAF	03/15/17	OP64173	SQ853
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

PFAA List for State of Texas

CAS No.	Compound	Result	MQL	SDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0080 U	0.016	0.0080	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0080 U	0.016	0.0080	ug/l	
307-24-4	Perfluorohexanoic acid	0.0080 U	0.016	0.0080	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0080 U	0.016	0.0080	ug/l	
335-67-1	Perfluorooctanoic acid	0.0040 U	0.016	0.0040	ug/l	
375-95-1	Perfluorononanoic acid	0.0040 U	0.016	0.0040	ug/l	
335-76-2	Perfluorodecanoic acid	0.0080 U	0.016	0.0080	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0080 U	0.016	0.0080	ug/l	
307-55-1	Perfluorododecanoic acid	0.0080 U	0.016	0.0080	ug/l	
72629-94-8	Perfluorotridecanoic acid	0.0080 U	0.016	0.0080	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.0080 U	0.016	0.0080	ug/l	
PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.0080 U	0.016	0.0080	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0080 U	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0040 U	0.016	0.0040	ug/l	
335-77-3	Perfluorodecanesulfonic acid	0.0080 U	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	0.0080 U	0.016	0.0080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	103%		61-134%
	13C2-PFDA	98%		62-128%
	d5-EtFOSAA	90%		57-135%

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	GM-20R-0317		
Lab Sample ID:	FA41776-5	**Date Sampled:**	03/01/17
Matrix:	AQ - Ground Water	**Date Received:**	03/04/17
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	PFC GW Investigation, NAS Corpus Christi, TX SWMU4		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q32429.D	1	03/21/17	NAF	03/15/17	OP64173	SQ855
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

PFAA List for State of Texas

CAS No.	Compound	Result	MQL	SDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0080 U	0.016	0.0080	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0080 U	0.016	0.0080	ug/l	
307-24-4	Perfluorohexanoic acid	0.0101	0.016	0.0080	ug/l	J
375-85-9	Perfluoroheptanoic acid	0.0080 U	0.016	0.0080	ug/l	
335-67-1	Perfluorooctanoic acid	0.0307	0.016	0.0040	ug/l	
375-95-1	Perfluorononanoic acid	0.0040 U	0.016	0.0040	ug/l	
335-76-2	Perfluorodecanoic acid	0.0080 U	0.016	0.0080	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0080 U	0.016	0.0080	ug/l	
307-55-1	Perfluorododecanoic acid	0.0080 U	0.016	0.0080	ug/l	
72629-94-8	Perfluorotridecanoic acid	0.0080 U	0.016	0.0080	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.0080 U	0.016	0.0080	ug/l	
PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.0080 U	0.016	0.0080	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0429	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.00621	0.016	0.0040	ug/l	J
335-77-3	Perfluorodecanesulfonic acid	0.0080 U	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	0.0080 U	0.016	0.0080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	87%		61-134%
	13C2-PFDA	113%		62-128%
	d5-EtFOSAA	77%		57-135%

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	DUP1-0317		
Lab Sample ID:	FA41776-6	**Date Sampled:**	03/01/17
Matrix:	AQ - Ground Water	**Date Received:**	03/04/17
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	PFC GW Investigation, NAS Corpus Christi, TX SWMU4		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q32430.D	1	03/21/17	NAF	03/15/17	OP64173	SQ855
Run #2							

	Initial Volume	Final Volume
Run #1	130 ml	1.0 ml
Run #2		

PFAA List for State of Texas

CAS No.	Compound	Result	MQL	SDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0077 U	0.015	0.0077	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0077 U	0.015	0.0077	ug/l	
307-24-4	Perfluorohexanoic acid	0.0108	0.015	0.0077	ug/l	J
375-85-9	Perfluoroheptanoic acid	0.00828	0.015	0.0077	ug/l	J
335-67-1	Perfluorooctanoic acid	0.0313	0.015	0.0038	ug/l	
375-95-1	Perfluorononanoic acid	0.0038 U	0.015	0.0038	ug/l	
335-76-2	Perfluorodecanoic acid	0.0077 U	0.015	0.0077	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0077 U	0.015	0.0077	ug/l	
307-55-1	Perfluorododecanoic acid	0.0077 U	0.015	0.0077	ug/l	
72629-94-8	Perfluorotridecanoic acid	0.0077 U	0.015	0.0077	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.0077 U	0.015	0.0077	ug/l	
PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.0077 U	0.015	0.0077	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0415	0.015	0.0077	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.00650	0.015	0.0038	ug/l	J
335-77-3	Perfluorodecanesulfonic acid	0.0077 U	0.015	0.0077	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	0.0077 U	0.015	0.0077	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	77%		61-134%
	13C2-PFDA	110%		62-128%
	d5-EtFOSAA	82%		57-135%

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	EB1-GW-0317		
Lab Sample ID:	FA41776-7	**Date Sampled:**	03/01/17
Matrix:	AQ - Equipment Blank	**Date Received:**	03/04/17
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	PFC GW Investigation, NAS Corpus Christi, TX SWMU4		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q32354.D	1	03/17/17	NAF	03/15/17	OP64173	SQ853
Run #2							

	Initial Volume	Final Volume
Run #1	120 ml	1.0 ml
Run #2		

PFAA List for State of Texas

CAS No.	Compound	Result	MQL	SDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0083 U	0.017	0.0083	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0083 U	0.017	0.0083	ug/l	
307-24-4	Perfluorohexanoic acid	0.0083 U	0.017	0.0083	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0083 U	0.017	0.0083	ug/l	
335-67-1	Perfluorooctanoic acid	0.0042 U	0.017	0.0042	ug/l	
375-95-1	Perfluorononanoic acid	0.0042 U	0.017	0.0042	ug/l	
335-76-2	Perfluorodecanoic acid	0.0083 U	0.017	0.0083	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0083 U	0.017	0.0083	ug/l	
307-55-1	Perfluorododecanoic acid	0.0083 U	0.017	0.0083	ug/l	
72629-94-8	Perfluorotridecanoic acid	0.0083 U	0.017	0.0083	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.0083 U	0.017	0.0083	ug/l	
PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.0083 U	0.017	0.0083	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0083 U	0.017	0.0083	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0042 U	0.017	0.0042	ug/l	
335-77-3	Perfluorodecanesulfonic acid	0.0083 U	0.017	0.0083	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	0.0083 U	0.017	0.0083	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	104%		61-134%
	13C2-PFDA	93%		62-128%
	d5-EtFOSAA	77%		57-135%

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	RE1-29R-0317		
Lab Sample ID:	FA41776-8	**Date Sampled:**	03/02/17
Matrix:	AQ - Ground Water	**Date Received:**	03/04/17
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	PFC GW Investigation, NAS Corpus Christi, TX SWMU4		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q32391.D	1	03/20/17	NAF	03/15/17	OP64173	SQ854
Run #2	Q32362.D	10	03/17/17	NAF	03/15/17	OP64173	SQ853

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2	125 ml	1.0 ml

PFAA List for State of Texas

CAS No.	Compound	Result	MQL	SDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.00982	0.016	0.0080	ug/l	J
2706-90-3	Perfluoropentanoic acid	0.0548	0.016	0.0080	ug/l	
307-24-4	Perfluorohexanoic acid	0.0766	0.016	0.0080	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0314	0.016	0.0080	ug/l	
335-67-1	Perfluorooctanoic acid	0.511 [a]	0.16	0.040	ug/l	
375-95-1	Perfluorononanoic acid	0.0040 U	0.016	0.0040	ug/l	
335-76-2	Perfluorodecanoic acid	0.0080 U	0.016	0.0080	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0080 U	0.016	0.0080	ug/l	
307-55-1	Perfluorododecanoic acid	0.0080 U	0.016	0.0080	ug/l	
72629-94-8	Perfluorotridecanoic acid	0.0080 U	0.016	0.0080	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.0080 U	0.016	0.0080	ug/l	
PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.00949	0.016	0.0080	ug/l	J
355-46-4	Perfluorohexanesulfonic acid	0.0337	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0040 U	0.016	0.0040	ug/l	
335-77-3	Perfluorodecanesulfonic acid	0.0080 U	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	0.0080 U	0.016	0.0080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	85%	94%	61-134%
	13C2-PFDA	86%	73%	62-128%
	d5-EtFOSAA	68%	79%	57-135%

(a) Result is from Run# 2

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	FB2-0317		
Lab Sample ID:	FA41776-9	**Date Sampled:**	03/02/17
Matrix:	AQ - Field Blank Water	**Date Received:**	03/04/17
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	PFC GW Investigation, NAS Corpus Christi, TX SWMU4		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q32355.D	1	03/17/17	NAF	03/15/17	OP64173	SQ853
Run #2							

	Initial Volume	Final Volume
Run #1	130 ml	1.0 ml
Run #2		

PFAA List for State of Texas

CAS No.	Compound	Result	MQL	SDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0077 U	0.015	0.0077	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0077 U	0.015	0.0077	ug/l	
307-24-4	Perfluorohexanoic acid	0.0077 U	0.015	0.0077	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0077 U	0.015	0.0077	ug/l	
335-67-1	Perfluorooctanoic acid	0.0038 U	0.015	0.0038	ug/l	
375-95-1	Perfluorononanoic acid	0.0038 U	0.015	0.0038	ug/l	
335-76-2	Perfluorodecanoic acid	0.0077 U	0.015	0.0077	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0077 U	0.015	0.0077	ug/l	
307-55-1	Perfluorododecanoic acid	0.0077 U	0.015	0.0077	ug/l	
72629-94-8	Perfluorotridecanoic acid	0.0077 U	0.015	0.0077	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.0077 U	0.015	0.0077	ug/l	
PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.0077 U	0.015	0.0077	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0077 U	0.015	0.0077	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0038 U	0.015	0.0038	ug/l	
335-77-3	Perfluorodecanesulfonic acid	0.0077 U	0.015	0.0077	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	0.0077 U	0.015	0.0077	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	100%		61-134%
	13C2-PFDA	86%		62-128%
	d5-EtFOSAA	78%		57-135%

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	ES-42R-0317		
Lab Sample ID:	FA41776-10	**Date Sampled:**	03/02/17
Matrix:	AQ - Ground Water	**Date Received:**	03/04/17
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	PFC GW Investigation, NAS Corpus Christi, TX SWMU4		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q32392.D	1	03/20/17	NAF	03/15/17	OP64173	SQ854
Run #2	Q32363.D	10	03/17/17	NAF	03/15/17	OP64173	SQ853

	Initial Volume	Final Volume
Run #1	130 ml	1.0 ml
Run #2	130 ml	1.0 ml

PFAA List for State of Texas

CAS No.	Compound	Result	MQL	SDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid [a]	0.0129	0.015	0.0077	ug/l	J
2706-90-3	Perfluoropentanoic acid	0.0573	0.015	0.0077	ug/l	
307-24-4	Perfluorohexanoic acid	0.309	0.015	0.0077	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0494	0.015	0.0077	ug/l	
335-67-1	Perfluorooctanoic acid	2.10 [b]	0.15	0.038	ug/l	
375-95-1	Perfluorononanoic acid	0.00951	0.015	0.0038	ug/l	J
335-76-2	Perfluorodecanoic acid	0.0077 U	0.015	0.0077	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0077 U	0.015	0.0077	ug/l	
307-55-1	Perfluorododecanoic acid [c]	0.0077 U	0.015	0.0077	ug/l	
72629-94-8	Perfluorotridecanoic acid [c]	0.0077 U	0.015	0.0077	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.0077 U	0.015	0.0077	ug/l	
PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.0189	0.015	0.0077	ug/l	
355-46-4	Perfluorohexanesulfonic acid	2.12 [b]	0.15	0.077	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.361	0.015	0.0038	ug/l	
335-77-3	Perfluorodecanesulfonic acid	0.0077 U	0.015	0.0077	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA [a]	0.0077 U	0.015	0.0077	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	94%	96%	61-134%
	13C2-PFDA	105%	86%	62-128%
	d5-EtFOSAA	71%	75%	57-135%

(a) Associated MS/MSD recovery or RPD outside control limits.
(b) Result is from Run# 2
(c) Associated MS/MSD recovery outside control limits.

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	EB2-GW-0317		
Lab Sample ID:	FA41776-11	**Date Sampled:**	03/02/17
Matrix:	AQ - Equipment Blank	**Date Received:**	03/04/17
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	PFC GW Investigation, NAS Corpus Christi, TX SWMU4		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Q32356.D	1	03/17/17	NAF	03/15/17	OP64173	SQ853
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

PFAA List for State of Texas

CAS No.	Compound	Result	MQL	SDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.0080 U	0.016	0.0080	ug/l	
2706-90-3	Perfluoropentanoic acid	0.0080 U	0.016	0.0080	ug/l	
307-24-4	Perfluorohexanoic acid	0.0080 U	0.016	0.0080	ug/l	
375-85-9	Perfluoroheptanoic acid	0.0080 U	0.016	0.0080	ug/l	
335-67-1	Perfluorooctanoic acid	0.0040 U	0.016	0.0040	ug/l	
375-95-1	Perfluorononanoic acid	0.0040 U	0.016	0.0040	ug/l	
335-76-2	Perfluorodecanoic acid	0.0080 U	0.016	0.0080	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.0080 U	0.016	0.0080	ug/l	
307-55-1	Perfluorododecanoic acid	0.0080 U	0.016	0.0080	ug/l	
72629-94-8	Perfluorotridecanoic acid	0.0080 U	0.016	0.0080	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.0080 U	0.016	0.0080	ug/l	
PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.0080 U	0.016	0.0080	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.0080 U	0.016	0.0080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.0040 U	0.016	0.0040	ug/l	
335-77-3	Perfluorodecanesulfonic acid	0.0080 U	0.016	0.0080	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	0.0080 U	0.016	0.0080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	102%		61-134%
	13C2-PFDA	95%		62-128%
	d5-EtFOSAA	80%		57-135%

U = Not detected SDL = Sample Detection Limit
MQL = Method Quantitation Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	R-2-0317		
Lab Sample ID:	FA41776-12	**Date Sampled:**	03/01/17
Matrix:	AQ - Ground Water	**Date Received:**	03/04/17
Method:	EPA 537 MOD EPA 537 MOD	**Percent Solids:**	n/a
Project:	PFC GW Investigation, NAS Corpus Christi, TX SWMU4		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Q32432.D	10	03/21/17	NAF	03/15/17	OP64173	SQ855
Run #2							

	Initial Volume	Final Volume
Run #1	125 ml	1.0 ml
Run #2		

PFAA List for State of Texas

CAS No.	Compound	Result	MQL	SDL	Units	Q
PERFLUOROALKYLCARBOXYLIC ACIDS						
375-22-4	Perfluorobutanoic acid	0.080 U	0.16	0.080	ug/l	
2706-90-3	Perfluoropentanoic acid	0.080 U	0.16	0.080	ug/l	
307-24-4	Perfluorohexanoic acid	0.0938	0.16	0.080	ug/l	J
375-85-9	Perfluoroheptanoic acid	0.080 U	0.16	0.080	ug/l	
335-67-1	Perfluorooctanoic acid	0.342	0.16	0.040	ug/l	
375-95-1	Perfluorononanoic acid	0.040 U	0.16	0.040	ug/l	
335-76-2	Perfluorodecanoic acid	0.080 U	0.16	0.080	ug/l	
2058-94-8	Perfluoroundecanoic acid	0.080 U	0.16	0.080	ug/l	
307-55-1	Perfluorododecanoic acid	0.080 U	0.16	0.080	ug/l	
72629-94-8	Perfluorotridecanoic acid	0.080 U	0.16	0.080	ug/l	
376-06-7	Perfluorotetradecanoic acid	0.080 U	0.16	0.080	ug/l	
PERFLUOROALKYLSULFONATES						
375-73-5	Perfluorobutanesulfonic acid	0.080 U	0.16	0.080	ug/l	
355-46-4	Perfluorohexanesulfonic acid	0.374	0.16	0.080	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	0.691	0.16	0.040	ug/l	
335-77-3	Perfluorodecanesulfonic acid	0.080 U	0.16	0.080	ug/l	
PERFLUOROOCTANESULFONAMIDES						
754-91-6	PFOSA	0.080 U	0.16	0.080	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	13C2-PFHxA	0% [b]		61-134%
	13C2-PFDA	0% [b]		62-128%
	d5-EtFOSAA	0% [b]		57-135%

(a) Dilution required due to matrix interference (internal standard failure).
(b) Outside control limits due to dilution.

U = Not detected SDL = Sample Detection Limit J = Indicates an estimated value
MQL = Method Quantitation Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- LRC Form
- QC Evaluation: DOD QSM5 Limits

FedEX 188644848 FA41776

RESOLUTION CONSULTANTS

CHAIN OF CUSTODY AND ANALYTICAL REQUEST RECORD

COC No. EIB20170303 | Page 1 of 1

Project Name: NAS Corpus Christi - SWMU4 - PFAS groundwater investigation | PO No. 22891 | Project No: 085881519 | Phase FI.WS

Site Location: NAS Corpus Christi

CTO No. JMA1 | RC Project Manager: Clare Barnett

Sampler/Site Phone# Emily Brickman / Tanner Miller

Lab Name: Accutest Laboratories | Turnaround Time(specify): 21 day

Sample Analysis Requested (*Enter number of containers for each test*)

Lab ID	Sample ID (sys_samp_code)	Location ID (sys_loc_code)	Date (mm/dd/yy)	Time (Military) (hhmm)	Matrix Code (1)	Sample Type (2)	Field Filtered (Y/N)	Total No. of Containers (3)→	PFAS US EPA Mod Method 537									Extra Volume for MS/MSD	HOLD
1	EB1-DR-0217	—	02/27/17	1635	WG	EB	N	2	X										
2	EB1-WC-0217	—	02/27/17	1120	WG	EB	N	2	X										
3	ES-37-0317	ES-37	03/01/17	1355	WG	N	N	2	X										
4	FB1-0317	—	03/01/17	1405	WG	FB	N	2	X										
5	GM-20R-0317	GM-20R	03/01/17	1645	WG	N	N	2	X										
6	DUP1-0317	GM-20R	03/01/17	1655	WG	FD	N	2	X										
7	EB1-GW-0317	—	03/01/17	1700	WG	EB	N	2	X										
8	REI-29R-0317	REI-29R	03/02/17	1535	WG	N	N	2	X										
9	FB2-0317	—	03/02/17	1628	WG	FB	N	2	X										
10	ES-42R-0317	ES-42R	03/02/17	1645	WG	N	N	6	X									X	
11	EB2-GW-0317	—	03/02/17	1650	WG	EB	N	2	X										
12	R-2-0317	R-2	03/01/17	1415	WG	N	N	2	X										

Field **Comments:** Level 4 data Package / TRRP 16 PFAS

Lab **Comments:**

Relinquished by (signature)	Date	Time	Received by (signature)	Date	Time
1 Emily J. Brickman	3/3/2017	1420	1 Fx		
2 Fx			2 [signature]	03/04/17	930
3			3		

Sample Shipment and Delivery Details

Number of coolers in shipment: 1

Samples Iced?(check) Yes X No

Method of Shipment: Fed EX

Airbill No:

Date Shipped: 3.6

(1) AA=Ambient air, **AQ**=Air quality control, **ASB**=Asbestos, **CK**=Caulk, **DS**=Storm drain sediment, **GS**=Soil gas, **IC**=IDW Concrete, **IDD**=IDW Solid, **IDS**=IDW soil, **IDW**=IDW Water, **LF**=Free Product, **MA**=Mastic, **PC**=Paint Chips, **SC**=Cement/Concrete, **SE**=Sediment, **SL**=Sludge, **SO**=Soil, **SQ**=Soil/Solid quality control, **SSD**=Subsurface sediment, **SU**=Surface soil (<6 in), **SW**=Swab or wipe, **TA**=Animal tissue, **TP**=Plant tissue, **TQ**=Tissue quality control, **WG**=Ground water, **WL**=Leachate, **WO**=Ocean water, **WP**=Drinking water, **WQ**=Water quality control, **WR**=Ground water effluent, **WS**=Surface water, **WU**=Storm water, **WW**=Waste water

(2) Sample Type: AB=Ambient Blk, **EB**=Equipment Blk, **FB**=Field Blk, **FD**=Field Duplicate Sample, **IDW**=Investigative-Derived Waste, **MIS**=Incremental Sampling Methodology, **N**=Normal Environmental Sample, **TB**=Trip Blk

(3) Preservative added: **HA**=Hydrochloric Acid, **NI**=Nitric Acid, **SH**=Sodium Hydroxide, **SA**=Sulfuric Acid, **ME**=Methanol, **SB**=sodium bisulfate, **ST**=Sodium Thiosulfate, **NO preservative** added leave blank

Rev 5/12

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FA41776: Chain of Custody

Page 1 of 3

SGS ACCUTEST - ORLANDO SAMPLE RECEIPT CONFIRMATION

SGS ACCUTEST'S JOB NUMBER: FA41776 CLIENT: Resolution Cons. PROJECT: NAS Corpus Christi

DATE/TIME RECEIVED: 03/04/17 930 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 8100 1224 9610

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [x] TRIP BLANK NOT PROVIDED
- [x] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM_____ 5-GRAM_____

NUMBER OF 5035 FIELD KITS ? _____

NUMBER OF LAB FILTERED METALS ? _____

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.8
- [ ] OBSERVED TEMPS: 2.8
- [ ] CORRECTED TEMPS: 3.6 (USED FOR LIMS)

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#_____

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

TEST STRIP LOT#s pH 0-3 230315 pH 10-12 219813A OTHER (specify) _____

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE 03/04/17 REVIEWER SIGNATURE/DATE KD 03-04-17

NF 02/16 receipt confirmation 020116.xls

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FA41776: Chain of Custody
Page 2 of 3

FA41776: Chain of Custody
Page 3 of 3

Appendix A Laboratory Data Package Cover Page

This data package is for Job No. FA41776 and laboratory batch no(s): OP64173 consists of

□□□ This signature page, the laboratory review checklist, and the following reportable data:
□□□ R1 Field chain-of-custody documentation;
□□□ R2 Sample identification cross-reference;
□□□ R3 Test reports (analytical data sheets) for each environmental sample that includes:
a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
b) dilution factors,
c) preparation methods,
d) cleanup methods, and
e) if required for the project, tentatively identified compounds (TICs).
□□□ R4 Surrogate recovery data including:
a) Calculated recovery (%R), and
b) The laboratory's surrogate QC limits.
□□□ R5 Test reports/summary forms for blank samples;
□□□ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
a) LCS spiking amounts,
b) Calculated %R for each analyte, and
c) The laboratory's LCS QC limits.
□□□ R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
a) Samples associated with the MS/MSD clearly identified,
b) MS/MSD spiking amounts,
c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
d) Calculated %Rs and relative percent differences (RPDs), and
e) The laboratory's MS/MSD QC limits
□□□ R8 Laboratory analytical duplicate (if applicable) recovery and precision:
a) The amount of analyte measured in the duplicate,
b) The calculated RPD, and
c) The laboratory's QC limits for analytical duplicates.
□□□ R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
□□□ R10 Other problems or anomalies.

The Exception Report for each "No"or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Report. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld.

Check, if applicable: [ ] This laboratory meets an exception under 30 TAC&25.6 and was last inspected by [ ] TCEQ or [X] __FDOH__ in August 2016. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Lovelie Metzgar	Lovelie Metzgar	QA Officer	03/23/2017
Name (Printed)	Signature	Official Title (printed)	Date

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: SGS Accutest – Orlando	LRC Date: 03/23/17
Project Name: PFC GW Investigation, NAS Corpus Christi, TX SWMU4	Laboratory Job Number: FA41776
Reviewer Name: Lovelie Metzgar	Prep Batch Number(s): OP64173

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?		X			2
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soil/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			2
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			2
		Were MS/MSD RPDs within laboratory QC limits?		X			2
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?		X			4
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL minimize the matrix interference affects on the sample results?	X				
		Is the Laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: SGS Accutest – Orlando	LRC Date: 03/23/17
Project Name: PFC GW Investigation, NAS Corpus Christi, TX SWMU4	Laboratory Job Number: FA41776
Reviewer Name: Lovelie Metzgar	Prep Batch Number(s): OP64173

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER #[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning:**					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	**Internal standards (IS):**					
		Were IS area counts and retention times within the method-required QC limits?		X			2
S5	OI	**Raw data (NELAC section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs):**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results:**					
		Were percent recoveries within method QC limits?			X		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports:**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods** (NELAC Chap 5)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs):**					
		Are laboratory SOPs current and on file for each method performed?	X				

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: SGS Accutest – Orlando	LRC Date: 03/23/17
Project Name: PFC GW Investigation, NAS Corpus Christi, TX SWMU4	Laboratory Job Number: FA41776
Reviewer Name: Lovelie Metzgar	Prep Batch Number(s): OP64173

DESCRIPTION	
1	For reporting purposes, the MQL is defined in the report as the RL. The unadjusted MQL/RL is reported in the method blank. The SDL/MDL is defined in the report as the MDL.
2	All anomalies are discussed in the case narrative.
3	The detectability check sample does not support the laboratory's capability to detect the COCs at the MDL The DCS spike level exceeds 2-3x the MDL.
4	For reporting purposes, the method blank represents the unadjusted MDL. The DCS is on file in the laboratory and is not included in the laboratory data package.

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O= organic analyses; I= inorganic analyses (and general chemistry, when applicable);
3. NA = Not Applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)

QC Evaluation: DOD QSM5 Limits

Job Number: FA41776
Account: Resolution Consultants
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4
Collected: 02/27/17 thru 03/02/17

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits

No Exceptions found.

* Sample used for QC is not from job FA41776

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: FA41776
Account: RESCTNM Resolution Consultants
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP64173-MB	Q32349.D	1	03/17/17	NAF	03/15/17	OP64173	SQ853

The QC reported here applies to the following samples: **Method:** EPA 537 MOD

FA41776-1, FA41776-2, FA41776-3, FA41776-4, FA41776-5, FA41776-6, FA41776-7, FA41776-8, FA41776-9, FA41776-10, FA41776-11, FA41776-12

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.015	0.0077	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.015	0.0077	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.015	0.0077	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.015	0.0077	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.015	0.0038	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.015	0.0038	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.015	0.0077	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.015	0.0077	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.015	0.0077	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.015	0.0077	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.015	0.0077	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.015	0.0077	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.015	0.0077	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.015	0.0038	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.015	0.0077	ug/l	
754-91-6	PFOSA	ND	0.015	0.0077	ug/l	

CAS No.	Surrogate Recoveries		Limits
	13C2-PFHxA	106%	61-134%
	13C2-PFDA	97%	62-128%
	d5-EtFOSAA	73%	57-135%

Blank Spike Summary

Job Number: FA41776
Account: RESCTNM Resolution Consultants
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP64173-BS	Q32348.D	1	03/17/17	NAF	03/15/17	OP64173	SQ853

The QC reported here applies to the following samples: **Method:** EPA 537 MOD

FA41776-1, FA41776-2, FA41776-3, FA41776-4, FA41776-5, FA41776-6, FA41776-7, FA41776-8, FA41776-9, FA41776-10, FA41776-11, FA41776-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.154	0.0467	30	20-120
2706-90-3	Perfluoropentanoic acid	0.154	0.184	120	40-131
307-24-4	Perfluorohexanoic acid	0.154	0.176	114	63-146
375-85-9	Perfluoroheptanoic acid	0.154	0.178	116	71-138
335-67-1	Perfluorooctanoic acid	0.154	0.184	120	74-137
375-95-1	Perfluorononanoic acid	0.154	0.176	114	76-140
335-76-2	Perfluorodecanoic acid	0.154	0.178	116	65-148
2058-94-8	Perfluoroundecanoic acid	0.154	0.142	92	57-138
307-55-1	Perfluorododecanoic acid	0.154	0.109	71	58-118
72629-94-8	Perfluorotridecanoic acid	0.154	0.104	68	52-120
376-06-7	Perfluorotetradecanoic acid	0.154	0.111	72	49-122
375-73-5	Perfluorobutanesulfonic acid	0.154	0.185	120	73-148
355-46-4	Perfluorohexanesulfonic acid	0.154	0.197	128	74-142
1763-23-1	Perfluorooctanesulfonic acid	0.154	0.178	116	70-134
335-77-3	Perfluorodecanesulfonic acid	0.154	0.118	77	56-127
754-91-6	PFOSA	0.154	0.0640	42	40-142

CAS No.	Surrogate Recoveries	BSP	Limits
	13C2-PFHxA	106%	61-134%
	13C2-PFDA	106%	62-128%
	d5-EtFOSAA	73%	57-135%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA41776
Account: RESCTNM Resolution Consultants
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP64173-MS	Q32364.D	10	03/17/17	NAF	03/15/17	OP64173	SQ853
OP64173-MSD	Q32365.D	10	03/17/17	NAF	03/15/17	OP64173	SQ853
FA41776-10	Q32392.D	1	03/20/17	NAF	03/15/17	OP64173	SQ854
FA41776-10	Q32363.D	10	03/17/17	NAF	03/15/17	OP64173	SQ853

The QC reported here applies to the following samples: **Method:** EPA 537 MOD

FA41776-1, FA41776-2, FA41776-3, FA41776-4, FA41776-5, FA41776-6, FA41776-7, FA41776-8, FA41776-9, FA41776-10, FA41776-11, FA41776-12

CAS No.	Compound	FA41776-10 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
375-22-4	Perfluorobutanoic acid	0.0129	J	0.154	ND	-8*	0.154	0.0814	45	200*	20-120/30
2706-90-3	Perfluoropentanoic acid	0.0573		0.154	0.204	95	0.154	0.185	83	10	40-131/30
307-24-4	Perfluorohexanoic acid	0.309		0.154	0.461	99	0.154	0.413	68	11	63-146/30
375-85-9	Perfluoroheptanoic acid	0.0494		0.154	0.202	99	0.154	0.182	86	10	71-138/30
335-67-1	Perfluorooctanoic acid	2.10 [b]		0.154	2.45	227* [a]	0.154	2.19	58* [a]	11	74-137/30
375-95-1	Perfluorononanoic acid	0.00951	J	0.154	0.149	91	0.154	0.143	87	4	76-140/30
335-76-2	Perfluorodecanoic acid	0.015 U		0.154	0.137	89	0.154	0.117	76	16	65-148/30
2058-94-8	Perfluoroundecanoic acid	0.015 U		0.154	0.116	75	0.154	0.0980	64	17	57-138/30
307-55-1	Perfluorododecanoic acid	0.015 U		0.154	0.0989	64	0.154	0.0845	55*	16	58-118/30
72629-94-8	Perfluorotridecanoic acid	0.015 U		0.154	0.0906	59	0.154	0.0786	51*	14	52-120/30
376-06-7	Perfluorotetradecanoic acid	0.015 U		0.154	0.0964	63	0.154	0.0784	51	21	49-122/30
375-73-5	Perfluorobutanesulfonic acid	0.0189		0.154	0.185	108	0.154	0.178	103	4	73-148/30
355-46-4	Perfluorohexanesulfonic acid	2.12 [b]		0.154	2.36	156* [a]	0.154	2.15	19* [a]	9	74-142/30
1763-23-1	Perfluorooctanesulfonic acid	0.361		0.154	0.494	86	0.154	0.437	49* [a]	12	70-134/30
335-77-3	Perfluorodecanesulfonic acid	0.015 U		0.154	0.0988	64	0.154	0.0887	58	11	56-127/30
754-91-6	PFOSA	0.015 U		0.154	ND	0*	0.154	ND	0*	nc	40-142/30

CAS No.	Surrogate Recoveries	MS	MSD	FA41776-10	FA41776-10	Limits
	13C2-PFHxA	91%	100%	94%	96%	61-134%
	13C2-PFDA	85%	89%	105%	86%	62-128%
	d5-EtFOSAA	80%	88%	71%	75%	57-135%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Result is from Run #2.

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: FA41776
Account: RESCTNM Resolution Consultants
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4

Check Std:	SQ853-ICC853	**Injection Date:**	03/17/17
Lab File ID:	Q32342.D	**Injection Time:**	16:01
Instrument ID:	GCMSQ	**Method:**	EPA 537 MOD

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	17313	4.31	24316	6.72	59186	6.71	47737	7.27	10098	7.54	28543	10.61
Check Std [b]	16847	4.31	24272	6.72	57728	6.71	46954	7.27	9849	7.54	27705	10.61
Upper Limit [c]	25970	5.31	36474	7.72	88779	7.71	71606	8.27	15147	8.54	42815	11.61
Lower Limit [d]	8657	3.31	12158	5.72	29593	5.71	23869	6.27	5049	6.54	14272	9.61

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	17960	4.31	23847	6.72	61733	6.71	48572	7.26	10387	7.54	28639	10.60
OP64173-BS	18226	4.31	26450	6.72	64740	6.71	51026	7.27	10992	7.54	30913	10.59
OP64173-MB	17395	4.32	23998	6.73	61631	6.72	48553	7.27	10663	7.54	28167	10.61
ZZZZZZ	17040	4.32	23989	6.73	62814	6.72	48099	7.27	10372	7.55	27504	10.61
FA41776-1 [e]	16562	4.32	23623	6.73	60552	6.72	46885	7.27	10442	7.54	26976	10.60
FA41776-2 [e]	16740	4.32	23248	6.73	61852	6.72	46460	7.27	9876	7.55	26628	10.60
FA41776-4	17374	4.32	25673	6.73	68737	6.72	51300	7.27	11233	7.55	29388	10.61
FA41776-7	17524	4.32	24914	6.73	65724	6.72	49188	7.29	10976	7.55	27483	10.63
FA41776-9	18001	4.33	26415	6.75	69928	6.74	52147	7.29	11513	7.55	29533	10.65
FA41776-11	16295	4.33	24644	6.75	64670	6.74	48587	7.29	10993	7.55	28126	10.63

IS 1 = 13C3-PFPeA
IS 2 = 13C2-6:2FTS
IS 3 = 13C2-PFOA
IS 4 = 13C4-PFOS
IS 5 = d3-MeFOSAA
IS 6 = 13C2-PFDoDA

(a) Initial Cal is: SQ853-ICC853 Q32342.D 03/17/17 16:01. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to +50% of initial cal area.
(c) Upper Limit = +50% of initial standard area; Retention time +1 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -1 minutes of check standard.
(e) Sample extracted beyond hold time; reported results are considered minimum values.

Semivolatile Internal Standard Area Summary

Job Number: FA41776
Account: RESCTNM Resolution Consultants
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4

Check Std:	SQ853-CC853	**Injection Date:**	03/17/17
Lab File ID:	Q32357.D	**Injection Time:**	21:01
Instrument ID:	GCMSQ	**Method:**	EPA 537 MOD

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	17313	4.31	24316	6.72	59186	6.71	47737	7.27	10098	7.54	28543	10.61
Check Std [b]	16930	4.33	24868	6.75	60273	6.74	46290	7.29	10415	7.55	27242	10.66
Upper Limit [c]	25970	5.33	36474	7.75	88779	7.74	71606	8.29	15147	8.55	42815	11.66
Lower Limit [d]	8657	3.33	12158	5.75	29593	5.74	23869	6.29	5049	6.55	14272	9.66

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
FA41776-8	15424	4.33	24892	6.75	62371	6.74	48824	7.29	10823	7.55	27839	10.66
FA41776-10	16826	4.33	26012	6.75	67567	6.74	52464	7.29	11106	7.55	29109	10.66
OP64173-MS	16947	4.33	26334	6.75	66506	6.74	52448	7.29	11346	7.55	28989	10.65
OP64173-MSD	16970	4.33	26360	6.75	66844	6.74	52196	7.29	10977	7.55	29118	10.65
SQ853-ECC853	15922	4.33	26407	6.75	62618	6.74	50404	7.29	11072	7.55	27972	10.65

IS 1 = 13C3-PFPeA
IS 2 = 13C2-6:2FTS
IS 3 = 13C2-PFOA
IS 4 = 13C4-PFOS
IS 5 = d3-MeFOSAA
IS 6 = 13C2-PFDoDA

(a) Initial Cal is: SQ853-ICC853 Q32342.D 03/17/17 16:01. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to +50% of initial cal area.
(c) Upper Limit = +50% of initial standard area; Retention time +1 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -1 minutes of check standard.

Semivolatile Internal Standard Area Summary

Job Number: FA41776
Account: RESCTNM Resolution Consultants
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4

Check Std:	SQ854-ICC854	**Injection Date:**	03/20/17
Lab File ID:	Q32381.D	**Injection Time:**	13:09
Instrument ID:	GCMSQ	**Method:**	EPA 537 MOD

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	13722	4.35	16921	6.76	49938	6.75	43581	7.30	7632	7.55	18907	10.36
Check Std [b]	13629	4.35	16946	6.76	50391	6.75	43873	7.30	7624	7.55	19162	10.36
Upper Limit [c]	20583	5.35	25382	7.76	74907	7.75	65372	8.30	11448	8.55	28361	11.36
Lower Limit [d]	6861	3.35	8461	5.76	24969	5.75	21791	6.30	3816	6.55	9454	9.36

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
FA41776-8	8948	4.30	17526	6.73	48235	6.72	44967	7.28	8336	7.54	18415	10.31
FA41776-10	10773	4.31	15814	6.73	46692	6.72	42942	7.28	8284	7.54	18705	10.31

IS 1 = 13C3-PFPeA
IS 2 = 13C2-6:2FTS
IS 3 = 13C2-PFOA
IS 4 = 13C4-PFOS
IS 5 = d3-MeFOSAA
IS 6 = 13C2-PFDoDA

(a) Initial Cal is: SQ854-ICC854 Q32381.D 03/20/17 13:09. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to +50% of initial cal area.
(c) Upper Limit = +50% of initial standard area; Retention time +1 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -1 minutes of check standard.

Semivolatile Internal Standard Area Summary

Job Number: FA41776
Account: RESCTNM Resolution Consultants
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4

Check Std:	SQ855-ICC855	**Injection Date:**	03/21/17
Lab File ID:	Q32423.D	**Injection Time:**	12:21
Instrument ID:	GCMSQ	**Method:**	EPA 537 MOD

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	14566	4.33	25991	6.76	66749	6.75	51147	7.31	11353	7.55	28587	10.83
Check Std [b]	13971	4.33	24642	6.76	62832	6.75	48557	7.31	10925	7.55	27117	10.83
Upper Limit [c]	21849	5.33	38987	7.76	100124	7.75	76721	8.31	17030	8.55	42881	11.83
Lower Limit [d]	7283	3.33	12996	5.76	33375	5.75	25574	6.31	5677	6.55	14294	9.83

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
FA41776-3	10890	4.31	23713	6.75	57305	6.74	44953	7.30	10614	7.54	25026	10.76
FA41776-5	8414	4.30	23024	6.73	47674	6.72	39476	7.29	10370	7.54	24526	10.76
FA41776-6	7315	4.28	22101	6.73	44309	6.72	37995	7.29	10436	7.54	23114	10.74
FA41776-12 [e]	8496	4.28	27195	6.72	54653	6.71	44936	7.26	11330	7.52	24966	10.68

IS 1 = 13C3-PFPeA
IS 2 = 13C2-6:2FTS
IS 3 = 13C2-PFOA
IS 4 = 13C4-PFOS
IS 5 = d3-MeFOSAA
IS 6 = 13C2-PFDoDA

(a) Initial Cal is: SQ855-ICC855 Q32423.D 03/21/17 12:21. Area is AVERAGE of initial cal points.
(b) Check Std Limit = -50 to +50% of initial cal area.
(c) Upper Limit = +50% of initial standard area; Retention time +1 minutes of check standard.
(d) Lower Limit = -50% of initial standard area; Retention time -1 minutes of check standard.
(e) Dilution required due to matrix interference (internal standard failure).

Semivolatile Surrogate Recovery Summary

Job Number: FA41776
Account: RESCTNM Resolution Consultants
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4

Method: EPA 537 MOD **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
FA41776-1	Q32351.D	99	97	80
FA41776-2	Q32352.D	105	103	89
FA41776-3	Q32428.D	96	104	75
FA41776-4	Q32353.D	103	98	90
FA41776-5	Q32429.D	87	113	77
FA41776-6	Q32430.D	77	110	82
FA41776-7	Q32354.D	104	93	77
FA41776-8	Q32391.D	85	86	68
FA41776-8	Q32362.D	94	73	79
FA41776-9	Q32355.D	100	86	78
FA41776-10	Q32392.D	94	105	71
FA41776-10	Q32363.D	96	86	75
FA41776-11	Q32356.D	102	95	80
FA41776-12	Q32432.D	0* [a]	0* [a]	0* [a]
OP64173-BS	Q32348.D	106	106	73
OP64173-MB	Q32349.D	106	97	73
OP64173-MS	Q32364.D	91	85	80
OP64173-MSD	Q32365.D	100	89	88

Surrogate Compounds	Recovery Limits
S1 = 13C2-PFHxA	61-134%
S2 = 13C2-PFDA	62-128%
S3 = d5-EtFOSAA	57-135%

(a) Outside control limits due to dilution.

Initial Calibration Summary

Job Number: FA41776 **Sample:** SQ853-ICC853
Account: RESCTNM Resolution Consultants **Lab FileID:** Q32342.D
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4

Initial Calibration ReSponse Factors - D:\MassHunter\Data\0317_LIST_SQ853\SQ853.batch.bin

Level ID : Calibration File
1 : D:\MassHunter\Data\0317_LIST_SQ853\Q32338.d
2 : D:\MassHunter\Data\0317_LIST_SQ853\Q32339.d
3 : D:\MassHunter\Data\0317_LIST_SQ853\Q32340.d
4 : D:\MassHunter\Data\0317_LIST_SQ853\Q32341.d
5 : D:\MassHunter\Data\0317_LIST_SQ853\Q32342.d
6 : D:\MassHunter\Data\0317_LIST_SQ853\Q32343.d
7 : D:\MassHunter\Data\0317_LIST_SQ853\Q32344.d

Compound	1	2	3	4	5	6	7	AvgRF	%RSD	r^2
1) 13C2-6:2FTS	----------ISTD----------									
7) 6:2FTS	1.0177	1.0576	1.0165	1.0207	1.0121	0.9735	0.9441	1.0060	3.642	1.0000
8) 8:2FTS	1.0812	1.0700	1.0048	1.0139	1.0358	0.9692	0.9515	1.0180	4.747	0.9986
31) 4:2FTS	0.9729	0.9171	0.9078	0.9111	0.9002	0.8825	0.8628	0.9078	3.776	0.9995
3) 13C2-PFDoDA	----------ISTD----------									
17) PFDoDA	0.9352	0.9529	0.9500	0.9359	1.0017	0.9619	0.9598	0.9568	2.344	0.9997
27) PFTeDA	0.4987	0.5147	0.5019	0.4964	0.5225	0.4977	0.5084	0.5057	1.947	0.9996
28) PFTrDA	0.8246	0.8094	0.8439	0.8163	0.8718	0.8454	0.8334	0.8350	2.519	0.9996
29) PFUnDA	1.0146	1.0736	1.0330	1.0149	1.0695	1.0215	1.0218	1.0356	2.448	0.9996
5) 13C2-PFOA	----------ISTD----------									
2) 13C2-PFDA	0.9236	0.9719	0.9384	0.9490	0.9962	0.9670	0.9703	0.9595	2.523	0.9998
4) 13C2-PFHxA	0.6813	0.6663	0.6788	0.6595	0.6622	0.6731	0.6431	0.6663	1.968	0.9991
16) PFDA	0.8671	0.8481	0.8056	0.7974	0.8572	0.8144	0.8090	0.8284	3.402	0.9994
19) PFHpA	0.6052	0.6036	0.5784	0.5761	0.6155	0.5906	0.5968	0.5952	2.428	0.9997
21) PFHxA	0.6000	0.6045	0.5563	0.5839	0.5837	0.5684	0.5623	0.5799	3.175	0.9997
23) PFNA	0.6302	0.6226	0.6172	0.5809	0.6352	0.5958	0.5967	0.6112	3.319	0.9993
24) PFOA	0.9762	0.9729	0.9638	0.9347	1.0334	0.9623	0.9716	0.9736	3.059	0.9992
6) 13C4-PFOS	----------ISTD----------									
15) PFBS	0.3225	0.3263	0.3320	0.3405	0.3547	0.3430	0.3408	0.3371	3.256	0.9997
18) PFDS	0.4472	0.4408	0.4410	0.4534	0.4682	0.4617	0.4645	0.4538	2.482	0.9999
20) PFHpS	0.5555	0.5561	0.5296	0.5399	0.5601	0.5689	0.5756	0.5551	2.866	0.9997
22) PFHxS	0.4599	0.4498	0.4530	0.4560	0.4732	0.4765	0.4567	0.4607	2.212	0.9991
25) PFOS	1.1398	1.0979	1.0800	1.0633	1.1490	1.0041	1.1127	1.0924	4.529	0.9948
32) PFNS	0.2919	0.2881	0.2748	0.2790	0.2939	0.2747	0.2784	0.2830	2.878	0.9993
33) PFPeS	0.1212	0.1195	0.1173	0.1117	0.1169	0.1140	0.1129	0.1162	3.009	0.9998
9) d3-MeFOSAA	----------ISTD----------									
10) d5-EtFOSAA	0.8710	0.7417	0.6913	0.7235	0.7418	0.7370	0.7518	0.7511	7.510	0.9997
11) EtFOSAA	-----	0.8678	0.7695	0.7198	0.7668	0.7293	0.7253	0.7631	7.289	0.9993
12) FOSA	5.8217	5.5223	5.7453	5.6020	6.0408	5.4177	5.5491	5.6713	3.747	0.9982
13) MeFOSAA	-----	0.7604	0.7996	0.7920	0.8074	0.7730	0.8759	0.8014	5.043	0.9923
30) 13C3-PFPeA	----------ISTD----------									
14) PFBA	1.1258	1.0651	0.9790	0.9904	1.0490	0.9896	1.0482	1.0353	5.096	0.9985
26) PFPeA	0.7004	0.6315	0.6351	0.6376	0.6710	0.6398	0.6567	0.6532	3.841	0.9995

*(value) - Average RF below (value)

Initial Calibration Verification

Job Number: FA41776 **Sample:** SQ853-ICV853
Account: RESCTNM Resolution Consultants **Lab FileID:** Q32346.D
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4

Continuing Calibration Report

Batch: D:\MassHunter\Data\0317_LIST_SQ853\SQ853.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\0317_LIST_SQ853\Q32338.d
2:D:\MassHunter\Data\0317_LIST_SQ853\Q32339.d
3:D:\MassHunter\Data\0317_LIST_SQ853\Q32340.d
4:D:\MassHunter\Data\0317_LIST_SQ853\Q32341.d
5:D:\MassHunter\Data\0317_LIST_SQ853\Q32342.d
6:D:\MassHunter\Data\0317_LIST_SQ853\Q32343.d
7:D:\MassHunter\Data\0317_LIST_SQ853\Q32344.d

Data File: Q32346
Type : QC
Level : 5

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-6:2FTS	---	--ISTD--		
13C2-PFDA	20.000	0.000	0.0	0.0
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	0.000	0.0	0.0
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
6:2FTS	20.000	20.907	4.5	104.5
8:2FTS	20.000	22.161	10.8	110.8
d3-MeFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	0.000	0.0	0.0
EtFOSAA	20.000	20.632	3.2	103.2
FOSA	20.000	21.051	5.3	105.3
MeFOSAA	20.000	20.412	2.1	102.1
PFBA	20.000	19.507	-2.5	97.5
PFBS	20.000	19.181	-4.1	95.9
PFDA	20.000	20.173	0.9	100.9
PFDoDA	20.000	19.872	-0.6	99.4
PFDS	20.000	19.786	-1.1	98.9
PFHpA	20.000	19.732	-1.3	98.7
PFHpS	20.000	19.580	-2.1	97.9
PFHxA	20.000	19.841	-0.8	99.2
PFHxS	20.000	21.329	6.6	106.6
PFNA	20.000	19.388	-3.1	96.9
PFOA	20.000	19.743	-1.3	98.7
PFOS	20.000	20.261	1.3	101.3
PFPeA	20.000	20.341	1.7	101.7
PFTeDA	20.000	20.099	0.5	100.5
PFTrDA	20.000	19.675	-1.6	98.4
PFUnDA	20.000	20.027	0.1	100.1
13C3-PFPeA	---	--ISTD--		
4:2FTS	20.000	20.285	1.4	101.4
PFNS	20.000	19.499	-2.5	97.5
PFPeS	20.000	19.048	-4.8	95.2

CC Criteria: +/- 20%

Continuing Calibration Summary

Job Number: FA41776 **Sample:** SQ853-CC853
Account: RESCTNM Resolution Consultants **Lab FileID:** Q32357.D
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4

Continuing Calibration Report

Batch: D:\MassHunter\Data\0317_LIST_SQ853\SQ853.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\0317_LIST_SQ853\Q32338.d
2:D:\MassHunter\Data\0317_LIST_SQ853\Q32339.d
3:D:\MassHunter\Data\0317_LIST_SQ853\Q32340.d
4:D:\MassHunter\Data\0317_LIST_SQ853\Q32341.d
5:D:\MassHunter\Data\0317_LIST_SQ853\Q32342.d
6:D:\MassHunter\Data\0317_LIST_SQ853\Q32343.d
7:D:\MassHunter\Data\0317_LIST_SQ853\Q32344.d

Data File: Q32357
Type : QC
Level : 5

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-6:2FTS	---	--ISTD--		
13C2-PFDA	20.000	20.728	3.6	103.6
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	19.855	-0.7	99.3
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
6:2FTS	20.000	20.232	1.2	101.2
8:2FTS	20.000	21.068	5.3	105.3
d3-MeFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	22.011	10.1	110.1
EtFOSAA	20.000	19.624	-1.9	98.1
FOSA	20.000	19.936	-0.3	99.7
MeFOSAA	20.000	19.715	-1.4	98.6
PFBA	20.000	20.063	0.3	100.3
PFBS	20.000	21.810	9.0	109.0
PFDA	20.000	19.776	-1.1	98.9
PFDoDA	20.000	20.513	2.6	102.6
PFDS	20.000	21.076	5.4	105.4
PFHpA	20.000	20.365	1.8	101.8
PFHpS	20.000	21.658	8.3	108.3
PFHxA	20.000	19.772	-1.1	98.9
PFHxS	20.000	22.723	13.6	113.6
PFNA	20.000	20.126	0.6	100.6
PFOA	20.000	21.188	5.9	105.9
PFOS	20.000	21.668	8.3	108.3
PFPeA	20.000	20.087	0.4	100.4
PFTeDA	20.000	19.573	-2.1	97.9
PFTrDA	20.000	20.363	1.8	101.8
PFUnDA	20.000	20.237	1.2	101.2
13C3-PFPeA	---	--ISTD--		
4:2FTS	20.000	22.166	10.8	110.8
PFNS	20.000	20.935	4.7	104.7
PFPeS	20.000	19.902	-0.5	99.5

CC Criteria: +/- 20%

Continuing Calibration Summary

Job Number: FA41776 **Sample:** SQ853-ECC853
Account: RESCTNM Resolution Consultants **Lab FileID:** Q32367.D
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4

Continuing Calibration Report

Batch: D:\MassHunter\Data\0317_LIST_SQ853\SQ853.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\0317_LIST_SQ853\Q32338.d
2:D:\MassHunter\Data\0317_LIST_SQ853\Q32339.d
3:D:\MassHunter\Data\0317_LIST_SQ853\Q32340.d
4:D:\MassHunter\Data\0317_LIST_SQ853\Q32341.d
5:D:\MassHunter\Data\0317_LIST_SQ853\Q32342.d
6:D:\MassHunter\Data\0317_LIST_SQ853\Q32343.d
7:D:\MassHunter\Data\0317_LIST_SQ853\Q32344.d

Data File: Q32367
Type : QC
Level : 5

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-6:2FTS	---	--ISTD--		
13C2-PFDA	20.000	20.612	3.1	103.1
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	19.660	-1.7	98.3
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
6:2FTS	20.000	20.618	3.1	103.1
8:2FTS	20.000	21.368	6.8	106.8
d3-MeFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	20.172	0.9	100.9
EtFOSAA	20.000	18.656	-6.7	93.3
FOSA	20.000	19.716	-1.4	98.6
MeFOSAA	20.000	19.654	-1.7	98.3
PFBA	20.000	20.865	4.3	104.3
PFBS	20.000	20.960	4.8	104.8
PFDA	20.000	19.293	-3.5	96.5
PFDoDA	20.000	21.174	5.9	105.9
PFDS	20.000	21.008	5.0	105.0
PFHpA	20.000	20.856	4.3	104.3
PFHpS	20.000	21.125	5.6	105.6
PFHxA	20.000	19.578	-2.1	97.9
PFHxS	20.000	22.137	10.7	110.7
PFNA	20.000	19.311	-3.4	96.6
PFOA	20.000	20.945	4.7	104.7
PFOS	20.000	21.143	5.7	105.7
PFPeA	20.000	19.371	-3.1	96.9
PFTeDA	20.000	21.226	6.1	106.1
PFTrDA	20.000	20.634	3.2	103.2
PFUnDA	20.000	20.903	4.5	104.5
13C3-PFPeA	---	--ISTD--		
4:2FTS	20.000	21.778	8.9	108.9
PFNS	20.000	19.644	-1.8	98.2
PFPeS	20.000	18.835	-5.8	94.2

CC Criteria: +/- 20%

Initial Calibration Summary

Job Number: FA41776 **Sample:** SQ854-ICC854
Account: RESCTNM Resolution Consultants **Lab FileID:** Q32381.D
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4

Initial Calibration ReSponse Factors - D:\MassHunter\Data\0320_LIST_SQ854\SQ854.batch.bin

Level ID	Calibration File
1	D:\MassHunter\Data\0320_LIST_SQ854\Q32377.d
2	D:\MassHunter\Data\0320_LIST_SQ854\Q32378.d
3	D:\MassHunter\Data\0320_LIST_SQ854\Q32379.d
4	D:\MassHunter\Data\0320_LIST_SQ854\Q32380.d
5	D:\MassHunter\Data\0320_LIST_SQ854\Q32381.d
6	D:\MassHunter\Data\0320_LIST_SQ854\Q32382.d
7	D:\MassHunter\Data\0320_LIST_SQ854\Q32383.d

Compound	1	2	3	4	5	6	7	AvgRF	%RSD	r^2
1) 13C2-6:2FTS	----------ISTD----------									
7) 6:2FTS	1.1897	1.0309	0.9771	0.9858	0.9786	0.9284	0.9515	1.0060	8.640	0.9994
8) 8:2FTS	0.9181	0.8157	0.7820	0.7927	0.7747	0.7594	0.7825	0.8036	6.640	0.9996
31) 4:2FTS	1.1335	1.0994	1.1023	1.0748	1.0509	1.0208	1.0648	1.0781	3.453	0.9992
3) 13C2-PFDoDA	----------ISTD----------									
17) PFDoDA	1.0196	0.9713	0.9410	0.9427	0.9176	0.9384	0.9598	0.9558	3.438	0.9996
27) PFTeDA	0.4850	0.5082	0.5086	0.5081	0.4932	0.5089	0.5127	0.5035	2.036	0.9998
28) PFTrDA	0.8376	0.8564	0.8452	0.8599	0.8145	0.8297	0.8548	0.8426	1.954	0.9994
29) PFUnDA	1.1522	0.9911	0.9942	1.0133	0.9190	0.9926	1.0304	1.0132	6.950	0.9980
5) 13C2-PFOA	----------ISTD----------									
2) 13C2-PFDA	0.9089	0.8060	0.7827	0.8251	0.7868	0.8053	0.8353	0.8215	5.226	0.9991
4) 13C2-PFHxA	0.7838	0.7015	0.6653	0.7125	0.6544	0.7032	0.6865	0.7010	6.009	0.9992
16) PFDA	0.6478	0.6061	0.5611	0.5885	0.5604	0.5739	0.5962	0.5905	5.177	0.9990
19) PFHpA	0.6595	0.6377	0.5945	0.6125	0.5767	0.6088	0.6407	0.6186	4.667	0.9978
21) PFHxA	0.6427	0.5804	0.5402	0.5717	0.5464	0.5778	0.5654	0.5749	5.835	0.9995
23) PFNA	0.5556	0.5304	0.4909	0.5011	0.4772	0.4972	0.5083	0.5087	5.184	0.9993
24) PFOA	1.0620	0.9825	0.9382	0.9634	0.9381	0.9711	0.9933	0.9784	4.326	0.9994
6) 13C4-PFOS	----------ISTD----------									
15) PFBS	0.3748	0.3354	0.3377	0.3228	0.3296	0.3351	0.3431	0.3398	4.914	0.9995
18) PFDS	0.4784	0.4629	0.4505	0.4577	0.4476	0.4626	0.4760	0.4622	2.534	0.9992
20) PFHpS	0.6000	0.5524	0.5420	0.5398	0.5531	0.5494	0.5730	0.5585	3.799	0.9991
22) PFHxS	0.5280	0.4820	0.4737	0.4655	0.4526	0.4625	0.4806	0.4778	5.115	0.9991
25) PFOS	1.1968	1.1318	1.0590	1.0661	1.0506	1.0946	1.0883	1.0982	4.673	0.9997
32) PFNS	0.2942	0.2532	0.2618	0.2584	0.2392	0.2488	0.2542	0.2585	6.700	0.9993
33) PFPeS	0.1203	0.1029	0.1025	0.0983	0.0961	0.0979	0.1008	0.1027	7.934	0.9994
9) d3-MeFOSAA	----------ISTD----------									
10) d5-EtFOSAA	0.9255	0.9462	0.7695	0.7851	0.7846	0.8116	0.8838	0.8438	8.690	0.9956
11) EtFOSAA	-----	0.9298	0.7870	0.7307	0.7415	0.7521	0.8056	0.7911	9.303	0.9969
12) FOSA	6.1312	5.9823	5.5410	5.8442	5.7033	5.7377	5.8915	5.8330	3.327	0.9996
13) MeFOSAA	1.0455	0.8815	0.8185	0.8427	0.8456	0.8610	0.8923	0.8839	8.536	0.9991
30) 13C3-PFPeA	----------ISTD----------									
14) PFBA	0.9900	0.8662	0.7601	0.7869	0.7518	0.7674	0.7942	0.8167	10.455	0.9992
26) PFPeA	0.6731	0.5877	0.5451	0.5914	0.5642	0.5819	0.6083	0.5931	6.862	0.9986

*(value) - Average RF below (value)

Initial Calibration Verification

Job Number: FA41776 **Sample:** SQ854-ICV854
Account: RESCTNM Resolution Consultants **Lab FileID:** Q32387.D
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4

Continuing Calibration Report

Batch: D:\MassHunter\Data\0320_LIST_SQ854\SQ854.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\0320_LIST_SQ854\Q32377.d
2:D:\MassHunter\Data\0320_LIST_SQ854\Q32378.d
3:D:\MassHunter\Data\0320_LIST_SQ854\Q32379.d
4:D:\MassHunter\Data\0320_LIST_SQ854\Q32380.d
5:D:\MassHunter\Data\0320_LIST_SQ854\Q32381.d
6:D:\MassHunter\Data\0320_LIST_SQ854\Q32382.d
7:D:\MassHunter\Data\0320_LIST_SQ854\Q32383.d

Data File: Q32387
Type : QC
Level : 5

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-6:2FTS	---	--ISTD--		
13C2-PFDA	20.000	0.000	0.0	0.0
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	0.000	0.0	0.0
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
6:2FTS	20.000	21.791	9.0	109.0
8:2FTS	20.000	23.005	15.0	115.0
d3-MeFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	0.000	0.0	0.0
EtFOSAA	20.000	18.808	-6.0	94.0
FOSA	20.000	20.797	4.0	104.0
MeFOSAA	20.000	18.632	-6.8	93.2
PFBA	20.000	20.823	4.1	104.1
PFBS	20.000	20.232	1.2	101.2
PFDA	20.000	20.791	4.0	104.0
PFDoDA	20.000	20.606	3.0	103.0
PFDS	20.000	20.426	2.1	102.1
PFHpA	20.000	19.830	-0.9	99.1
PFHpS	20.000	20.313	1.6	101.6
PFHxA	20.000	20.425	2.1	102.1
PFHxS	20.000	22.441	12.2	112.2
PFNA	20.000	20.522	2.6	102.6
PFOA	20.000	20.573	2.9	102.9
PFOS	20.000	20.932	4.7	104.7
PFPeA	20.000	20.471	2.4	102.4
PFTeDA	20.000	20.880	4.4	104.4
PFTrDA	20.000	20.773	3.9	103.9
PFUnDA	20.000	21.501	7.5	107.5
13C3-PFPeA	---	--ISTD--		
4:2FTS	20.000	20.967	4.8	104.8
PFNS	20.000	19.997	0.0	100.0
PFPeS	20.000	19.167	-4.2	95.8

CC Criteria: +/- 20%

Continuing Calibration Summary

Job Number: FA41776 **Sample:** SQ854-CC854
Account: RESCTNM Resolution Consultants **Lab FileID:** Q32395.D
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4

Continuing Calibration Report

Batch: D:\MassHunter\Data\0320_LIST_SQ854\SQ854.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\0320_LIST_SQ854\Q32377.d
2:D:\MassHunter\Data\0320_LIST_SQ854\Q32378.d
3:D:\MassHunter\Data\0320_LIST_SQ854\Q32379.d
4:D:\MassHunter\Data\0320_LIST_SQ854\Q32380.d
5:D:\MassHunter\Data\0320_LIST_SQ854\Q32381.d
6:D:\MassHunter\Data\0320_LIST_SQ854\Q32382.d
7:D:\MassHunter\Data\0320_LIST_SQ854\Q32383.d

Data File: Q32395
Type : QC
Level : 5

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-6:2FTS	---	--ISTD--		
13C2-PFDA	20.000	19.395	-3.0	97.0
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	17.541	-12.3	87.7
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
6:2FTS	20.000	19.995	0.0	100.0
8:2FTS	20.000	20.340	1.7	101.7
d3-MeFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	18.509	-7.5	92.5
EtFOSAA	20.000	17.880	-10.6	89.4
FOSA	20.000	20.267	1.3	101.3
MeFOSAA	20.000	18.753	-6.2	93.8
PFBA	20.000	18.362	-8.2	91.8
PFBS	20.000	18.860	-5.7	94.3
PFDA	20.000	19.504	-2.5	97.5
PFDoDA	20.000	19.493	-2.5	97.5
PFDS	20.000	18.403	-8.0	92.0
PFHpA	20.000	18.800	-6.0	94.0
PFHpS	20.000	19.657	-1.7	98.3
PFHxA	20.000	18.382	-8.1	91.9
PFHxS	20.000	19.930	-0.4	99.6
PFNA	20.000	19.287	-3.6	96.4
PFOA	20.000	19.154	-4.2	95.8
PFOS	20.000	19.243	-3.8	96.2
PFPeA	20.000	19.580	-2.1	97.9
PFTeDA	20.000	20.180	0.9	100.9
PFTrDA	20.000	19.350	-3.3	96.7
PFUnDA	20.000	19.710	-1.4	98.6
13C3-PFPeA	---	--ISTD--		
4:2FTS	20.000	19.623	-1.9	98.1
PFNS	20.000	18.355	-8.2	91.8
PFPeS	20.000	17.976	-10.1	89.9

CC Criteria: +/- 20%

Initial Calibration Summary

Job Number: FA41776 **Sample:** SQ855-ICC855
Account: RESCTNM Resolution Consultants **Lab FileID:** Q32423.D
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4

Initial Calibration ReSponse Factors - D:\MassHunter\Data\0321_LIST_SQ855\SQ855.batch.bin

Level ID : Calibration File
1 : D:\MassHunter\Data\0321_LIST_SQ855\Q32419.d
2 : D:\MassHunter\Data\0321_LIST_SQ855\Q32420.d
3 : D:\MassHunter\Data\0321_LIST_SQ855\Q32421.d
4 : D:\MassHunter\Data\0321_LIST_SQ855\Q32422.d
5 : D:\MassHunter\Data\0321_LIST_SQ855\Q32423.d
6 : D:\MassHunter\Data\0321_LIST_SQ855\Q32424.d
7 : D:\MassHunter\Data\0321_LIST_SQ855\Q32425.d

Compound	1	2	3	4	5	6	7	AvgRF	%RSD	r^2
1) 13C2-6:2FTS	----------ISTD----------									
7) 6:2FTS	1.1061	1.0576	0.9738	0.9941	0.9191	0.9231	0.9190	0.9847	7.493	0.9996
8) 8:2FTS	1.0019	1.0413	0.9565	0.9640	0.9374	0.9045	0.9292	0.9621	4.820	0.9995
31) 4:2FTS	1.1736	1.0778	0.9667	0.9844	0.9430	0.9456	0.9547	1.0066	8.653	0.9998
3) 13C2-PFDoDA	----------ISTD----------									
17) PFDoDA	1.0128	0.9624	0.9198	0.9403	0.9022	0.9328	0.9522	0.9461	3.758	0.9995
27) PFTeDA	0.5202	0.5069	0.4918	0.5044	0.4754	0.5072	0.5125	0.5026	2.935	0.9992
28) PFTrDA	0.9186	0.8790	0.8320	0.8544	0.7901	0.8343	0.8506	0.8513	4.725	0.9992
29) PFUnDA	1.1340	1.0592	1.0626	1.0522	1.0334	1.0796	1.1159	1.0767	3.350	0.9989
5) 13C2-PFOA	----------ISTD----------									
2) 13C2-PFDA	0.9381	0.9613	0.9135	0.9194	0.9025	0.9079	0.9580	0.9287	2.582	0.9985
4) 13C2-PFHxA	0.6939	0.6392	0.5927	0.6015	0.6054	0.5908	0.6182	0.6202	5.880	0.9991
16) PFDA	0.7104	0.6966	0.6468	0.6498	0.6409	0.6452	0.6818	0.6674	4.255	0.9984
19) PFHpA	0.6103	0.6098	0.5692	0.5654	0.5754	0.5654	0.5843	0.5828	3.383	0.9995
21) PFHxA	0.5762	0.5158	0.4735	0.4855	0.4884	0.4790	0.5222	0.5058	7.127	0.9967
23) PFNA	0.5541	0.5157	0.5036	0.5159	0.5030	0.5219	0.5483	0.5232	3.893	0.9982
24) PFOA	1.0392	0.9216	0.9000	0.9488	0.8883	0.9724	0.9961	0.9523	5.698	0.9981
6) 13C4-PFOS	----------ISTD----------									
15) PFBS	0.3539	0.3364	0.3080	0.3003	0.2998	0.3141	0.3156	0.3183	6.279	0.9995
18) PFDS	0.4694	0.4876	0.4654	0.4692	0.4646	0.4688	0.4996	0.4750	2.806	0.9979
20) PFHpS	0.5936	0.4379	0.5558	0.5488	0.5349	0.5563	0.5725	0.5428	9.188	0.9991
22) PFHxS	0.5307	0.4850	0.4579	0.4634	0.4520	0.4499	0.4579	0.4710	6.111	0.9998
25) PFOS	1.2346	1.1397	1.0627	1.0469	1.0094	1.0524	1.0891	1.0907	6.891	0.9989
32) PFNS	0.2733	0.2703	0.2506	0.2432	0.2431	0.2399	0.2507	0.2530	5.321	0.9991
33) PFPeS	0.1110	0.0993	0.0894	0.0858	0.0881	0.0924	0.0934	0.0942	9.100	0.9992
9) d3-MeFOSAA	----------ISTD----------									
10) d5-EtFOSAA	0.7639	0.7972	0.7390	0.7575	0.7843	0.7897	0.8006	0.7760	2.959	0.9997
11) EtFOSAA	0.8794	0.7645	0.6660	0.8120	0.6897	0.7120	0.7554	0.7541	9.810	0.9972
12) FOSA	6.3957	5.6684	5.9131	5.7719	5.3042	5.5520	5.5703	5.7394	6.036	0.9995
13) MeFOSAA	0.9917	0.8128	0.8281	0.8298	0.7869	0.8238	0.8849	0.8511	8.058	0.9967
30) 13C3-PFPeA	----------ISTD----------									
14) PFBA	0.7927	0.7736	0.6889	0.7180	0.6586	0.6852	0.7000	0.7167	6.844	0.9993
26) PFPeA	0.6277	0.6139	0.5450	0.5742	0.5566	0.5721	0.6134	0.5861	5.456	0.9971

*(value) - Average RF below (value)

Initial Calibration Verification

Job Number: FA41776 **Sample:** SQ855-ICV855
Account: RESCTNM Resolution Consultants **Lab FileID:** Q32427.D
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4

Continuing Calibration Report

Batch: D:\MassHunter\Data\0321_LIST_SQ855\SQ855.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\0321_LIST_SQ855\Q32419.d
2:D:\MassHunter\Data\0321_LIST_SQ855\Q32420.d
3:D:\MassHunter\Data\0321_LIST_SQ855\Q32421.d
4:D:\MassHunter\Data\0321_LIST_SQ855\Q32422.d
5:D:\MassHunter\Data\0321_LIST_SQ855\Q32423.d
6:D:\MassHunter\Data\0321_LIST_SQ855\Q32424.d
7:D:\MassHunter\Data\0321_LIST_SQ855\Q32425.d

Data File: Q32427
Type : QC
Level : 5

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-6:2FTS	---	--ISTD--		
13C2-PFDA	20.000	0.000	0.0	0.0
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	0.000	0.0	0.0
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
6:2FTS	20.000	22.771	13.9	113.9
8:2FTS	20.000	23.004	15.0	115.0
d3-MeFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	0.000	0.0	0.0
EtFOSAA	20.000	22.694	13.5	113.5
FOSA	20.000	22.608	13.0	113.0
MeFOSAA	20.000	21.663	8.3	108.3
PFBA	20.000	21.260	6.3	106.3
PFBS	20.000	19.436	-2.8	97.2
PFDA	20.000	20.215	1.1	101.1
PFDoDA	20.000	20.161	0.8	100.8
PFDS	20.000	20.262	1.3	101.3
PFHpA	20.000	19.982	-0.1	99.9
PFHpS	20.000	20.979	4.9	104.9
PFHxA	20.000	19.497	-2.5	97.5
PFHxS	20.000	22.177	10.9	110.9
PFNA	20.000	20.305	1.5	101.5
PFOA	20.000	19.024	-4.9	95.1
PFOS	20.000	20.593	3.0	103.0
PFPeA	20.000	20.149	0.7	100.7
PFTeDA	20.000	16.880	-15.6	84.4
PFTrDA	20.000	19.828	-0.9	99.1
PFUnDA	20.000	21.636	8.2	108.2
13C3-PFPeA	---	--ISTD--		
4:2FTS	20.000	20.471	2.4	102.4
PFNS	20.000	19.966	-0.2	99.8
PFPeS	20.000	19.544	-2.3	97.7

CC Criteria: +/- 20%

Continuing Calibration Summary

Job Number: FA41776 **Sample:** SQ855-CC855
Account: RESCTNM Resolution Consultants **Lab FileID:** Q32433.D
Project: PFC GW Investigation, NAS Corpus Christi, TX SWMU4

Continuing Calibration Report

Batch: D:\MassHunter\Data\0321_LIST_SQ855\SQ855.batch.bin

Level ID:Calibration File
1:D:\MassHunter\Data\0321_LIST_SQ855\Q32419.d
2:D:\MassHunter\Data\0321_LIST_SQ855\Q32420.d
3:D:\MassHunter\Data\0321_LIST_SQ855\Q32421.d
4:D:\MassHunter\Data\0321_LIST_SQ855\Q32422.d
5:D:\MassHunter\Data\0321_LIST_SQ855\Q32423.d
6:D:\MassHunter\Data\0321_LIST_SQ855\Q32424.d
7:D:\MassHunter\Data\0321_LIST_SQ855\Q32425.d

Data File: Q32433
Type : QC
Level : 5

Cpnd Name	Exp. Conc	Final Conc	Dev %	Area %
13C2-6:2FTS	---	--ISTD--		
13C2-PFDA	20.000	18.454	-7.7	92.3
13C2-PFDoDA	---	--ISTD--		
13C2-PFHxA	20.000	17.519	-12.4	87.6
13C2-PFOA	---	--ISTD--		
13C4-PFOS	---	--ISTD--		
6:2FTS	20.000	19.803	-1.0	99.0
8:2FTS	20.000	19.041	-4.8	95.2
d3-MeFOSAA	---	--ISTD--		
d5-EtFOSAA	20.000	18.468	-7.7	92.3
EtFOSAA	20.000	17.620	-11.9	88.1
FOSA	20.000	19.680	-1.6	98.4
MeFOSAA	20.000	16.968	-15.2	84.8
PFBA	20.000	19.060	-4.7	95.3
PFBS	20.000	18.423	-7.9	92.1
PFDA	20.000	18.442	-7.8	92.2
PFDoDA	20.000	18.887	-5.6	94.4
PFDS	20.000	18.616	-6.9	93.1
PFHpA	20.000	19.147	-4.3	95.7
PFHpS	20.000	18.950	-5.2	94.8
PFHxA	20.000	17.523	-12.4	87.6
PFHxS	20.000	20.796	4.0	104.0
PFNA	20.000	18.740	-6.3	93.7
PFOA	20.000	18.802	-6.0	94.0
PFOS	20.000	18.399	-8.0	92.0
PFPeA	20.000	18.027	-9.9	90.1
PFTeDA	20.000	20.426	2.1	102.1
PFTrDA	20.000	17.880	-10.6	89.4
PFUnDA	20.000	20.548	2.7	102.7
13C3-PFPeA	---	--ISTD--		
4:2FTS	20.000	18.839	-5.8	94.2
PFNS	20.000	18.648	-6.8	93.2
PFPeS	20.000	18.810	-6.0	94.0

CC Criteria: +/- 20%

GC/MS Semi-volatiles

Raw Data

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/20/17 13:54

Data File	:	Q32351.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 19:01
Sample Name	:	FA41776-1
Vial	:	Vial 14
Sample Info	:	OP64173,SQ853,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.322	266.0 -> 222.0	16562	20.000	µg/L		0.013
13C2-PFOA	6.725	415.0 -> 370.0	60552	20.000	µg/L		0.013
13C2-6:2FTS	6.734	429.0 -> 409.0	23623	20.000	µg/L		0.013
13C4-PFOS	7.274	503.0 -> 80.0	46885	20.000	µg/L		0.000
d3-MeFOSAA	7.536	573.0 -> 419.0	10442	20.000	µg/L		0.000
13C2-PFDoDA	10.601	615.0 -> 570.0	26976	20.000	µg/L		-0.013
System Monitoring Compounds							
13C2-PFHxA	5.310	315.0 -> 270.0	39431	19.86	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 99.31%				
d5-EtFOSAA	7.672	589.0 -> 419.0	6250	16.07	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 80.36%				
13C2-PFDA	8.056	515.0 -> 470.0	57134	19.44	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 97.20%				
Target Compounds							**Qvalue**
PFBA	3.027	213.0 -> 169.0	0	0.000	µg/L	m	1
PFHxS	6.068	399.0 -> 80.0	30	0.028	µg/L		28
PFOS	7.302	499.0 -> 80.0	237	0.094	µg/L	# m	66

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32351.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 19:01
Sample Name	:	FA41776-1
Vial	:	Vial 14
Sample Info	:	OP64173,SQ853,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	FA41776-1	**Method:**	EPA 537 MOD	
Lab FileID:	Q32351.D	**Analyst approved:**	03/20/17 09:29	Nancy Saunders
Injection Time:	03/17/17 19:01	**Supervisor approved:**	03/20/17 13:54	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanesulfonic acid	1763-23-1		7.30	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/20/17 13:54

Data File	:	Q32352.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 19:21
Sample Name	:	FA41776-2
Vial	:	Vial 15
Sample Info	:	OP64173,SQ853,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.322	266.0 -> 222.0	16740	20.000	µg/L		0.013
13C2-PFOA	6.725	415.0 -> 370.0	61852	20.000	µg/L		0.013
13C2-6:2FTS	6.734	429.0 -> 409.0	23248	20.000	µg/L		0.013
13C4-PFOS	7.274	503.0 -> 80.0	46460	20.000	µg/L		0.000
d3-MeFOSAA	7.549	573.0 -> 419.0	9876	20.000	µg/L		0.013
13C2-PFDoDA	10.601	615.0 -> 570.0	26628	20.000	µg/L		-0.013
System Monitoring Compounds							
13C2-PFHxA	5.310	315.0 -> 270.0	42749	21.08	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 105.41%				
d5-EtFOSAA	7.672	589.0 -> 419.0	6565	17.85	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 89.23%				
13C2-PFDA	8.056	515.0 -> 470.0	62101	20.69	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 103.43%				
Target Compounds							**Qvalue**
PFBA	2.127	213.0 -> 169.0	0	0.000	µg/L	m	1
PFHxS	6.056	399.0 -> 80.0	38	0.035	µg/L		28
PFOS	7.302	499.0 -> 80.0	238	0.095	µg/L	# m	85

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.1.2

7

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32352.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 19:21
Sample Name	:	FA41776-2
Vial	:	Vial 15
Sample Info	:	OP64173,SQ853,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.1.2

7

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

7.1.2

7

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	FA41776-2	**Method:**	EPA 537 MOD	
Lab FileID:	Q32352.D	**Analyst approved:**	03/20/17 09:29	Nancy Saunders
Injection Time:	03/17/17 19:21	**Supervisor approved:**	03/20/17 13:54	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanesulfonic acid	1763-23-1		7.30	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 18:03

Data File	:	Q32428.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 13:57
Sample Name	:	FA41776-3
Vial	:	Vial 10
Sample Info	:	OP64173,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.310	266.0 -> 222.0	10890	20.000	µg/L		-0.025
13C2-PFOA	6.737	415.0 -> 370.0	57305	20.000	µg/L		-0.012
13C2-6:2FTS	6.746	429.0 -> 409.0	23713	20.000	µg/L		-0.014
13C4-PFOS	7.301	503.0 -> 80.0	44953	20.000	µg/L		-0.012
d3-MeFOSAA	7.537	573.0 -> 419.0	10614	20.000	µg/L		-0.012
13C2-PFDoDA	10.763	615.0 -> 570.0	25026	20.000	µg/L		-0.062
System Monitoring Compounds							
13C2-PFHxA	5.297	315.0 -> 270.0	33339	19.16	µg/L		-0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 95.82%				
d5-EtFOSAA	7.660	589.0 -> 419.0	6290	14.93	µg/L		-0.012
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 74.63%				
13C2-PFDA	8.104	515.0 -> 470.0	55455	20.70	µg/L		-0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 103.52%				
Target Compounds							**Qvalue**
PFBA	3.002	213.0 -> 169.0	571	1.515	µg/L		100
PFPeA	4.313	263.0 -> 219.0	1159	3.591	µg/L		100
PFBS	4.441	299.0 -> 80.0	724	1.028	µg/L	#	84
4:2FTS	5.182	327.0 -> 307.0	28	0.024	µg/L		100
PFHxA	5.300	313.0 -> 269.0	3993	2.769	µg/L	#	93
PFPeS	5.342	349.0 -> 99.0	129	0.620	µg/L		100
PFHxS	6.056	399.0 -> 80.0	13794	13.495	µg/L	# m	80
PFHpA	6.073	363.0 -> 319.0	2469	1.495	µg/L	#	88
PFHpS	6.694	449.0 -> 80.0	523	0.414	µg/L	m	100
PFOA	6.739	413.0 -> 369.0	14686	5.246	µg/L	# m	98
6:2FTS	6.748	427.0 -> 407.0	127	0.117	µg/L		100
PFOS	7.302	499.0 -> 80.0	16775	6.985	µg/L	# m	71
PFNA	7.369	463.0 -> 419.0	280	0.183	µg/L		58
MeFOSAA	7.551	570.0 -> 419.0	1256	2.772	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	1717	4.399	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32428.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 13:57
Sample Name	:	FA41776-3
Vial	:	Vial 10
Sample Info	:	OP64173,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

PFOA

13C2-6:2FTS

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

FOSA

PFOS

13C4-PFOS

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

PFDoDA

Perfluorinated Compounds by LC/MS/MS.

13C2-PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	FA41776-3	**Method:**	EPA 537 MOD
Lab FileID:	Q32428.D	**Analyst approved:**	03/21/17 16:39 Nancy Saunders
Injection Time:	03/21/17 13:57	**Supervisor approved:**	03/21/17 18:03 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.06	Split peak
Perfluoroheptanesulfonic acid	375-92-8		6.69	Split peak
Perfluorooctanoic acid	335-67-1		6.74	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.30	Split peak

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32353.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 19:41
Sample Name	:	FA41776-4
Vial	:	Vial 16
Sample Info	:	OP64173,SQ853,125,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.322	266.0 -> 222.0	17374	20.000	µg/L		0.013
13C2-PFOA	6.725	415.0 -> 370.0	68737	20.000	µg/L		0.013
13C2-6:2FTS	6.734	429.0 -> 409.0	25673	20.000	µg/L		0.013
13C4-PFOS	7.274	503.0 -> 80.0	51300	20.000	µg/L		0.000
d3-MeFOSAA	7.549	573.0 -> 419.0	11233	20.000	µg/L		0.013
13C2-PFDoDA	10.613	615.0 -> 570.0	29388	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	5.310	315.0 -> 270.0	46598	20.68	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 103.39%				
d5-EtFOSAA	7.672	589.0 -> 419.0	7532	18.00	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 90.02%				
13C2-PFDA	8.056	515.0 -> 470.0	65541	19.64	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 98.22%				
Target Compounds							**Qvalue**
PFBA	2.164	213.0 -> 169.0	0	0.000	µg/L	m	1
PFBS	4.579	299.0 -> 80.0	105	0.120	µg/L		31
PFOS	7.302	499.0 -> 80.0	146	0.053	µg/L	#	56

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32353.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 19:41
Sample Name	:	FA41776-4
Vial	:	Vial 16
Sample Info	:	OP64173,SQ853,125,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

7.1.4

7

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.1.4

7

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

7.1.4

7

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 18:03

Data File	:	Q32429.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 14:16
Sample Name	:	FA41776-5
Vial	:	Vial 11
Sample Info	:	OP64173,SQ855,125,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.297	266.0 -> 222.0	8414	20.000	µg/L		-0.038
13C2-PFOA	6.725	415.0 -> 370.0	47674	20.000	µg/L		-0.025
13C2-6:2FTS	6.734	429.0 -> 409.0	23024	20.000	µg/L		-0.026
13C4-PFOS	7.289	503.0 -> 80.0	39476	20.000	µg/L		-0.025
d3-MeFOSAA	7.537	573.0 -> 419.0	10370	20.000	µg/L		-0.012
13C2-PFDoDA	10.763	615.0 -> 570.0	24526	20.000	µg/L		-0.062
System Monitoring Compounds							
13C2-PFHxA	5.285	315.0 -> 270.0	25287	17.47	µg/L		-0.038
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 87.36%				
d5-EtFOSAA	7.660	589.0 -> 419.0	6360	15.45	µg/L		-0.012
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 77.23%				
13C2-PFDA	8.092	515.0 -> 470.0	50321	22.58	µg/L		-0.037
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 112.91%				
Target Compounds							**Qvalue**
PFBA	3.915	213.0 -> 169.0	0	0.000	µg/L	m	1
PFPeA	4.325	263.0 -> 219.0	110	0.442	µg/L		100
PFBS	4.529	299.0 -> 80.0	0	0.000	µg/L	m	1
PFHxA	5.287	313.0 -> 269.0	1518	1.265	µg/L	#	92
PFPeS	5.330	349.0 -> 99.0	41	0.224	µg/L		100
4:2FTS	5.595	327.0 -> 307.0	0	0.000	µg/L	m	1
PFHxS	6.043	399.0 -> 80.0	4811	5.359	µg/L	# m	82
PFHpA	6.061	363.0 -> 319.0	1246	0.907	µg/L	# m	82
PFHpS	6.694	449.0 -> 80.0	145	0.130	µg/L	m	100
PFOA	6.727	413.0 -> 369.0	8943	3.840	µg/L	# m	99
PFOS	7.071	499.0 -> 80.0	1637	0.776	µg/L	# m	67
MeFOSAA	7.538	570.0 -> 419.0	375	0.846	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	565	1.482	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32429.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 14:16
Sample Name	:	FA41776-5
Vial	:	Vial 11
Sample Info	:	OP64173,SQ855,125,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

PFOA

13C2-6:2FTS

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

FOSA

PFOS

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

PFDoDA

Perfluorinated Compounds by LC/MS/MS.

13C2-PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	FA41776-5	**Method:**	EPA 537 MOD	
Lab FileID:	Q32429.D	**Analyst approved:**	03/21/17 16:41	Nancy Saunders
Injection Time:	03/21/17 14:16	**Supervisor approved:**	03/21/17 18:03	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.04	Split peak
Perfluoroheptanoic acid	375-85-9		6.06	Split peak
Perfluoroheptanesulfonic acid	375-92-8		6.69	Split peak
Perfluorooctanoic acid	335-67-1		6.73	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.07	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 18:03

Data File	:	Q32430.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 14:34
Sample Name	:	FA41776-6
Vial	:	Vial 12
Sample Info	:	OP64173,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.284	266.0 -> 222.0	7315	20.000	µg/L		-0.050
13C2-PFOA	6.725	415.0 -> 370.0	44309	20.000	µg/L		-0.025
13C2-6:2FTS	6.734	429.0 -> 409.0	22101	20.000	µg/L		-0.026
13C4-PFOS	7.289	503.0 -> 80.0	37995	20.000	µg/L		-0.025
d3-MeFOSAA	7.537	573.0 -> 419.0	10436	20.000	µg/L		-0.012
13C2-PFDoDA	10.738	615.0 -> 570.0	23114	20.000	µg/L		-0.087
System Monitoring Compounds							
13C2-PFHxA	5.285	315.0 -> 270.0	20808	15.47	µg/L		-0.038
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 77.34%				
d5-EtFOSAA	7.660	589.0 -> 419.0	6774	16.35	µg/L		-0.012
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 81.74%				
13C2-PFDA	8.081	515.0 -> 470.0	45749	22.09	µg/L		-0.048
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 110.45%				
Target Compounds							**Qvalue**
PFBA	3.915	213.0 -> 169.0	0	0.000	µg/L	m	1
PFPeA	4.325	263.0 -> 219.0	152	0.700	µg/L		100
PFBS	4.516	299.0 -> 80.0	0	0.000	µg/L	m	1
PFHxA	5.287	313.0 -> 269.0	1566	1.404	µg/L	#	91
PFPeS	5.317	349.0 -> 99.0	34	0.196	µg/L		100
4:2FTS	5.595	327.0 -> 307.0	0	0.000	µg/L	m	1
PFHxS	6.043	399.0 -> 80.0	4666	5.401	µg/L	# m	81
PFHpA	6.061	363.0 -> 319.0	1374	1.076	µg/L	# m	79
PFHpS	6.682	449.0 -> 80.0	81	0.076	µg/L		100
PFOA	6.727	413.0 -> 369.0	8817	4.073	µg/L	# m	99
PFOS	7.071	499.0 -> 80.0	1714	0.845	µg/L	# m	57
EtFOSAA	7.661	584.0 -> 419.0	418	1.090	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32430.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 14:34
Sample Name	:	FA41776-6
Vial	:	Vial 12
Sample Info	:	OP64173,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

PFOA

13C2-6:2FTS

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

FOSA

PFOS

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

PFDoDA

Perfluorinated Compounds by LC/MS/MS.

13C2-PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	FA41776-6	**Method:**	EPA 537 MOD	
Lab FileID:	Q32430.D	**Analyst approved:**	03/21/17 16:42	Nancy Saunders
Injection Time:	03/21/17 14:34	**Supervisor approved:**	03/21/17 18:03	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.04	Split peak
Perfluoroheptanoic acid	375-85-9		6.06	Split peak
Perfluorooctanoic acid	335-67-1		6.73	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.07	Split peak

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32354.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 20:01
Sample Name	:	FA41776-7
Vial	:	Vial 17
Sample Info	:	OP64173,SQ853,120,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.322	266.0 -> 222.0	17524	20.000	µg/L		0.013
13C2-PFOA	6.725	415.0 -> 370.0	65724	20.000	µg/L		0.013
13C2-6:2FTS	6.734	429.0 -> 409.0	24914	20.000	µg/L		0.013
13C4-PFOS	7.286	503.0 -> 80.0	49188	20.000	µg/L		0.013
d3-MeFOSAA	7.549	573.0 -> 419.0	10976	20.000	µg/L		0.013
13C2-PFDoDA	10.626	615.0 -> 570.0	27483	20.000	µg/L		0.013
System Monitoring Compounds							
13C2-PFHxA	5.310	315.0 -> 270.0	44829	20.80	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 104.02%				
d5-EtFOSAA	7.672	589.0 -> 419.0	6286	15.38	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 76.89%				
13C2-PFDA	8.056	515.0 -> 470.0	59189	18.55	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 92.77%				
Target Compounds							**Qvalue**
PFBA	3.015	213.0 -> 169.0	0	0.000	µg/L	m	1
PFHxS	6.068	399.0 -> 80.0	23	0.020	µg/L	#	54
6:2FTS	6.748	427.0 -> 407.0	91	0.069	µg/L		100
PFOS	7.302	499.0 -> 80.0	124	0.047	µg/L	#	67
PFDS	8.624	599.0 -> 80.0	0	0.000	µg/L	m	1

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32354.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 20:01
Sample Name	:	FA41776-7
Vial	:	Vial 17
Sample Info	:	OP64173,SQ853,120,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.1.7

7

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

7.1.7

7

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 13:48

Data File	:	Q32362.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 22:41
Sample Name	:	FA41776-8
Vial	:	Vial 23
Sample Info	:	OP64173,SQ853,125,,,1,10,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.335	266.0 -> 222.0	15424	20.000	µg/L		0.025
13C2-PFOA	6.737	415.0 -> 370.0	62371	20.000	µg/L		0.025
13C2-6:2FTS	6.746	429.0 -> 409.0	24892	20.000	µg/L		0.025
13C4-PFOS	7.286	503.0 -> 80.0	48824	20.000	µg/L		0.013
d3-MeFOSAA	7.549	573.0 -> 419.0	10823	20.000	µg/L		0.013
13C2-PFDoDA	10.663	615.0 -> 570.0	27839	20.000	µg/L		0.050
System Monitoring Compounds							
13C2-PFHxA	5.322	315.0 -> 270.0	3854	1.88	µg/L		0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 9.42%				
d5-EtFOSAA	7.672	589.0 -> 419.0	634	1.57	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 7.86%				
13C2-PFDA	8.081	515.0 -> 470.0	4399	1.45	µg/L		0.038
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 7.26%				
Target Compounds							**Qvalue**
PFBA	3.027	213.0 -> 169.0	82	0.103	µg/L	m	100
PFPeA	4.338	263.0 -> 219.0	280	0.557	µg/L		100
PFBS	4.466	299.0 -> 80.0	134	0.161	µg/L	#	86
PFHxA	5.312	313.0 -> 269.0	1950	1.103	µg/L	# m	94
PFPeS	5.367	349.0 -> 99.0	20	0.070	µg/L		100
PFHxS	6.068	399.0 -> 80.0	572	0.504	µg/L	# m	78
PFHpA	6.086	363.0 -> 319.0	782	0.421	µg/L	m	93
PFOA	6.739	413.0 -> 369.0	19370	6.384	µg/L	# m	80
6:2FTS	6.762	427.0 -> 407.0	77	0.059	µg/L		100
PFOS	7.315	499.0 -> 80.0	310	0.118	µg/L	# m	47

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32362.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 22:41
Sample Name	:	FA41776-8
Vial	:	Vial 23
Sample Info	:	OP64173,SQ853,125,,,1,10,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.1.8

7

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

7.1.8

7

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

7.1.8

7

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

7.1.8

7

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

7.1.8

7

Manual Integration Approval Summary

Sample Number:	FA41776-8	**Method:**	EPA 537 MOD
Lab FileID:	Q32362.D	**Analyst approved:**	03/21/17 11:33 Nancy Saunders
Injection Time:	03/17/17 22:41	**Supervisor approved:**	03/21/17 13:48 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorobutanoic acid	375-22-4		3.03	Poor instrument integration
Perfluorohexanoic acid	307-24-4		5.31	Split peak
Perfluorohexanesulfonic acid	355-46-4		6.07	Split peak
Perfluoroheptanoic acid	375-85-9		6.09	Split peak
Perfluorooctanoic acid	335-67-1		6.74	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.32	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 13:52

Data File	:	Q32391.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 16:29
Sample Name	:	FA41776-8
Vial	:	Vial 13
Sample Info	:	OP64173,SQ854,125,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.297	266.0 -> 222.0	8948	20.000	µg/L		-0.013
13C2-PFOA	6.725	415.0 -> 370.0	48235	20.000	µg/L		0.012
13C2-6:2FTS	6.734	429.0 -> 409.0	17526	20.000	µg/L		0.012
13C4-PFOS	7.276	503.0 -> 80.0	44967	20.000	µg/L		0.002
d3-MeFOSAA	7.536	573.0 -> 419.0	8336	20.000	µg/L		0.000
13C2-PFDoDA	10.313	615.0 -> 570.0	18415	20.000	µg/L		-0.300
System Monitoring Compounds							
13C2-PFHxA	5.297	315.0 -> 270.0	28356	17.04	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 85.20%				
d5-EtFOSAA	7.659	589.0 -> 419.0	4785	13.54	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 67.72%				
13C2-PFDA	8.044	515.0 -> 470.0	34017	17.20	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 85.98%				
Target Compounds							**Qvalue**
PFBA	2.990	213.0 -> 169.0	429	1.228	µg/L		100
PFPeA	4.313	263.0 -> 219.0	1823	6.851	µg/L		100
PFBS	4.441	299.0 -> 80.0	904	1.187	µg/L	#	82
4:2FTS	5.219	327.0 -> 307.0	46	0.050	µg/L		100
PFHxA	5.300	313.0 -> 269.0	13113	9.571	µg/L	#	93
PFPeS	5.330	349.0 -> 99.0	141	0.632	µg/L		100
PFHxS	6.056	399.0 -> 80.0	4461	4.207	µg/L	# m	80
PFHpA	6.073	363.0 -> 319.0	5906	3.928	µg/L	# m	88
PFOA	6.726	413.0 -> 369.0	158316	66.989	µg/L	# m	99
6:2FTS	6.735	427.0 -> 407.0	93	0.112	µg/L		100
PFHpS	7.000	449.0 -> 80.0	0	0.000	µg/L	m	1
PFOS	7.290	499.0 -> 80.0	362	0.148	µg/L	m	88
PFDS	9.675	599.0 -> 80.0	0	0.000	µg/L	m	1

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32391.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 16:29
Sample Name	:	FA41776-8
Vial	:	Vial 13
Sample Info	:	OP64173,SQ854,125,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	FA41776-8	**Method:**	EPA 537 MOD
Lab FileID:	Q32391.D	**Analyst approved:**	03/21/17 11:33 Nancy Saunders
Injection Time:	03/20/17 16:29	**Supervisor approved:**	03/21/17 13:52 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.06	Split peak
Perfluoroheptanoic acid	375-85-9		6.07	Split peak
Perfluorooctanoic acid	335-67-1		6.73	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.29	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/20/17 13:54

Data File	:	Q32355.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 20:21
Sample Name	:	FA41776-9
Vial	:	Vial 18
Sample Info	:	OP64173,SQ853,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.335	266.0 -> 222.0	18001	20.000	µg/L		0.025
13C2-PFOA	6.737	415.0 -> 370.0	69928	20.000	µg/L		0.025
13C2-6:2FTS	6.746	429.0 -> 409.0	26415	20.000	µg/L		0.025
13C4-PFOS	7.286	503.0 -> 80.0	52147	20.000	µg/L		0.013
d3-MeFOSAA	7.549	573.0 -> 419.0	11513	20.000	µg/L		0.013
13C2-PFDoDA	10.651	615.0 -> 570.0	29533	20.000	µg/L		0.038
System Monitoring Compounds							
13C2-PFHxA	5.310	315.0 -> 270.0	45742	19.95	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 99.76%				
d5-EtFOSAA	7.672	589.0 -> 419.0	6657	15.53	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 77.63%				
13C2-PFDA	8.069	515.0 -> 470.0	58500	17.24	µg/L		0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 86.18%				
Target Compounds							**Qvalue**
PFBA	2.114	213.0 -> 169.0	0	0.000	µg/L	m	1
PFHpS	6.949	449.0 -> 80.0	0	0.000	µg/L	m	1
PFOS	7.302	499.0 -> 80.0	227	0.081	µg/L	# m	65

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.1.10

7

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32355.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 20:21
Sample Name	:	FA41776-9
Vial	:	Vial 18
Sample Info	:	OP64173,SQ853,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.1.10

7

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

7.1.10

7

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	FA41776-9	**Method:**	EPA 537 MOD	
Lab FileID:	Q32355.D	**Analyst approved:**	03/20/17 09:29	Nancy Saunders
Injection Time:	03/17/17 20:21	**Supervisor approved:**	03/20/17 13:54	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorooctanesulfonic acid	1763-23-1		7.30	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 13:48

Data File	:	Q32363.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 23:00
Sample Name	:	FA41776-10
Vial	:	Vial 24
Sample Info	:	OP64173,SQ853,130,,,1,10,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.335	266.0 -> 222.0	16826	20.000	µg/L		0.025
13C2-PFOA	6.737	415.0 -> 370.0	67567	20.000	µg/L		0.025
13C2-6:2FTS	6.746	429.0 -> 409.0	26012	20.000	µg/L		0.025
13C4-PFOS	7.286	503.0 -> 80.0	52464	20.000	µg/L		0.013
d3-MeFOSAA	7.549	573.0 -> 419.0	11106	20.000	µg/L		0.013
13C2-PFDoDA	10.663	615.0 -> 570.0	29109	20.000	µg/L		0.050
System Monitoring Compounds							
13C2-PFHxA	5.322	315.0 -> 270.0	4244	1.92	µg/L		0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 9.58%				
d5-EtFOSAA	7.672	589.0 -> 419.0	623	1.51	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 7.53%				
13C2-PFDA	8.081	515.0 -> 470.0	5622	1.71	µg/L		0.038
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 8.57%				
Target Compounds							**Qvalue**
PFBA	3.027	213.0 -> 169.0	125	0.145	µg/L	m	100
PFPeA	4.338	263.0 -> 219.0	379	0.692	µg/L		100
PFBS	4.466	299.0 -> 80.0	275	0.306	µg/L		89
PFHxA	5.325	313.0 -> 269.0	7937	4.146	µg/L	#	94
PFPeS	5.355	349.0 -> 99.0	53	0.178	µg/L		100
PFHxS	6.068	399.0 -> 80.0	33554	27.513	µg/L	# m	84
PFHpA	6.086	363.0 -> 319.0	1222	0.607	µg/L	m	95
PFHpS	6.694	449.0 -> 80.0	458	0.306	µg/L	m	100
PFOA	6.739	413.0 -> 369.0	89904	27.354	µg/L	# m	84
6:2FTS	6.762	427.0 -> 407.0	93	0.067	µg/L		100
PFOS	7.288	499.0 -> 80.0	12670	4.484	µg/L	# m	69
PFNA	7.356	463.0 -> 419.0	291	0.143	µg/L	# m	62
PFDS	9.700	599.0 -> 80.0	0	0.000	µg/L	m	1

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32363.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 23:00
Sample Name	:	FA41776-10
Vial	:	Vial 24
Sample Info	:	OP64173,SQ853,130,,,1,10,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	FA41776-10	**Method:**	EPA 537 MOD
Lab FileID:	Q32363.D	**Analyst approved:**	03/21/17 11:33 Nancy Saunders
Injection Time:	03/17/17 23:00	**Supervisor approved:**	03/21/17 13:48 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorobutanoic acid	375-22-4		3.03	Poor instrument integration
Perfluorohexanesulfonic acid	355-46-4		6.07	Split peak
Perfluoroheptanoic acid	375-85-9		6.09	Split peak
Perfluoroheptanesulfonic acid	375-92-8		6.69	Split peak
Perfluorooctanoic acid	335-67-1		6.74	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.29	Split peak
Perfluorononanoic acid	375-95-1		7.36	Poor instrument integration

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 13:52

Data File	:	Q32392.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 16:47
Sample Name	:	FA41776-10
Vial	:	Vial 14
Sample Info	:	OP64173,SQ854,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.310	266.0 -> 222.0	10773	20.000	µg/L		0.000
13C2-PFOA	6.725	415.0 -> 370.0	46692	20.000	µg/L		0.012
13C2-6:2FTS	6.734	429.0 -> 409.0	15814	20.000	µg/L		0.012
13C4-PFOS	7.276	503.0 -> 80.0	42942	20.000	µg/L		0.002
d3-MeFOSAA	7.536	573.0 -> 419.0	8284	20.000	µg/L		0.000
13C2-PFDoDA	10.313	615.0 -> 570.0	18705	20.000	µg/L		-0.300
System Monitoring Compounds							
13C2-PFHxA	5.297	315.0 -> 270.0	30299	18.81	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 94.04%				
d5-EtFOSAA	7.659	589.0 -> 419.0	5006	14.26	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 71.30%				
13C2-PFDA	8.044	515.0 -> 470.0	40039	20.91	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 104.55%				
Target Compounds							**Qvalue**
PFBA	3.002	213.0 -> 169.0	707	1.682	µg/L		100
PFPeA	4.313	263.0 -> 219.0	2387	7.454	µg/L		100
PFBS	4.441	299.0 -> 80.0	1787	2.457	µg/L		93
4:2FTS	5.219	327.0 -> 307.0	48	0.058	µg/L		100
PFHxA	5.300	313.0 -> 269.0	53262	40.160	µg/L	#	93
PFPeS	5.342	349.0 -> 99.0	408	1.915	µg/L		100
PFHxS	6.056	399.0 -> 80.0	260409	257.210	µg/L	# m	80
PFHpA	6.073	363.0 -> 319.0	9342	6.420	µg/L	# m	90
PFHpS	6.682	449.0 -> 80.0	3254	2.696	µg/L	m	100
PFOA	6.726	413.0 -> 369.0	675193	295.142	µg/L	m	97
6:2FTS	6.735	427.0 -> 407.0	175	0.234	µg/L		100
PFOS	7.277	499.0 -> 80.0	109503	46.935	µg/L	# m	67
PFNA	7.343	463.0 -> 419.0	1448	1.237	µg/L	# m	49
PFDS	9.725	599.0 -> 80.0	0	0.000	µg/L	m	1

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32392.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 16:47
Sample Name	:	FA41776-10
Vial	:	Vial 14
Sample Info	:	OP64173,SQ854,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	FA41776-10	**Method:**	EPA 537 MOD
Lab FileID:	Q32392.D	**Analyst approved:**	03/21/17 11:33 Nancy Saunders
Injection Time:	03/20/17 16:47	**Supervisor approved:**	03/21/17 13:52 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.06	Split peak
Perfluoroheptanoic acid	375-85-9		6.07	Split peak
Perfluoroheptanesulfonic acid	375-92-8		6.68	Split peak
Perfluorooctanoic acid	335-67-1		6.73	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.28	Split peak
Perfluorononanoic acid	375-95-1		7.34	Split peak

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32356.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 20:41
Sample Name	:	FA41776-11
Vial	:	Vial 19
Sample Info	:	OP64173,SQ853,125,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.335	266.0 -> 222.0	16295	20.000	µg/L		0.025
13C2-PFOA	6.737	415.0 -> 370.0	64670	20.000	µg/L		0.025
13C2-6:2FTS	6.746	429.0 -> 409.0	24644	20.000	µg/L		0.025
13C4-PFOS	7.286	503.0 -> 80.0	48587	20.000	µg/L		0.013
d3-MeFOSAA	7.549	573.0 -> 419.0	10993	20.000	µg/L		0.013
13C2-PFDoDA	10.626	615.0 -> 570.0	28126	20.000	µg/L		0.013
System Monitoring Compounds							
13C2-PFHxA	5.310	315.0 -> 270.0	43444	20.49	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 102.45%				
d5-EtFOSAA	7.672	589.0 -> 419.0	6547	15.99	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 79.95%				
13C2-PFDA	8.069	515.0 -> 470.0	59513	18.96	µg/L		0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 94.80%				
Target Compounds							**Qvalue**
PFBA	2.252	213.0 -> 169.0	0	0.000	µg/L	m	1
PFHxS	6.068	399.0 -> 80.0	17	0.015	µg/L		28
PFOS	7.315	499.0 -> 80.0	116	0.044	µg/L		91

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32356.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 20:41
Sample Name	:	FA41776-11
Vial	:	Vial 19
Sample Info	:	OP64173,SQ853,125,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.1.13

7

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

7.1.13

7

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 18:03

Data File	:	Q32432.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 15:14
Sample Name	:	FA41776-12
Vial	:	Vial 13
Sample Info	:	OP64173,SQ855,125,,,1,10,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.284	266.0 -> 222.0	8496	20.000	µg/L		-0.050
13C2-PFOA	6.712	415.0 -> 370.0	54653	20.000	µg/L		-0.037
13C2-6:2FTS	6.721	429.0 -> 409.0	27195	20.000	µg/L		-0.039
13C4-PFOS	7.262	503.0 -> 80.0	44936	20.000	µg/L		-0.052
d3-MeFOSAA	7.524	573.0 -> 419.0	11330	20.000	µg/L		-0.025
13C2-PFDoDA	10.676	615.0 -> 570.0	24966	20.000	µg/L		-0.150
System Monitoring Compounds							
13C2-PFHxA	5.272	315.0 -> 270.0	0	0.00	µg/L		-0.050
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 0.00%				
d5-EtFOSAA	7.660	589.0 -> 419.0	0	0.00	µg/L		-0.012
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 0.00%				
13C2-PFDA	8.044	515.0 -> 470.0	0	0.00	µg/L		-0.085
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 0.00%				
Target Compounds							**Qvalue**
PFBA	3.715	213.0 -> 169.0	0	0.000	µg/L	m	1
PFPeA	4.438	263.0 -> 219.0	0	0.000	µg/L	m	1
PFBS	4.516	299.0 -> 80.0	0	0.000	µg/L	m	1
PFHxA	5.275	313.0 -> 269.0	1613	1.173	µg/L	#	97
PFPeS	5.305	349.0 -> 99.0	130	0.626	µg/L		100
4:2FTS	5.583	327.0 -> 307.0	0	0.000	µg/L	m	1
PFHxS	6.031	399.0 -> 80.0	4773	4.671	µg/L	# m	78
PFHpA	6.036	363.0 -> 319.0	448	0.285	µg/L	m	92
PFHpS	6.669	449.0 -> 80.0	575	0.455	µg/L	m	100
PFOA	6.714	413.0 -> 369.0	11400	4.270	µg/L	# m	95
PFOS	7.263	499.0 -> 80.0	20741	8.639	µg/L	# m	66
PFNA	7.356	463.0 -> 419.0	95	0.065	µg/L	# m	89

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32432.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 15:14
Sample Name	:	FA41776-12
Vial	:	Vial 13
Sample Info	:	OP64173,SQ855,125,,,1,10,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

PFOA

13C2-6:2FTS

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

FOSA

PFOS

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

PFDoDA

Perfluorinated Compounds by LC/MS/MS.

13C2-PFDoDA

PFTrDA

PFTeDA

Calibration Curve

7.1.14

7

Manual Integration Approval Summary

Sample Number:	FA41776-12	**Method:**	EPA 537 MOD
Lab FileID:	Q32432.D	**Analyst approved:**	03/21/17 16:43 Nancy Saunders
Injection Time:	03/21/17 15:14	**Supervisor approved:**	03/21/17 18:03 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.03	Split peak
Perfluoroheptanoic acid	375-85-9		6.04	Split peak
Perfluoroheptanesulfonic acid	375-92-8		6.67	Split peak
Perfluorooctanoic acid	335-67-1		6.71	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.26	Split peak
Perfluorononanoic acid	375-95-1		7.36	Split peak

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32349.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 18:21
Sample Name	:	OP64173-MB
Vial	:	Vial 12
Sample Info	:	OP64173,SQ853,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.322	266.0 -> 222.0	17395	20.000	µg/L		0.013
13C2-PFOA	6.725	415.0 -> 370.0	61631	20.000	µg/L		0.013
13C2-6:2FTS	6.734	429.0 -> 409.0	23998	20.000	µg/L		0.013
13C4-PFOS	7.274	503.0 -> 80.0	48553	20.000	µg/L		0.000
d3-MeFOSAA	7.536	573.0 -> 419.0	10663	20.000	µg/L		0.000
13C2-PFDoDA	10.613	615.0 -> 570.0	28167	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	5.297	315.0 -> 270.0	42789	21.18	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 105.89%				
d5-EtFOSAA	7.672	589.0 -> 419.0	5832	14.69	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 73.43%				
13C2-PFDA	8.044	515.0 -> 470.0	57811	19.33	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 96.63%				
Target Compounds							**Qvalue**
PFBA	3.015	213.0 -> 169.0	0	0.000	µg/L	m	1
PFHxS	6.056	399.0 -> 80.0	25	0.022	µg/L		28
MeFOSAA	7.550	570.0 -> 419.0	694	1.564	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	946	2.428	µg/L		100
PFDS	9.700	599.0 -> 80.0	0	0.000	µg/L	m	1

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32349.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 18:21
Sample Name	:	OP64173-MB
Vial	:	Vial 12
Sample Info	:	OP64173,SQ853,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32348.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 18:01
Sample Name	:	OP64173-BS
Vial	:	Vial 11
Sample Info	:	OP64173,SQ853,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.310	266.0 -> 222.0	18226	20.000	µg/L		0.000
13C2-PFOA	6.712	415.0 -> 370.0	64740	20.000	µg/L		0.000
13C2-6:2FTS	6.721	429.0 -> 409.0	26450	20.000	µg/L		0.000
13C4-PFOS	7.274	503.0 -> 80.0	51026	20.000	µg/L		0.000
d3-MeFOSAA	7.536	573.0 -> 419.0	10992	20.000	µg/L		0.000
13C2-PFDoDA	10.588	615.0 -> 570.0	30913	20.000	µg/L		-0.025
System Monitoring Compounds							
13C2-PFHxA	5.297	315.0 -> 270.0	45060	21.23	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 106.15%				
d5-EtFOSAA	7.672	589.0 -> 419.0	5940	14.51	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 72.55%				
13C2-PFDA	8.044	515.0 -> 470.0	66465	21.15	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 105.76%				
Target Compounds							**Qvalue**
PFBA	3.015	213.0 -> 169.0	5673	6.065	µg/L		100
PFPeA	4.325	263.0 -> 219.0	14196	23.908	µg/L		100
PFBS	4.453	299.0 -> 80.0	21003	24.022	µg/L		89
PFHxA	5.300	313.0 -> 269.0	42047	22.919	µg/L	#	94
PFHxS	6.056	399.0 -> 80.0	30425	25.651	µg/L	#	84
PFHpA	6.073	363.0 -> 319.0	44677	23.168	µg/L		98
PFHpS	6.682	449.0 -> 80.0	29373	20.165	µg/L		100
PFOA	6.727	413.0 -> 369.0	75192	23.876	µg/L		91
6:2FTS	6.735	427.0 -> 407.0	26852	20.067	µg/L		100
FOSA	7.088	498.0 -> 78.0	25378	8.322	µg/L		100
PFOS	7.275	499.0 -> 80.0	63626	23.154	µg/L	#	81
PFNA	7.343	463.0 -> 419.0	44411	22.885	µg/L		96
MeFOSAA	7.550	570.0 -> 419.0	7279	15.915	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	5780	14.397	µg/L		100
PFDA	8.046	513.0 -> 469.0	60931	23.101	µg/L		100
8:2FTS	8.176	527.0 -> 507.0	28194	22.055	µg/L		100
PFDS	9.099	599.0 -> 80.0	18139	15.341	µg/L		100
PFUnDA	9.329	563.0 -> 519.0	29342	18.506	µg/L		100
PFDoDA	10.594	613.0 -> 569.0	21199	14.234	µg/L		100
PFTrDA	11.689	663.0 -> 619.0	17482	13.457	µg/L		100
PFTeDA	12.677	713.0 -> 669.0	11273	14.424	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32348.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 18:01
Sample Name	:	OP64173-BS
Vial	:	Vial 11
Sample Info	:	OP64173,SQ853,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.3.1

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Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

7.3.1

7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 13:48

Data File	:	Q32364.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 23:20
Sample Name	:	OP64173-MS
Vial	:	Vial 25
Sample Info	:	OP64173,SQ853,130,,,1,10,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.335	266.0 -> 222.0	16947	20.000	µg/L		0.025
13C2-PFOA	6.737	415.0 -> 370.0	66506	20.000	µg/L		0.025
13C2-6:2FTS	6.746	429.0 -> 409.0	26334	20.000	µg/L		0.025
13C4-PFOS	7.286	503.0 -> 80.0	52448	20.000	µg/L		0.013
d3-MeFOSAA	7.549	573.0 -> 419.0	11346	20.000	µg/L		0.013
13C2-PFDoDA	10.651	615.0 -> 570.0	28989	20.000	µg/L		0.038
System Monitoring Compounds							
13C2-PFHxA	5.322	315.0 -> 270.0	3978	1.82	µg/L		0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 9.12%				
d5-EtFOSAA	7.672	589.0 -> 419.0	676	1.60	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 8.00%				
13C2-PFDA	8.069	515.0 -> 470.0	5469	1.69	µg/L		0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 8.47%				
Target Compounds							**Qvalue**
PFBA	3.027	213.0 -> 169.0	534	0.614	µg/L	m	100
PFPeA	4.338	263.0 -> 219.0	1468	2.658	µg/L		100
PFBS	4.466	299.0 -> 80.0	2167	2.411	µg/L		95
PFHxA	5.312	313.0 -> 269.0	11288	5.990	µg/L	#	94
PFPeS	5.355	349.0 -> 99.0	0	0.000	µg/L	m	1
PFHxS	6.068	399.0 -> 80.0	37403	30.679	µg/L	# m	82
PFHpA	6.086	363.0 -> 319.0	5213	2.631	µg/L		98
PFHpS	6.694	449.0 -> 80.0	3198	2.136	µg/L		100
PFOA	6.739	413.0 -> 369.0	102869	31.798	µg/L	# m	87
6:2FTS	6.748	427.0 -> 407.0	2764	1.997	µg/L		100
FOSA	7.100	498.0 -> 78.0	1848	0.587	µg/L		100
PFOS	7.288	499.0 -> 80.0	18131	6.419	µg/L	# m	72
PFNA	7.356	463.0 -> 419.0	3867	1.940	µg/L		94
MeFOSAA	7.562	570.0 -> 419.0	612	1.297	µg/L		100
EtFOSAA	7.686	584.0 -> 419.0	688	1.660	µg/L		100
PFDA	8.071	513.0 -> 469.0	4818	1.778	µg/L		100
8:2FTS	8.214	527.0 -> 507.0	2383	1.872	µg/L		100
PFDS	9.149	599.0 -> 80.0	1562	1.285	µg/L		100
PFUnDA	9.391	563.0 -> 519.0	2250	1.513	µg/L		100
PFDoDA	10.657	613.0 -> 569.0	1795	1.285	µg/L		100
PFTrDA	11.764	663.0 -> 619.0	1435	1.178	µg/L		100
PFTeDA	12.753	713.0 -> 669.0	919	1.254	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32364.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 23:20
Sample Name	:	OP64173-MS
Vial	:	Vial 25
Sample Info	:	OP64173,SQ853,130,,,1,10,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.4.1

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Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

7.4.1

7

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

7.4.1

7

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

7.4.1

7

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	OP64173-MS	**Method:**	EPA 537 MOD
Lab FileID:	Q32364.D	**Analyst approved:**	03/21/17 11:33 Nancy Saunders
Injection Time:	03/17/17 23:20	**Supervisor approved:**	03/21/17 13:48 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorobutanoic acid	375-22-4		3.03	Poor instrument integration
Perfluorohexanesulfonic acid	355-46-4		6.07	Split peak
Perfluorooctanoic acid	335-67-1		6.74	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.29	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 13:48

Data File	:	Q32365.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 23:40
Sample Name	:	OP64173-MSD
Vial	:	Vial 26
Sample Info	:	OP64173,SQ853,130,,,1,10,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.335	266.0 -> 222.0	16970	20.000	µg/L		0.025
13C2-PFOA	6.737	415.0 -> 370.0	66844	20.000	µg/L		0.025
13C2-6:2FTS	6.746	429.0 -> 409.0	26360	20.000	µg/L		0.025
13C4-PFOS	7.286	503.0 -> 80.0	52196	20.000	µg/L		0.013
d3-MeFOSAA	7.549	573.0 -> 419.0	10977	20.000	µg/L		0.013
13C2-PFDoDA	10.651	615.0 -> 570.0	29118	20.000	µg/L		0.038
System Monitoring Compounds							
13C2-PFHxA	5.310	315.0 -> 270.0	4399	2.01	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 10.04%				
d5-EtFOSAA	7.672	589.0 -> 419.0	719	1.76	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 8.79%				
13C2-PFDA	8.069	515.0 -> 470.0	5769	1.78	µg/L		0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 8.89%				
Target Compounds							**Qvalue**
PFBA	3.027	213.0 -> 169.0	922	1.058	µg/L		100
PFPeA	4.338	263.0 -> 219.0	1330	2.405	µg/L		100
PFBS	4.466	299.0 -> 80.0	2069	2.313	µg/L		88
PFHxA	5.312	313.0 -> 269.0	10172	5.370	µg/L	#	94
PFPeS	5.355	349.0 -> 99.0	0	0.000	µg/L	m	1
PFHxS	6.068	399.0 -> 80.0	33873	27.917	µg/L	# m	82
PFHpA	6.086	363.0 -> 319.0	4717	2.369	µg/L		96
PFHpS	6.694	449.0 -> 80.0	3357	2.253	µg/L		100
PFOA	6.739	413.0 -> 369.0	92603	28.480	µg/L	# m	87
6:2FTS	6.748	427.0 -> 407.0	2930	2.115	µg/L		100
FOSA	7.100	498.0 -> 78.0	1996	0.655	µg/L		100
PFOS	7.288	499.0 -> 80.0	15974	5.683	µg/L	# m	71
PFNA	7.356	463.0 -> 419.0	3726	1.860	µg/L		97
MeFOSAA	7.562	570.0 -> 419.0	659	1.444	µg/L		100
EtFOSAA	7.686	584.0 -> 419.0	664	1.655	µg/L		100
PFDA	8.071	513.0 -> 469.0	4138	1.520	µg/L		100
8:2FTS	8.214	527.0 -> 507.0	2486	1.952	µg/L		100
PFDS	9.149	599.0 -> 80.0	1395	1.154	µg/L		100
PFUnDA	9.391	563.0 -> 519.0	1902	1.273	µg/L		100
PFDoDA	10.657	613.0 -> 569.0	1540	1.098	µg/L		100
PFTrDA	11.764	663.0 -> 619.0	1250	1.021	µg/L		100
PFTeDA	12.753	713.0 -> 669.0	751	1.020	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.4.2

7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32365.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 23:40
Sample Name	:	OP64173-MSD
Vial	:	Vial 26
Sample Info	:	OP64173,SQ853,130,,,1,10,WATER
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

7.4.2

7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

7.4.2

7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

7.4.2

7

SGS ACCUTEST FA41776

Manual Integration Approval Summary

Sample Number:	OP64173-MSD	**Method:**	EPA 537 MOD	
Lab FileID:	Q32365.D	**Analyst approved:**	03/21/17 11:33	Nancy Saunders
Injection Time:	03/17/17 23:40	**Supervisor approved:**	03/21/17 13:48	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.07	Split peak
Perfluorooctanoic acid	335-67-1		6.74	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.29	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/20/17 13:54

Data File	:	Q32338.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 14:40
Sample Name	:	IC853-1
Vial	:	Vial 2
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.322	266.0 -> 222.0	16931	20.000	µg/L		0.013
13C2-PFOA	6.725	415.0 -> 370.0	58570	20.000	µg/L		0.013
13C2-6:2FTS	6.734	429.0 -> 409.0	22815	20.000	µg/L		0.013
13C4-PFOS	7.274	503.0 -> 80.0	46887	20.000	µg/L		0.000
d3-MeFOSAA	7.549	573.0 -> 419.0	9567	20.000	µg/L		0.013
13C2-PFDoDA	10.613	615.0 -> 570.0	28952	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	5.310	315.0 -> 270.0	1995	1.04	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 5.20%				
d5-EtFOSAA	7.672	589.0 -> 419.0	417	1.17	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 5.85%				
13C2-PFDA	8.056	515.0 -> 470.0	2705	0.95	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 4.76%				
Target Compounds							**Qvalue**
PFBA	3.015	213.0 -> 169.0	953	1.097	µg/L		100
PFPeA	4.325	263.0 -> 219.0	593	1.075	µg/L		100
PFBS	4.453	299.0 -> 80.0	756	0.941	µg/L		91
4:2FTS	5.219	327.0 -> 307.0	1110	1.113	µg/L		100
PFHxA	5.300	313.0 -> 269.0	1757	1.059	µg/L	#	94
PFPeS	5.342	349.0 -> 99.0	284	1.067	µg/L		100
PFHxS	6.056	399.0 -> 80.0	1078	0.989	µg/L	m	90
PFHpA	6.073	363.0 -> 319.0	1772	1.016	µg/L		98
PFHpS	6.682	449.0 -> 80.0	1302	0.973	µg/L		100
PFOA	6.727	413.0 -> 369.0	2859	1.003	µg/L		89
6:2FTS	6.735	427.0 -> 407.0	1161	0.966	µg/L		100
FOSA	7.088	498.0 -> 78.0	2785	1.049	µg/L		100
PFOS	7.275	499.0 -> 80.0	2672	1.058	µg/L	# m	79
PFNA	7.343	463.0 -> 419.0	1846	1.051	µg/L		95
MeFOSAA	7.550	570.0 -> 419.0	543	1.365	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	541	1.547	µg/L		100
PFNS	7.929	549.0 -> 99.0	684	1.048	µg/L		100
PFDA	8.058	513.0 -> 469.0	2539	1.064	µg/L		100
8:2FTS	8.189	527.0 -> 507.0	1233	1.119	µg/L		100
PFDS	9.112	599.0 -> 80.0	1048	0.965	µg/L		100
PFUnDA	9.354	563.0 -> 519.0	1469	0.989	µg/L		100
PFDoDA	10.619	613.0 -> 569.0	1354	0.970	µg/L		100
PFTrDA	11.727	663.0 -> 619.0	1194	0.981	µg/L		100
PFTeDA	12.703	713.0 -> 669.0	722	0.986	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32338.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 14:40
Sample Name	:	IC853-1
Vial	:	Vial 2
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ853-IC853	**Method:**	EPA 537 MOD	
Lab FileID:	Q32338.D	**Analyst approved:**	03/20/17 09:24	Nancy Saunders
Injection Time:	03/17/17 14:40	**Supervisor approved:**	03/20/17 13:54	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.06	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.28	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/20/17 13:54

Data File	:	Q32339.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 15:01
Sample Name	:	IC853-2
Vial	:	Vial 3
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.322	266.0 -> 222.0	17506	20.000	µg/L		0.013
13C2-PFOA	6.725	415.0 -> 370.0	58629	20.000	µg/L		0.013
13C2-6:2FTS	6.734	429.0 -> 409.0	23436	20.000	µg/L		0.013
13C4-PFOS	7.274	503.0 -> 80.0	47894	20.000	µg/L		0.000
d3-MeFOSAA	7.536	573.0 -> 419.0	10263	20.000	µg/L		0.000
13C2-PFDoDA	10.613	615.0 -> 570.0	28719	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	5.310	315.0 -> 270.0	3907	2.03	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 10.16%				
d5-EtFOSAA	7.672	589.0 -> 419.0	761	1.99	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 9.96%				
13C2-PFDA	8.056	515.0 -> 470.0	5698	2.00	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 10.01%				
Target Compounds							**Qvalue**
PFBA	3.015	213.0 -> 169.0	1865	2.075	µg/L		100
PFPeA	4.325	263.0 -> 219.0	1105	1.938	µg/L		100
PFBS	4.453	299.0 -> 80.0	1563	1.904	µg/L		92
4:2FTS	5.219	327.0 -> 307.0	2149	2.098	µg/L		100
PFHxA	5.300	313.0 -> 269.0	3544	2.133	µg/L	#	94
PFPeS	5.342	349.0 -> 99.0	572	2.103	µg/L		100
PFHxS	6.056	399.0 -> 80.0	2154	1.935	µg/L	m	87
PFHpA	6.073	363.0 -> 319.0	3539	2.027	µg/L		100
PFHpS	6.682	449.0 -> 80.0	2664	1.948	µg/L		100
PFOA	6.727	413.0 -> 369.0	5704	2.000	µg/L	#	87
6:2FTS	6.735	427.0 -> 407.0	2479	2.012	µg/L		100
FOSA	7.088	498.0 -> 78.0	5668	1.991	µg/L		100
PFOS	7.275	499.0 -> 80.0	5258	2.039	µg/L	# m	78
PFNA	7.343	463.0 -> 419.0	3650	2.077	µg/L		95
MeFOSAA	7.550	570.0 -> 419.0	780	1.828	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	891	2.376	µg/L		100
PFNS	7.929	549.0 -> 99.0	1380	2.069	µg/L		100
PFDA	8.058	513.0 -> 469.0	4972	2.082	µg/L		100
8:2FTS	8.189	527.0 -> 507.0	2508	2.214	µg/L		100
PFDS	9.112	599.0 -> 80.0	2111	1.902	µg/L		100
PFUnDA	9.354	563.0 -> 519.0	3083	2.093	µg/L		100
PFDoDA	10.619	613.0 -> 569.0	2737	1.978	µg/L		100
PFTrDA	11.714	663.0 -> 619.0	2325	1.926	µg/L		100
PFTeDA	12.715	713.0 -> 669.0	1478	2.036	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.5.2

7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32339.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 15:01
Sample Name	:	IC853-2
Vial	:	Vial 3
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

7.5.2

7

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ853-IC853	**Method:**	EPA 537 MOD	
Lab FileID:	Q32339.D	**Analyst approved:**	03/20/17 09:24	Nancy Saunders
Injection Time:	03/17/17 15:01	**Supervisor approved:**	03/20/17 13:54	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.06	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.28	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/20/17 13:54

7.5.3

7

Data File	:	Q32340.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 15:21
Sample Name	:	IC853-5
Vial	:	Vial 4
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.322	266.0 -> 222.0	17454	20.000	µg/L		0.013
13C2-PFOA	6.725	415.0 -> 370.0	58959	20.000	µg/L		0.013
13C2-6:2FTS	6.734	429.0 -> 409.0	23438	20.000	µg/L		0.013
13C4-PFOS	7.274	503.0 -> 80.0	48394	20.000	µg/L		0.000
d3-MeFOSAA	7.536	573.0 -> 419.0	9983	20.000	µg/L		0.000
13C2-PFDoDA	10.626	615.0 -> 570.0	28545	20.000	µg/L		0.013
System Monitoring Compounds							
13C2-PFHxA	5.297	315.0 -> 270.0	10006	5.18	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 25.88%				
d5-EtFOSAA	7.672	589.0 -> 419.0	1725	4.64	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 23.20%				
13C2-PFDA	8.044	515.0 -> 470.0	13831	4.83	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 24.17%				
Target Compounds							**Qvalue**
PFBA	3.015	213.0 -> 169.0	4272	4.769	µg/L		100
PFPeA	4.325	263.0 -> 219.0	2771	4.874	µg/L		100
PFBS	4.453	299.0 -> 80.0	4017	4.844	µg/L		92
4:2FTS	5.219	327.0 -> 307.0	5319	5.192	µg/L		100
PFHxA	5.300	313.0 -> 269.0	8200	4.908	µg/L	#	94
PFPeS	5.342	349.0 -> 99.0	1419	5.163	µg/L		100
PFHxS	6.056	399.0 -> 80.0	5480	4.872	µg/L	# m	84
PFHpA	6.073	363.0 -> 319.0	8526	4.855	µg/L		97
PFHpS	6.682	449.0 -> 80.0	6408	4.638	µg/L		100
PFOA	6.727	413.0 -> 369.0	14206	4.953	µg/L		91
6:2FTS	6.735	427.0 -> 407.0	5956	4.864	µg/L		100
FOSA	7.088	498.0 -> 78.0	14339	5.177	µg/L		100
PFOS	7.275	499.0 -> 80.0	13066	5.014	µg/L	# m	77
PFNA	7.343	463.0 -> 419.0	9097	5.147	µg/L		95
MeFOSAA	7.550	570.0 -> 419.0	1996	4.805	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	1921	5.267	µg/L		100
PFNS	7.929	549.0 -> 99.0	3325	4.934	µg/L		100
PFDA	8.046	513.0 -> 469.0	11875	4.944	µg/L		100
8:2FTS	8.189	527.0 -> 507.0	5888	5.197	µg/L		100
PFDS	9.124	599.0 -> 80.0	5335	4.758	µg/L		100
PFUnDA	9.354	563.0 -> 519.0	7372	5.035	µg/L		100
PFDoDA	10.632	613.0 -> 569.0	6780	4.930	µg/L		100
PFTrDA	11.727	663.0 -> 619.0	6023	5.020	µg/L		100
PFTeDA	12.715	713.0 -> 669.0	3582	4.963	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32340.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 15:21
Sample Name	:	IC853-5
Vial	:	Vial 4
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ853-IC853	**Method:**	EPA 537 MOD	
Lab FileID:	Q32340.D	**Analyst approved:**	03/20/17 09:24	Nancy Saunders
Injection Time:	03/17/17 15:21	**Supervisor approved:**	03/20/17 13:54	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.06	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.28	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/20/17 13:54

Data File	:	Q32341.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 15:41
Sample Name	:	IC853-10
Vial	:	Vial 5
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.322	266.0 -> 222.0	18085	20.000	µg/L		0.013
13C2-PFOA	6.725	415.0 -> 370.0	61136	20.000	µg/L		0.013
13C2-6:2FTS	6.734	429.0 -> 409.0	24320	20.000	µg/L		0.013
13C4-PFOS	7.274	503.0 -> 80.0	48685	20.000	µg/L		0.000
d3-MeFOSAA	7.536	573.0 -> 419.0	10348	20.000	µg/L		0.000
13C2-PFDoDA	10.613	615.0 -> 570.0	29163	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	5.297	315.0 -> 270.0	20161	10.06	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 50.29%				
d5-EtFOSAA	7.672	589.0 -> 419.0	3744	9.71	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 48.57%				
13C2-PFDA	8.044	515.0 -> 470.0	29010	9.78	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 48.88%				
Target Compounds							**Qvalue**
PFBA	3.015	213.0 -> 169.0	8956	9.649	µg/L		100
PFPeA	4.325	263.0 -> 219.0	5765	9.785	µg/L		100
PFBS	4.453	299.0 -> 80.0	8287	9.934	µg/L		90
4:2FTS	5.219	327.0 -> 307.0	11079	10.422	µg/L		100
PFHxA	5.300	313.0 -> 269.0	17849	10.302	µg/L	#	94
PFPeS	5.342	349.0 -> 99.0	2719	9.832	µg/L		100
PFHxS	6.056	399.0 -> 80.0	11101	9.809	µg/L	m	86
PFHpA	6.073	363.0 -> 319.0	17611	9.671	µg/L		98
PFHpS	6.682	449.0 -> 80.0	13143	9.457	µg/L		100
PFOA	6.727	413.0 -> 369.0	28573	9.608	µg/L	#	91
6:2FTS	6.735	427.0 -> 407.0	12412	9.871	µg/L		100
FOSA	7.088	498.0 -> 78.0	28985	10.097	µg/L		100
PFOS	7.275	499.0 -> 80.0	25884	9.873	µg/L	# m	76
PFNA	7.343	463.0 -> 419.0	17758	9.690	µg/L		96
MeFOSAA	7.550	570.0 -> 419.0	4098	9.518	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	3724	9.854	µg/L		100
PFNS	7.929	549.0 -> 99.0	6791	10.019	µg/L		100
PFDA	8.046	513.0 -> 469.0	24374	9.786	µg/L		100
8:2FTS	8.176	527.0 -> 507.0	12329	10.489	µg/L		100
PFDS	9.112	599.0 -> 80.0	11036	9.782	µg/L		100
PFUnDA	9.341	563.0 -> 519.0	14799	9.894	µg/L		100
PFDoDA	10.607	613.0 -> 569.0	13647	9.713	µg/L		100
PFTrDA	11.702	663.0 -> 619.0	11903	9.712	µg/L		100
PFTeDA	12.690	713.0 -> 669.0	7239	9.818	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32341.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 15:41
Sample Name	:	IC853-10
Vial	:	Vial 5
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

7.5.4

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Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.5.4

7

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

7.5.4

7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ853-IC853	**Method:**	EPA 537 MOD	
Lab FileID:	Q32341.D	**Analyst approved:**	03/20/17 09:24	Nancy Saunders
Injection Time:	03/17/17 15:41	**Supervisor approved:**	03/20/17 13:54	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.06	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.28	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/20/17 13:54

Data File	:	Q32342.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 16:01
Sample Name	:	ICC853-20
Vial	:	Vial 6
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.310	266.0 -> 222.0	16847	20.000	µg/L		0.000
13C2-PFOA	6.712	415.0 -> 370.0	57728	20.000	µg/L		0.000
13C2-6:2FTS	6.721	429.0 -> 409.0	24272	20.000	µg/L		0.000
13C4-PFOS	7.274	503.0 -> 80.0	46954	20.000	µg/L		0.000
d3-MeFOSAA	7.536	573.0 -> 419.0	9849	20.000	µg/L		0.000
13C2-PFDoDA	10.613	615.0 -> 570.0	27705	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	5.297	315.0 -> 270.0	38226	20.20	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 100.99%				
d5-EtFOSAA	7.672	589.0 -> 419.0	7305	19.92	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 99.58%				
13C2-PFDA	8.044	515.0 -> 470.0	57507	20.52	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 102.62%				
Target Compounds							**Qvalue**
PFBA	3.015	213.0 -> 169.0	17672	20.439	µg/L		100
PFPeA	4.325	263.0 -> 219.0	11303	20.595	µg/L		100
PFBS	4.453	299.0 -> 80.0	16654	20.699	µg/L		89
4:2FTS	5.219	327.0 -> 307.0	21849	20.594	µg/L		100
PFHxA	5.300	313.0 -> 269.0	33693	20.596	µg/L	#	94
PFPeS	5.330	349.0 -> 99.0	5488	20.578	µg/L		100
PFHxS	6.056	399.0 -> 80.0	22217	20.355	µg/L	# m	85
PFHpA	6.073	363.0 -> 319.0	35531	20.664	µg/L		98
PFHpS	6.682	449.0 -> 80.0	26301	19.622	µg/L		100
PFOA	6.727	413.0 -> 369.0	59655	21.244	µg/L		92
6:2FTS	6.735	427.0 -> 407.0	24565	20.003	µg/L		100
FOSA	7.088	498.0 -> 78.0	59495	21.775	µg/L		100
PFOS	7.275	499.0 -> 80.0	53952	21.337	µg/L	# m	76
PFNA	7.343	463.0 -> 419.0	36670	21.192	µg/L		97
MeFOSAA	7.550	570.0 -> 419.0	7952	19.408	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	7552	20.994	µg/L		100
PFNS	7.929	549.0 -> 99.0	13799	21.107	µg/L		100
PFDA	8.046	513.0 -> 469.0	49485	21.041	µg/L		100
8:2FTS	8.176	527.0 -> 507.0	25140	21.430	µg/L		100
PFDS	9.112	599.0 -> 80.0	21986	20.207	µg/L		100
PFUnDA	9.341	563.0 -> 519.0	29631	20.852	µg/L		100
PFDoDA	10.619	613.0 -> 569.0	27753	20.792	µg/L		100
PFTrDA	11.714	663.0 -> 619.0	24153	20.743	µg/L		100
PFTeDA	12.703	713.0 -> 669.0	14475	20.666	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.5.5
7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32342.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 16:01
Sample Name	:	ICC853-20
Vial	:	Vial 6
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.5.5

7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ853-ICC853	**Method:**	EPA 537 MOD	
Lab FileID:	Q32342.D	**Analyst approved:**	03/20/17 09:24	Nancy Saunders
Injection Time:	03/17/17 16:01	**Supervisor approved:**	03/20/17 13:54	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.06	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.28	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/20/17 13:54

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32343.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 16:21
Sample Name	:	IC853-40
Vial	:	Vial 7
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.310	266.0 -> 222.0	17606	20.000	µg/L		0.000
13C2-PFOA	6.712	415.0 -> 370.0	59849	20.000	µg/L		0.000
13C2-6:2FTS	6.721	429.0 -> 409.0	25590	20.000	µg/L		0.000
13C4-PFOS	7.261	503.0 -> 80.0	47760	20.000	µg/L		-0.013
d3-MeFOSAA	7.536	573.0 -> 419.0	10605	20.000	µg/L		0.000
13C2-PFDoDA	10.613	615.0 -> 570.0	28154	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	5.297	315.0 -> 270.0	80571	41.06	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 205.32%				
d5-EtFOSAA	7.659	589.0 -> 419.0	15631	39.58	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 197.88%				
13C2-PFDA	8.044	515.0 -> 470.0	115744	39.84	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 199.22%				
Target Compounds							**Qvalue**
PFBA	3.015	213.0 -> 169.0	34847	38.565	µg/L		100
PFPeA	4.325	263.0 -> 219.0	22529	39.278	µg/L		100
PFBS	4.441	299.0 -> 80.0	32764	40.036	µg/L		90
4:2FTS	5.219	327.0 -> 307.0	45166	40.378	µg/L		100
PFHxA	5.300	313.0 -> 269.0	68038	40.116	µg/L	#	94
PFPeS	5.330	349.0 -> 99.0	10887	40.132	µg/L		100
PFHxS	6.043	399.0 -> 80.0	45519	41.000	µg/L	# m	84
PFHpA	6.061	363.0 -> 319.0	70692	39.655	µg/L		99
PFHpS	6.682	449.0 -> 80.0	54337	39.856	µg/L		100
PFOA	6.727	413.0 -> 369.0	115184	39.565	µg/L		91
6:2FTS	6.735	427.0 -> 407.0	49826	40.234	µg/L		100
FOSA	7.088	498.0 -> 78.0	114907	39.058	µg/L		100
PFOS	7.275	499.0 -> 80.0	95915	37.292	µg/L	# m	80
PFNA	7.343	463.0 -> 419.0	71313	39.752	µg/L		97
MeFOSAA	7.550	570.0 -> 419.0	16394	37.158	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	15467	39.933	µg/L		100
PFNS	7.916	549.0 -> 99.0	26235	39.453	µg/L		100
PFDA	8.046	513.0 -> 469.0	97487	39.981	µg/L		100
8:2FTS	8.176	527.0 -> 507.0	49603	40.105	µg/L		100
PFDS	9.099	599.0 -> 80.0	44097	39.845	µg/L		100
PFUnDA	9.341	563.0 -> 519.0	57520	39.834	µg/L		100
PFDoDA	10.619	613.0 -> 569.0	54165	39.932	µg/L		100
PFTrDA	11.714	663.0 -> 619.0	47601	40.230	µg/L		100
PFTeDA	12.690	713.0 -> 669.0	28025	39.374	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.5.6
7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32343.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 16:21
Sample Name	:	IC853-40
Vial	:	Vial 7
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

7.5.6

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Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.5.6

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SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

7.5.6

7

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

7.5.6

7

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ853-IC853	**Method:**	EPA 537 MOD	
Lab FileID:	Q32343.D	**Analyst approved:**	03/20/17 09:24	Nancy Saunders
Injection Time:	03/17/17 16:21	**Supervisor approved:**	03/20/17 13:54	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.04	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.28	Split peak

Q32344.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger 03/20/17 13:54

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32344.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 16:41
Sample Name	:	IC853-50
Vial	:	Vial 8
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.310	266.0 -> 222.0	16759	20.000	µg/L		0.000
13C2-PFOA	6.712	415.0 -> 370.0	59429	20.000	µg/L		0.000
13C2-6:2FTS	6.721	429.0 -> 409.0	26339	20.000	µg/L		0.000
13C4-PFOS	7.261	503.0 -> 80.0	47584	20.000	µg/L		-0.013
d3-MeFOSAA	7.536	573.0 -> 419.0	10073	20.000	µg/L		0.000
13C2-PFDoDA	10.601	615.0 -> 570.0	28564	20.000	µg/L		-0.013
System Monitoring Compounds							
13C2-PFHxA	5.297	315.0 -> 270.0	95542	49.04	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 245.19%				
d5-EtFOSAA	7.659	589.0 -> 419.0	18933	50.46	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 252.32%				
13C2-PFDA	8.031	515.0 -> 470.0	144161	49.98	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 249.89%				
Target Compounds							**Qvalue**
PFBA	3.002	213.0 -> 169.0	43916	51.060	µg/L		100
PFPeA	4.313	263.0 -> 219.0	27516	50.396	µg/L		100
PFBS	4.441	299.0 -> 80.0	40544	49.725	µg/L		91
4:2FTS	5.219	327.0 -> 307.0	56817	49.350	µg/L		100
PFHxA	5.300	313.0 -> 269.0	83549	49.611	µg/L	#	94
PFPeS	5.330	349.0 -> 99.0	13426	49.675	µg/L		100
PFHxS	6.043	399.0 -> 80.0	54324	49.112	µg/L	m	86
PFHpA	6.061	363.0 -> 319.0	88665	50.089	µg/L		98
PFHpS	6.682	449.0 -> 80.0	68478	50.414	µg/L		100
PFOA	6.714	413.0 -> 369.0	144349	49.934	µg/L		91
6:2FTS	6.723	427.0 -> 407.0	62165	49.850	µg/L		100
FOSA	7.088	498.0 -> 78.0	139745	50.006	µg/L		100
PFOS	7.263	499.0 -> 80.0	132363	51.653	µg/L	# m	75
PFNA	7.331	463.0 -> 419.0	88650	49.765	µg/L		97
MeFOSAA	7.550	570.0 -> 419.0	22058	52.633	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	18265	49.644	µg/L		100
PFNS	7.916	549.0 -> 99.0	33122	49.993	µg/L		100
PFDA	8.033	513.0 -> 469.0	120194	49.643	µg/L		100
8:2FTS	8.164	527.0 -> 507.0	62652	49.215	µg/L		100
PFDS	9.099	599.0 -> 80.0	55256	50.113	µg/L		100
PFUnDA	9.329	563.0 -> 519.0	72967	49.806	µg/L		100
PFDoDA	10.607	613.0 -> 569.0	68539	49.804	µg/L		100
PFTrDA	11.702	663.0 -> 619.0	59516	49.577	µg/L		100
PFTeDA	12.690	713.0 -> 669.0	36304	50.273	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32344.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 16:41
Sample Name	:	IC853-50
Vial	:	Vial 8
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.5.7

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Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

7.5.7

7

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

7.5.7

7

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

7.5.7

7

Manual Integration Approval Summary

Sample Number:	SQ853-IC853	**Method:**	EPA 537 MOD	
Lab FileID:	Q32344.D	**Analyst approved:**	03/20/17 09:24	Nancy Saunders
Injection Time:	03/17/17 16:41	**Supervisor approved:**	03/20/17 13:54	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.04	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.26	Split peak

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32346.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 17:21
Sample Name	:	ICV853-20
Vial	:	Vial 9
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.310	266.0 -> 222.0	16449	20.000	µg/L		0.000
13C2-PFOA	6.712	415.0 -> 370.0	58410	20.000	µg/L		0.000
13C2-6:2FTS	6.721	429.0 -> 409.0	24031	20.000	µg/L		0.000
13C4-PFOS	7.261	503.0 -> 80.0	47631	20.000	µg/L		-0.013
d3-MeFOSAA	7.536	573.0 -> 419.0	10021	20.000	µg/L		0.000
13C2-PFDoDA	10.588	615.0 -> 570.0	27890	20.000	µg/L		-0.025
System Monitoring Compounds							
d5-EtFOSAA	7.672	589.0 -> 419.0	0	0.00	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 0.00%				
Target Compounds							**Qvalue**
PFBA	3.002	213.0 -> 169.0	16467	19.507	µg/L		100
PFPeA	4.313	263.0 -> 219.0	10901	20.341	µg/L		100
PFBS	4.441	299.0 -> 80.0	15655	19.181	µg/L		91
4:2FTS	5.219	327.0 -> 307.0	21308	20.285	µg/L		100
PFHxA	5.300	313.0 -> 269.0	32842	19.841	µg/L	#	94
PFPeS	5.330	349.0 -> 99.0	5153	19.048	µg/L		100
PFHxS	6.043	399.0 -> 80.0	23616	21.329	µg/L		86
PFHpA	6.061	363.0 -> 319.0	34330	19.732	µg/L		98
PFHpS	6.682	449.0 -> 80.0	26623	19.580	µg/L		100
PFOA	6.727	413.0 -> 369.0	56096	19.743	µg/L		92
6:2FTS	6.735	427.0 -> 407.0	25372	20.907	µg/L		100
FOSA	7.088	498.0 -> 78.0	58522	21.051	µg/L		100
PFOS	7.275	499.0 -> 80.0	51971	20.261	µg/L	#	81
PFNA	7.343	463.0 -> 419.0	33945	19.388	µg/L		95
MeFOSAA	7.550	570.0 -> 419.0	8510	20.412	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	7551	20.632	µg/L		100
PFNS	7.929	549.0 -> 99.0	12931	19.499	µg/L		100
PFDA	8.046	513.0 -> 469.0	48004	20.173	µg/L		100
8:2FTS	8.176	527.0 -> 507.0	25739	22.161	µg/L		100
PFDS	9.099	599.0 -> 80.0	21838	19.786	µg/L		100
PFUnDA	9.329	563.0 -> 519.0	28648	20.027	µg/L		100
PFDoDA	10.594	613.0 -> 569.0	26702	19.872	µg/L		100
PFTrDA	11.689	663.0 -> 619.0	23062	19.675	µg/L		100
PFTeDA	12.677	713.0 -> 669.0	14172	20.099	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32346.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 17:21
Sample Name	:	ICV853-20
Vial	:	Vial 9
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.5.8

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Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/20/17 13:54

Data File	:	Q32357.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 21:01
Sample Name	:	CC853-20
Vial	:	Vial 6
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.335	266.0 -> 222.0	16930	20.000	µg/L		0.025
13C2-PFOA	6.737	415.0 -> 370.0	60273	20.000	µg/L		0.025
13C2-6:2FTS	6.746	429.0 -> 409.0	24868	20.000	µg/L		0.025
13C4-PFOS	7.286	503.0 -> 80.0	46290	20.000	µg/L		0.013
d3-MeFOSAA	7.549	573.0 -> 419.0	10415	20.000	µg/L		0.013
13C2-PFDoDA	10.663	615.0 -> 570.0	27242	20.000	µg/L		0.050
System Monitoring Compounds							
13C2-PFHxA	5.322	315.0 -> 270.0	39232	19.85	µg/L		0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 99.27%				
d5-EtFOSAA	7.672	589.0 -> 419.0	8539	22.01	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 110.06%				
13C2-PFDA	8.069	515.0 -> 470.0	60640	20.73	µg/L		0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 103.64%				
Target Compounds							**Qvalue**
PFBA	3.027	213.0 -> 169.0	17432	20.063	µg/L		100
PFPeA	4.338	263.0 -> 219.0	11079	20.087	µg/L		100
PFBS	4.466	299.0 -> 80.0	17299	21.810	µg/L		92
4:2FTS	5.232	327.0 -> 307.0	24094	22.166	µg/L		100
PFHxA	5.325	313.0 -> 269.0	33771	19.772	µg/L	#	94
PFPeS	5.355	349.0 -> 99.0	5233	19.902	µg/L		100
PFHxS	6.068	399.0 -> 80.0	24451	22.723	µg/L	# m	84
PFHpA	6.086	363.0 -> 319.0	36561	20.365	µg/L		97
PFHpS	6.694	449.0 -> 80.0	28618	21.658	µg/L		100
PFOA	6.739	413.0 -> 369.0	62120	21.188	µg/L		91
6:2FTS	6.748	427.0 -> 407.0	25444	20.232	µg/L		100
FOSA	7.100	498.0 -> 78.0	57604	19.936	µg/L		100
PFOS	7.288	499.0 -> 80.0	54015	21.668	µg/L	# m	75
PFNA	7.356	463.0 -> 419.0	36362	20.126	µg/L		99
MeFOSAA	7.562	570.0 -> 419.0	8543	19.715	µg/L		100
EtFOSAA	7.686	584.0 -> 419.0	7465	19.624	µg/L		100
PFNS	7.941	549.0 -> 99.0	13493	20.935	µg/L		100
PFDA	8.071	513.0 -> 469.0	48561	19.776	µg/L		100
8:2FTS	8.214	527.0 -> 507.0	25321	21.068	µg/L		100
PFDS	9.149	599.0 -> 80.0	22607	21.076	µg/L		100
PFUnDA	9.391	563.0 -> 519.0	28276	20.237	µg/L		100
PFDoDA	10.657	613.0 -> 569.0	26923	20.513	µg/L		100
PFTrDA	11.764	663.0 -> 619.0	23314	20.363	µg/L		100
PFTeDA	12.753	713.0 -> 669.0	13480	19.573	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32357.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-17 21:01
Sample Name	:	CC853-20
Vial	:	Vial 6
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

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Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

7.5.9

7

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

7.5.9

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SGS ACCUTEST FA41776

Manual Integration Approval Summary

Sample Number:	SQ853-CC853	**Method:**	EPA 537 MOD	
Lab FileID:	Q32357.D	**Analyst approved:**	03/20/17 09:24	Nancy Saunders
Injection Time:	03/17/17 21:01	**Supervisor approved:**	03/20/17 13:54	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.07	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.29	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/20/17 13:54

Data File	:	Q32367.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-18 00:20
Sample Name	:	ECC853-20
Vial	:	Vial 6
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.335	266.0 -> 222.0	15922	20.000	µg/L		0.025
13C2-PFOA	6.737	415.0 -> 370.0	62618	20.000	µg/L		0.025
13C2-6:2FTS	6.746	429.0 -> 409.0	26407	20.000	µg/L		0.025
13C4-PFOS	7.286	503.0 -> 80.0	50404	20.000	µg/L		0.013
d3-MeFOSAA	7.549	573.0 -> 419.0	11072	20.000	µg/L		0.013
13C2-PFDoDA	10.651	615.0 -> 570.0	27972	20.000	µg/L		0.038
System Monitoring Compounds							
13C2-PFHxA	5.322	315.0 -> 270.0	40361	19.66	µg/L		0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 98.30%				
d5-EtFOSAA	7.672	589.0 -> 419.0	8318	20.17	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 100.86%				
13C2-PFDA	8.069	515.0 -> 470.0	62646	20.61	µg/L		0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 103.06%				
Target Compounds							**Qvalue**
PFBA	3.027	213.0 -> 169.0	17049	20.865	µg/L		100
PFPeA	4.338	263.0 -> 219.0	10048	19.371	µg/L		100
PFBS	4.466	299.0 -> 80.0	18103	20.960	µg/L		90
4:2FTS	5.232	327.0 -> 307.0	25137	21.778	µg/L		100
PFHxA	5.312	313.0 -> 269.0	34741	19.578	µg/L	#	94
PFPeS	5.355	349.0 -> 99.0	5392	18.835	µg/L		100
PFHxS	6.068	399.0 -> 80.0	25938	22.137	µg/L	# m	84
PFHpA	6.086	363.0 -> 319.0	38899	20.856	µg/L		96
PFHpS	6.694	449.0 -> 80.0	30395	21.125	µg/L		100
PFOA	6.739	413.0 -> 369.0	63797	20.945	µg/L		91
6:2FTS	6.748	427.0 -> 407.0	27512	20.618	µg/L		100
FOSA	7.100	498.0 -> 78.0	60559	19.716	µg/L		100
PFOS	7.288	499.0 -> 80.0	57390	21.143	µg/L	# m	77
PFNA	7.356	463.0 -> 419.0	36246	19.311	µg/L		96
MeFOSAA	7.562	570.0 -> 419.0	9053	19.654	µg/L		100
EtFOSAA	7.686	584.0 -> 419.0	7545	18.656	µg/L		100
PFNS	7.941	549.0 -> 99.0	13786	19.644	µg/L		100
PFDA	8.071	513.0 -> 469.0	49220	19.293	µg/L		100
8:2FTS	8.214	527.0 -> 507.0	27272	21.368	µg/L		100
PFDS	9.149	599.0 -> 80.0	24537	21.008	µg/L		100
PFUnDA	9.391	563.0 -> 519.0	29989	20.903	µg/L		100
PFDoDA	10.657	613.0 -> 569.0	28535	21.174	µg/L		100
PFTrDA	11.752	663.0 -> 619.0	24257	20.634	µg/L		100
PFTeDA	12.753	713.0 -> 669.0	15010	21.226	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32367.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-18 00:20
Sample Name	:	ECC853-20
Vial	:	Vial 6
Sample Info	:	OP64163,SQ853,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0317_SQ853.quantmethod.xml
Quant Batch Name	:	SQ853.batch.bin
Last Calib Update	:	2017-03-20 07:42

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

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Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ853-ECC853	**Method:**	EPA 537 MOD	
Lab FileID:	Q32367.D	**Analyst approved:**	03/20/17 09:24	Nancy Saunders
Injection Time:	03/18/17 00:20	**Supervisor approved:**	03/20/17 13:54	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.07	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.29	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 13:52

Data File	:	Q32377.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 11:55
Sample Name	:	IC854-1
Vial	:	Vial 2
Sample Info	:	OP64173,SQ854,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.360	266.0 -> 222.0	13717	20.000	µg/L		0.050
13C2-PFOA	6.764	415.0 -> 370.0	48290	20.000	µg/L		0.052
13C2-6:2FTS	6.774	429.0 -> 409.0	15683	20.000	µg/L		0.053
13C4-PFOS	7.313	503.0 -> 80.0	42019	20.000	µg/L		0.040
d3-MeFOSAA	7.550	573.0 -> 419.0	7575	20.000	µg/L		0.014
13C2-PFDoDA	10.400	615.0 -> 570.0	17766	20.000	µg/L		-0.213
System Monitoring Compounds							
13C2-PFHxA	5.347	315.0 -> 270.0	1892	1.14	µg/L		0.050
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 5.68%				
d5-EtFOSAA	7.684	589.0 -> 419.0	351	1.09	µg/L		0.012
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 5.46%				
13C2-PFDA	8.117	515.0 -> 470.0	2195	1.11	µg/L		0.073
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 5.54%				
Target Compounds							**Qvalue**
PFBA	3.052	213.0 -> 169.0	679	1.268	µg/L		100
PFPeA	4.375	263.0 -> 219.0	462	1.132	µg/L		100
PFBS	4.491	299.0 -> 80.0	787	1.106	µg/L		89
4:2FTS	5.269	327.0 -> 307.0	889	1.081	µg/L		100
PFHxA	5.350	313.0 -> 269.0	1552	1.131	µg/L	#	94
PFPeS	5.380	349.0 -> 99.0	253	1.210	µg/L		100
PFHxS	6.093	399.0 -> 80.0	1109	1.120	µg/L	m	87
PFHpA	6.111	363.0 -> 319.0	1592	1.058	µg/L	#	87
PFHpS	6.735	449.0 -> 80.0	1261	1.067	µg/L		100
PFOA	6.766	413.0 -> 369.0	2564	1.084	µg/L	#	94
6:2FTS	6.776	427.0 -> 407.0	933	1.256	µg/L		100
FOSA	7.100	498.0 -> 78.0	2322	1.054	µg/L		100
PFOS	7.327	499.0 -> 80.0	2514	1.101	µg/L	# m	75
PFNA	7.394	463.0 -> 419.0	1341	1.108	µg/L	#	91
MeFOSAA	7.564	570.0 -> 419.0	396	1.193	µg/L		100
EtFOSAA	7.686	584.0 -> 419.0	461	1.561	µg/L		100
PFNS	7.989	549.0 -> 99.0	618	1.172	µg/L		100
PFDA	8.120	513.0 -> 469.0	1564	1.107	µg/L		100
8:2FTS	8.251	527.0 -> 507.0	720	1.186	µg/L		100
PFDS	9.099	599.0 -> 80.0	1005	1.021	µg/L		100
PFUnDA	9.306	563.0 -> 519.0	1023	1.144	µg/L		100
PFDoDA	10.407	613.0 -> 569.0	906	1.075	µg/L		100
PFTrDA	11.364	663.0 -> 619.0	744	0.994	µg/L		100
PFTeDA	12.252	713.0 -> 669.0	431	0.952	µg/L	m	100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.5.11
7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32377.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 11:55
Sample Name	:	IC854-1
Vial	:	Vial 2
Sample Info	:	OP64173,SQ854,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

7.5.11

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Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ854-IC854	**Method:**	EPA 537 MOD
Lab FileID:	Q32377.D	**Analyst approved:**	03/21/17 11:24 Nancy Saunders
Injection Time:	03/20/17 11:55	**Supervisor approved:**	03/21/17 13:52 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.09	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.33	Split peak
Perfluorotetradecanoic acid	376-06-7		12.25	Missed peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 13:52

Data File	:	Q32378.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 12:13
Sample Name	:	IC854-2
Vial	:	Vial 3
Sample Info	:	OP64173,SQ854,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.360	266.0 -> 222.0	13832	20.000	µg/L		0.050
13C2-PFOA	6.763	415.0 -> 370.0	50835	20.000	µg/L		0.051
13C2-6:2FTS	6.773	429.0 -> 409.0	16443	20.000	µg/L		0.051
13C4-PFOS	7.313	503.0 -> 80.0	44991	20.000	µg/L		0.039
d3-MeFOSAA	7.549	573.0 -> 419.0	7683	20.000	µg/L		0.013
13C2-PFDoDA	10.400	615.0 -> 570.0	19420	20.000	µg/L		-0.213
System Monitoring Compounds							
13C2-PFHxA	5.335	315.0 -> 270.0	3566	2.03	µg/L		0.038
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 10.17%				
d5-EtFOSAA	7.672	589.0 -> 419.0	727	2.23	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 11.16%				
13C2-PFDA	8.104	515.0 -> 470.0	4097	1.97	µg/L		0.061
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 9.83%				
Target Compounds							**Qvalue**
PFBA	3.052	213.0 -> 169.0	1198	2.218	µg/L		100
PFPeA	4.363	263.0 -> 219.0	813	1.976	µg/L		100
PFBS	4.491	299.0 -> 80.0	1509	1.980	µg/L		88
4:2FTS	5.257	327.0 -> 307.0	1808	2.096	µg/L		100
PFHxA	5.337	313.0 -> 269.0	2951	2.043	µg/L	#	92
PFPeS	5.380	349.0 -> 99.0	463	2.071	µg/L		100
PFHxS	6.093	399.0 -> 80.0	2169	2.045	µg/L	# m	85
PFHpA	6.111	363.0 -> 319.0	3242	2.046	µg/L	#	88
PFHpS	6.719	449.0 -> 80.0	2485	1.965	µg/L		100
PFOA	6.765	413.0 -> 369.0	4994	2.005	µg/L		96
6:2FTS	6.774	427.0 -> 407.0	1695	2.178	µg/L		100
FOSA	7.100	498.0 -> 78.0	4596	2.056	µg/L		100
PFOS	7.315	499.0 -> 80.0	5092	2.083	µg/L	# m	74
PFNA	7.381	463.0 -> 419.0	2697	2.115	µg/L		99
MeFOSAA	7.562	570.0 -> 419.0	677	2.012	µg/L		100
EtFOSAA	7.685	584.0 -> 419.0	714	2.384	µg/L		100
PFNS	7.979	549.0 -> 99.0	1139	2.016	µg/L		100
PFDA	8.107	513.0 -> 469.0	3081	2.072	µg/L		100
8:2FTS	8.239	527.0 -> 507.0	1341	2.107	µg/L		100
PFDS	9.087	599.0 -> 80.0	2082	1.977	µg/L		100
PFUnDA	9.293	563.0 -> 519.0	1925	1.968	µg/L		100
PFDoDA	10.407	613.0 -> 569.0	1886	2.048	µg/L		100
PFTrDA	11.364	663.0 -> 619.0	1663	2.033	µg/L		100
PFTeDA	12.240	713.0 -> 669.0	987	1.995	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.5.12

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SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32378.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 12:13
Sample Name	:	IC854-2
Vial	:	Vial 3
Sample Info	:	OP64173,SQ854,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.5.12

7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ854-IC854	**Method:**	EPA 537 MOD	
Lab FileID:	Q32378.D	**Analyst approved:**	03/21/17 11:24	Nancy Saunders
Injection Time:	03/20/17 12:13	**Supervisor approved:**	03/21/17 13:52	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.09	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.32	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 13:52

Data File	:	Q32379.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 12:32
Sample Name	:	IC854-5
Vial	:	Vial 4
Sample Info	:	OP64173,SQ854,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.360	266.0 -> 222.0	14525	20.000	µg/L		0.050
13C2-PFOA	6.763	415.0 -> 370.0	51659	20.000	µg/L		0.051
13C2-6:2FTS	6.773	429.0 -> 409.0	16866	20.000	µg/L		0.051
13C4-PFOS	7.313	503.0 -> 80.0	44147	20.000	µg/L		0.039
d3-MeFOSAA	7.549	573.0 -> 419.0	7795	20.000	µg/L		0.013
13C2-PFDoDA	10.388	615.0 -> 570.0	19255	20.000	µg/L		-0.225
System Monitoring Compounds							
13C2-PFHxA	5.335	315.0 -> 270.0	8592	4.82	µg/L		0.038
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 24.11%				
d5-EtFOSAA	7.684	589.0 -> 419.0	1500	4.54	µg/L		0.012
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 22.70%				
13C2-PFDA	8.092	515.0 -> 470.0	10109	4.77	µg/L		0.048
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 23.86%				
Target Compounds							**Qvalue**
PFBA	3.052	213.0 -> 169.0	2760	4.866	µg/L		100
PFPeA	4.363	263.0 -> 219.0	1979	4.583	µg/L		100
PFBS	4.491	299.0 -> 80.0	3727	4.985	µg/L		90
4:2FTS	5.257	327.0 -> 307.0	4648	5.255	µg/L		100
PFHxA	5.337	313.0 -> 269.0	6976	4.754	µg/L	#	93
PFPeS	5.380	349.0 -> 99.0	1131	5.157	µg/L		100
PFHxS	6.093	399.0 -> 80.0	5229	5.023	µg/L	# m	84
PFHpA	6.111	363.0 -> 319.0	7678	4.769	µg/L	#	88
PFHpS	6.719	449.0 -> 80.0	5982	4.820	µg/L		100
PFOA	6.765	413.0 -> 369.0	12117	4.787	µg/L	#	96
6:2FTS	6.774	427.0 -> 407.0	4120	5.160	µg/L		100
FOSA	7.100	498.0 -> 78.0	10797	4.761	µg/L		100
PFOS	7.315	499.0 -> 80.0	11687	4.873	µg/L	# m	77
PFNA	7.381	463.0 -> 419.0	6340	4.893	µg/L		98
MeFOSAA	7.562	570.0 -> 419.0	1595	4.672	µg/L		100
EtFOSAA	7.685	584.0 -> 419.0	1533	5.045	µg/L		100
PFNS	7.979	549.0 -> 99.0	2889	5.211	µg/L		100
PFDA	8.095	513.0 -> 469.0	7246	4.795	µg/L		100
8:2FTS	8.239	527.0 -> 507.0	3298	5.051	µg/L		100
PFDS	9.074	599.0 -> 80.0	4972	4.810	µg/L		100
PFUnDA	9.281	563.0 -> 519.0	4786	4.936	µg/L		100
PFDoDA	10.394	613.0 -> 569.0	4529	4.961	µg/L		100
PFTrDA	11.351	663.0 -> 619.0	4069	5.015	µg/L		100
PFTeDA	12.215	713.0 -> 669.0	2448	4.991	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.5.13

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SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32379.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 12:32
Sample Name	:	IC854-5
Vial	:	Vial 4
Sample Info	:	OP64173,SQ854,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.5.13

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Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ854-IC854	**Method:**	EPA 537 MOD	
Lab FileID:	Q32379.D	**Analyst approved:**	03/21/17 11:24	Nancy Saunders
Injection Time:	03/20/17 12:32	**Supervisor approved:**	03/21/17 13:52	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.09	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.32	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 13:52

Data File	:	Q32380.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 12:50
Sample Name	:	IC854-10
Vial	:	Vial 5
Sample Info	:	OP64173,SQ854,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.360	266.0 -> 222.0	13330	20.000	µg/L		0.050
13C2-PFOA	6.763	415.0 -> 370.0	49091	20.000	µg/L		0.051
13C2-6:2FTS	6.773	429.0 -> 409.0	16713	20.000	µg/L		0.051
13C4-PFOS	7.313	503.0 -> 80.0	44138	20.000	µg/L		0.039
d3-MeFOSAA	7.549	573.0 -> 419.0	7574	20.000	µg/L		0.013
13C2-PFDoDA	10.388	615.0 -> 570.0	18967	20.000	µg/L		-0.225
System Monitoring Compounds							
13C2-PFHxA	5.335	315.0 -> 270.0	17489	10.33	µg/L		0.038
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 51.63%				
d5-EtFOSAA	7.672	589.0 -> 419.0	2973	9.26	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 46.32%				
13C2-PFDA	8.092	515.0 -> 470.0	20253	10.06	µg/L		0.048
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 50.30%				
Target Compounds							**Qvalue**
PFBA	3.040	213.0 -> 169.0	5244	10.075	µg/L		100
PFPeA	4.363	263.0 -> 219.0	3942	9.945	µg/L		100
PFBS	4.491	299.0 -> 80.0	7124	9.530	µg/L		89
4:2FTS	5.257	327.0 -> 307.0	8981	10.247	µg/L		100
PFHxA	5.337	313.0 -> 269.0	14033	10.064	µg/L	#	93
PFPeS	5.367	349.0 -> 99.0	2169	9.890	µg/L		100
PFHxS	6.081	399.0 -> 80.0	10274	9.872	µg/L	# m	83
PFHpA	6.111	363.0 -> 319.0	15034	9.826	µg/L	#	87
PFHpS	6.719	449.0 -> 80.0	11913	9.601	µg/L		100
PFOA	6.765	413.0 -> 369.0	23648	9.832	µg/L		95
6:2FTS	6.774	427.0 -> 407.0	8238	10.411	µg/L		100
FOSA	7.100	498.0 -> 78.0	22133	10.043	µg/L		100
PFOS	7.315	499.0 -> 80.0	23527	9.811	µg/L	# m	77
PFNA	7.381	463.0 -> 419.0	12299	9.990	µg/L		98
MeFOSAA	7.562	570.0 -> 419.0	3191	9.620	µg/L		100
EtFOSAA	7.685	584.0 -> 419.0	2767	9.368	µg/L		100
PFNS	7.966	549.0 -> 99.0	5703	10.289	µg/L		100
PFDA	8.095	513.0 -> 469.0	14444	10.058	µg/L		100
8:2FTS	8.226	527.0 -> 507.0	6624	10.240	µg/L		100
PFDS	9.074	599.0 -> 80.0	10101	9.772	µg/L		100
PFUnDA	9.281	563.0 -> 519.0	9610	10.061	µg/L		100
PFDoDA	10.394	613.0 -> 569.0	8940	9.941	µg/L		100
PFTrDA	11.351	663.0 -> 619.0	8155	10.205	µg/L		100
PFTeDA	12.227	713.0 -> 669.0	4818	9.971	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.5.14 7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32380.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 12:50
Sample Name	:	IC854-10
Vial	:	Vial 5
Sample Info	:	OP64173,SQ854,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ854-IC854	**Method:**	EPA 537 MOD	
Lab FileID:	Q32380.D	**Analyst approved:**	03/21/17 11:24	Nancy Saunders
Injection Time:	03/20/17 12:50	**Supervisor approved:**	03/21/17 13:52	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.08	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.32	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 13:52

Data File	:	Q32381.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 13:09
Sample Name	:	ICC854-20
Vial	:	Vial 6
Sample Info	:	OP64173,SQ854,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.347	266.0 -> 222.0	13629	20.000	µg/L		0.038
13C2-PFOA	6.750	415.0 -> 370.0	50391	20.000	µg/L		0.038
13C2-6:2FTS	6.760	429.0 -> 409.0	16946	20.000	µg/L		0.039
13C4-PFOS	7.301	503.0 -> 80.0	43873	20.000	µg/L		0.027
d3-MeFOSAA	7.549	573.0 -> 419.0	7624	20.000	µg/L		0.013
13C2-PFDoDA	10.363	615.0 -> 570.0	19162	20.000	µg/L		-0.250
System Monitoring Compounds							
13C2-PFHxA	5.335	315.0 -> 270.0	32977	18.97	µg/L		0.038
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 94.84%				
d5-EtFOSAA	7.672	589.0 -> 419.0	5982	18.51	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 92.57%				
13C2-PFDA	8.081	515.0 -> 470.0	39650	19.19	µg/L		0.038
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 95.93%				
Target Compounds							**Qvalue**
PFBA	3.040	213.0 -> 169.0	10246	19.251	µg/L		100
PFPeA	4.350	263.0 -> 219.0	7690	18.977	µg/L		100
PFBS	4.478	299.0 -> 80.0	14461	19.462	µg/L		87
4:2FTS	5.257	327.0 -> 307.0	17808	20.038	µg/L		100
PFHxA	5.337	313.0 -> 269.0	27533	19.237	µg/L	#	93
PFPeS	5.367	349.0 -> 99.0	4216	19.345	µg/L		100
PFHxS	6.081	399.0 -> 80.0	19856	19.196	µg/L	# m	84
PFHpA	6.098	363.0 -> 319.0	29058	18.503	µg/L	#	88
PFHpS	6.719	449.0 -> 80.0	24266	19.674	µg/L		100
PFOA	6.752	413.0 -> 369.0	47274	19.147	µg/L		96
6:2FTS	6.762	427.0 -> 407.0	16582	20.669	µg/L		100
FOSA	7.100	498.0 -> 78.0	43483	19.601	µg/L		100
PFOS	7.302	499.0 -> 80.0	46093	19.337	µg/L	# m	75
PFNA	7.381	463.0 -> 419.0	24047	19.028	µg/L		98
MeFOSAA	7.562	570.0 -> 419.0	6447	19.306	µg/L		100
EtFOSAA	7.685	584.0 -> 419.0	5654	19.015	µg/L		100
PFNS	7.966	549.0 -> 99.0	10495	19.050	µg/L		100
PFDA	8.083	513.0 -> 469.0	28238	19.156	µg/L		100
8:2FTS	8.214	527.0 -> 507.0	13128	20.015	µg/L		100
PFDS	9.049	599.0 -> 80.0	19636	19.113	µg/L		100
PFUnDA	9.256	563.0 -> 519.0	17610	18.250	µg/L		100
PFDoDA	10.369	613.0 -> 569.0	17583	19.352	µg/L		100
PFTrDA	11.326	663.0 -> 619.0	15608	19.331	µg/L		100
PFTeDA	12.202	713.0 -> 669.0	9450	19.356	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.5.15

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SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32381.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 13:09
Sample Name	:	ICC854-20
Vial	:	Vial 6
Sample Info	:	OP64173,SQ854,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

7.5.15

7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ854-ICC854	**Method:**	EPA 537 MOD	
Lab FileID:	Q32381.D	**Analyst approved:**	03/21/17 11:24	Nancy Saunders
Injection Time:	03/20/17 13:09	**Supervisor approved:**	03/21/17 13:52	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.08	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.30	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 13:52

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32382.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 13:27
Sample Name	:	IC854-40
Vial	:	Vial 7
Sample Info	:	OP64173,SQ854,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.347	266.0 -> 222.0	13556	20.000	µg/L		0.038
13C2-PFOA	6.750	415.0 -> 370.0	49688	20.000	µg/L		0.038
13C2-6:2FTS	6.760	429.0 -> 409.0	17758	20.000	µg/L		0.039
13C4-PFOS	7.301	503.0 -> 80.0	42768	20.000	µg/L		0.027
d3-MeFOSAA	7.549	573.0 -> 419.0	7638	20.000	µg/L		0.013
13C2-PFDoDA	10.375	615.0 -> 570.0	18861	20.000	µg/L		-0.238
System Monitoring Compounds							
13C2-PFHxA	5.335	315.0 -> 270.0	69882	40.77	µg/L		0.038
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 203.83%				
d5-EtFOSAA	7.672	589.0 -> 419.0	12398	38.30	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 191.51%				
13C2-PFDA	8.081	515.0 -> 470.0	80025	39.27	µg/L		0.038
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 196.36%				
Target Compounds							**Qvalue**
PFBA	3.040	213.0 -> 169.0	20806	39.303	µg/L		100
PFPeA	4.350	263.0 -> 219.0	15775	39.139	µg/L		100
PFBS	4.478	299.0 -> 80.0	28663	39.573	µg/L		91
4:2FTS	5.244	327.0 -> 307.0	36256	38.931	µg/L		100
PFHxA	5.325	313.0 -> 269.0	57424	40.688	µg/L	#	92
PFPeS	5.367	349.0 -> 99.0	8372	39.407	µg/L		100
PFHxS	6.081	399.0 -> 80.0	39556	39.229	µg/L	# m	85
PFHpA	6.098	363.0 -> 319.0	60504	39.071	µg/L	#	86
PFHpS	6.707	449.0 -> 80.0	46994	39.087	µg/L		100
PFOA	6.752	413.0 -> 369.0	96506	39.641	µg/L		95
6:2FTS	6.762	427.0 -> 407.0	32973	39.221	µg/L		100
FOSA	7.100	498.0 -> 78.0	87654	39.439	µg/L		100
PFOS	7.302	499.0 -> 80.0	93627	40.293	µg/L	# m	75
PFNA	7.368	463.0 -> 419.0	49414	39.653	µg/L		99
MeFOSAA	7.562	570.0 -> 419.0	13153	39.314	µg/L		100
EtFOSAA	7.685	584.0 -> 419.0	11490	38.573	µg/L		100
PFNS	7.954	549.0 -> 99.0	21279	39.622	µg/L		100
PFDA	8.083	513.0 -> 469.0	57027	39.234	µg/L		100
8:2FTS	8.214	527.0 -> 507.0	26969	39.238	µg/L		100
PFDS	9.049	599.0 -> 80.0	39565	39.505	µg/L		100
PFUnDA	9.268	563.0 -> 519.0	37443	39.423	µg/L		100
PFDoDA	10.369	613.0 -> 569.0	35400	39.583	µg/L		100
PFTrDA	11.326	663.0 -> 619.0	31300	39.384	µg/L		100
PFTeDA	12.202	713.0 -> 669.0	19196	39.946	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32382.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 13:27
Sample Name	:	IC854-40
Vial	:	Vial 7
Sample Info	:	OP64173,SQ854,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

7.5.16

7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ854-IC854	**Method:**	EPA 537 MOD	
Lab FileID:	Q32382.D	**Analyst approved:**	03/21/17 11:24	Nancy Saunders
Injection Time:	03/20/17 13:27	**Supervisor approved:**	03/21/17 13:52	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.08	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.30	Split peak

Q32383.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger 03/21/17 13:52

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32383.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 13:45
Sample Name	:	IC854-50
Vial	:	Vial 8
Sample Info	:	OP64173,SQ854,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.347	266.0 -> 222.0	13464	20.000	µg/L		0.038
13C2-PFOA	6.750	415.0 -> 370.0	49613	20.000	µg/L		0.038
13C2-6:2FTS	6.760	429.0 -> 409.0	18035	20.000	µg/L		0.039
13C4-PFOS	7.301	503.0 -> 80.0	43133	20.000	µg/L		0.027
d3-MeFOSAA	7.549	573.0 -> 419.0	7533	20.000	µg/L		0.013
13C2-PFDoDA	10.363	615.0 -> 570.0	18921	20.000	µg/L		-0.250
System Monitoring Compounds							
13C2-PFHxA	5.322	315.0 -> 270.0	85153	49.75	µg/L		0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 248.74%				
d5-EtFOSAA	7.672	589.0 -> 419.0	16644	52.14	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 260.68%				
13C2-PFDA	8.069	515.0 -> 470.0	103604	50.92	µg/L		0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 254.59%				
Target Compounds							**Qvalue**
PFBA	3.040	213.0 -> 169.0	26732	50.842	µg/L		100
PFPeA	4.350	263.0 -> 219.0	20476	51.149	µg/L		100
PFBS	4.478	299.0 -> 80.0	37000	50.651	µg/L		88
4:2FTS	5.244	327.0 -> 307.0	48008	50.759	µg/L		100
PFHxA	5.325	313.0 -> 269.0	70126	49.763	µg/L	#	93
PFPeS	5.355	349.0 -> 99.0	10871	50.736	µg/L		100
PFHxS	6.081	399.0 -> 80.0	51821	50.957	µg/L	# m	84
PFHpA	6.098	363.0 -> 319.0	79473	51.397	µg/L	#	86
PFHpS	6.707	449.0 -> 80.0	61790	50.958	µg/L		100
PFOA	6.752	413.0 -> 369.0	123197	50.681	µg/L		95
6:2FTS	6.762	427.0 -> 407.0	42901	50.245	µg/L		100
FOSA	7.086	498.0 -> 78.0	110953	50.620	µg/L		100
PFOS	7.302	499.0 -> 80.0	117354	50.076	µg/L	# m	76
PFNA	7.368	463.0 -> 419.0	63050	50.672	µg/L		98
MeFOSAA	7.562	570.0 -> 419.0	16804	50.931	µg/L		100
EtFOSAA	7.685	584.0 -> 419.0	15171	51.642	µg/L		100
PFNS	7.954	549.0 -> 99.0	27406	50.599	µg/L		100
PFDA	8.071	513.0 -> 469.0	73952	50.954	µg/L		100
8:2FTS	8.201	527.0 -> 507.0	35281	50.542	µg/L		100
PFDS	9.037	599.0 -> 80.0	51327	50.816	µg/L		100
PFUnDA	9.256	563.0 -> 519.0	48740	51.154	µg/L		100
PFDoDA	10.357	613.0 -> 569.0	45401	50.605	µg/L		100
PFTrDA	11.314	663.0 -> 619.0	40434	50.716	µg/L		100
PFTeDA	12.190	713.0 -> 669.0	24252	50.309	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

75.17

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SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32383.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 13:45
Sample Name	:	IC854-50
Vial	:	Vial 8
Sample Info	:	OP64173,SQ854,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ854-IC854	**Method:**	EPA 537 MOD	
Lab FileID:	Q32383.D	**Analyst approved:**	03/21/17 11:24	Nancy Saunders
Injection Time:	03/20/17 13:45	**Supervisor approved:**	03/21/17 13:52	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.08	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.30	Split peak

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32387.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 15:15
Sample Name	:	ICV854-20
Vial	:	Vial 9
Sample Info	:	OP64173,SQ854,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.322	266.0 -> 222.0	13605	20.000	µg/L		0.012
13C2-PFOA	6.737	415.0 -> 370.0	50919	20.000	µg/L		0.025
13C2-6:2FTS	6.746	429.0 -> 409.0	16916	20.000	µg/L		0.025
13C4-PFOS	7.288	503.0 -> 80.0	44533	20.000	µg/L		0.014
d3-MeFOSAA	7.536	573.0 -> 419.0	8095	20.000	µg/L		0.000
13C2-PFDoDA	10.325	615.0 -> 570.0	19041	20.000	µg/L		-0.288
System Monitoring Compounds							
Target Compounds							**Qvalue**
PFBA	3.027	213.0 -> 169.0	11063	20.823	µg/L		100
PFPeA	4.338	263.0 -> 219.0	8281	20.471	µg/L		100
PFBS	4.466	299.0 -> 80.0	15259	20.232	µg/L		87
4:2FTS	5.232	327.0 -> 307.0	18600	20.967	µg/L		100
PFHxA	5.312	313.0 -> 269.0	29541	20.425	µg/L	#	93
PFPeS	5.355	349.0 -> 99.0	4240	19.167	µg/L		100
PFHxS	6.068	399.0 -> 80.0	23562	22.441	µg/L	#	82
PFHpA	6.086	363.0 -> 319.0	31469	19.830	µg/L	#	87
PFHpS	6.707	449.0 -> 80.0	25430	20.313	µg/L		100
PFOA	6.739	413.0 -> 369.0	51327	20.573	µg/L		96
6:2FTS	6.748	427.0 -> 407.0	17451	21.791	µg/L		100
FOSA	7.086	498.0 -> 78.0	48983	20.797	µg/L		100
PFOS	7.290	499.0 -> 80.0	50645	20.932	µg/L	#	79
PFNA	7.356	463.0 -> 419.0	26208	20.522	µg/L		99
MeFOSAA	7.550	570.0 -> 419.0	6606	18.632	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	5937	18.808	µg/L		100
PFNS	7.941	549.0 -> 99.0	11182	19.997	µg/L		100
PFDA	8.058	513.0 -> 469.0	30969	20.791	µg/L		100
8:2FTS	8.189	527.0 -> 507.0	15062	23.005	µg/L		100
PFDS	9.012	599.0 -> 80.0	21301	20.426	µg/L		100
PFUnDA	9.218	563.0 -> 519.0	20617	21.501	µg/L		100
PFDoDA	10.319	613.0 -> 569.0	18604	20.606	µg/L		100
PFTrDA	11.276	663.0 -> 619.0	16666	20.773	µg/L		100
PFTeDA	12.152	713.0 -> 669.0	10130	20.880	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32387.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 15:15
Sample Name	:	ICV854-20
Vial	:	Vial 9
Sample Info	:	OP64173,SQ854,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

PFBA

13C3-PFPeA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.5.18

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Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 13:52

Data File	:	Q32395.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 17:43
Sample Name	:	CC854-20
Vial	:	Vial 6
Sample Info	:	OP64173,SQ854,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.322	266.0 -> 222.0	11412	20.000	µg/L		0.012
13C2-PFOA	6.725	415.0 -> 370.0	47676	20.000	µg/L		0.012
13C2-6:2FTS	6.734	429.0 -> 409.0	17061	20.000	µg/L		0.012
13C4-PFOS	7.276	503.0 -> 80.0	42639	20.000	µg/L		0.002
d3-MeFOSAA	7.536	573.0 -> 419.0	7623	20.000	µg/L		0.000
13C2-PFDoDA	10.288	615.0 -> 570.0	17363	20.000	µg/L		-0.325
System Monitoring Compounds							
13C2-PFHxA	5.297	315.0 -> 270.0	28851	17.54	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 87.70%				
d5-EtFOSAA	7.659	589.0 -> 419.0	5979	18.51	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 92.54%				
13C2-PFDA	8.031	515.0 -> 470.0	37922	19.40	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 96.98%				
Target Compounds							**Qvalue**
PFBA	3.015	213.0 -> 169.0	8183	18.362	µg/L		100
PFPeA	4.325	263.0 -> 219.0	6644	19.580	µg/L		100
PFBS	4.453	299.0 -> 80.0	13619	18.860	µg/L		86
4:2FTS	5.219	327.0 -> 307.0	17558	19.623	µg/L		100
PFHxA	5.300	313.0 -> 269.0	24892	18.382	µg/L	#	93
PFPeS	5.342	349.0 -> 99.0	3808	17.976	µg/L		100
PFHxS	6.056	399.0 -> 80.0	20035	19.930	µg/L	# m	80
PFHpA	6.073	363.0 -> 319.0	27935	18.800	µg/L	#	86
PFHpS	6.694	449.0 -> 80.0	23562	19.657	µg/L		100
PFOA	6.726	413.0 -> 369.0	44741	19.154	µg/L		95
6:2FTS	6.735	427.0 -> 407.0	16151	19.995	µg/L		100
FOSA	7.086	498.0 -> 78.0	44953	20.267	µg/L		100
PFOS	7.277	499.0 -> 80.0	44580	19.243	µg/L	# m	74
PFNA	7.343	463.0 -> 419.0	23061	19.287	µg/L		97
MeFOSAA	7.550	570.0 -> 419.0	6262	18.753	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	5315	17.880	µg/L		100
PFNS	7.916	549.0 -> 99.0	9828	18.355	µg/L		100
PFDA	8.033	513.0 -> 469.0	27201	19.504	µg/L		100
8:2FTS	8.164	527.0 -> 507.0	13432	20.340	µg/L		100
PFDS	8.974	599.0 -> 80.0	18375	18.403	µg/L		100
PFUnDA	9.180	563.0 -> 519.0	17233	19.710	µg/L		100
PFDoDA	10.294	613.0 -> 569.0	16048	19.493	µg/L		100
PFTrDA	11.251	663.0 -> 619.0	14156	19.350	µg/L		100
PFTeDA	12.102	713.0 -> 669.0	8927	20.180	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32395.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-20 17:43
Sample Name	:	CC854-20
Vial	:	Vial 6
Sample Info	:	OP64173,SQ854,5.20,,,5,1,SOIL
Quant Method	:	PFC_LISTDW_0320_SQ854.quantmethod.xml
Quant Batch Name	:	SQ854.batch.bin
Last Calib Update	:	2017-03-21 07:59

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

13C2-6:2FTS

PFOA

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

PFOS

FOSA

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

13C2-PFDoDA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ854-CC854	**Method:**	EPA 537 MOD	
Lab FileID:	Q32395.D	**Analyst approved:**	03/21/17 11:24	Nancy Saunders
Injection Time:	03/20/17 17:43	**Supervisor approved:**	03/21/17 13:52	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.06	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.28	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 18:03

Data File	:	Q32419.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 11:03
Sample Name	:	IC855-1
Vial	:	Vial 2
Sample Info	:	OP64208,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.347	266.0 -> 222.0	15746	20.000	µg/L		0.013
13C2-PFOA	6.763	415.0 -> 370.0	71562	20.000	µg/L		0.013
13C2-6:2FTS	6.773	429.0 -> 409.0	26226	20.000	µg/L		0.013
13C4-PFOS	7.326	503.0 -> 80.0	53877	20.000	µg/L		0.013
d3-MeFOSAA	7.550	573.0 -> 419.0	11715	20.000	µg/L		0.000
13C2-PFDoDA	10.876	615.0 -> 570.0	30113	20.000	µg/L		0.050
System Monitoring Compounds							
13C2-PFHxA	5.335	315.0 -> 270.0	2483	1.14	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 5.71%				
d5-EtFOSAA	7.672	589.0 -> 419.0	447	0.96	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 4.81%				
13C2-PFDA	8.167	515.0 -> 470.0	3357	1.00	µg/L		0.038
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 5.02%				
Target Compounds							**Qvalue**
PFBA	3.040	213.0 -> 169.0	624	1.146	µg/L	m	100
PFPeA	4.350	263.0 -> 219.0	494	1.058	µg/L		100
PFBS	4.479	299.0 -> 80.0	953	1.129	µg/L		93
4:2FTS	5.257	327.0 -> 307.0	1539	1.234	µg/L		100
PFHxA	5.337	313.0 -> 269.0	2062	1.145	µg/L	#	92
PFPeS	5.367	349.0 -> 99.0	299	1.201	µg/L		100
PFHxS	6.093	399.0 -> 80.0	1430	1.167	µg/L	# m	84
PFHpA	6.111	363.0 -> 319.0	2184	1.059	µg/L	#	90
PFHpS	6.732	449.0 -> 80.0	1599	1.055	µg/L		100
PFOA	6.765	413.0 -> 369.0	3718	1.064	µg/L	#	91
6:2FTS	6.774	427.0 -> 407.0	1450	1.199	µg/L		100
FOSA	7.087	498.0 -> 78.0	3746	1.153	µg/L		100
PFOS	7.327	499.0 -> 80.0	3326	1.155	µg/L	# m	72
PFNA	7.406	463.0 -> 419.0	1983	1.037	µg/L		98
MeFOSAA	7.564	570.0 -> 419.0	581	1.162	µg/L		100
EtFOSAA	7.686	584.0 -> 419.0	515	1.196	µg/L		100
PFNS	8.014	549.0 -> 99.0	736	1.110	µg/L		100
PFDA	8.157	513.0 -> 469.0	2542	1.069	µg/L		100
8:2FTS	8.326	527.0 -> 507.0	1314	1.086	µg/L		100
PFDS	9.324	599.0 -> 80.0	1265	0.968	µg/L		100
PFUnDA	9.568	563.0 -> 519.0	1707	1.036	µg/L		100
PFDoDA	10.869	613.0 -> 569.0	1525	1.077	µg/L		100
PFTrDA	12.014	663.0 -> 619.0	1383	1.094	µg/L		100
PFTeDA	13.040	713.0 -> 669.0	783	1.026	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.5.20
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SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32419.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 11:03
Sample Name	:	IC855-1
Vial	:	Vial 2
Sample Info	:	OP64208,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

PFOA

13C2-6:2FTS

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

FOSA

PFOS

13C4-PFOS

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

PFDoDA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

13C2-PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ855-IC855	**Method:**	EPA 537 MOD
Lab FileID:	Q32419.D	**Analyst approved:**	03/21/17 16:36 Nancy Saunders
Injection Time:	03/21/17 11:03	**Supervisor approved:**	03/21/17 18:03 Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorobutanoic acid	375-22-4		3.04	Poor instrument integration
Perfluorohexanesulfonic acid	355-46-4		6.09	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.33	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 18:03

Data File	:	Q32420.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 11:24
Sample Name	:	IC855-2
Vial	:	Vial 3
Sample Info	:	OP64208,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.347	266.0 -> 222.0	14923	20.000	µg/L		0.013
13C2-PFOA	6.763	415.0 -> 370.0	66400	20.000	µg/L		0.013
13C2-6:2FTS	6.773	429.0 -> 409.0	24903	20.000	µg/L		0.013
13C4-PFOS	7.326	503.0 -> 80.0	50033	20.000	µg/L		0.013
d3-MeFOSAA	7.549	573.0 -> 419.0	11439	20.000	µg/L		0.000
13C2-PFDoDA	10.863	615.0 -> 570.0	28931	20.000	µg/L		0.038
System Monitoring Compounds							
13C2-PFHxA	5.335	315.0 -> 270.0	4244	2.11	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 10.53%				
d5-EtFOSAA	7.672	589.0 -> 419.0	912	2.01	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 10.04%				
13C2-PFDA	8.154	515.0 -> 470.0	6383	2.06	µg/L		0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 10.28%				
Target Compounds							**Qvalue**
PFBA	3.040	213.0 -> 169.0	1154	2.237	µg/L		100
PFPeA	4.350	263.0 -> 219.0	916	2.071	µg/L		100
PFBS	4.479	299.0 -> 80.0	1683	2.147	µg/L	#	85
4:2FTS	5.257	327.0 -> 307.0	2684	2.266	µg/L		100
PFHxA	5.337	313.0 -> 269.0	3425	2.050	µg/L	#	93
PFPeS	5.367	349.0 -> 99.0	497	2.148	µg/L		100
PFHxS	6.093	399.0 -> 80.0	2427	2.133	µg/L	# m	82
PFHpA	6.111	363.0 -> 319.0	4049	2.115	µg/L	#	87
PFHpS	6.719	449.0 -> 80.0	2191	1.556	µg/L		100
PFOA	6.765	413.0 -> 369.0	6119	1.886	µg/L	#	95
6:2FTS	6.774	427.0 -> 407.0	2634	2.293	µg/L		100
FOSA	7.087	498.0 -> 78.0	6484	2.044	µg/L		100
PFOS	7.327	499.0 -> 80.0	5702	2.133	µg/L	# m	75
PFNA	7.394	463.0 -> 419.0	3424	1.930	µg/L		93
MeFOSAA	7.563	570.0 -> 419.0	930	1.904	µg/L		100
EtFOSAA	7.686	584.0 -> 419.0	875	2.079	µg/L		100
PFNS	8.014	549.0 -> 99.0	1352	2.196	µg/L		100
PFDA	8.157	513.0 -> 469.0	4626	2.096	µg/L		100
8:2FTS	8.314	527.0 -> 507.0	2593	2.258	µg/L		100
PFDS	9.312	599.0 -> 80.0	2440	2.011	µg/L		100
PFUnDA	9.568	563.0 -> 519.0	3064	1.935	µg/L		100
PFDoDA	10.882	613.0 -> 569.0	2784	2.046	µg/L		100
PFTrDA	12.014	663.0 -> 619.0	2543	2.094	µg/L		100
PFTeDA	13.040	713.0 -> 669.0	1466	1.999	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.5.21
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SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32420.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 11:24
Sample Name	:	IC855-2
Vial	:	Vial 3
Sample Info	:	OP64208,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.5.21

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SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

PFOA

13C2-6:2FTS

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

FOSA

PFOS

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

PFDoDA

Perfluorinated Compounds by LC/MS/MS.

13C2-PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ855-IC855	**Method:**	EPA 537 MOD	
Lab FileID:	Q32420.D	**Analyst approved:**	03/21/17 16:36	Nancy Saunders
Injection Time:	03/21/17 11:24	**Supervisor approved:**	03/21/17 18:03	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.09	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.33	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 18:03

Data File	:	Q32421.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 11:43
Sample Name	:	IC855-5
Vial	:	Vial 4
Sample Info	:	OP64208,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.347	266.0 -> 222.0	15512	20.000	µg/L		0.013
13C2-PFOA	6.763	415.0 -> 370.0	69827	20.000	µg/L		0.013
13C2-6:2FTS	6.773	429.0 -> 409.0	26793	20.000	µg/L		0.013
13C4-PFOS	7.313	503.0 -> 80.0	53452	20.000	µg/L		0.000
d3-MeFOSAA	7.549	573.0 -> 419.0	11785	20.000	µg/L		0.000
13C2-PFDoDA	10.851	615.0 -> 570.0	29503	20.000	µg/L		0.025
System Monitoring Compounds							
13C2-PFHxA	5.322	315.0 -> 270.0	10347	4.88	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 24.40%				
d5-EtFOSAA	7.672	589.0 -> 419.0	2177	4.65	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 23.27%				
13C2-PFDA	8.142	515.0 -> 470.0	15946	4.89	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 24.43%				
Target Compounds							**Qvalue**
PFBA	3.040	213.0 -> 169.0	2671	4.979	µg/L		100
PFPeA	4.350	263.0 -> 219.0	2114	4.596	µg/L		100
PFBS	4.479	299.0 -> 80.0	4116	4.914	µg/L		89
4:2FTS	5.244	327.0 -> 307.0	6475	5.081	µg/L		100
PFHxA	5.325	313.0 -> 269.0	8265	4.704	µg/L	#	93
PFPeS	5.367	349.0 -> 99.0	1195	4.838	µg/L		100
PFHxS	6.081	399.0 -> 80.0	6119	5.035	µg/L	# m	83
PFHpA	6.098	363.0 -> 319.0	9936	4.936	µg/L	#	87
PFHpS	6.719	449.0 -> 80.0	7427	4.936	µg/L		100
PFOA	6.765	413.0 -> 369.0	15710	4.606	µg/L		94
6:2FTS	6.774	427.0 -> 407.0	6523	5.278	µg/L		100
FOSA	7.087	498.0 -> 78.0	17421	5.330	µg/L		100
PFOS	7.327	499.0 -> 80.0	14201	4.973	µg/L	# m	76
PFNA	7.394	463.0 -> 419.0	8792	4.713	µg/L		96
MeFOSAA	7.563	570.0 -> 419.0	2440	4.849	µg/L		100
EtFOSAA	7.686	584.0 -> 419.0	1962	4.528	µg/L		100
PFNS	8.014	549.0 -> 99.0	3348	5.089	µg/L		100
PFDA	8.145	513.0 -> 469.0	11291	4.865	µg/L		100
8:2FTS	8.301	527.0 -> 507.0	6407	5.185	µg/L		100
PFDS	9.299	599.0 -> 80.0	6220	4.798	µg/L		100
PFUnDA	9.543	563.0 -> 519.0	7838	4.854	µg/L		100
PFDoDA	10.857	613.0 -> 569.0	6784	4.888	µg/L		100
PFTrDA	11.989	663.0 -> 619.0	6137	4.954	µg/L		100
PFTeDA	13.015	713.0 -> 669.0	3628	4.849	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.5.22
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SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32421.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 11:43
Sample Name	:	IC855-5
Vial	:	Vial 4
Sample Info	:	OP64208,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.5.22

7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

PFOA

13C2-6:2FTS

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

FOSA

PFOS

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

PFDoDA

Perfluorinated Compounds by LC/MS/MS.

13C2-PFDoDA

PFTrDA

PFTeDA

Calibration Curve

SGS ACCUTEST FA41776

Manual Integration Approval Summary

Sample Number:	SQ855-IC855	**Method:**	EPA 537 MOD	
Lab FileID:	Q32421.D	**Analyst approved:**	03/21/17 16:36	Nancy Saunders
Injection Time:	03/21/17 11:43	**Supervisor approved:**	03/21/17 18:03	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.08	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.33	Split peak

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 18:03

Data File	:	Q32422.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 12:02
Sample Name	:	IC855-10
Vial	:	Vial 5
Sample Info	:	OP64208,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.335	266.0 -> 222.0	13811	20.000	µg/L		0.000
13C2-PFOA	6.750	415.0 -> 370.0	65893	20.000	µg/L		0.000
13C2-6:2FTS	6.760	429.0 -> 409.0	25040	20.000	µg/L		0.000
13C4-PFOS	7.313	503.0 -> 80.0	51093	20.000	µg/L		0.000
d3-MeFOSAA	7.549	573.0 -> 419.0	11254	20.000	µg/L		0.000
13C2-PFDoDA	10.826	615.0 -> 570.0	28173	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	5.322	315.0 -> 270.0	19816	9.91	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 49.53%				
d5-EtFOSAA	7.672	589.0 -> 419.0	4262	9.54	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 47.69%				
13C2-PFDA	8.142	515.0 -> 470.0	30290	9.84	µg/L		0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 49.18%				
Target Compounds							**Qvalue**
PFBA	3.027	213.0 -> 169.0	4958	10.379	µg/L		100
PFPeA	4.338	263.0 -> 219.0	3965	9.684	µg/L		100
PFBS	4.466	299.0 -> 80.0	7671	9.582	µg/L		88
4:2FTS	5.244	327.0 -> 307.0	12325	10.347	µg/L		100
PFHxA	5.325	313.0 -> 269.0	15995	9.646	µg/L	#	93
PFPeS	5.355	349.0 -> 99.0	2193	9.290	µg/L		100
PFHxS	6.081	399.0 -> 80.0	11837	10.189	µg/L	# m	82
PFHpA	6.098	363.0 -> 319.0	18629	9.808	µg/L	#	88
PFHpS	6.719	449.0 -> 80.0	14019	9.749	µg/L		100
PFOA	6.752	413.0 -> 369.0	31259	9.711	µg/L		95
6:2FTS	6.762	427.0 -> 407.0	12447	10.776	µg/L		100
FOSA	7.087	498.0 -> 78.0	32479	10.405	µg/L		100
PFOS	7.315	499.0 -> 80.0	26744	9.798	µg/L	# m	77
PFNA	7.381	463.0 -> 419.0	16997	9.655	µg/L		99
MeFOSAA	7.551	570.0 -> 419.0	4670	9.720	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	4569	11.040	µg/L		100
PFNS	8.002	549.0 -> 99.0	6213	9.879	µg/L		100
PFDA	8.132	513.0 -> 469.0	21409	9.775	µg/L		100
8:2FTS	8.289	527.0 -> 507.0	12070	10.452	µg/L		100
PFDS	9.274	599.0 -> 80.0	11987	9.673	µg/L		100
PFUnDA	9.518	563.0 -> 519.0	14822	9.613	µg/L		100
PFDoDA	10.819	613.0 -> 569.0	13245	9.994	µg/L		100
PFTrDA	11.952	663.0 -> 619.0	12036	10.174	µg/L		100
PFTeDA	12.965	713.0 -> 669.0	7106	9.945	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32422.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 12:02
Sample Name	:	IC855-10
Vial	:	Vial 5
Sample Info	:	OP64208,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

7.5.23

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SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

7.5.23

7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

PFOA

13C2-6:2FTS

7.5.23

7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

FOSA

PFOS

13C4-PFOS

7.5.23

7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

PFDoDA

Perfluorinated Compounds by LC/MS/MS.

13C2-PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ855-IC855	**Method:**	EPA 537 MOD	
Lab FileID:	Q32422.D	**Analyst approved:**	03/21/17 16:36	Nancy Saunders
Injection Time:	03/21/17 12:02	**Supervisor approved:**	03/21/17 18:03	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.08	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.32	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 18:03

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32423.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 12:21
Sample Name	:	ICC855-20
Vial	:	Vial 6
Sample Info	:	OP64208,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.335	266.0 -> 222.0	13971	20.000	µg/L		0.000
13C2-PFOA	6.750	415.0 -> 370.0	62832	20.000	µg/L		0.000
13C2-6:2FTS	6.760	429.0 -> 409.0	24642	20.000	µg/L		0.000
13C4-PFOS	7.313	503.0 -> 80.0	48557	20.000	µg/L		0.000
d3-MeFOSAA	7.549	573.0 -> 419.0	10925	20.000	µg/L		0.000
13C2-PFDoDA	10.826	615.0 -> 570.0	27117	20.000	µg/L		0.000
System Monitoring Compounds							
13C2-PFHxA	5.322	315.0 -> 270.0	38037	19.94	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 99.70%				
d5-EtFOSAA	7.672	589.0 -> 419.0	8569	19.75	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 98.77%				
13C2-PFDA	8.129	515.0 -> 470.0	56706	19.31	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 96.55%				
Target Compounds							**Qvalue**
PFBA	3.027	213.0 -> 169.0	9201	19.041	µg/L		100
PFPeA	4.338	263.0 -> 219.0	7776	18.773	µg/L		100
PFBS	4.466	299.0 -> 80.0	14556	19.132	µg/L		89
4:2FTS	5.244	327.0 -> 307.0	23237	19.823	µg/L		100
PFHxA	5.325	313.0 -> 269.0	30685	19.406	µg/L	#	93
PFPeS	5.355	349.0 -> 99.0	4277	19.065	µg/L		100
PFHxS	6.081	399.0 -> 80.0	21949	19.879	µg/L	# m	82
PFHpA	6.098	363.0 -> 319.0	36152	19.960	µg/L	#	88
PFHpS	6.707	449.0 -> 80.0	25973	19.004	µg/L		100
PFOA	6.752	413.0 -> 369.0	55814	18.184	µg/L		95
6:2FTS	6.762	427.0 -> 407.0	22648	19.925	µg/L		100
FOSA	7.087	498.0 -> 78.0	57947	19.123	µg/L		100
PFOS	7.315	499.0 -> 80.0	49012	18.893	µg/L	# m	76
PFNA	7.381	463.0 -> 419.0	31603	18.827	µg/L		98
MeFOSAA	7.551	570.0 -> 419.0	8597	18.434	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	7535	18.754	µg/L		100
PFNS	7.989	549.0 -> 99.0	11803	19.747	µg/L		100
PFDA	8.132	513.0 -> 469.0	40270	19.283	µg/L		100
8:2FTS	8.289	527.0 -> 507.0	23099	20.326	µg/L		100
PFDS	9.274	599.0 -> 80.0	22558	19.155	µg/L		100
PFUnDA	9.518	563.0 -> 519.0	28022	18.883	µg/L		100
PFDoDA	10.819	613.0 -> 569.0	24465	19.180	µg/L		100
PFTrDA	11.952	663.0 -> 619.0	21426	18.818	µg/L		100
PFTeDA	12.977	713.0 -> 669.0	12892	18.748	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.5.24
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SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32423.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 12:21
Sample Name	:	ICC855-20
Vial	:	Vial 6
Sample Info	:	OP64208,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

PFOA

13C2-6:2FTS

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

FOSA

PFOS

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

PFDoDA

Perfluorinated Compounds by LC/MS/MS.

13C2-PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ855-ICC855	**Method:**	EPA 537 MOD	
Lab FileID:	Q32423.D	**Analyst approved:**	03/21/17 16:36	Nancy Saunders
Injection Time:	03/21/17 12:21	**Supervisor approved:**	03/21/17 18:03	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.08	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.32	Split peak

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 18:03

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32424.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 12:39
Sample Name	:	IC855-40
Vial	:	Vial 7
Sample Info	:	OP64208,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.335	266.0 -> 222.0	14171	20.000	µg/L		0.000
13C2-PFOA	6.750	415.0 -> 370.0	66387	20.000	µg/L		0.000
13C2-6:2FTS	6.760	429.0 -> 409.0	27082	20.000	µg/L		0.000
13C4-PFOS	7.313	503.0 -> 80.0	50574	20.000	µg/L		0.000
d3-MeFOSAA	7.537	573.0 -> 419.0	11174	20.000	µg/L		-0.013
13C2-PFDoDA	10.813	615.0 -> 570.0	27748	20.000	µg/L		-0.013
System Monitoring Compounds							
13C2-PFHxA	5.322	315.0 -> 270.0	78445	38.92	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 194.61%				
d5-EtFOSAA	7.672	589.0 -> 419.0	17649	39.78	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 198.88%				
13C2-PFDA	8.117	515.0 -> 470.0	120542	38.85	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 194.24%				
Target Compounds							**Qvalue**
PFBA	3.027	213.0 -> 169.0	19421	39.624	µg/L		100
PFPeA	4.338	263.0 -> 219.0	16214	38.590	µg/L		100
PFBS	4.466	299.0 -> 80.0	31773	40.096	µg/L		87
4:2FTS	5.232	327.0 -> 307.0	51218	39.757	µg/L		100
PFHxA	5.312	313.0 -> 269.0	63605	38.072	µg/L	#	93
PFPeS	5.355	349.0 -> 99.0	9344	39.986	µg/L		100
PFHxS	6.068	399.0 -> 80.0	45508	39.573	µg/L	# m	84
PFHpA	6.086	363.0 -> 319.0	75071	39.228	µg/L	#	87
PFHpS	6.707	449.0 -> 80.0	56265	39.526	µg/L		100
PFOA	6.752	413.0 -> 369.0	129112	39.811	µg/L		92
6:2FTS	6.762	427.0 -> 407.0	50000	40.026	µg/L		100
FOSA	7.087	498.0 -> 78.0	124080	40.033	µg/L		100
PFOS	7.315	499.0 -> 80.0	106445	39.396	µg/L	# m	76
PFNA	7.381	463.0 -> 419.0	69301	39.073	µg/L		98
MeFOSAA	7.551	570.0 -> 419.0	18412	38.597	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	15912	38.721	µg/L		100
PFNS	7.989	549.0 -> 99.0	24270	38.987	µg/L		100
PFDA	8.120	513.0 -> 469.0	85662	38.822	µg/L		100
8:2FTS	8.276	527.0 -> 507.0	48990	39.224	µg/L		100
PFDS	9.274	599.0 -> 80.0	47421	38.661	µg/L		100
PFUnDA	9.506	563.0 -> 519.0	59915	39.456	µg/L		100
PFDoDA	10.819	613.0 -> 569.0	51769	39.662	µg/L		100
PFTrDA	11.939	663.0 -> 619.0	46303	39.741	µg/L		100
PFTeDA	12.965	713.0 -> 669.0	28148	40.000	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32424.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 12:39
Sample Name	:	IC855-40
Vial	:	Vial 7
Sample Info	:	OP64208,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

PFOA

13C2-6:2FTS

7.5.25

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SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

FOSA

PFOS

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

PFDoDA

Perfluorinated Compounds by LC/MS/MS.

13C2-PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ855-IC855	**Method:**	EPA 537 MOD	
Lab FileID:	Q32424.D	**Analyst approved:**	03/21/17 16:36	Nancy Saunders
Injection Time:	03/21/17 12:39	**Supervisor approved:**	03/21/17 18:03	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.07	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.32	Split peak

Q32425.D

Manual Integrations APPROVED (compounds with "m" flag)

Mike Eger 03/21/17 18:03

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32425.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 12:58
Sample Name	:	IC855-50
Vial	:	Vial 8
Sample Info	:	OP64208,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.322	266.0 -> 222.0	13828	20.000	µg/L		-0.013
13C2-PFOA	6.750	415.0 -> 370.0	64343	20.000	µg/L		0.000
13C2-6:2FTS	6.760	429.0 -> 409.0	27248	20.000	µg/L		0.000
13C4-PFOS	7.301	503.0 -> 80.0	50443	20.000	µg/L		-0.013
d3-MeFOSAA	7.537	573.0 -> 419.0	11177	20.000	µg/L		-0.013
13C2-PFDoDA	10.788	615.0 -> 570.0	28522	20.000	µg/L		-0.038
System Monitoring Compounds							
13C2-PFHxA	5.310	315.0 -> 270.0	99446	50.91	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 254.55%				
d5-EtFOSAA	7.672	589.0 -> 419.0	22370	50.40	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 252.02%				
13C2-PFDA	8.117	515.0 -> 470.0	154098	51.24	µg/L		-0.013
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 256.20%				
Target Compounds							**Qvalue**
PFBA	3.015	213.0 -> 169.0	24200	50.599	µg/L		100
PFPeA	4.338	263.0 -> 219.0	21204	51.718	µg/L		100
PFBS	4.466	299.0 -> 80.0	39799	50.354	µg/L		88
4:2FTS	5.232	327.0 -> 307.0	65032	50.173	µg/L		100
PFHxA	5.312	313.0 -> 269.0	83998	51.876	µg/L	#	92
PFPeS	5.355	349.0 -> 99.0	11778	50.533	µg/L		100
PFHxS	6.068	399.0 -> 80.0	57742	50.340	µg/L	# m	85
PFHpA	6.086	363.0 -> 319.0	93986	50.672	µg/L	#	87
PFHpS	6.707	449.0 -> 80.0	72199	50.851	µg/L		100
PFOA	6.752	413.0 -> 369.0	160238	50.978	µg/L		93
6:2FTS	6.762	427.0 -> 407.0	62603	49.810	µg/L		100
FOSA	7.087	498.0 -> 78.0	155650	50.206	µg/L		100
PFOS	7.302	499.0 -> 80.0	137339	50.961	µg/L	# m	76
PFNA	7.381	463.0 -> 419.0	88203	51.310	µg/L		100
MeFOSAA	7.551	570.0 -> 419.0	24725	51.820	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	21108	51.354	µg/L		100
PFNS	7.989	549.0 -> 99.0	31615	50.917	µg/L		100
PFDA	8.120	513.0 -> 469.0	109672	51.282	µg/L		100
8:2FTS	8.264	527.0 -> 507.0	63295	50.370	µg/L		100
PFDS	9.249	599.0 -> 80.0	63001	51.495	µg/L		100
PFUnDA	9.493	563.0 -> 519.0	79570	50.976	µg/L		100
PFDoDA	10.794	613.0 -> 569.0	67900	50.608	µg/L		100
PFTrDA	11.927	663.0 -> 619.0	60652	50.644	µg/L		100
PFTeDA	12.940	713.0 -> 669.0	36547	50.526	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.5.26

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SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32425.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 12:58
Sample Name	:	IC855-50
Vial	:	Vial 8
Sample Info	:	OP64208,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

PFOA

13C2-6:2FTS

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

FOSA

PFOS

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

PFDoDA

Perfluorinated Compounds by LC/MS/MS.

13C2-PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ855-IC855	**Method:**	EPA 537 MOD	
Lab FileID:	Q32425.D	**Analyst approved:**	03/21/17 16:36	Nancy Saunders
Injection Time:	03/21/17 12:58	**Supervisor approved:**	03/21/17 18:03	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.07	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.30	Split peak

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32427.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 13:35
Sample Name	:	ICV855-20
Vial	:	Vial 9
Sample Info	:	OP64208,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.322	266.0 -> 222.0	12417	20.000	µg/L		-0.013
13C2-PFOA	6.737	415.0 -> 370.0	59189	20.000	µg/L		-0.013
13C2-6:2FTS	6.746	429.0 -> 409.0	23634	20.000	µg/L		-0.014
13C4-PFOS	7.301	503.0 -> 80.0	46634	20.000	µg/L		-0.013
d3-MeFOSAA	7.537	573.0 -> 419.0	10364	20.000	µg/L		-0.013
13C2-PFDoDA	10.776	615.0 -> 570.0	25593	20.000	µg/L		-0.050
System Monitoring Compounds							
d5-EtFOSAA	7.672	589.0 -> 419.0	0	0.00	µg/L		0.000
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 0.00%				
Target Compounds							**Qvalue**
PFBA	3.015	213.0 -> 169.0	9130	21.260	µg/L		100
PFPeA	4.325	263.0 -> 219.0	7418	20.149	µg/L		100
PFBS	4.453	299.0 -> 80.0	14202	19.436	µg/L		90
4:2FTS	5.232	327.0 -> 307.0	23015	20.471	µg/L		100
PFHxA	5.312	313.0 -> 269.0	29040	19.497	µg/L	#	93
PFPeS	5.342	349.0 -> 99.0	4211	19.544	µg/L		100
PFHxS	6.068	399.0 -> 80.0	23516	22.177	µg/L	#	82
PFHpA	6.086	363.0 -> 319.0	34094	19.982	µg/L	#	88
PFHpS	6.707	449.0 -> 80.0	27537	20.979	µg/L		100
PFOA	6.752	413.0 -> 369.0	55008	19.024	µg/L		96
6:2FTS	6.762	427.0 -> 407.0	24824	22.771	µg/L		100
FOSA	7.087	498.0 -> 78.0	64995	22.608	µg/L		100
PFOS	7.302	499.0 -> 80.0	51306	20.593	µg/L	#	78
PFNA	7.368	463.0 -> 419.0	32108	20.305	µg/L		100
MeFOSAA	7.551	570.0 -> 419.0	9585	21.663	µg/L		100
EtFOSAA	7.673	584.0 -> 419.0	8650	22.694	µg/L		100
PFNS	7.979	549.0 -> 99.0	11461	19.966	µg/L		100
PFDA	8.107	513.0 -> 469.0	39768	20.215	µg/L		100
8:2FTS	8.264	527.0 -> 507.0	25074	23.004	µg/L		100
PFDS	9.237	599.0 -> 80.0	22917	20.262	µg/L		100
PFUnDA	9.481	563.0 -> 519.0	30303	21.636	µg/L		100
PFDoDA	10.782	613.0 -> 569.0	24271	20.161	µg/L		100
PFTrDA	11.914	663.0 -> 619.0	21307	19.828	µg/L		100
PFTeDA	12.927	713.0 -> 669.0	10956	16.880	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32427.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 13:35
Sample Name	:	ICV855-20
Vial	:	Vial 9
Sample Info	:	OP64208,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

PFOA

13C2-6:2FTS

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

FOSA

PFOS

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

PFDoDA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

13C2-PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Perfluorinated Compounds by LC/MS/MS.

Manual Integrations APPROVED (compounds with "m" flag)
Mike Eger
03/21/17 18:03

Data File	:	Q32433.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 15:34
Sample Name	:	CC855-20
Vial	:	Vial 6
Sample Info	:	OP64208,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
13C3-PFPeA	4.297	266.0 -> 222.0	12282	20.000	µg/L		-0.038
13C2-PFOA	6.725	415.0 -> 370.0	59711	20.000	µg/L		-0.025
13C2-6:2FTS	6.734	429.0 -> 409.0	24746	20.000	µg/L		-0.026
13C4-PFOS	7.289	503.0 -> 80.0	47115	20.000	µg/L		-0.025
d3-MeFOSAA	7.524	573.0 -> 419.0	10882	20.000	µg/L		-0.025
13C2-PFDoDA	10.726	615.0 -> 570.0	23305	20.000	µg/L		-0.100
System Monitoring Compounds							
13C2-PFHxA	5.297	315.0 -> 270.0	31757	17.52	µg/L		-0.025
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 87.59%				
d5-EtFOSAA	7.660	589.0 -> 419.0	7979	18.47	µg/L		-0.012
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 92.34%				
13C2-PFDA	8.081	515.0 -> 470.0	51504	18.45	µg/L		-0.048
Spiked Amount: 20.000	Range: 14 - 26		Recovery = 92.27%				
Target Compounds							**Qvalue**
PFBA	3.002	213.0 -> 169.0	8096	19.060	µg/L		100
PFPeA	4.313	263.0 -> 219.0	6564	18.027	µg/L		100
PFBS	4.441	299.0 -> 80.0	13600	18.423	µg/L		88
4:2FTS	5.207	327.0 -> 307.0	22176	18.839	µg/L		100
PFHxA	5.287	313.0 -> 269.0	26331	17.523	µg/L	#	93
PFPeS	5.330	349.0 -> 99.0	4095	18.810	µg/L		100
PFHxS	6.056	399.0 -> 80.0	22279	20.796	µg/L	# m	83
PFHpA	6.073	363.0 -> 319.0	32957	19.147	µg/L	#	87
PFHpS	6.694	449.0 -> 80.0	25131	18.950	µg/L		100
PFOA	6.727	413.0 -> 369.0	54845	18.802	µg/L		96
6:2FTS	6.736	427.0 -> 407.0	22604	19.803	µg/L		100
FOSA	7.074	498.0 -> 78.0	59400	19.680	µg/L		100
PFOS	7.290	499.0 -> 80.0	46313	18.399	µg/L	# m	76
PFNA	7.356	463.0 -> 419.0	29894	18.740	µg/L		99
MeFOSAA	7.538	570.0 -> 419.0	7882	16.968	µg/L		100
EtFOSAA	7.661	584.0 -> 419.0	7051	17.620	µg/L		100
PFNS	7.954	549.0 -> 99.0	10815	18.648	µg/L		100
PFDA	8.083	513.0 -> 469.0	36601	18.442	µg/L		100
8:2FTS	8.226	527.0 -> 507.0	21730	19.041	µg/L		100
PFDS	9.199	599.0 -> 80.0	21272	18.616	µg/L		100
PFUnDA	9.431	563.0 -> 519.0	26207	20.548	µg/L		100
PFDoDA	10.732	613.0 -> 569.0	20705	18.887	µg/L		100
PFTrDA	11.852	663.0 -> 619.0	17496	17.880	µg/L		100
PFTeDA	12.878	713.0 -> 669.0	12072	20.426	µg/L		100

(#) = Qualifier Out of Range; (m) = Manual Integration; (+) = Area Summed

7.5.28

7

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

Data File	:	Q32433.d
Operator	:	NANCYF
Acq Method Name	:	dMRM_PFOA_PFOS_LIST.m
Acquisition date	:	2017-03-21 15:34
Sample Name	:	CC855-20
Vial	:	Vial 6
Sample Info	:	OP64208,SQ855,130,,,1,1,WATER
Quant Method	:	PFC_LISTDW_0321_SQ855.quantmethod.xml
Quant Batch Name	:	SQ855.batch.bin
Last Calib Update	:	2017-03-21 15:48

PFBA

13C3-PFPeA

Perfluorinated Compounds by LC/MS/MS.

PFPeA

PFBS

4:2FTS

13C2-PFHxA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

PFHxA

PFPeS

PFHxS

PFHpA

Perfluorinated Compounds by LC/MS/MS.

PFHpS

13C2-PFOA

PFOA

13C2-6:2FTS

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

6:2FTS

FOSA

PFOS

13C4-PFOS

Perfluorinated Compounds by LC/MS/MS.

PFNA

d3-MeFOSAA

MeFOSAA

d5-EtFOSAA

Perfluorinated Compounds by LC/MS/MS.

EtFOSAA

PFNS

13C2-PFDA

PFDA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

8:2FTS

PFDS

PFUnDA

PFDoDA

SGS ACCUTEST FA41776

Perfluorinated Compounds by LC/MS/MS.

13C2-PFDoDA

PFTrDA

PFTeDA

Calibration Curve

Manual Integration Approval Summary

Sample Number:	SQ855-CC855	**Method:**	EPA 537 MOD	
Lab FileID:	Q32433.D	**Analyst approved:**	03/21/17 16:36	Nancy Saunders
Injection Time:	03/21/17 15:34	**Supervisor approved:**	03/21/17 18:03	Mike Eger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Perfluorohexanesulfonic acid	355-46-4		6.06	Split peak
Perfluorooctanesulfonic acid	1763-23-1		7.29	Split peak

SGS ACCUTEST-ORLANDO

DATE:	3-17-17
COLUMN TYPE:	Aquasil ECIB
AMOUNT INJECTED:	5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	373

LCMS1-Q ANALYSIS LOG

METHODS:	537 MOD NO32017
ACQ. METHOD:	dMAM ~~APCL537~~ PFOI PFOS List
PROC. METHOD:	PFC List DW 03173 2017
CALIB. DATE:	3-17-17
RUN BATCH: SQ	853

ANALYST:	MAJ
ELUENT A LOT #:	167416 w/ Acetic Acid
ELUENT B LOT #:	167263
WATER LOT #:	167416
ISTD Lot #:	LCB18

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	ION RATIO	MANUAL INTS RATIONALE, PK #	SCON <CL*	COMMENTS
Q 32331	1	CCB	PFC	—	—				✓
Q 32	2	RT		LC823	100/500				✓
Q 33	2	CCBT1-20							FOSAT int
Q 34	2	-20							FOSAT run curve
Q 35	1	CCB		—					✓
Q 36	1	CCB		—					✓
Q 37	1	CCB		—					✓
Q 38	2	IC853-1		LC823	5/500		SP		✓
Q 39	3	-2			10/500		SP		✓
Q 40	4	-5			25/500		SP		✓
Q 41	5	-10			50/500		SP		✓
Q 42	6	IC853-20			100/500		SP		✓
Q 43	7	IC853-40			200/500		SP		✓
Q 44	8	-50			250/500		SP		✓ NO32017
Q 45	1	CCB NO32017		—					~~Pass~~ ✓
Q 46	9	ICV8503-20		82986 LC817/814	5/5/100 500				Pass
Q 47	10	FA41984-16		OP64165	20x		SP		✓ Est. mc hits c.o. report from 1X.
Q 48	11	OP64173-BJ		OP64173	1T				✓
Q 49	12	-MB							BDL target
Q 50	13	FA41988-2					SP		BDL

*< Conductivity Limit For Perchlorate by SW846 6850

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

LCMS1_Q_log.xls ME rev. 06/16

Analyst's Signature: [signature]

SGS ACCUTEST-ORLANDO

DATE:	03-17-17
COLUMN TYPE:	Poroshell EC18
AMOUNT INJECTED:	5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	373

LCMS1-Q ANALYSIS LOG

METHODS:	537 MOD
ACQ. METHOD:	dmRM RFOA PFOS List
PROC. METHOD:	PFC List AW 031752B53
CALIB. DATE:	03-17-17
RUN BATCH: SQ	B53

ANALYST:	MAS
ELUENT A LOT #:	167416 w/ Acetic Acid
ELUENT B LOT #:	167263 "
WATER LOT #:	167416
ISTD Lot #:	LCB18

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	ION RATIO	MANUAL INTS RATIONALE, PK #	SCON <CL*	COMMENTS
Q 32351	14	FA41776-1	PFC	OP64173	1X		SP		BDL
Q 52	15	-2					SP		BDL
Q 53	16	-4							BDL
Q 54	17	-7							BDL
Q 55	18	-9					SP		BDL
Q 56	19	-11							BDL
Q 57	6	CCB53-20		LCB23	100/100		SP		Pass
Q 58	1	CCB							✓
Q 59	20	FA41776-3		OP64173	10X		PII SP		✓ Run 1x
Q 60	21	-5					SP		BDL Run 1x
Q 61	22	-6					SP		BDL Run 1X
Q 62	23	-8					PII SP		✓ Run 1X
Q 63	24	-10					PII SP		✓ Run 1x
Q 64	25	OP64176-MS					PII SP		✓
Q 65	26	-MSD					PII SP		✓
Q 66	27	FA41776-12			10X		SP		✓ 2R 2x, 1x
Q 67	6	ECCB53-20		LCB23	100/100				Pass
Q 68	1	CCB							✓
Q									
Q							MAS 03-20-17		

*< Conductivity Limit For Perchlorate by SW846 6850

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

LCMS1_Q_log.xls ME rev. 06/16

Analyst's Signature: MAS

SGS ACCUTEST-ORLANDO

DATE:	03-20-17
COLUMN TYPE:	Poroshell EC18
AMOUNT INJECTED:	5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	360

LCMS1-Q ANALYSIS LOG

METHODS:	537 mod
ACQ. METHOD:	dmrm PFOA PFOSlist
PROC. METHOD:	PFC LiCHOW 03202017
CALIB. DATE:	03-20-17
RUN BATCH: SQ	854

ANALYST:	MS
ELUENT A LOT #:	167416 w Acetic Acid
ELUENT B LOT #:	167939
WATER LOT #:	167416
ISTD Lot #:	LC818

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	ION RATIO	MANUAL INTS RATIONALE, PK #	SCON <CL*	COMMENTS
Q 32369	1	CCB	PFC	—					✓
Q 70	1	CCB		—					✓
Q 71	2	CC 853-20		LC823	100/500				Some low try new std
Q 72	1	CCB		—					✓
Q 73	2	CC853-20		LC831	100/500				still low, run curve
Q 74	1	CCB		—					✓
Q 75	1	CCB		—					✓
Q 76	1	CCB		—					✓
Q 77	2	IC 854-1		LC831	5/500		SP MP		✓
Q 78	3	-2			10/500		SP		✓
Q 79	4	-5			25/500		SP		✓
Q 80	5	-10			50/500		SP		✓
Q 81	6	ICC 854-20			100/500		SP		✓
Q 82	7	IC 854-40			200/500		SP		✓
Q 83	8	-50			250/500		SP		✓
Q 84	1	CCB		—					✓
Q 85	9	ICV 854-20	MS 03/17	LC817/814 829BL	5/100/15 500				Auto sampler stopped rerun
Q 86	1	CCB		—					✓
Q 87	9	ICV 854-20		LC817/814 829BL	5/100/15 500				PASS
Q 88	10	FA41776-3	✓	OP64173	1X		SP		✓ RR PFOA

*< Conductivity Limit For Perchlorate by SW846 6850

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

LCMS1_Q_log.xls ME rev. 06/16

Analyst's Signature: MS

SGS ACCUTEST-ORLANDO

DATE:	03-20-17
COLUMN TYPE:	Poroshell EC18
AMOUNT INJECTED:	5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	360

LCMS1-Q ANALYSIS LOG

METHODS:	537 MOD
ACQ. METHOD:	AMRM PFOA PFOS List
PROC. METHOD:	PFC List DW 03202854
CALIB. DATE:	03-20-17
RUN BATCH: SQ	854

ANALYST:	NAS
ELUENT A LOT #:	167416 w Acetic Acid
ELUENT B LOT #:	167939 L
WATER LOT #:	167416
ISTD Lot #:	LCB18

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	ION RATIO	MANUAL INTS RATIONALE, PK #	SCON <CL*	COMMENTS
Q 32389	11	FA41776-5	PFC	OP64173	1x		SP, PII		✓ RR PFOA
Q 90	12	-6					SP		✓ RR PFOA
Q 91	13	-8					SP		✓
Q 92	14	-10					SP		✓
Q 93	15	-12							✗ ISTD Δ RRT
Q 94	16	NOT2117 -12			2x				✗ ISTD Δ RRT
Q 95	~~160~~	CCB54-20		LCB31	100/TW		SP		PASS
Q 96	1	CCB		—					✓
Q 97	17	OP64208-BS		OP64208	1x				✓
Q 98	18	-MB							BDL extrapolated
Q 99	18	-MB					PII		BDL
Q 400	19	FA42078-1					PII SP		BDL
Q 01	20	FA41906-1					PII		BDL
Q 02	21	-3					PII SP		BDL ET hit
Q 03	22	-10					PII		BDL
Q 04	25	FA41775-2R					PII OP SP		✓
Q 05	26	OP64208-MS							✓
Q 06	27	-MSD							✓
Q 07	6	CCB54-20		LCB31	100/TW		SP		PASS
Q 08	1	CCB		—					✓

*< Conductivity Limit For Perchlorate by SW846 6850

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

LCMS1_Q_log.xls ME rev. 06/16

Analyst's Signature: _____

SGS ACCUTEST-ORLANDO

DATE:	03-20-17
COLUMN TYPE:	Poroshell C18
AMOUNT INJECTED:	5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	360

LCMS1-Q ANALYSIS LOG

METHODS:	537 mod
ACQ. METHOD:	1MRM PFOA PFOS List
PROC. METHOD:	PFC List DW 0320 SQ854
CALIB. DATE:	03-20-17
RUN BATCH: SQ	854

ANALYST:	NAS
ELUENT A LOT #:	167416 w Acetic Acid
ELUENT B LOT #:	167939 L
WATER LOT #:	167416
ISTD Lot #:	LL818

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	ION RATIO	MANUAL INTS RATIONALE, PK #	SCON <CL*	COMMENTS
Q 32409	1	CCB	PFC	—	—				✓
Q 10	23	FA41775-1R	|	OP64208	1x				RR
Q 11	24	-1R	|	|	20x				RR 25x
Q 12	28	-3R	|	↓	1x				RR
Q									Auto sampler
Q									stuck
Q									
Q									
Q									
Q									
Q									
Q									
Q									
Q							NAS		
Q							03-21-17		
Q									
Q									
Q									
Q									
Q									

*< Conductivity Limit For Perchlorate by SW846 6850

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

LCMS1_Q_log.xls ME rev. 06/16

Analyst's Signature: [signature]

SGS ACCUTEST-ORLANDO

DATE:	03-21-17
COLUMN TYPE:	Acquity II EC18
AMOUNT INJECTED:	5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	354

LCMS1-Q ANALYSIS LOG

METHODS:	537 mod
ACQ. METHOD:	amam PFOA PFOS List
PROC. METHOD:	PFC List + DW 0321 SQ855
CALIB. DATE:	03-21-17
RUN BATCH: SQ	855

ANALYST:	NAS
ELUENT A LOT #:	167416 w Acetic Acid
ELUENT B LOT #:	167939 +
WATER LOT #:	167416
ISTD Lot #:	LC818

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	ION RATIO	MANUAL INTS RATIONALE, PK #	SCON <CL*	COMMENTS
Q 32413	1	CCB	PFC	—	—				✓
Q 14	2	RG		LC831					✓
Q 15	2	CC854-20		+					ISTAT run curve
Q 16	1	CCB		—	—				✓
Q 17	1	CCB		—	—				✓
Q 18	1	CCB		—	—				✓
Q 19	2	IC855-1		LC831	5/TW		PII SP		✓
Q 20	3	-2			10/TW		SP		✓
Q 21	4	-5			25/TW		SP		✓
Q 22	5	-10			50/TW		SP		✓
Q 23	6	ICC855-20			100/TW		SP		✓
Q 24	7	IC855-40			200/TW		SP		✓
Q 25	8	-50		+	250/TW		SP		✓
Q 26	1	CCB		—	—				✓
Q 27	9	ICV855-20		LC811 814 824	5/100 5/100				PASS
Q 28	10	FA4177 6-3		PA4173	1X		SP		✓
Q 29	11	-5					SP		✓
Q 30	12	-6			+		SP		✓
Q 31	13	-12			5X		SP OP		X Dilution ISTAT
Q 32	13	-12	✓	+	10X		SP OP		✓

*< Conductivity Limit For Perchlorate by SW846 6850

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

LCMS1_Q_log.xls ME rev. 06/16

Analyst's Signature: [signature]

SGS ACCUTEST-ORLANDO

DATE:	03-21-17
COLUMN TYPE:	Porosh II Rec18
AMOUNT INJECTED:	5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	354

LCMS1-Q ANALYSIS LOG

METHODS:	537 MOD
ACQ. METHOD:	AMAM PFOA MOS LIST
PROC. METHOD:	PFC LIST-DW 032152 855
CALIB. DATE:	03-21-17
RUN BATCH: SQ	855

ANALYST:	NAS
ELUENT A LOT #:	167416 w/ Acetic Acid
ELUENT B LOT #:	167439 +
WATER LOT #:	167416
ISTD Lot #:	LC818

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	ION RATIO	MANUAL INTS RATIONALE, PK #	SCON <CL*	COMMENTS
Q 32433	6	CC855-20	PFC	LC831	100/100		SP		Pass
Q 34	1	CCB		—	—				✓
Q 35	14	OP64208-BS		OP64208	1x				✓
Q 36	15	-MB							✓ C.O PA
Q 37	15	-MB							BDL
Q 38	16	FA41984-4							BDL
Q 39	17	FA41775-1R			✓		SP		✓ Run 25x
Q 40	18	-1R			25x		PII SP		✓
Q 41	19	-3R			1x		SP		✓
Q 42	20	-4R		✓	✓				BDL
Q 43	6	CC855-20		LC831	100/100		SP		Pass
Q 44	1	CCB		—	—				✓
Q 45	21	OP64241-BS		OP64241	1x				✓
Q 46	22	-MB							✓ C.O PA
Q 47	22	-MB							BDL
Q 48	23	FA42039-1				03/22/17	PII	I	BDL
Q 49	24	-2					PII SP		✓ Run 5x
Q 50	25	-3					PII SP		✓
Q 51	26	-4					SP		✓
Q 52	27	-5	✓	✓	✓				BDL

*< Conductivity Limit For Perchlorate by SW846 6850

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

LCMS1_Q_log.xls ME rev. 06/16

Analyst's Signature: [signature]

SGS ACCUTEST-ORLANDO

LCMS1-Q ANALYSIS LOG

DATE:	03-21-17	METHODS:	537 mod	ANALYST:	NAS
COLUMN TYPE:	Poroshell EC18	ACQ. METHOD:	AMAM AGIA PFOS LIST	ELUENT A LOT #:	167416 w Acetic Acid
AMOUNT INJECTED:	5 ul	PROC. METHOD:	PFC LIST DW 0321S2BTT	ELUENT B LOT #:	167939 +
INSTRUMENT:	LCMS1-Q	CALIB. DATE:	03-21-17	WATER LOT #:	167416
HEAD PRESSURE:	354	RUN BATCH: SQ	855	ISTD Lot #:	LCB18

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	ION RATIO	MANUAL INTS RATIONALE, PK #	SCON <CL*	COMMENTS
Q52453	28	FA42039-6	PFC	OP64241	1X		SP		BDL
Q 54	29	-7		↓	↓		SP		BDL
Q 55	6	CCB55-20		LCB31	100/100		SP		Pass
Q 56	1	CCB		—	—				✓
Q 57	1	CCB		—	—				✓
Q 58	30	FA42039-8		OP64241	1X		SP		BDL
Q 59	31	-9							BDL
Q 60	32	-10					SP		BDL
Q 61	36	-12					SP		BDL
Q 62	37	-14					SP		BDL
Q 63	38	-15					~~SP~~ I		BDL
Q 64	39	-16					SP		BDL
Q 65	33	-11							BDL
Q 66	34	OP64241-MS							✓
Q 67	35	-MSD		↓	✓				✓
Q 68	6	CCB55-20		LCB31	100/100		SP		Pass
Q 69	1	CCB		—	—				✓
Q 70	1	CCB		—	—				✓
Q 71	40	FA42039-17		OP64241	1X		SP		BDL
Q 72	41	-19	✓	↓	↓				BDL

*< Conductivity Limit For Perchlorate by SW846 6850

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

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LCMS1_Q_log.xls ME rev. 06/16

Analyst's Signature: [signature]

SGS ACCUTEST-ORLANDO

DATE:	03-21-17
COLUMN TYPE:	Porosell ECIB
AMOUNT INJECTED:	5 ul
INSTRUMENT:	LCMS1-Q
HEAD PRESSURE:	354

LCMS1-Q ANALYSIS LOG

METHODS:	537 mod
ACQ. METHOD:	AN2M AFOA PFOS LIST
PROC. METHOD:	PFC LIST OW 0321 SQ BST
CALIB. DATE:	03-21-17
RUN BATCH: SQ	855

ANALYST:	NAS
ELUENT A LOT #:	167416 w Acetic
ELUENT B LOT #:	168839 +
WATER LOT #:	167416
ISTD Lot #:	LC 818

DATA FILE	ALS #	SAMPLE ID	SAMPLE METHOD	OP BATCH	DF	ION RATIO	MANUAL INTS RATIONALE, PK #	SCON <CL*	COMMENTS
Q 32473	42	FA42039-20	PFC	OP64241	17		SP		BDL
Q 74	43	-21							BDL
Q 75	44	-22							BDL
Q 76	6	ECCB77-20		LCB31	100/100		SP		POSS
Q 77	1	CCB		—	—				✓
Q									
Q									
Q									
Q									
Q									
Q									
Q									
Q									
Q									
Q									
Q									
Q									
Q									
Q									
Q									

03-22-17
NAS

*< Conductivity Limit For Perchlorate by SW846 6850

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

LCMS1_Q_log.xls ME rev. 06/16

Analyst's Signature: [signature]

SGS ACCUTEST - ORLANDO

SPE LIQUID SAMPLE PREP REPORT

Date/Time: Started 03/15/17 0900 {mm/dd/yy 24:00}

Date/Time: Finished 03/15/17 1400 {mm/dd/yy 24:00}

Prep Method: 3535A or Method (circle)

Analytical Method: LC 537

Batch#: OP64173 Ext. By: MB Conc. By: MB Vialed By: MB

Sample ID	Bottle Number	Amount Extracted (ml)	Initial pH	Adjusted pH	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP64173 MB	X	130	6	N/A	20ul		1ml	
OP64173 BS		130				10+10ul		
FA41776-1	1	130						
-2	1	130						
-3	1	130						
-4	1	125						
-5	1	125						
-6	1	130						
-7	1	120						
-8	1	125						
-9	1	130						
-10	1	130						
-11	1	125						
-12	1	125						
FA41888-2	3	130						
FA41776-10MS	2	130	6	N/A	20ul	10+10ul	1ml	
-10 MSD	3	130						
DUP								

MB 03/15/17

Comments:

Surr.1 ID: LC822 Conc: 1ppm Exp. Date: 08/09/17 Inj. By: MB Ver. By MB

Surr.2 ID: — Conc: — Exp. Date: — Inj. By: — Ver. By —

Spk.1 ID: 8298C Conc: 2ppm Exp. Date: 01/26/18 Inj. By: MB Ver. By MB

Spk.2 ID: LC817 Conc: 2ppm Exp. Date: 07/30/17 Inj. By: MB Ver. By MB

Initial Bath Temp (Therm ID): _____

Observed Temp °C: _____ Corr. Temp °C: _____

Exchange Bath/N-Evap Temp (Therm ID): _____

Observed Temp °C: _____ Corr. Temp °C: _____

Methanol Lot # 167939

Acetonitrile Lot # —

Water Lot# OP63463

SPE Lot # S300-0221

SPE Lot # —

Syringe Filter Lot# —

pH Paper # 234215

Reagent # —

Solvent # —

Relinquished By: Ahmad

Accepted By: —

Date: 03/17/17

Date: 03-17-17

NF 02/16

extwater_spe 020116.xls

7.7.1

7

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
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776	SWMU 00001	SWMU 00001	ES-GW-37	Monitoring well	1380974.99	17140721.59	N6247011D8013	JMA1	RESOLUTION CONSULTANTS	ES-37-0317
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776	SWMU 00001	SWMU 00001	R-GW-02	Monitoring well	1379727.36	17140956.39	N6247011D8013	JMA1	RESOLUTION CONSULTANTS	R-2-0317
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776	SWMU 00004	SWMU 00004	GM-20R	Monitoring well	1379880.41	17138312.39	N6247011D8013	JMA1	RESOLUTION CONSULTANTS	DUP1-0317
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776	SWMU 00004	SWMU 00004	REI-29R	Monitoring well	1381472.39	17139249.96	N6247011D8013	JMA1	RESOLUTION CONSULTANTS	RE1-29R-0317
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776	SWMU 00004	SWMU 00004	GM-20R	Monitoring well	1379880.41	17138312.39	N6247011D8013	JMA1	RESOLUTION CONSULTANTS	GM-20R-0317
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776	SWMU 00004	SWMU 00004	ES-42R	Monitoring well	1380745.72	17138626.58	N6247011D8013	JMA1	RESOLUTION CONSULTANTS	ES-42R-0317
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776							N6247011D8013	JMA1	RESOLUTION CONSULTANTS	EB1-GW-0317
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776							N6247011D8013	JMA1	RESOLUTION CONSULTANTS	EB1-WC-0217
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776							N6247011D8013	JMA1	RESOLUTION CONSULTANTS	FB1-0317
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776							N6247011D8013	JMA1	RESOLUTION CONSULTANTS	EB2-GW-0317
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776							N6247011D8013	JMA1	RESOLUTION CONSULTANTS	EB1-DR-0217
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776							N6247011D8013	JMA1	RESOLUTION CONSULTANTS	FB2-0317

DODCMD_ID	INSTALLATION_ID	SDG	SITE_NAME	SAMPLE_MATRIX_DESC	SAMPLE_TYPE_DESC	COLLECT_DATE	ANALYTICAL_METHOD	ANALYTICAL_METHOD_GRP_DESC	RES_META_ID
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776	SWMU 00001	Ground water	Normal (Regular)	1-Mar-17	537_MOD	Perfluoroalkyl Compounds	20170831141433.00
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776	SWMU 00001	Ground water	Normal (Regular)	1-Mar-17	537_MOD	Perfluoroalkyl Compounds	20170831141433.00
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776	SWMU 00004	Ground water	Field duplicate	1-Mar-17	537_MOD	Perfluoroalkyl Compounds	20170831141433.00
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776	SWMU 00004	Ground water	Normal (Regular)	2-Mar-17	537_MOD	Perfluoroalkyl Compounds	20170831141433.00
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776	SWMU 00004	Ground water	Normal (Regular)	1-Mar-17	537_MOD	Perfluoroalkyl Compounds	20170831141433.00
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776	SWMU 00004	Ground water	Normal (Regular)	2-Mar-17	537_MOD	Perfluoroalkyl Compounds	20170831141433.00
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776		Water for QC samples	QC Sample	1-Mar-17	537_MOD	Perfluoroalkyl Compounds	20170831141433.00
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776		Water for QC samples	QC Sample	27-Feb-17	537_MOD	Perfluoroalkyl Compounds	20170831141433.00
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776		Water for QC samples	QC Sample	1-Mar-17	537_MOD	Perfluoroalkyl Compounds	20170831141433.00
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776		Water for QC samples	QC Sample	2-Mar-17	537_MOD	Perfluoroalkyl Compounds	20170831141433.00
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776		Water for QC samples	QC Sample	27-Feb-17	537_MOD	Perfluoroalkyl Compounds	20170831141433.00
SOUTHEAST	CORPUS_CHRISTI_NAS	FA41776		Water for QC samples	QC Sample	2-Mar-17	537_MOD	Perfluoroalkyl Compounds	20170831141433.00