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Automated Report

Technical Report for

AECOM, INC.

N6274223F0104 RH Fire Suppression System

60697810

SGS Job Number: FC6803

Sampling Date: 06/08/23



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Total number of pages in report: 70



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.

Norm Farmer
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Test results relate only to samples analyzed.

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Sample Summary

AECOM, INC.

Job No: FC6803

N6274223F0104 RH Fire Suppression System
Project No: 60697810

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FC6803-1	06/08/23	09:15 MYJV	06/10/23	AQ	Ground Water	AF-RHMW225401-WGN01B-2306
FC6803-2	06/08/23	09:20 CPAY	06/10/23	AQ	Ground Water	AF-RHMW17S-WGN01LF-2306
FC6803-3	06/08/23	09:45 CPAY	06/10/23	AQ	Equipment Blank	AF-RHMW17S-WQEB01-2306
FC6803-4	06/08/23	10:45 CPAY	06/10/23	AQ	Ground Water	AF-RHMW17D-WGN01LF-2306
FC6803-5	06/08/23	10:10 CPAY	06/10/23	AQ	Field Blank Water	AF-RHMW17D-WQFB01-2306
FC6803-6	06/08/23	12:00 CPAY	06/10/23	AQ	Ground Water	AF-RHMW17-WGN01LF-2306

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: AECOM, INC.

Job No: FC6803

Site: N6274223F0104 RH Fire Suppression System

Report Date: 6/21/2023 5:02:52 PM

On 06/10/2023, 5 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc - Orlando. at a maximum corrected temperature of 4.4 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. - Orlando Job Number of FC6803 was assigned to the project.

Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

MS Semi-volatiles By Method EPA DRAFT 1633

Matrix: AQ

Batch ID: OP97325

Sample(s) FC6803-1MS, FC6803-2DUP were used as the QC samples indicated.

Blank Spike Recovery(s) for 3:3 Fluorotelomer carboxylate are outside control limits.

Sample(s) FC6803-4 have surrogates outside control limits.

FC6803-1 for 3:3 Fluorotelomer carboxylate: Associated BS recovery outside control limits.

FC6803-2 for 3:3 Fluorotelomer carboxylate: Associated BS recovery outside control limits.

FC6803-3 for 3:3 Fluorotelomer carboxylate: Associated BS recovery outside control limits.

FC6803-4: Confirmation run.

FC6803-5 for 3:3 Fluorotelomer carboxylate: Associated BS recovery outside control limits.

FC6803-6 for 3:3 Fluorotelomer carboxylate: Associated BS recovery outside control limits.

Matrix: AQ

Batch ID: OP97385

Sample(s) FC6444-23MS, FC6444-24DUP were used as the QC samples indicated.

Blank Spike Recovery(s) for 3:3 Fluorotelomer carboxylate are outside control limits.

Sample(s) FC6803-4 have surrogates outside control limits.

FC6803-4 for 3:3 Fluorotelomer carboxylate: Associated BS recovery outside control limits; LLBS recovery was within control limits and sample was ND.

FC6803-4 for 13C4-PFBA: Outside control limits.

FC6803-4 for d3-MeFOSAA: Outside control limits.

SGS North America Inc. - Orlando certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted. Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria. SGS North America Inc.- Orlando is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety.

Narrative prepared by:

Kim Benham, Client Services (Signature on File)

Summary of Hits

Job Number: FC6803
Account: AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System
Collected: 06/08/23



Lab Sample ID	Client Sample ID	Result/ Analyte	LOQ	LOD	Units	Method
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FC6803-1 AF-RHMW225401-WGN01B-2306

Perfluoropentanoic acid	1.0 J	7.3	1.8	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid	0.79 J	3.6	1.8	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid	0.60 J	3.6	1.8	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid	0.92 J	3.6	0.91	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid	0.58 J	3.6	1.8	ng/l	EPA DRAFT 1633
Perfluorohexanesulfonic acid	0.92 J	3.6	1.8	ng/l	EPA DRAFT 1633
Perfluorooctanesulfonic acid	0.87 J	3.6	1.8	ng/l	EPA DRAFT 1633

FC6803-2 AF-RHMW17S-WGN01LF-2306

Perfluorobutanoic acid	13.7 J	14	3.6	ng/l	EPA DRAFT 1633
Perfluoropentanoic acid	16.6	7.1	1.8	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid	1.7 J	3.6	1.8	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid	0.77 J	3.6	1.8	ng/l	EPA DRAFT 1633
Perfluorooctanoic acid	0.94 J	3.6	0.89	ng/l	EPA DRAFT 1633
Perfluorobutanesulfonic acid	0.48 J	3.6	1.8	ng/l	EPA DRAFT 1633

FC6803-3 AF-RHMW17S-WQEB01-2306

No hits reported in this sample.

FC6803-4 AF-RHMW17D-WGN01LF-2306

No hits reported in this sample.

FC6803-5 AF-RHMW17D-WQFB01-2306

No hits reported in this sample.

FC6803-6 AF-RHMW17-WGN01LF-2306

Perfluoropentanoic acid	2.6 J	7.3	1.8	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid	2.1 J	3.6	1.8	ng/l	EPA DRAFT 1633
Perfluoroheptanoic acid	0.67 J	3.6	1.8	ng/l	EPA DRAFT 1633
6:2 Fluorotelomer sulfonate	10.7 J	18	7.3	ng/l	EPA DRAFT 1633

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	AF-RHMW225401-WGN01B-2306		
Lab Sample ID:	FC6803-1	Date Sampled:	06/08/23
Matrix:	AQ - Ground Water	Date Received:	06/10/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	Percent Solids:	n/a
Project:	N6274223F0104 RH Fire Suppression System		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q19366.D	1	06/14/23 19:40	MV	06/13/23 13:00	OP97325	S6Q289
Run #2							

Run #	Initial Volume	Final Volume
Run #1	550 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
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PERFLUOROALKYL CARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	3.6 U	15	3.6	1.7	ng/l	
2706-90-3	Perfluoropentanoic acid	1.0	7.3	1.8	0.85	ng/l	J
307-24-4	Perfluorohexanoic acid	0.79	3.6	1.8	0.45	ng/l	J
375-85-9	Perfluoroheptanoic acid	0.60	3.6	1.8	0.45	ng/l	J
335-67-1	Perfluorooctanoic acid	0.92	3.6	0.91	0.45	ng/l	J
375-95-1	Perfluorononanoic acid	1.8 U	3.6	1.8	0.55	ng/l	
335-76-2	Perfluorodecanoic acid	1.8 U	3.6	1.8	0.45	ng/l	
2058-94-8	Perfluoroundecanoic acid	1.8 U	3.6	1.8	0.55	ng/l	
307-55-1	Perfluorododecanoic acid	1.8 U	3.6	1.8	0.55	ng/l	
72629-94-8	Perfluorotridecanoic acid	1.8 U	3.6	1.8	0.76	ng/l	
376-06-7	Perfluorotetradecanoic acid	1.8 U	3.6	1.8	0.45	ng/l	

PERFLUOROALKYL SULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	0.58	3.6	1.8	0.45	ng/l	J
2706-91-4	Perfluoropentanesulfonic acid	3.6 U	4.5	3.6	1.0	ng/l	
355-46-4	Perfluorohexanesulfonic acid	0.92	3.6	1.8	0.64	ng/l	J
375-92-8	Perfluoroheptanesulfonic acid	1.8 U	3.6	1.8	0.45	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	0.87	3.6	1.8	0.49	ng/l	J
68259-12-1	Perfluorononanesulfonic acid	1.8 U	3.6	1.8	0.52	ng/l	
335-77-3	Perfluorodecanesulfonic acid	1.8 U	3.6	1.8	0.58	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	3.6 U	4.5	3.6	1.0	ng/l	

FLUOROTELOMER SULFONIC ACIDS

757124-72-4	4:2 Fluorotelomer sulfonate	7.3 U	18	7.3	2.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	7.3 U	18	7.3	3.2	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	7.3 U	18	7.3	3.7	ng/l	

PERFLUOROOCCTANE SULFONAMIDES

754-91-6	PFOSA	1.8 U	3.6	1.8	0.61	ng/l	
31506-32-8	MeFOSA	3.6 U	7.3	3.6	0.91	ng/l	
4151-50-2	EtFOSA	3.6 U	7.3	3.6	0.91	ng/l	

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

Report of Analysis

Client Sample ID:	AF-RHMW225401-WGN01B-2306		
Lab Sample ID:	FC6803-1	Date Sampled:	06/08/23
Matrix:	AQ - Ground Water	Date Received:	06/10/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	Percent Solids:	n/a
Project:	N6274223F0104 RH Fire Suppression System		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
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PERFLUOROOCCTANE SULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	3.6 U	4.5	3.6	0.91	ng/l	
2991-50-6	EtFOSAA	3.6 U	4.5	3.6	1.2	ng/l	

PERFLUOROOCCTANE SULFONAMIDO ETHANOLS

24448-09-7	MeFOSE	18 U	36	18	4.0	ng/l	
1691-99-2	EtFOSE	18 U	36	18	6.7	ng/l	

PER and POLYFLUOROETHER CARBOXYLIC ACIDS

13252-13-6	HFPO-DA (GenX)	1.8 U	3.6	1.8	0.91	ng/l	
919005-14-4	ADONA	3.6 U	7.3	3.6	1.7	ng/l	
377-73-1	PFMPA	1.8 U	7.3	1.8	0.91	ng/l	
863090-89-5	PFMBA	3.6 U	7.3	3.6	1.0	ng/l	
151772-58-6	NFDHA	3.6 U	7.3	3.6	1.1	ng/l	

PER and POLYFLUOROETHER SULFONIC ACIDS

756426-58-1	9Cl-PF3ONS (F-53B Major)	3.6 U	7.3	3.6	1.3	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	3.6 U	7.3	3.6	1.6	ng/l	
113507-82-7	PFEESA	1.8 U	7.3	1.8	0.71	ng/l	

FLUOROTELOMER CARBOXYLIC ACIDS

356-02-5	3:3 Fluorotelomer carboxylat ^a	9.1 U	18	9.1	4.1	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	18 U	91	18	7.9	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	18 U	91	18	7.1	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	108%		20-150%
	13C5-PFPeA	118%		20-150%
	13C5-PFHxA	115%		20-150%
	13C4-PFHpA	118%		20-150%
	13C8-PFOA	113%		20-150%
	13C9-PFNA	116%		20-150%
	13C6-PFDA	117%		20-150%
	13C7-PFUnDA	106%		20-150%
	13C2-PFDoDA	106%		20-150%
	13C2-PFTeDA	96%		20-150%
	13C3-PFBS	124%		20-150%
	13C3-PFHxS	118%		20-150%

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

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Report of Analysis

Client Sample ID:	AF-RHMW225401-WGN01B-2306		
Lab Sample ID:	FC6803-1	Date Sampled:	06/08/23
Matrix:	AQ - Ground Water	Date Received:	06/10/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	Percent Solids:	n/a
Project:	N6274223F0104 RH Fire Suppression System		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	125%		20-150%
	13C8-FOSA	91%		20-150%
	d3-MeFOSA	94%		20-150%
	d5-EtFOSA	94%		20-150%
	d3-MeFOSAA	119%		20-150%
	d5-EtFOSAA	123%		20-150%
	d7-MeFOSE	85%		20-150%
	d9-EtFOSE	96%		20-150%
	13C2-4:2FTS	140%		20-180%
	13C2-6:2FTS	127%		20-180%
	13C2-8:2FTS	121%		20-180%
	13C3-HFPO-DA	113%		20-150%

(a) Associated BS recovery outside control limits.

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

Report of Analysis

Client Sample ID:	AF-RHMW17S-WGN01LF-2306		
Lab Sample ID:	FC6803-2	Date Sampled:	06/08/23
Matrix:	AQ - Ground Water	Date Received:	06/10/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	Percent Solids:	n/a
Project:	N6274223F0104 RH Fire Suppression System		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q19368.D	1	06/14/23 20:08	MV	06/13/23 13:00	OP97325	S6Q289
Run #2							

Run #	Initial Volume	Final Volume
Run #1	560 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
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PERFLUOROALKYL CARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	13.7	14	3.6	1.7	ng/l	J
2706-90-3	Perfluoropentanoic acid	16.6	7.1	1.8	0.84	ng/l	
307-24-4	Perfluorohexanoic acid	1.7	3.6	1.8	0.45	ng/l	J
375-85-9	Perfluoroheptanoic acid	0.77	3.6	1.8	0.45	ng/l	J
335-67-1	Perfluorooctanoic acid	0.94	3.6	0.89	0.45	ng/l	J
375-95-1	Perfluorononanoic acid	1.8 U	3.6	1.8	0.54	ng/l	
335-76-2	Perfluorodecanoic acid	1.8 U	3.6	1.8	0.45	ng/l	
2058-94-8	Perfluoroundecanoic acid	1.8 U	3.6	1.8	0.54	ng/l	
307-55-1	Perfluorododecanoic acid	1.8 U	3.6	1.8	0.54	ng/l	
72629-94-8	Perfluorotridecanoic acid	1.8 U	3.6	1.8	0.75	ng/l	
376-06-7	Perfluorotetradecanoic acid	1.8 U	3.6	1.8	0.45	ng/l	

PERFLUOROALKYL SULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	0.48	3.6	1.8	0.45	ng/l	J
2706-91-4	Perfluoropentanesulfonic acid	3.6 U	4.5	3.6	1.0	ng/l	
355-46-4	Perfluorohexanesulfonic acid	1.8 U	3.6	1.8	0.62	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	1.8 U	3.6	1.8	0.45	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	1.8 U	3.6	1.8	0.48	ng/l	
68259-12-1	Perfluorononanesulfonic acid	1.8 U	3.6	1.8	0.51	ng/l	
335-77-3	Perfluorodecanesulfonic acid	1.8 U	3.6	1.8	0.57	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	3.6 U	4.5	3.6	1.0	ng/l	

FLUOROTELOMER SULFONIC ACIDS

757124-72-4	4:2 Fluorotelomer sulfonate	7.1 U	18	7.1	2.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	7.1 U	18	7.1	3.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	7.1 U	18	7.1	3.7	ng/l	

PERFLUOROOCCTANE SULFONAMIDES

754-91-6	PFOSA	1.8 U	3.6	1.8	0.60	ng/l	
31506-32-8	MeFOSA	3.6 U	7.1	3.6	0.89	ng/l	
4151-50-2	EtFOSA	3.6 U	7.1	3.6	0.89	ng/l	

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

4.2
4

Report of Analysis

Client Sample ID:	AF-RHMW17S-WGN01LF-2306		
Lab Sample ID:	FC6803-2	Date Sampled:	06/08/23
Matrix:	AQ - Ground Water	Date Received:	06/10/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	Percent Solids:	n/a
Project:	N6274223F0104 RH Fire Suppression System		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
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PERFLUOROOCCTANE SULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	3.6 U	4.5	3.6	0.89	ng/l	
2991-50-6	EtFOSAA	3.6 U	4.5	3.6	1.2	ng/l	

PERFLUOROOCCTANE SULFONAMIDO ETHANOLS

24448-09-7	MeFOSE	18 U	36	18	3.9	ng/l	
1691-99-2	EtFOSE	18 U	36	18	6.6	ng/l	

PER and POLYFLUOROETHER CARBOXYLIC ACIDS

13252-13-6	HFPO-DA (GenX)	1.8 U	3.6	1.8	0.89	ng/l	
919005-14-4	ADONA	3.6 U	7.1	3.6	1.7	ng/l	
377-73-1	PFMPA	1.8 U	7.1	1.8	0.89	ng/l	
863090-89-5	PFMBA	3.6 U	7.1	3.6	1.0	ng/l	
151772-58-6	NFDHA	3.6 U	7.1	3.6	1.1	ng/l	

PER and POLYFLUOROETHER SULFONIC ACIDS

756426-58-1	9Cl-PF3ONS (F-53B Major)	3.6 U	7.1	3.6	1.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	3.6 U	7.1	3.6	1.6	ng/l	
113507-82-7	PFEESA	1.8 U	7.1	1.8	0.70	ng/l	

FLUOROTELOMER CARBOXYLIC ACIDS

356-02-5	3:3 Fluorotelomer carboxylat ^a	8.9 U	18	8.9	4.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	18 U	89	18	7.8	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	18 U	89	18	7.0	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
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	13C4-PFBA	48%		20-150%
	13C5-PFPeA	110%		20-150%
	13C5-PFHxA	118%		20-150%
	13C4-PFHpA	118%		20-150%
	13C8-PFOA	115%		20-150%
	13C9-PFNA	105%		20-150%
	13C6-PFDA	110%		20-150%
	13C7-PFUnDA	94%		20-150%
	13C2-PFDoDA	87%		20-150%
	13C2-PFTeDA	73%		20-150%
	13C3-PFBS	113%		20-150%
	13C3-PFHxS	111%		20-150%

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

Report of Analysis

Client Sample ID: AF-RHMW17S-WGN01LF-2306		Date Sampled: 06/08/23
Lab Sample ID: FC6803-2		Date Received: 06/10/23
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA DRAFT 1633 EPA 1633 DRAFT		
Project: N6274223F0104 RH Fire Suppression System		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	95%		20-150%
	13C8-FOSA	92%		20-150%
	d3-MeFOSA	78%		20-150%
	d5-EtFOSA	77%		20-150%
	d3-MeFOSAA	103%		20-150%
	d5-EtFOSAA	90%		20-150%
	d7-MeFOSE	76%		20-150%
	d9-EtFOSE	81%		20-150%
	13C2-4:2FTS	101%		20-180%
	13C2-6:2FTS	95%		20-180%
	13C2-8:2FTS	100%		20-180%
	13C3-HFPO-DA	110%		20-150%

(a) Associated BS recovery outside control limits.

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

Report of Analysis

Client Sample ID:	AF-RHMW17S-WQEB01-2306		
Lab Sample ID:	FC6803-3	Date Sampled:	06/08/23
Matrix:	AQ - Equipment Blank	Date Received:	06/10/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	Percent Solids:	n/a
Project:	N6274223F0104 RH Fire Suppression System		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q19370.D	1	06/14/23 20:36	MV	06/13/23 13:00	OP97325	S6Q289
Run #2							

Run #	Initial Volume	Final Volume
Run #1	570 ml	5.0 ml
Run #2		

CAS No. Compound Result LOQ LOD DL Units Q

PERFLUOROALKYL CARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	3.5 U	14	3.5	1.7	ng/l
2706-90-3	Perfluoropentanoic acid	1.8 U	7.0	1.8	0.82	ng/l
307-24-4	Perfluorohexanoic acid	1.8 U	3.5	1.8	0.44	ng/l
375-85-9	Perfluoroheptanoic acid	1.8 U	3.5	1.8	0.44	ng/l
335-67-1	Perfluorooctanoic acid	0.88 U	3.5	0.88	0.44	ng/l
375-95-1	Perfluorononanoic acid	1.8 U	3.5	1.8	0.54	ng/l
335-76-2	Perfluorodecanoic acid	1.8 U	3.5	1.8	0.44	ng/l
2058-94-8	Perfluoroundecanoic acid	1.8 U	3.5	1.8	0.53	ng/l
307-55-1	Perfluorododecanoic acid	1.8 U	3.5	1.8	0.53	ng/l
72629-94-8	Perfluorotridecanoic acid	1.8 U	3.5	1.8	0.74	ng/l
376-06-7	Perfluorotetradecanoic acid	1.8 U	3.5	1.8	0.44	ng/l

PERFLUOROALKYL SULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	1.8 U	3.5	1.8	0.44	ng/l
2706-91-4	Perfluoropentanesulfonic acid	3.5 U	4.4	3.5	0.98	ng/l
355-46-4	Perfluorohexanesulfonic acid	1.8 U	3.5	1.8	0.61	ng/l
375-92-8	Perfluoroheptanesulfonic acid	1.8 U	3.5	1.8	0.44	ng/l
1763-23-1	Perfluorooctanesulfonic acid	1.8 U	3.5	1.8	0.47	ng/l
68259-12-1	Perfluorononanesulfonic acid	1.8 U	3.5	1.8	0.50	ng/l
335-77-3	Perfluorodecanesulfonic acid	1.8 U	3.5	1.8	0.56	ng/l
79780-39-5	Perfluorododecanesulfonic aci	3.5 U	4.4	3.5	1.0	ng/l

FLUOROTELOMER SULFONIC ACIDS

757124-72-4	4:2 Fluorotelomer sulfonate	7.0 U	18	7.0	2.8	ng/l
27619-97-2	6:2 Fluorotelomer sulfonate	7.0 U	18	7.0	3.0	ng/l
39108-34-4	8:2 Fluorotelomer sulfonate	7.0 U	18	7.0	3.6	ng/l

PERFLUOROOCCTANE SULFONAMIDES

754-91-6	PFOSA	1.8 U	3.5	1.8	0.59	ng/l
31506-32-8	MeFOSA	3.5 U	7.0	3.5	0.88	ng/l
4151-50-2	EtFOSA	3.5 U	7.0	3.5	0.88	ng/l

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

4.3
4

Report of Analysis

Client Sample ID:	AF-RHMW17S-WQEB01-2306		
Lab Sample ID:	FC6803-3	Date Sampled:	06/08/23
Matrix:	AQ - Equipment Blank	Date Received:	06/10/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	Percent Solids:	n/a
Project:	N6274223F0104 RH Fire Suppression System		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
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PERFLUOROOCCTANE SULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	3.5 U	4.4	3.5	0.88	ng/l	
2991-50-6	EtFOSAA	3.5 U	4.4	3.5	1.2	ng/l	

PERFLUOROOCCTANE SULFONAMIDO ETHANOLS

24448-09-7	MeFOSE	18 U	35	18	3.8	ng/l	
1691-99-2	EtFOSE	18 U	35	18	6.5	ng/l	

PER and POLYFLUOROETHER CARBOXYLIC ACIDS

13252-13-6	HFPO-DA (GenX)	1.8 U	3.5	1.8	0.88	ng/l	
919005-14-4	ADONA	3.5 U	7.0	3.5	1.6	ng/l	
377-73-1	PFMPA	1.8 U	7.0	1.8	0.88	ng/l	
863090-89-5	PFMBA	3.5 U	7.0	3.5	1.0	ng/l	
151772-58-6	NFDHA	3.5 U	7.0	3.5	1.1	ng/l	

PER and POLYFLUOROETHER SULFONIC ACIDS

756426-58-1	9Cl-PF3ONS (F-53B Major)	3.5 U	7.0	3.5	1.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	3.5 U	7.0	3.5	1.5	ng/l	
113507-82-7	PFEESA	1.8 U	7.0	1.8	0.68	ng/l	

FLUOROTELOMER CARBOXYLIC ACIDS

356-02-5	3:3 Fluorotelomer carboxylat ^a	8.8 U	18	8.8	4.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	18 U	88	18	7.7	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	18 U	88	18	6.9	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
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	13C4-PFBA	119%		20-150%
	13C5-PFPeA	127%		20-150%
	13C5-PFHxA	126%		20-150%
	13C4-PFHpA	124%		20-150%
	13C8-PFOA	102%		20-150%
	13C9-PFNA	119%		20-150%
	13C6-PFDA	99%		20-150%
	13C7-PFUnDA	99%		20-150%
	13C2-PFDoDA	101%		20-150%
	13C2-PFTeDA	93%		20-150%
	13C3-PFBS	111%		20-150%
	13C3-PFHxS	107%		20-150%

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

Report of Analysis

Client Sample ID:	AF-RHMW17S-WQEB01-2306		Date Sampled:	06/08/23
Lab Sample ID:	FC6803-3		Date Received:	06/10/23
Matrix:	AQ - Equipment Blank		Percent Solids:	n/a
Method:	EPA DRAFT 1633 EPA 1633 DRAFT			
Project:	N6274223F0104 RH Fire Suppression System			

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	114%		20-150%
	13C8-FOSA	96%		20-150%
	d3-MeFOSA	94%		20-150%
	d5-EtFOSA	106%		20-150%
	d3-MeFOSAA	116%		20-150%
	d5-EtFOSAA	120%		20-150%
	d7-MeFOSE	87%		20-150%
	d9-EtFOSE	103%		20-150%
	13C2-4:2FTS	133%		20-180%
	13C2-6:2FTS	124%		20-180%
	13C2-8:2FTS	103%		20-180%
	13C3-HFPO-DA	116%		20-150%

(a) Associated BS recovery outside control limits.

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

Report of Analysis

Client Sample ID:	AF-RHMW17D-WGN01LF-2306		
Lab Sample ID:	FC6803-4	Date Sampled:	06/08/23
Matrix:	AQ - Ground Water	Date Received:	06/10/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	Percent Solids:	n/a
Project:	N6274223F0104 RH Fire Suppression System		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q19598.D	1	06/20/23 09:20	MV	06/16/23 13:00	OP97385	S6Q292
Run #2	6Q19599.D	1	06/20/23 09:34	MV	06/16/23 13:00	OP97385	S6Q292
Run #3 ^a	6Q19371.D	1	06/14/23 20:50	MV	06/13/23 13:00	OP97325	S6Q289

Run #	Initial Volume	Final Volume
Run #1	520 ml	5.0 ml
Run #2	66.0 ml	5.0 ml
Run #3	530 ml	5.0 ml

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
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PERFLUOROALKYL CARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	30 U ^b	120	30	14	ng/l	
2706-90-3	Perfluoropentanoic acid	1.9 U	7.7	1.9	0.90	ng/l	
307-24-4	Perfluorohexanoic acid	1.9 U	3.8	1.9	0.48	ng/l	
375-85-9	Perfluoroheptanoic acid	1.9 U	3.8	1.9	0.48	ng/l	
335-67-1	Perfluorooctanoic acid	0.96 U	3.8	0.96	0.48	ng/l	
375-95-1	Perfluorononanoic acid	1.9 U	3.8	1.9	0.59	ng/l	
335-76-2	Perfluorodecanoic acid	1.9 U	3.8	1.9	0.48	ng/l	
2058-94-8	Perfluoroundecanoic acid	1.9 U	3.8	1.9	0.58	ng/l	
307-55-1	Perfluorododecanoic acid	1.9 U	3.8	1.9	0.58	ng/l	
72629-94-8	Perfluorotridecanoic acid	1.9 U	3.8	1.9	0.81	ng/l	
376-06-7	Perfluorotetradecanoic acid	1.9 U	3.8	1.9	0.48	ng/l	

PERFLUOROALKYL SULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	1.9 U	3.8	1.9	0.48	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	3.8 U	4.8	3.8	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	1.9 U	3.8	1.9	0.67	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	1.9 U	3.8	1.9	0.48	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	1.9 U	3.8	1.9	0.52	ng/l	
68259-12-1	Perfluorononanesulfonic acid	1.9 U	3.8	1.9	0.55	ng/l	
335-77-3	Perfluorodecanesulfonic acid	1.9 U	3.8	1.9	0.62	ng/l	
79780-39-5	Perfluorododecanesulfonic acid	3.8 U	4.8	3.8	1.1	ng/l	

FLUOROTELOMER SULFONIC ACIDS

757124-72-4	4:2 Fluorotelomer sulfonate	7.7 U	19	7.7	3.1	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	7.7 U	19	7.7	3.3	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	7.7 U	19	7.7	4.0	ng/l	

PERFLUOROOCCTANE SULFONAMIDES

754-91-6	PFOSA	1.9 U	3.8	1.9	0.64	ng/l	
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U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.4
4

Report of Analysis

Client Sample ID:	AF-RHMW17D-WGN01LF-2306		
Lab Sample ID:	FC6803-4	Date Sampled:	06/08/23
Matrix:	AQ - Ground Water	Date Received:	06/10/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	Percent Solids:	n/a
Project:	N6274223F0104 RH Fire Suppression System		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
31506-32-8	MeFOSA	3.8 U	7.7	3.8	0.96	ng/l	
4151-50-2	EtFOSA	3.8 U	7.7	3.8	0.96	ng/l	

PERFLUOROOCCTANE SULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	30 U ^b	38	30	7.6	ng/l	
2991-50-6	EtFOSAA	3.8 U	4.8	3.8	1.3	ng/l	

PERFLUOROOCCTANE SULFONAMIDO ETHANOLS

24448-09-7	MeFOSE	19 U	38	19	4.2	ng/l	
1691-99-2	EtFOSE	19 U	38	19	7.1	ng/l	

PER and POLYFLUOROETHER CARBOXYLIC ACIDS

13252-13-6	HFPO-DA (GenX)	1.9 U	3.8	1.9	0.96	ng/l	
919005-14-4	ADONA	3.8 U	7.7	3.8	1.8	ng/l	
377-73-1	PFMPA	1.9 U	7.7	1.9	0.96	ng/l	
863090-89-5	PFMBA	3.8 U	7.7	3.8	1.1	ng/l	
151772-58-6	NFDHA	3.8 U	7.7	3.8	1.2	ng/l	

PER and POLYFLUOROETHER SULFONIC ACIDS

756426-58-1	9Cl-PF3ONS (F-53B Major)	3.8 U	7.7	3.8	1.3	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	3.8 U	7.7	3.8	1.7	ng/l	
113507-82-7	PFEESA	1.9 U	7.7	1.9	0.75	ng/l	

FLUOROTELOMER CARBOXYLIC ACIDS

356-02-5	3:3 Fluorotelomer carboxylat ^c	9.6 U	19	9.6	4.3	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	19 U	96	19	8.4	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	19 U	96	19	7.5	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C4-PFBA	4% ^d	107%	4% ^d	20-150%
	13C5-PFPeA	28%	118%	30%	20-150%
	13C5-PFHxA	100%	112%	112%	20-150%
	13C4-PFHpA	116%	111%	123%	20-150%
	13C8-PFOA	112%	107%	120%	20-150%
	13C9-PFNA	108%	109%	123%	20-150%
	13C6-PFDA	104%	101%	121%	20-150%
	13C7-PFUnDA	99%	95%	121%	20-150%
	13C2-PFDoDA	94%	91%	117%	20-150%
	13C2-PFTeDA	68%	76%	88%	20-150%

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

4.4
4

Report of Analysis

Client Sample ID: AF-RHMW17D-WGN01LF-2306		Date Sampled: 06/08/23
Lab Sample ID: FC6803-4		Date Received: 06/10/23
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA DRAFT 1633 EPA 1633 DRAFT		
Project: N6274223F0104 RH Fire Suppression System		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C3-PFBS	104%	114%	116%	20-150%
	13C3-PFHxS	115%	113%	120%	20-150%
	13C8-PFOS	123%	85%	126%	20-150%
	13C8-FOSA	88%	72%	102%	20-150%
	d3-MeFOSA	101%	77%	110%	20-150%
	d5-EtFOSA	107%	79%	114%	20-150%
	d3-MeFOSAA	156% ^d	80%	168% ^d	20-150%
	d5-EtFOSAA	133%	82%	168% ^d	20-150%
	d7-MeFOSE	76%	63%	84%	20-150%
	d9-EtFOSE	92%	77%	100%	20-150%
	13C2-4:2FTS	120%	131%	149%	20-180%
	13C2-6:2FTS	100%	116%	112%	20-180%
	13C2-8:2FTS	108%	99%	122%	20-180%
	13C3-HFPO-DA	93%	119%	102%	20-150%

- (a) Confirmation run.
- (b) Result is from Run# 2
- (c) Associated BS recovery outside control limits; LLBS recovery was within control limits and sample was ND.
- (d) Outside control limits.

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

Report of Analysis

4.5
4

Client Sample ID:	AF-RHMW17D-WQFB01-2306		
Lab Sample ID:	FC6803-5	Date Sampled:	06/08/23
Matrix:	AQ - Field Blank Water	Date Received:	06/10/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	Percent Solids:	n/a
Project:	N6274223F0104 RH Fire Suppression System		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q19372.D	1	06/14/23 21:04	MV	06/13/23 13:00	OP97325	S6Q289
Run #2							

Run #	Initial Volume	Final Volume
Run #1	560 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
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PERFLUOROALKYL CARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	3.6 U	14	3.6	1.7	ng/l	
2706-90-3	Perfluoropentanoic acid	1.8 U	7.1	1.8	0.84	ng/l	
307-24-4	Perfluorohexanoic acid	1.8 U	3.6	1.8	0.45	ng/l	
375-85-9	Perfluoroheptanoic acid	1.8 U	3.6	1.8	0.45	ng/l	
335-67-1	Perfluorooctanoic acid	0.89 U	3.6	0.89	0.45	ng/l	
375-95-1	Perfluorononanoic acid	1.8 U	3.6	1.8	0.54	ng/l	
335-76-2	Perfluorodecanoic acid	1.8 U	3.6	1.8	0.45	ng/l	
2058-94-8	Perfluoroundecanoic acid	1.8 U	3.6	1.8	0.54	ng/l	
307-55-1	Perfluorododecanoic acid	1.8 U	3.6	1.8	0.54	ng/l	
72629-94-8	Perfluorotridecanoic acid	1.8 U	3.6	1.8	0.75	ng/l	
376-06-7	Perfluorotetradecanoic acid	1.8 U	3.6	1.8	0.45	ng/l	

PERFLUOROALKYL SULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	1.8 U	3.6	1.8	0.45	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	3.6 U	4.5	3.6	1.0	ng/l	
355-46-4	Perfluorohexanesulfonic acid	1.8 U	3.6	1.8	0.62	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	1.8 U	3.6	1.8	0.45	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	1.8 U	3.6	1.8	0.48	ng/l	
68259-12-1	Perfluorononanesulfonic acid	1.8 U	3.6	1.8	0.51	ng/l	
335-77-3	Perfluorodecanesulfonic acid	1.8 U	3.6	1.8	0.57	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	3.6 U	4.5	3.6	1.0	ng/l	

FLUOROTELOMER SULFONIC ACIDS

757124-72-4	4:2 Fluorotelomer sulfonate	7.1 U	18	7.1	2.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	7.1 U	18	7.1	3.1	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	7.1 U	18	7.1	3.7	ng/l	

PERFLUOROOCCTANE SULFONAMIDES

754-91-6	PFOSA	1.8 U	3.6	1.8	0.60	ng/l	
31506-32-8	MeFOSA	3.6 U	7.1	3.6	0.89	ng/l	
4151-50-2	EtFOSA	3.6 U	7.1	3.6	0.89	ng/l	

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

Report of Analysis

Client Sample ID:	AF-RHMW17D-WQFB01-2306		
Lab Sample ID:	FC6803-5	Date Sampled:	06/08/23
Matrix:	AQ - Field Blank Water	Date Received:	06/10/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	Percent Solids:	n/a
Project:	N6274223F0104 RH Fire Suppression System		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
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PERFLUOROOCCTANE SULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	3.6 U	4.5	3.6	0.89	ng/l	
2991-50-6	EtFOSAA	3.6 U	4.5	3.6	1.2	ng/l	

PERFLUOROOCCTANE SULFONAMIDO ETHANOLS

24448-09-7	MeFOSE	18 U	36	18	3.9	ng/l	
1691-99-2	EtFOSE	18 U	36	18	6.6	ng/l	

PER and POLYFLUOROETHER CARBOXYLIC ACIDS

13252-13-6	HFPO-DA (GenX)	1.8 U	3.6	1.8	0.89	ng/l	
919005-14-4	ADONA	3.6 U	7.1	3.6	1.7	ng/l	
377-73-1	PFMPA	1.8 U	7.1	1.8	0.89	ng/l	
863090-89-5	PFMBA	3.6 U	7.1	3.6	1.0	ng/l	
151772-58-6	NFDHA	3.6 U	7.1	3.6	1.1	ng/l	

PER and POLYFLUOROETHER SULFONIC ACIDS

756426-58-1	9Cl-PF3ONS (F-53B Major)	3.6 U	7.1	3.6	1.2	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	3.6 U	7.1	3.6	1.6	ng/l	
113507-82-7	PFEESA	1.8 U	7.1	1.8	0.70	ng/l	

FLUOROTELOMER CARBOXYLIC ACIDS

356-02-5	3:3 Fluorotelomer carboxylat ^a	8.9 U	18	8.9	4.0	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	18 U	89	18	7.8	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	18 U	89	18	7.0	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
---------	------------------------	--------	--------	--------

	13C4-PFBA	118%		20-150%
	13C5-PFPeA	119%		20-150%
	13C5-PFHxA	120%		20-150%
	13C4-PFHpA	120%		20-150%
	13C8-PFOA	107%		20-150%
	13C9-PFNA	117%		20-150%
	13C6-PFDA	107%		20-150%
	13C7-PFUnDA	114%		20-150%
	13C2-PFDoDA	99%		20-150%
	13C2-PFTeDA	81%		20-150%
	13C3-PFBS	120%		20-150%
	13C3-PFHxS	121%		20-150%

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

Report of Analysis

Client Sample ID:	AF-RHMW17D-WQFB01-2306		
Lab Sample ID:	FC6803-5	Date Sampled:	06/08/23
Matrix:	AQ - Field Blank Water	Date Received:	06/10/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	Percent Solids:	n/a
Project:	N6274223F0104 RH Fire Suppression System		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	106%		20-150%
	13C8-FOSA	83%		20-150%
	d3-MeFOSA	81%		20-150%
	d5-EtFOSA	86%		20-150%
	d3-MeFOSAA	112%		20-150%
	d5-EtFOSAA	100%		20-150%
	d7-MeFOSE	77%		20-150%
	d9-EtFOSE	94%		20-150%
	13C2-4:2FTS	142%		20-180%
	13C2-6:2FTS	137%		20-180%
	13C2-8:2FTS	125%		20-180%
	13C3-HFPO-DA	104%		20-150%

(a) Associated BS recovery outside control limits.

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

Report of Analysis

Client Sample ID:	AF-RHMW17-WGN01LF-2306		
Lab Sample ID:	FC6803-6	Date Sampled:	06/08/23
Matrix:	AQ - Ground Water	Date Received:	06/10/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	Percent Solids:	n/a
Project:	N6274223F0104 RH Fire Suppression System		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q19375.D	1	06/14/23 21:46	MV	06/13/23 13:00	OP97325	S6Q289
Run #2							

Run #	Initial Volume	Final Volume
Run #1	550 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
---------	----------	--------	-----	-----	----	-------	---

PERFLUOROALKYL CARBOXYLIC ACIDS

375-22-4	Perfluorobutanoic acid	3.6 U	15	3.6	1.7	ng/l	
2706-90-3	Perfluoropentanoic acid	2.6	7.3	1.8	0.85	ng/l	J
307-24-4	Perfluorohexanoic acid	2.1	3.6	1.8	0.45	ng/l	J
375-85-9	Perfluoroheptanoic acid	0.67	3.6	1.8	0.45	ng/l	J
335-67-1	Perfluorooctanoic acid	0.91 U	3.6	0.91	0.45	ng/l	
375-95-1	Perfluorononanoic acid	1.8 U	3.6	1.8	0.55	ng/l	
335-76-2	Perfluorodecanoic acid	1.8 U	3.6	1.8	0.45	ng/l	
2058-94-8	Perfluoroundecanoic acid	1.8 U	3.6	1.8	0.55	ng/l	
307-55-1	Perfluorododecanoic acid	1.8 U	3.6	1.8	0.55	ng/l	
72629-94-8	Perfluorotridecanoic acid	1.8 U	3.6	1.8	0.76	ng/l	
376-06-7	Perfluorotetradecanoic acid	1.8 U	3.6	1.8	0.45	ng/l	

PERFLUOROALKYL SULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	1.8 U	3.6	1.8	0.45	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	3.6 U	4.5	3.6	1.0	ng/l	
355-46-4	Perfluorohexanesulfonic acid	1.8 U	3.6	1.8	0.64	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	1.8 U	3.6	1.8	0.45	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	1.8 U	3.6	1.8	0.49	ng/l	
68259-12-1	Perfluorononanesulfonic acid	1.8 U	3.6	1.8	0.52	ng/l	
335-77-3	Perfluorodecanesulfonic acid	1.8 U	3.6	1.8	0.58	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	3.6 U	4.5	3.6	1.0	ng/l	

FLUOROTELOMER SULFONIC ACIDS

757124-72-4	4:2 Fluorotelomer sulfonate	7.3 U	18	7.3	2.9	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	10.7	18	7.3	3.2	ng/l	J
39108-34-4	8:2 Fluorotelomer sulfonate	7.3 U	18	7.3	3.7	ng/l	

PERFLUOROOCCTANE SULFONAMIDES

754-91-6	PFOSA	1.8 U	3.6	1.8	0.61	ng/l	
31506-32-8	MeFOSA	3.6 U	7.3	3.6	0.91	ng/l	
4151-50-2	EtFOSA	3.6 U	7.3	3.6	0.91	ng/l	

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

4.6
4

Report of Analysis

Client Sample ID:	AF-RHMW17-WGN01LF-2306		
Lab Sample ID:	FC6803-6	Date Sampled:	06/08/23
Matrix:	AQ - Ground Water	Date Received:	06/10/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	Percent Solids:	n/a
Project:	N6274223F0104 RH Fire Suppression System		

CAS No. Compound Result LOQ LOD DL Units Q

PERFLUOROOCCTANE SULFONAMIDOACETIC ACIDS

2355-31-9	MeFOSAA	3.6 U	4.5	3.6	0.91	ng/l
2991-50-6	EtFOSAA	3.6 U	4.5	3.6	1.2	ng/l

PERFLUOROOCCTANE SULFONAMIDO ETHANOLS

24448-09-7	MeFOSE	18 U	36	18	4.0	ng/l
1691-99-2	EtFOSE	18 U	36	18	6.7	ng/l

PER and POLYFLUOROETHER CARBOXYLIC ACIDS

13252-13-6	HFPO-DA (GenX)	1.8 U	3.6	1.8	0.91	ng/l
919005-14-4	ADONA	3.6 U	7.3	3.6	1.7	ng/l
377-73-1	PFMPA	1.8 U	7.3	1.8	0.91	ng/l
863090-89-5	PFMBA	3.6 U	7.3	3.6	1.0	ng/l
151772-58-6	NFDHA	3.6 U	7.3	3.6	1.1	ng/l

PER and POLYFLUOROETHER SULFONIC ACIDS

756426-58-1	9Cl-PF3ONS (F-53B Major)	3.6 U	7.3	3.6	1.3	ng/l
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	3.6 U	7.3	3.6	1.6	ng/l
113507-82-7	PFEESA	1.8 U	7.3	1.8	0.71	ng/l

FLUOROTELOMER CARBOXYLIC ACIDS

356-02-5	3:3 Fluorotelomer carboxylat ^a	9.1 U	18	9.1	4.1	ng/l
914637-49-3	5:3 Fluorotelomer carboxylate	18 U	91	18	7.9	ng/l
812-70-4	7:3 Fluorotelomer carboxylate	18 U	91	18	7.1	ng/l

CAS No. ID Standard Recoveries Run# 1 Run# 2 Limits

13C4-PFBA	108%	20-150%
13C5-PFPeA	123%	20-150%
13C5-PFHxA	125%	20-150%
13C4-PFHpA	123%	20-150%
13C8-PFOA	111%	20-150%
13C9-PFNA	118%	20-150%
13C6-PFDA	104%	20-150%
13C7-PFUnDA	70%	20-150%
13C2-PFDoDA	57%	20-150%
13C2-PFTeDA	37%	20-150%
13C3-PFBS	118%	20-150%
13C3-PFHxS	121%	20-150%

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

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4

Report of Analysis

Client Sample ID:	AF-RHMW17-WGN01LF-2306	
Lab Sample ID:	FC6803-6	Date Sampled: 06/08/23
Matrix:	AQ - Ground Water	Date Received: 06/10/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	Percent Solids: n/a
Project:	N6274223F0104 RH Fire Suppression System	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	88%		20-150%
	13C8-FOSA	86%		20-150%
	d3-MeFOSA	73%		20-150%
	d5-EtFOSA	75%		20-150%
	d3-MeFOSAA	110%		20-150%
	d5-EtFOSAA	113%		20-150%
	d7-MeFOSE	65%		20-150%
	d9-EtFOSE	80%		20-150%
	13C2-4:2FTS	128%		20-180%
	13C2-6:2FTS	119%		20-180%
	13C2-8:2FTS	78%		20-180%
	13C3-HFPO-DA	117%		20-150%

(a) Associated BS recovery outside control limits.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
 LOQ = Limit of Quantitation DL = Detection 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
- QC Evaluation: DOD QSM5.x Limits



SGS North America Inc - Orlando

Chain of Custody

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COC #: 2306AFSG07

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FC6803

Client / Reporting Information		Project Information				Analytical Information											Matrix Codes	
Company Name: AECOM		Project Name: N8274223F0104 RH Fire Suppression System				<p><i>PFAS EPA Draft 1633</i></p> <p><i>11/11 6/18/23</i></p> <p><i>INITIAL ASSESSMENT SP</i></p> <p><i>LABEL VERIFICATION SP</i></p>											DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe	
Address: 1001 Bishop St. ste 1600		Street																
City: Honolulu State: HI Zip: 96813		City: Honolulu State: Hawaii																
Project Contact: Katie Abbott Email: katie.abbott@aecom.com Project Manager: Watson Tanji Email: watson.tanji@aecom.com Phone #: 303-796-4624 / 808-954-4512		Project #: 60697810																
Sampler(s) Name(s) (Printed) Sampler 1: <i>Matt Jim</i> Sampler 2: <i>Jacklyn V</i>		Client Purchase Order #																
SGS Orlando Sample #	Field ID / Point of Collection	DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	PCB	MNH	INQ3	INQ4	INQ5	MNH-ZNAC	D WATER	MNH	PFAS EPA Draft 1633	LAB USE ONLY
1	AF-RHMW225401-WGN01B-2306	6/18/23	0815	M.J.	GW	3	X											
Turnaround Time (Business days)	Approved By: / Date:	COMMERCIAL "A" (RESULTS ONLY)	COMMERCIAL "B" (RESULTS PLUS QC)	REDT1 (EPA LEVEL 3)	FULLT1 (EPA LEVEL 4)	EDD'S	EDMS upload database: JBPHE	EDMS Coverage: AFFF Assessment Sampling GW										
10 Day (Business)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		UNITED ANWB 010-47599075										
7 Day		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>												
5 Day		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>												
3 Day RUSH		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>												
2 Day RUSH		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>												
1 Day RUSH		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>												
Other		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>												
Rush T/A Data Available VIA Email or Lablink																		
Relinquished By/Sampler/Affiliation		Date Time:		Received By/Affiliation		Relinquished By/Affiliation		Date Time:		Received By/Affiliation		Relinquished By/Affiliation		Date Time:		Received By/Affiliation		
1 <i>Matt Jim AECOM</i>		6/18/23 1430		2 <i>Miranda Degarmo / AECOM</i>		3 <i>Miranda Degarmo / AECOM</i>		6/18/23 1435		4 <i>UC</i>		5 <i>UC</i>						
6 <i>UC</i>		7 <i>UC</i>		8 <i>UC</i>														
Lab Use Only: Cooler Temperature (s) Celsius (corrected):		4.4/1000																

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FC6803: Chain of Custody

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SGS - ORLANDO Quote #

SKIFF #

FC6803

Client / Reporting Information		Project Information				Analytical Information													Matrix Codes	
Company Name: AECOM		Project Name: N6274223F0104 RH Fire Suppression System				<div style="position: absolute; top: 0; right: 0; font-size: 2em; font-weight: bold;">FC6803</div> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> <p>ASU 6/18/23</p> </div>													DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe	
Address: 1001 Bishop St. ste 1600		Street																		
City: Honolulu State: HI Zip: 96813		City: Honolulu		State: Hawaii																
Project Contact: Katie Abbott Email: katie.abbott@aecom.com		Project # 60697810																		
Project Manager: Watson Tanji Email: watson.tanji@aecom.com		Fax #																		
Phone #: 303-796-4624 / 808-954-4512		Client Purchase Order #				PFAS EPA Draft: 1633														
Sampler(s) Name(s) (Printed) Sampler 1: <i>Cristina Rice</i> Sampler 2: <i>Andy Young</i>		LAB USE ONLY																		
SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION			CONTAINER INFORMATION															
		DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	MS	MSH	MSO3	MSO4	MSO4	MSO4-ZNAC	DI WATER	MSO4				
2	AF-RHMW17S-WGN01F-2306	6/18/23	0920	CP, AY	GW	3		X										X		
3	AF-RHMW17S-WQEB01-2306	6/18/23	0930	CP, AY	GW	3		X										X		
		<div style="font-size: 2em; font-weight: bold; opacity: 0.5;">ASU 6/18/23</div>																		
Turnaround Time (Business days)				Data Deliverable Information				Comments / Remarks												
10 Day (Business)		Approved By: / Date:		<input type="checkbox"/> COMMERCIAL "A" (RESULTS ONLY) <input type="checkbox"/> COMMERCIAL "B" (RESULTS PLUS QC) <input type="checkbox"/> REDT1 (EPA LEVEL 3) <input checked="" type="checkbox"/> FULLT1 (EPA LEVEL 4) <input checked="" type="checkbox"/> EDD'S				EDMS upload database: JBPHE EDMS Coverage: AFFF Assessment Sampling GW Unital MNB-D16-47599075												
7 Day																				
5 Day																				
3 Day RUSH																				
2 Day RUSH																				
1 Day RUSH																				
Other																				
Rush T/A Data Available VIA Email or Lablink		Sample Custody must be documented below each time samples change possession, including courier delivery.																		
Relinquished by Sampler/Affiliation		Date Time:		Received By/Affiliation				Relinquished By/Affiliation		Date Time:		Received By/Affiliation								
1 Andy Young / AECOM		6/18/23 1300		2 Eli Martin / AECOM				3 Eli Martin / AECOM		6/18/23		4 UC								
Relinquished by/Affiliation		Date Time:		Received By/Affiliation				Relinquished By/Affiliation		Date Time:		Received By/Affiliation								
5 UC				6 [Signature] 06/10/23 1015				7				8								
Lab Use Only: Cooler Temperature (s) Celsius (corrected):		http://www.sgs.com/en/terms-and-conditions																		

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FC6803: Chain of Custody

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FC6803

Form containing Client/Reporting Information, Project Information, Analytical Information, Matrix Codes, and Chain of Custody table. Includes handwritten notes and signatures.

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FC6803: Chain of Custody

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Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, FL 32811
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FC6803

Client / Reporting Information			Project Information				Analytical Information										Matrix Codes
Company Name: AECOM			Project Name: N6274223F0104 RH Fire Suppression System				<div style="text-align: center; font-size: 2em; opacity: 0.5;"> </div>										DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe
Address: 1001 Bishop St. ste 1600			Street														
City: Honolulu State: HI Zip: 96813			City: Honolulu State: Hawaii														
Project Contact: Katie Abbott Email: katie.abbott@aecom.com			Project # 60697810														
Project Manager: Watson Tanji Email: watson.tanji@aecom.com			Fax #														
Phone #: 303-798-4624 / 808-954-4512			Client Purchase Order #				PFAS EPA Draft 1633										
Sampler(s) Name(s) (Printed) Sampler 1: <i>Cosmin Perez</i> Sampler 2: <i>Andy Young</i>																	
SGS Orlando Sample #	Field ID / Point of Collection	DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	PCB	NIOSH	INCO3	PERCEA	MOH-ZNAC	DI WATER	MECH	LAB USE ONLY	
6	AF-RHMW17-WGN01LF-2306	6/18/23	1200	CP, AY	GW	3		X									
Turnaround Time (Business days)			Data Deliverable Information				Comments / Remarks										
10 Day (Business) 7 Day <input checked="" type="checkbox"/> 5 Day 3 Day RUSH 2 Day RUSH 1 Day RUSH Other _____			Approved By / Date: _____ <input type="checkbox"/> COMMERCIAL "A" (RESULTS ONLY) <input type="checkbox"/> COMMERCIAL "B" (RESULTS PLUS QC) <input type="checkbox"/> REDT1 (EPA LEVEL 3) <input checked="" type="checkbox"/> FULLT1 (EPA LEVEL 4) <input checked="" type="checkbox"/> EDD'S				EDMS upload database: JBPHE EDMS Coverage: AFFF Assessment Sampling GW <i>Unit AWB - 016 - 47599073</i>										
Rush T/A Data Available VIA Email or Lablink																	
Sample Custody must be documented below each time samples change possession, including courier delivery.																	
Relinquished by Sampler/Affiliation		Date Time:		Received By/Affiliation		Relinquished By/Affiliation		Date Time:		Received By/Affiliation		Relinquished By/Affiliation		Date Time:		Received By/Affiliation	
1 <i>Andy Young/AECOM</i>		6/18/23 1300		2 <i>Eli Martin/AECOM</i>		3 <i>Eli Martin/AECOM</i>		6/18/23 1400		4 <i>UC</i>		5 <i>UC</i>		6 <i>UC</i>		7	
8																	

Lab Use Only: Cooler Temperature (s) Celsius (corrected):

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FC6803: Chain of Custody

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SGS Sample Receipt Summary

Job Number: FC6803

Client: AECOM

Project: N6274223F0104 RH Fire Suppression System

Date / Time Received: 6/10/2023 10:15:00 AM

Delivery Method: United Cargo/Airspace

Airbill #'s: United Cargo AWB #: 016-47599075

Therm ID: IR 1;

Therm CF: -0.1;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (4.5);

Cooler Temps (Corrected) °C: Cooler 1: (4.4);

Cooler Information

Y or N

- | | | |
|-----------------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Temp criteria achieved | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4. Cooler temp verification | IR Gun | |
| 5. Cooler media | Ice (Bag) | |

Trip Blank Information

Y or N

N/A

- | | | | |
|--------------------------------|--------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Trip Blank listed on COC | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | <u>W</u> or <u>S</u> | <u>N/A</u> | |
| 3. Type Of TB Received | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sample Information

Y or N

N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Sample labels present on bottles | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Samples preserved properly | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 3. Sufficient volume/containers recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Condition of sample | Intact | | |
| 5. Sample recvd within HT | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 6. Dates/Times/IDs on COC match Sample Label | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 7. VOCs have headspace | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 8. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 9. Compositing instructions clear | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 10. Voa Soil Kits/Jars received past 48hrs? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 11. % Solids Jar received? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 12. Residual Chlorine Present? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____

Number of 5035 Field Kits: _____

Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 _____ 230320 _____

pH 10-12 _____

Other: (Specify) pH 1.0 - 12.0 _____ 222221 _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP

Date: 6/10/2023 10:15:00 A

Reviewer: SP

Date: 6/11/2023

FC6803: Chain of Custody

Page 5 of 5

QC Evaluation: DOD QSM5.x Limits

Job Number: FC6803
Account: AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System
Collected: 06/08/23

QC Sample ID	CAS#	Analyte	Sample Result Type	Result Type	Units	Limits
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No DOD QSM5.x Limits found for methods in this job.

* Sample used for QC is not from job FC6803

5.2
5

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Instrument Blank

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q289-IBLK	6Q19333.D	1	06/14/23	MV	n/a	n/a	S6Q289

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-1, FC6803-2, FC6803-3, FC6803-5, FC6803-6

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-44:2	Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-19	Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-91	Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q289-IBLK	6Q19333.D	1	06/14/23	MV	n/a	n/a	S6Q289

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-1, FC6803-2, FC6803-3, FC6803-5, FC6803-6

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-35:3	Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries	Limits
	13C4-PFBA	101% 20-150%
	13C5-PFPeA	110% 20-150%
	13C5-PFHxA	104% 20-150%
	13C4-PFHpA	104% 20-150%
	13C8-PFOA	113% 20-150%
	13C9-PFNA	102% 20-150%
	13C6-PFDA	97% 20-150%
	13C7-PFUnDA	92% 20-150%
	13C2-PFDoDA	96% 20-150%
	13C2-PFTeDA	100% 20-150%
	13C3-PFBS	99% 20-150%
	13C3-PFHxS	101% 20-150%
	13C8-PFOS	91% 20-150%
	13C8-FOSA	92% 20-150%
	d3-MeFOSA	94% 20-150%
	d5-EtFOSA	97% 20-150%
	d3-MeFOSAA	97% 20-150%
	d5-EtFOSAA	96% 20-150%
	d7-MeFOSE	97% 20-150%
	d9-EtFOSE	96% 20-150%
	13C2-4:2FTS	116% 20-180%
	13C2-6:2FTS	112% 20-180%
	13C2-8:2FTS	112% 20-180%
	13C3-HFPO-DA	110% 20-150%

6.1.1
6

Instrument Blank

Job Number: FC6803
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q292-IBLK	6Q19529.D	1	06/19/23	MV	n/a	n/a	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic acid	ND	0.0050	0.0011	ug/l	
757124-72-44:2	Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-19	Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-91	Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q292-IBLK	6Q19529.D	1	06/19/23	MV	n/a	n/a	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-4

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-35:3	Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries	Limits
	13C4-PFBA	100%
	13C5-PFPeA	97%
	13C5-PFHxA	93%
	13C4-PFHpA	97%
	13C8-PFOA	99%
	13C9-PFNA	97%
	13C6-PFDA	100%
	13C7-PFUnDA	98%
	13C2-PFDoDA	93%
	13C2-PFTeDA	96%
	13C3-PFBS	106%
	13C3-PFHxS	99%
	13C8-PFOS	102%
	13C8-FOSA	104%
	d3-MeFOSA	97%
	d5-EtFOSA	95%
	d3-MeFOSAA	87%
	d5-EtFOSAA	95%
	d7-MeFOSE	101%
	d9-EtFOSE	100%
	13C2-4:2FTS	114%
	13C2-6:2FTS	115%
	13C2-8:2FTS	107%
	13C3-HFPO-DA	97%

Instrument Blank

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q292-IBLK	6Q19624.D	1	06/20/23	MV	n/a	n/a	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-44:2	Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-19	Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-91	Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Instrument Blank

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q292-IBLK	6Q19624.D	1	06/20/23	MV	n/a	n/a	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-4

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-35:3	Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries	Limits
	13C4-PFBA	100% 20-150%
	13C5-PFPeA	103% 20-150%
	13C5-PFHxA	100% 20-150%
	13C4-PFHpA	91% 20-150%
	13C8-PFOA	105% 20-150%
	13C9-PFNA	102% 20-150%
	13C6-PFDA	90% 20-150%
	13C7-PFUnDA	88% 20-150%
	13C2-PFDoDA	92% 20-150%
	13C2-PFTeDA	84% 20-150%
	13C3-PFBS	95% 20-150%
	13C3-PFHxS	104% 20-150%
	13C8-PFOS	102% 20-150%
	13C8-FOSA	97% 20-150%
	d3-MeFOSA	92% 20-150%
	d5-EtFOSA	99% 20-150%
	d3-MeFOSAA	92% 20-150%
	d5-EtFOSAA	84% 20-150%
	d7-MeFOSE	86% 20-150%
	d9-EtFOSE	91% 20-150%
	13C2-4:2FTS	121% 20-180%
	13C2-6:2FTS	108% 20-180%
	13C2-8:2FTS	104% 20-180%
	13C3-HFPO-DA	98% 20-150%

Continuing Calibration Blank

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q289-ICCB	6Q19362.D	1	06/14/23	MV	n/a	n/a	S6Q289

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-1, FC6803-2, FC6803-3, FC6803-5

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-44:2	Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-19	Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-91	Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q289-ICCB	6Q19362.D	1	06/14/23	MV	n/a	n/a	S6Q289

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-1, FC6803-2, FC6803-3, FC6803-5

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-35:3	Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries	Limits
	13C4-PFBA	101% 20-150%
	13C5-PFPeA	109% 20-150%
	13C5-PFHxA	109% 20-150%
	13C4-PFHpA	107% 20-150%
	13C8-PFOA	103% 20-150%
	13C9-PFNA	90% 20-150%
	13C6-PFDA	82% 20-150%
	13C7-PFUnDA	90% 20-150%
	13C2-PFDoDA	89% 20-150%
	13C2-PFTeDA	95% 20-150%
	13C3-PFBS	99% 20-150%
	13C3-PFHxS	96% 20-150%
	13C8-PFOS	97% 20-150%
	13C8-FOSA	92% 20-150%
	d3-MeFOSA	89% 20-150%
	d5-EtFOSA	94% 20-150%
	d3-MeFOSAA	104% 20-150%
	d5-EtFOSAA	93% 20-150%
	d7-MeFOSE	96% 20-150%
	d9-EtFOSE	93% 20-150%
	13C2-4:2FTS	114% 20-180%
	13C2-6:2FTS	109% 20-180%
	13C2-8:2FTS	103% 20-180%
	13C3-HFPO-DA	101% 20-150%

Continuing Calibration Blank

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q289-ICCB	6Q19374.D	1	06/14/23	MV	n/a	n/a	S6Q289

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-6

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-44:2	Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-19	Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-91	Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q289-ICCB	6Q19374.D	1	06/14/23	MV	n/a	n/a	S6Q289

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-6

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-35:3	Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries	Limits
	13C4-PFBA	100% 20-150%
	13C5-PFPeA	103% 20-150%
	13C5-PFHxA	102% 20-150%
	13C4-PFHpA	104% 20-150%
	13C8-PFOA	104% 20-150%
	13C9-PFNA	102% 20-150%
	13C6-PFDA	114% 20-150%
	13C7-PFUnDA	115% 20-150%
	13C2-PFDoDA	105% 20-150%
	13C2-PFTeDA	108% 20-150%
	13C3-PFBS	103% 20-150%
	13C3-PFHxS	98% 20-150%
	13C8-PFOS	95% 20-150%
	13C8-FOSA	100% 20-150%
	d3-MeFOSA	95% 20-150%
	d5-EtFOSA	102% 20-150%
	d3-MeFOSAA	99% 20-150%
	d5-EtFOSAA	98% 20-150%
	d7-MeFOSE	105% 20-150%
	d9-EtFOSE	99% 20-150%
	13C2-4:2FTS	122% 20-180%
	13C2-6:2FTS	115% 20-180%
	13C2-8:2FTS	110% 20-180%
	13C3-HFPO-DA	100% 20-150%

Continuing Calibration Blank

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q289-ICCB	6Q19377.D	1	06/14/23	MV	n/a	n/a	S6Q289

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-6

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-44:2	Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-19	Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-91	Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q289-ICCB	6Q19377.D	1	06/14/23	MV	n/a	n/a	S6Q289

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-6

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-35:3	Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries	Limits
	13C4-PFBA	102% 20-150%
	13C5-PFPeA	98% 20-150%
	13C5-PFHxA	96% 20-150%
	13C4-PFHpA	100% 20-150%
	13C8-PFOA	95% 20-150%
	13C9-PFNA	111% 20-150%
	13C6-PFDA	101% 20-150%
	13C7-PFUnDA	96% 20-150%
	13C2-PFDoDA	106% 20-150%
	13C2-PFTeDA	105% 20-150%
	13C3-PFBS	90% 20-150%
	13C3-PFHxS	90% 20-150%
	13C8-PFOS	104% 20-150%
	13C8-FOSA	98% 20-150%
	d3-MeFOSA	99% 20-150%
	d5-EtFOSA	102% 20-150%
	d3-MeFOSAA	116% 20-150%
	d5-EtFOSAA	106% 20-150%
	d7-MeFOSE	101% 20-150%
	d9-EtFOSE	93% 20-150%
	13C2-4:2FTS	106% 20-180%
	13C2-6:2FTS	112% 20-180%
	13C2-8:2FTS	96% 20-180%
	13C3-HFPO-DA	94% 20-150%

Continuing Calibration Blank

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q292-ICCB	6Q19592.D	1	06/20/23	MV	n/a	n/a	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-44:2	Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-19	Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-91	Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q292-ICCB	6Q19592.D	1	06/20/23	MV	n/a	n/a	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-4

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-35:3	Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries	Limits
	13C4-PFBA	100% 20-150%
	13C5-PFPeA	107% 20-150%
	13C5-PFHxA	103% 20-150%
	13C4-PFHpA	99% 20-150%
	13C8-PFOA	103% 20-150%
	13C9-PFNA	92% 20-150%
	13C6-PFDA	89% 20-150%
	13C7-PFUnDA	93% 20-150%
	13C2-PFDoDA	84% 20-150%
	13C2-PFTeDA	77% 20-150%
	13C3-PFBS	106% 20-150%
	13C3-PFHxS	95% 20-150%
	13C8-PFOS	102% 20-150%
	13C8-FOSA	97% 20-150%
	d3-MeFOSA	95% 20-150%
	d5-EtFOSA	95% 20-150%
	d3-MeFOSAA	92% 20-150%
	d5-EtFOSAA	91% 20-150%
	d7-MeFOSE	95% 20-150%
	d9-EtFOSE	91% 20-150%
	13C2-4:2FTS	126% 20-180%
	13C2-6:2FTS	119% 20-180%
	13C2-8:2FTS	100% 20-180%
	13C3-HFPO-DA	104% 20-150%

6.1.7

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Method Blank Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97325-MB	6Q19365.D	1	06/14/23	MV	06/13/23	OP97325	S6Q289

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-1, FC6803-2, FC6803-3, FC6803-5, FC6803-6

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-44:2	Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-19	Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-91	Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Method Blank Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97325-MB	6Q19365.D	1	06/14/23	MV	06/13/23	OP97325	S6Q289

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-1, FC6803-2, FC6803-3, FC6803-5, FC6803-6

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-35:3	Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries	Limits
	13C4-PFBA	105% 20-150%
	13C5-PFPeA	106% 20-150%
	13C5-PFHxA	107% 20-150%
	13C4-PFHpA	106% 20-150%
	13C8-PFOA	103% 20-150%
	13C9-PFNA	117% 20-150%
	13C6-PFDA	98% 20-150%
	13C7-PFUnDA	98% 20-150%
	13C2-PFDoDA	96% 20-150%
	13C2-PFTeDA	96% 20-150%
	13C3-PFBS	108% 20-150%
	13C3-PFHxS	109% 20-150%
	13C8-PFOS	88% 20-150%
	13C8-FOSA	59% 20-150%
	d3-MeFOSA	59% 20-150%
	d5-EtFOSA	69% 20-150%
	d3-MeFOSAA	102% 20-150%
	d5-EtFOSAA	99% 20-150%
	d7-MeFOSE	51% 20-150%
	d9-EtFOSE	66% 20-150%
	13C2-4:2FTS	130% 20-180%
	13C2-6:2FTS	135% 20-180%
	13C2-8:2FTS	113% 20-180%
	13C3-HFPO-DA	104% 20-150%

Method Blank Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97385-MB	6Q19597.D	1	06/20/23	MV	06/16/23	OP97385	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-44:2	Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-19	Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-91	Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Method Blank Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97385-MB	6Q19597.D	1	06/20/23	MV	06/16/23	OP97385	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-4

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-35:3	Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries	Limits
	13C4-PFBA	106% 20-150%
	13C5-PFPeA	108% 20-150%
	13C5-PFHxA	105% 20-150%
	13C4-PFHpA	99% 20-150%
	13C8-PFOA	112% 20-150%
	13C9-PFNA	108% 20-150%
	13C6-PFDA	97% 20-150%
	13C7-PFUnDA	95% 20-150%
	13C2-PFDoDA	95% 20-150%
	13C2-PFTeDA	85% 20-150%
	13C3-PFBS	108% 20-150%
	13C3-PFHxS	100% 20-150%
	13C8-PFOS	102% 20-150%
	13C8-FOSA	73% 20-150%
	d3-MeFOSA	77% 20-150%
	d5-EtFOSA	80% 20-150%
	d3-MeFOSAA	95% 20-150%
	d5-EtFOSAA	82% 20-150%
	d7-MeFOSE	64% 20-150%
	d9-EtFOSE	80% 20-150%
	13C2-4:2FTS	129% 20-180%
	13C2-6:2FTS	113% 20-180%
	13C2-8:2FTS	96% 20-180%
	13C3-HFPO-DA	104% 20-150%

Continuing Calibration Blank

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q292-ICCB	6Q19604.D	1	06/20/23	MV	n/a	n/a	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

OP97385-DUP, OP97385-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-44:2	Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-19	Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-91	Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q292-ICCB	6Q19604.D	1	06/20/23	MV	n/a	n/a	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

OP97385-DUP, OP97385-MS

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-35:3	Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries	Limits
	13C4-PFBA	99% 20-150%
	13C5-PFPeA	105% 20-150%
	13C5-PFHxA	103% 20-150%
	13C4-PFHpA	100% 20-150%
	13C8-PFOA	92% 20-150%
	13C9-PFNA	106% 20-150%
	13C6-PFDA	103% 20-150%
	13C7-PFUnDA	102% 20-150%
	13C2-PFDoDA	97% 20-150%
	13C2-PFTeDA	87% 20-150%
	13C3-PFBS	102% 20-150%
	13C3-PFHxS	100% 20-150%
	13C8-PFOS	94% 20-150%
	13C8-FOSA	94% 20-150%
	d3-MeFOSA	89% 20-150%
	d5-EtFOSA	94% 20-150%
	d3-MeFOSAA	89% 20-150%
	d5-EtFOSAA	91% 20-150%
	d7-MeFOSE	86% 20-150%
	d9-EtFOSE	88% 20-150%
	13C2-4:2FTS	124% 20-180%
	13C2-6:2FTS	121% 20-180%
	13C2-8:2FTS	108% 20-180%
	13C3-HFPO-DA	103% 20-150%

Continuing Calibration Blank

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q292-ICCB	6Q19620.D	1	06/20/23	MV	n/a	n/a	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

S6Q292-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.016	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.0080	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0040	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0040	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0040	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0040	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0040	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0040	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0040	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0040	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0040	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0040	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0040	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0040	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0040	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0040	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0040	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-44:2	Fluorotelomer sulfonate	ND	0.020	0.0032	ug/l	
27619-97-2	6:2 Fluorotelomer sulfonate	ND	0.020	0.0035	ug/l	
39108-34-4	8:2 Fluorotelomer sulfonate	ND	0.020	0.0041	ug/l	
754-91-6	PFOSA	ND	0.0040	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0080	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0080	0.0010	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	
24448-09-7	MeFOSE	ND	0.040	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.040	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.0040	0.0010	ug/l	
919005-14-4	ADONA	ND	0.0080	0.0019	ug/l	
377-73-1	PFMPA	ND	0.0080	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.0080	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.0080	0.0012	ug/l	
756426-58-19	Cl-PF3ONS (F-53B Major)	ND	0.0080	0.0014	ug/l	
763051-92-91	Cl-PF3OUdS (F-53B Minor)	ND	0.0080	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q292-ICCB	6Q19620.D	1	06/20/23	MV	n/a	n/a	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

S6Q292-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.0080	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.020	0.0045	ug/l	
914637-49-35:3	Fluorotelomer carboxylate	ND	0.10	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.10	0.0079	ug/l	

CAS No.	ID Standard Recoveries	Limits
	13C4-PFBA	101% 20-150%
	13C5-PFPeA	111% 20-150%
	13C5-PFHxA	105% 20-150%
	13C4-PFHpA	102% 20-150%
	13C8-PFOA	94% 20-150%
	13C9-PFNA	100% 20-150%
	13C6-PFDA	106% 20-150%
	13C7-PFUnDA	101% 20-150%
	13C2-PFDoDA	101% 20-150%
	13C2-PFTeDA	89% 20-150%
	13C3-PFBS	102% 20-150%
	13C3-PFHxS	98% 20-150%
	13C8-PFOS	101% 20-150%
	13C8-FOSA	98% 20-150%
	d3-MeFOSA	97% 20-150%
	d5-EtFOSA	100% 20-150%
	d3-MeFOSAA	98% 20-150%
	d5-EtFOSAA	98% 20-150%
	d7-MeFOSE	91% 20-150%
	d9-EtFOSE	95% 20-150%
	13C2-4:2FTS	118% 20-180%
	13C2-6:2FTS	111% 20-180%
	13C2-8:2FTS	105% 20-180%
	13C3-HFPO-DA	111% 20-150%

Blank Spike Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97325-LLBS	6Q19364.D	1	06/14/23	MV	06/13/23	OP97325	S6Q289

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-1, FC6803-2, FC6803-3, FC6803-5, FC6803-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.03	0.0263	88	40-150
2706-90-3	Perfluoropentanoic acid	0.015	0.0128	85	40-150
307-24-4	Perfluorohexanoic acid	0.0075	0.0066	88	40-150
375-85-9	Perfluoroheptanoic acid	0.0075	0.0060	80	40-150
335-67-1	Perfluorooctanoic acid	0.0075	0.0064	85	40-150
375-95-1	Perfluorononanoic acid	0.0075	0.0063	84	40-150
335-76-2	Perfluorodecanoic acid	0.0075	0.0061	81	40-150
2058-94-8	Perfluoroundecanoic acid	0.0075	0.0064	85	40-150
307-55-1	Perfluorododecanoic acid	0.0075	0.0068	91	40-150
72629-94-8	Perfluorotridecanoic acid	0.0075	0.0066	88	40-150
376-06-7	Perfluorotetradecanoic acid	0.0075	0.0068	91	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00665	0.0055	83	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00706	0.0058	82	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00686	0.0059	86	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00715	0.0060	84	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00696	0.0055	79	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00722	0.0064	89	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00724	0.0069	95	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00728	0.0063	87	40-150
757124-72-44:2	Fluorotelomer sulfonate	0.0281	0.0244	87	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0285	0.0224	79	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0288	0.0220	76	40-150
754-91-6	PFOSA	0.0075	0.0064	85	40-150
31506-32-8	MeFOSA	0.015	0.0124	83	40-150
4151-50-2	EtFOSA	0.015	0.0131	87	40-150
2355-31-9	MeFOSAA	0.0075	0.0062	83	40-150
2991-50-6	EtFOSAA	0.0075	0.0064	85	40-150
24448-09-7	MeFOSE	0.0375	0.0332	89	40-150
1691-99-2	EtFOSE	0.0375	0.0309	82	40-150
13252-13-6	HFPO-DA (GenX)	0.015	0.0132	88	40-150
919005-14-4	ADONA	0.0142	0.0123	87	40-150
377-73-1	PFMPA	0.015	0.0128	85	40-150
863090-89-5	PFMBA	0.015	0.0126	84	40-150
151772-58-6	NFDHA	0.015	0.0129	86	40-150
756426-58-19	Cl-PF3ONS (F-53B Major)	0.014	0.0124	88	40-150
763051-92-91	Cl-PF3OUdS (F-53B Minor)	0.0142	0.0120	85	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97325-LLBS	6Q19364.D	1	06/14/23	MV	06/13/23	OP97325	S6Q289

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-1, FC6803-2, FC6803-3, FC6803-5, FC6803-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0134	0.0115	86	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.0375	0.0229	61	40-150
914637-49-35:3	Fluorotelomer carboxylate	0.188	0.151	81	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.188	0.174	93	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	116%	20-150%
	13C5-PFPeA	119%	20-150%
	13C5-PFHxA	117%	20-150%
	13C4-PFHpA	123%	20-150%
	13C8-PFOA	108%	20-150%
	13C9-PFNA	130%	20-150%
	13C6-PFDA	115%	20-150%
	13C7-PFUnDA	115%	20-150%
	13C2-PFDoDA	112%	20-150%
	13C2-PFTeDA	105%	20-150%
	13C3-PFBS	120%	20-150%
	13C3-PFHxS	122%	20-150%
	13C8-PFOS	113%	20-150%
	13C8-FOSA	82%	20-150%
	d3-MeFOSA	80%	20-150%
	d5-EtFOSA	83%	20-150%
	d3-MeFOSAA	122%	20-150%
	d5-EtFOSAA	113%	20-150%
	d7-MeFOSE	71%	20-150%
	d9-EtFOSE	86%	20-150%
	13C2-4:2FTS	134%	20-180%
	13C2-6:2FTS	142%	20-180%
	13C2-8:2FTS	142%	20-180%
	13C3-HFPO-DA	114%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97385-LLBS	6Q19596.D	1	06/20/23	MV	06/16/23	OP97385	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.03	0.0269	90	40-150
2706-90-3	Perfluoropentanoic acid	0.015	0.0132	88	40-150
307-24-4	Perfluorohexanoic acid	0.0075	0.0073	97	40-150
375-85-9	Perfluoroheptanoic acid	0.0075	0.0066	88	40-150
335-67-1	Perfluorooctanoic acid	0.0075	0.0061	81	40-150
375-95-1	Perfluorononanoic acid	0.0075	0.0059	79	40-150
335-76-2	Perfluorodecanoic acid	0.0075	0.0073	97	40-150
2058-94-8	Perfluoroundecanoic acid	0.0075	0.0071	95	40-150
307-55-1	Perfluorododecanoic acid	0.0075	0.0063	84	40-150
72629-94-8	Perfluorotridecanoic acid	0.0075	0.0062	83	40-150
376-06-7	Perfluorotetradecanoic acid	0.0075	0.0075	100	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00665	0.0057	86	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00706	0.0066	94	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00686	0.0059	86	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00715	0.0065	91	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00696	0.0056	80	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00722	0.0058	80	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00724	0.0060	83	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00728	0.0059	81	40-150
757124-72-44:2	Fluorotelomer sulfonate	0.0281	0.0230	82	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0285	0.0271	95	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0288	0.0231	80	40-150
754-91-6	PFOSA	0.0075	0.0066	88	40-150
31506-32-8	MeFOSA	0.015	0.0131	87	40-150
4151-50-2	EtFOSA	0.015	0.0135	90	40-150
2355-31-9	MeFOSAA	0.0075	0.0067	89	40-150
2991-50-6	EtFOSAA	0.0075	0.0067	89	40-150
24448-09-7	MeFOSE	0.0375	0.0363	97	40-150
1691-99-2	EtFOSE	0.0375	0.0350	93	40-150
13252-13-6	HFPO-DA (GenX)	0.015	0.0133	89	40-150
919005-14-4	ADONA	0.0142	0.0118	83	40-150
377-73-1	PFMPA	0.015	0.0136	91	40-150
863090-89-5	PFMBA	0.015	0.0134	89	40-150
151772-58-6	NFDHA	0.015	0.0135	90	40-150
756426-58-19	Cl-PF3ONS (F-53B Major)	0.014	0.0111	79	40-150
763051-92-91	Cl-PF3OUdS (F-53B Minor)	0.0142	0.0114	80	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97385-LLBS	6Q19596.D	1	06/20/23	MV	06/16/23	OP97385	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0134	0.0123	92	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.0375	0.0196	52	40-150
914637-49-35:3	Fluorotelomer carboxylate	0.188	0.150	80	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.188	0.162	86	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	104%	20-150%
	13C5-PFHxA	96%	20-150%
	13C4-PFHpA	97%	20-150%
	13C8-PFOA	104%	20-150%
	13C9-PFNA	101%	20-150%
	13C6-PFDA	108%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	101%	20-150%
	13C2-PFTeDA	83%	20-150%
	13C3-PFBS	111%	20-150%
	13C3-PFHxS	106%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	69%	20-150%
	d3-MeFOSA	68%	20-150%
	d5-EtFOSA	72%	20-150%
	d3-MeFOSAA	89%	20-150%
	d5-EtFOSAA	90%	20-150%
	d7-MeFOSE	58%	20-150%
	d9-EtFOSE	73%	20-150%
	13C2-4:2FTS	129%	20-180%
	13C2-6:2FTS	118%	20-180%
	13C2-8:2FTS	125%	20-180%
	13C3-HFPO-DA	101%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97325-BS	6Q19363.D	1	06/14/23	MV	06/13/23	OP97325	S6Q289

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-1, FC6803-2, FC6803-3, FC6803-5, FC6803-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.0863	86	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0424	85	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0226	90	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0197	79	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0224	90	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0225	90	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0201	80	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0202	81	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0228	91	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0208	83	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0222	89	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0185	83	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0186	79	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0177	77	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0199	84	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0178	77	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0199	83	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0194	80	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0181	75	40-150
757124-72-44:2	Fluorotelomer sulfonate	0.0938	0.0783	84	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.0784	83	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.0839	87	40-150
754-91-6	PFOSA	0.025	0.0230	92	40-150
31506-32-8	MeFOSA	0.05	0.0404	81	40-150
4151-50-2	EtFOSA	0.05	0.0422	84	40-150
2355-31-9	MeFOSAA	0.025	0.0210	84	40-150
2991-50-6	EtFOSAA	0.025	0.0187	75	40-150
24448-09-7	MeFOSE	0.125	0.109	87	40-150
1691-99-2	EtFOSE	0.125	0.105	84	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0403	81	40-150
919005-14-4	ADONA	0.0473	0.0402	85	40-150
377-73-1	PFMPA	0.05	0.0231	46	40-150
863090-89-5	PFMBA	0.05	0.0430	86	40-150
151772-58-6	NFDHA	0.05	0.0426	85	40-150
756426-58-19	Cl-PF3ONS (F-53B Major)	0.0468	0.0392	84	40-150
763051-92-91	Cl-PF3OUdS (F-53B Minor)	0.0473	0.0400	85	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97325-BS	6Q19363.D	1	06/14/23	MV	06/13/23	OP97325	S6Q289

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-1, FC6803-2, FC6803-3, FC6803-5, FC6803-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0382	86	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.0406	32*	40-150
914637-49-35:3	Fluorotelomer carboxylate	0.625	0.512	82	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.564	90	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	33%	20-150%
	13C5-PFPeA	113%	20-150%
	13C5-PFHxA	111%	20-150%
	13C4-PFHpA	121%	20-150%
	13C8-PFOA	106%	20-150%
	13C9-PFNA	116%	20-150%
	13C6-PFDA	120%	20-150%
	13C7-PFUnDA	116%	20-150%
	13C2-PFDoDA	116%	20-150%
	13C2-PFTeDA	109%	20-150%
	13C3-PFBS	126%	20-150%
	13C3-PFHxS	130%	20-150%
	13C8-PFOS	117%	20-150%
	13C8-FOSA	83%	20-150%
	d3-MeFOSA	88%	20-150%
	d5-EtFOSA	88%	20-150%
	d3-MeFOSAA	119%	20-150%
	d5-EtFOSAA	120%	20-150%
	d7-MeFOSE	71%	20-150%
	d9-EtFOSE	85%	20-150%
	13C2-4:2FTS	143%	20-180%
	13C2-6:2FTS	145%	20-180%
	13C2-8:2FTS	130%	20-180%
	13C3-HFPO-DA	115%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97385-BS	6Q19595.D	1	06/20/23	MV	06/16/23	OP97385	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.0914	91	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0452	90	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0235	94	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0208	83	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0223	89	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0215	86	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0239	96	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0247	99	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0217	87	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0209	84	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0222	89	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0186	84	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0215	91	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0196	86	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0228	96	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0201	87	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0238	99	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0223	92	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0210	87	40-150
757124-72-44:2	Fluorotelomer sulfonate	0.0938	0.0782	83	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.0852	90	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.0806	84	40-150
754-91-6	PFOSA	0.025	0.0245	98	40-150
31506-32-8	MeFOSA	0.05	0.0446	89	40-150
4151-50-2	EtFOSA	0.05	0.0469	94	40-150
2355-31-9	MeFOSAA	0.025	0.0248	99	40-150
2991-50-6	EtFOSAA	0.025	0.0226	90	40-150
24448-09-7	MeFOSE	0.125	0.119	95	40-150
1691-99-2	EtFOSE	0.125	0.115	92	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0471	94	40-150
919005-14-4	ADONA	0.0473	0.0390	83	40-150
377-73-1	PFMPA	0.05	0.0237	47	40-150
863090-89-5	PFMBA	0.05	0.0456	91	40-150
151772-58-6	NFDHA	0.05	0.0423	85	40-150
756426-58-19	Cl-PF3ONS (F-53B Major)	0.0468	0.0378	81	40-150
763051-92-91	Cl-PF3OUdS (F-53B Minor)	0.0473	0.0355	75	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97385-BS	6Q19595.D	1	06/20/23	MV	06/16/23	OP97385	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0401	90	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.0256	20*	40-150
914637-49-35:3	Fluorotelomer carboxylate	0.625	0.478	76	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.553	88	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	30%	20-150%
	13C5-PFPeA	110%	20-150%
	13C5-PFHxA	107%	20-150%
	13C4-PFHpA	107%	20-150%
	13C8-PFOA	110%	20-150%
	13C9-PFNA	112%	20-150%
	13C6-PFDA	113%	20-150%
	13C7-PFUnDA	102%	20-150%
	13C2-PFDoDA	105%	20-150%
	13C2-PFTeDA	95%	20-150%
	13C3-PFBS	122%	20-150%
	13C3-PFHxS	111%	20-150%
	13C8-PFOS	96%	20-150%
	13C8-FOSA	66%	20-150%
	d3-MeFOSA	78%	20-150%
	d5-EtFOSA	78%	20-150%
	d3-MeFOSAA	100%	20-150%
	d5-EtFOSAA	95%	20-150%
	d7-MeFOSE	69%	20-150%
	d9-EtFOSE	75%	20-150%
	13C2-4:2FTS	133%	20-180%
	13C2-6:2FTS	123%	20-180%
	13C2-8:2FTS	120%	20-180%
	13C3-HFPO-DA	110%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97325-MS	6Q19367.D	1	06/14/23	MV	06/13/23	OP97325	S6Q289
FC6803-1	6Q19366.D	1	06/14/23	MV	06/13/23	OP97325	S6Q289

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-1, FC6803-2, FC6803-3, FC6803-5, FC6803-6

CAS No.	Compound	FC6803-1 ug/l	Spike Q	MS ug/l	MS %	Limits	
375-22-4	Perfluorobutanoic acid	0.015 U		0.0926	0.0856	92	40-150
2706-90-3	Perfluoropentanoic acid	0.0010 J		0.0463	0.0421	89	40-150
307-24-4	Perfluorohexanoic acid	0.00079 J		0.0231	0.0208	86	40-150
375-85-9	Perfluoroheptanoic acid	0.00060 J		0.0231	0.0211	89	40-150
335-67-1	Perfluorooctanoic acid	0.00092 J		0.0231	0.0197	81	40-150
375-95-1	Perfluorononanoic acid	0.0036 U		0.0231	0.0202	87	40-150
335-76-2	Perfluorodecanoic acid	0.0036 U		0.0231	0.0205	89	40-150
2058-94-8	Perfluoroundecanoic acid	0.0036 U		0.0231	0.0201	87	40-150
307-55-1	Perfluorododecanoic acid	0.0036 U		0.0231	0.0206	89	40-150
72629-94-8	Perfluorotridecanoic acid	0.0036 U		0.0231	0.0183	79	40-150
376-06-7	Perfluorotetradecanoic acid	0.0036 U		0.0231	0.0212	92	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00058 J		0.0205	0.0180	85	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0045 U		0.0218	0.0184	84	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00092 J		0.0212	0.0185	83	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0036 U		0.0221	0.0219	99	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00087 J		0.0215	0.0201	90	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0036 U		0.0223	0.0210	94	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0036 U		0.0223	0.0197	88	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0045 U		0.0225	0.0190	85	40-150
757124-72-44:2	Fluorotelomer sulfonate	0.018 U		0.0868	0.0783	90	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.018 U		0.088	0.0778	88	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.018 U		0.0889	0.0825	93	40-150
754-91-6	PFOSA	0.0036 U		0.0231	0.0206	89	40-150
31506-32-8	MeFOSA	0.0073 U		0.0463	0.0407	88	40-150
4151-50-2	EtFOSA	0.0073 U		0.0463	0.0425	92	40-150
2355-31-9	MeFOSAA	0.0045 U		0.0231	0.0201	87	40-150
2991-50-6	EtFOSAA	0.0045 U		0.0231	0.0216	93	40-150
24448-09-7	MeFOSE	0.036 U		0.116	0.111	96	40-150
1691-99-2	EtFOSE	0.036 U		0.116	0.112	97	40-150
13252-13-6	HFPO-DA (GenX)	0.0036 U		0.0463	0.0414	89	40-150
919005-14-4	ADONA	0.0073 U		0.0438	0.0386	88	40-150
377-73-1	PFMPA	0.0073 U		0.0463	0.0407	88	40-150
863090-89-5	PFMBA	0.0073 U		0.0463	0.0415	90	40-150
151772-58-6	NFDHA	0.0073 U		0.0463	0.0407	88	40-150
756426-58-19	Cl-PF3ONS (F-53B Major)	0.0073 U		0.0433	0.0348	80	40-150
763051-92-91	Cl-PF3OUdS (F-53B Minor)	0.0073 U		0.0438	0.0369	84	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97325-MS	6Q19367.D	1	06/14/23	MV	06/13/23	OP97325	S6Q289
FC6803-1	6Q19366.D	1	06/14/23	MV	06/13/23	OP97325	S6Q289

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-1, FC6803-2, FC6803-3, FC6803-5, FC6803-6

CAS No.	Compound	FC6803-1 ug/l	Spike Q	MS ug/l	MS %	Limits
113507-82-7	PFEESA	0.0073 U	0.0412	0.0381	92	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.018 U	0.116	0.0762	66	40-150
914637-49-35:3	Fluorotelomer carboxylate	0.091 U	0.579	0.503	87	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.091 U	0.579	0.558	96	40-150

CAS No.	ID Standard Recoveries	MS	FC6803-1	Limits
	13C4-PFBA	85%	108%	20-150%
	13C5-PFPeA	113%	118%	20-150%
	13C5-PFHxA	110%	115%	20-150%
	13C4-PFHpA	112%	118%	20-150%
	13C8-PFOA	117%	113%	20-150%
	13C9-PFNA	113%	116%	20-150%
	13C6-PFDA	117%	117%	20-150%
	13C7-PFUnDA	112%	106%	20-150%
	13C2-PFDoDA	112%	106%	20-150%
	13C2-PFTeDA	100%	96%	20-150%
	13C3-PFBS	128%	124%	20-150%
	13C3-PFHxS	126%	118%	20-150%
	13C8-PFOS	103%	125%	20-150%
	13C8-FOSA	92%	91%	20-150%
	d3-MeFOSA	86%	94%	20-150%
	d5-EtFOSA	91%	94%	20-150%
	d3-MeFOSAA	113%	119%	20-150%
	d5-EtFOSAA	109%	123%	20-150%
	d7-MeFOSE	78%	85%	20-150%
	d9-EtFOSE	88%	96%	20-150%
	13C2-4:2FTS	131%	140%	20-180%
	13C2-6:2FTS	117%	127%	20-180%
	13C2-8:2FTS	119%	121%	20-180%
	13C3-HFPO-DA	110%	113%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97385-MS	6Q19606.D	1	06/20/23	MV	06/16/23	OP97385	S6Q292
FC6444-23 ^a	6Q19605.D	1	06/20/23	MV	06/16/23	OP97385	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-4

CAS No.	Compound	FC6444-23 ug/l	Spike Q	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	0.13 U	0.833	0.774	93	40-150
2706-90-3	Perfluoropentanoic acid	0.067 U	0.417	0.376	90	40-150
307-24-4	Perfluorohexanoic acid	0.033 U	0.208	0.184	88	40-150
375-85-9	Perfluoroheptanoic acid	0.033 U	0.208	0.206	99	40-150
335-67-1	Perfluorooctanoic acid	0.0079 J	0.208	0.180	83	40-150
375-95-1	Perfluorononanoic acid	0.033 U	0.208	0.176	84	40-150
335-76-2	Perfluorodecanoic acid	0.033 U	0.208	0.196	94	40-150
2058-94-8	Perfluoroundecanoic acid	0.033 U	0.208	0.180	86	40-150
307-55-1	Perfluorododecanoic acid	0.033 U	0.208	0.182	87	40-150
72629-94-8	Perfluorotridecanoic acid	0.033 U	0.208	0.182	87	40-150
376-06-7	Perfluorotetradecanoic acid	0.033 U	0.208	0.210	101	40-150
375-73-5	Perfluorobutanesulfonic acid	0.033 U	0.185	0.154	83	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.042 U	0.196	0.187	95	40-150
355-46-4	Perfluorohexanesulfonic acid	0.033 U	0.19	0.163	86	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.033 U	0.199	0.171	86	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.033 U	0.193	0.174	90	40-150
68259-12-1	Perfluorononanesulfonic acid	0.033 U	0.2	0.165	82	40-150
335-77-3	Perfluorodecanesulfonic acid	0.033 U	0.201	0.146	73	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.042 U	0.202	0.137	68	40-150
757124-72-44:2	Fluorotelomer sulfonate	0.17 U	0.781	0.745	95	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.17 U	0.792	0.777	98	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.17 U	0.8	0.642	80	40-150
754-91-6	PFOSA	0.033 U	0.208	0.202	97	40-150
31506-32-8	MeFOSA	0.067 U	0.417	0.346	83	40-150
4151-50-2	EtFOSA	0.067 U	0.417	0.361	87	40-150
2355-31-9	MeFOSAA	0.042 U	0.208	0.190	91	40-150
2991-50-6	EtFOSAA	0.042 U	0.208	0.198	95	40-150
24448-09-7	MeFOSE	0.33 U	1.04	1.08	104	40-150
1691-99-2	EtFOSE	0.33 U	1.04	0.962	92	40-150
13252-13-6	HFPO-DA (GenX)	0.033 U	0.417	0.377	90	40-150
919005-14-4	ADONA	0.067 U	0.394	0.352	89	40-150
377-73-1	PFMPA	0.067 U	0.417	0.385	92	40-150
863090-89-5	PFMBA	0.067 U	0.417	0.372	89	40-150
151772-58-6	NFDHA	0.067 U	0.417	0.364	87	40-150
756426-58-19	Cl-PF3ONS (F-53B Major)	0.067 U	0.39	0.305	78	40-150
763051-92-91	Cl-PF3OUdS (F-53B Minor)	0.067 U	0.394	0.259	66	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97385-MS	6Q19606.D	1	06/20/23	MV	06/16/23	OP97385	S6Q292
FC6444-23 ^a	6Q19605.D	1	06/20/23	MV	06/16/23	OP97385	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-4

CAS No.	Compound	FC6444-23 ug/l	Spike Q	MS ug/l	MS %	Limits
113507-82-7	PFEESA	0.067 U	0.371	0.336	91	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.17 U	1.04	0.622	60	40-150
914637-49-35:3	Fluorotelomer carboxylate	0.83 U	5.21	4.18	80	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.83 U	5.21	4.16	80	40-150

CAS No.	ID Standard Recoveries	MS	FC6444-23	Limits
	13C4-PFBA	108%	114%	20-150%
	13C5-PFPeA	115%	119%	20-150%
	13C5-PFHxA	109%	109%	20-150%
	13C4-PFHpA	100%	110%	20-150%
	13C8-PFOA	107%	101%	20-150%
	13C9-PFNA	109%	101%	20-150%
	13C6-PFDA	91%	104%	20-150%
	13C7-PFUnDA	93%	92%	20-150%
	13C2-PFDoDA	84%	86%	20-150%
	13C2-PFTeDA	65%	79%	20-150%
	13C3-PFBS	118%	107%	20-150%
	13C3-PFHxS	105%	98%	20-150%
	13C8-PFOS	101%	100%	20-150%
	13C8-FOSA	75%		20-150%
	d3-MeFOSA	82%		20-150%
	d5-EtFOSA	88%		20-150%
	d3-MeFOSAA	97%	108%	20-150%
	d5-EtFOSAA	93%	95%	20-150%
	d7-MeFOSE	61%		20-150%
	d9-EtFOSE	80%		20-150%
	13C2-4:2FTS	118%		20-180%
	13C2-6:2FTS	110%	109%	20-180%
	13C2-8:2FTS	113%	104%	20-180%
	13C3-HFPO-DA	111%		20-150%

(a) Reduced volume extracted due to high solids content.

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97325-DUP	6Q19369.D	1	06/14/23	MV	06/13/23	OP97325	S6Q289
FC6803-2	6Q19368.D	1	06/14/23	MV	06/13/23	OP97325	S6Q289

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-1, FC6803-2, FC6803-3, FC6803-5, FC6803-6

CAS No.	Compound	FC6803-2 ug/l	DUP Q	ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	0.0137	J	0.0137	J	0	30
2706-90-3	Perfluoropentanoic acid	0.0166		0.0181		9	30
307-24-4	Perfluorohexanoic acid	0.0017	J	0.0015	J	13	30
375-85-9	Perfluoroheptanoic acid	0.00077	J	0.00062	J	22	30
335-67-1	Perfluorooctanoic acid	0.00094	J	0.00097	J	3	30
375-95-1	Perfluorononanoic acid	0.0036	U	ND		nc	30
335-76-2	Perfluorodecanoic acid	0.0036	U	ND		nc	30
2058-94-8	Perfluoroundecanoic acid	0.0036	U	ND		nc	30
307-55-1	Perfluorododecanoic acid	0.0036	U	ND		nc	30
72629-94-8	Perfluorotridecanoic acid	0.0036	U	ND		nc	30
376-06-7	Perfluorotetradecanoic acid	0.0036	U	ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	0.00048	J	0.00051	J	6	30
2706-91-4	Perfluoropentanesulfonic acid	0.0045	U	ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	0.0036	U	ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	0.0036	U	ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	0.0036	U	ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	0.0036	U	ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	0.0036	U	ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	0.0045	U	ND		nc	30
757124-72-44:2	Fluorotelomer sulfonate	0.018	U	ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	0.018	U	ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	0.018	U	ND		nc	30
754-91-6	PFOSA	0.0036	U	ND		nc	30
31506-32-8	MeFOSA	0.0071	U	ND		nc	30
4151-50-2	EtFOSA	0.0071	U	ND		nc	30
2355-31-9	MeFOSAA	0.0045	U	ND		nc	30
2991-50-6	EtFOSAA	0.0045	U	ND		nc	30
24448-09-7	MeFOSE	0.036	U	ND		nc	30
1691-99-2	EtFOSE	0.036	U	ND		nc	30
13252-13-6	HFPO-DA (GenX)	0.0036	U	ND		nc	30
919005-14-4	ADONA	0.0071	U	ND		nc	30
377-73-1	PFMPA	0.0071	U	ND		nc	30
863090-89-5	PFMBA	0.0071	U	ND		nc	30
151772-58-6	NFDHA	0.0071	U	ND		nc	30
756426-58-19	Cl-PF3ONS (F-53B Major)	0.0071	U	ND		nc	30
763051-92-91	Cl-PF3OUdS (F-53B Minor)	0.0071	U	ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97325-DUP	6Q19369.D	1	06/14/23	MV	06/13/23	OP97325	S6Q289
FC6803-2	6Q19368.D	1	06/14/23	MV	06/13/23	OP97325	S6Q289

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-1, FC6803-2, FC6803-3, FC6803-5, FC6803-6

CAS No.	Compound	FC6803-2 ug/l	DUP Q	ug/l	Q	RPD	Limits
113507-82-7PFEESA		0.0071 U	ND			nc	30
356-02-5	3:3 Fluorotelomer carboxylate	0.018 U	ND			nc	30
914637-49-35:3	Fluorotelomer carboxylate	0.089 U	ND			nc	30
812-70-4	7:3 Fluorotelomer carboxylate	0.089 U	ND			nc	30

CAS No.	ID Standard Recoveries	DUP	FC6803-2	Limits
	13C4-PFBA	52%	48%	20-150%
	13C5-PFPeA	117%	110%	20-150%
	13C5-PFHxA	129%	118%	20-150%
	13C4-PFHpA	127%	118%	20-150%
	13C8-PFOA	107%	115%	20-150%
	13C9-PFNA	122%	105%	20-150%
	13C6-PFDA	109%	110%	20-150%
	13C7-PFUnDA	103%	94%	20-150%
	13C2-PFDoDA	90%	87%	20-150%
	13C2-PFTeDA	78%	73%	20-150%
	13C3-PFBS	114%	113%	20-150%
	13C3-PFHxS	109%	111%	20-150%
	13C8-PFOS	103%	95%	20-150%
	13C8-FOSA	89%	92%	20-150%
	d3-MeFOSA	79%	78%	20-150%
	d5-EtFOSA	80%	77%	20-150%
	d3-MeFOSAA	101%	103%	20-150%
	d5-EtFOSAA	91%	90%	20-150%
	d7-MeFOSE	70%	76%	20-150%
	d9-EtFOSE	80%	81%	20-150%
	13C2-4:2FTS	105%	101%	20-180%
	13C2-6:2FTS	94%	95%	20-180%
	13C2-8:2FTS	102%	100%	20-180%
	13C3-HFPO-DA	112%	110%	20-150%

(a) Associated BS recovery outside DOD QSM control limits.

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97385-DUP	6Q19608.D	1	06/20/23	MV	06/16/23	OP97385	S6Q292
FC6444-24 ^a	6Q19607.D	1	06/20/23	MV	06/16/23	OP97385	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-4

CAS No.	Compound	FC6444-24 ug/l	DUP Q	ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	0.13 U	ND		nc		30
2706-90-3	Perfluoropentanoic acid	0.067 U	ND		nc		30
307-24-4	Perfluorohexanoic acid	0.033 U	ND		nc		30
375-85-9	Perfluoroheptanoic acid	0.033 U	ND		nc		30
335-67-1	Perfluorooctanoic acid	0.033 U	ND		nc		30
375-95-1	Perfluorononanoic acid	0.033 U	ND		nc		30
335-76-2	Perfluorodecanoic acid	0.033 U	ND		nc		30
2058-94-8	Perfluoroundecanoic acid	0.033 U	ND		nc		30
307-55-1	Perfluorododecanoic acid	0.033 U	ND		nc		30
72629-94-8	Perfluorotridecanoic acid	0.033 U	ND		nc		30
376-06-7	Perfluorotetradecanoic acid	0.033 U	ND		nc		30
375-73-5	Perfluorobutanesulfonic acid	0.033 U	ND		nc		30
2706-91-4	Perfluoropentanesulfonic acid	0.042 U	ND		nc		30
355-46-4	Perfluorohexanesulfonic acid	0.033 U	ND		nc		30
375-92-8	Perfluoroheptanesulfonic acid	0.033 U	ND		nc		30
1763-23-1	Perfluorooctanesulfonic acid	0.0088 J	0.0065 J		30		30
68259-12-1	Perfluorononanesulfonic acid	0.033 U	ND		nc		30
335-77-3	Perfluorodecanesulfonic acid	0.033 U	ND		nc		30
79780-39-5	Perfluorododecanesulfonic aci	0.042 U	ND		nc		30
757124-72-44:2	Fluorotelomer sulfonate	0.17 U	ND		nc		30
27619-97-2	6:2 Fluorotelomer sulfonate	0.17 U	ND		nc		30
39108-34-4	8:2 Fluorotelomer sulfonate	0.17 U	ND		nc		30
754-91-6	PFOSA	0.033 U	ND		nc		30
31506-32-8	MeFOSA	0.067 U	ND		nc		30
4151-50-2	EtFOSA	0.067 U	ND		nc		30
2355-31-9	MeFOSAA	0.042 U	ND		nc		30
2991-50-6	EtFOSAA	0.042 U	ND		nc		30
24448-09-7	MeFOSE	0.33 U	ND		nc		30
1691-99-2	EtFOSE	0.33 U	ND		nc		30
13252-13-6	HFPO-DA (GenX)	0.033 U	ND		nc		30
919005-14-4	ADONA	0.067 U	ND		nc		30
377-73-1	PFMPA	0.067 U	ND		nc		30
863090-89-5	PFMBA	0.067 U	ND		nc		30
151772-58-6	NFDHA	0.067 U	ND		nc		30
756426-58-19	Cl-PF3ONS (F-53B Major)	0.067 U	ND		nc		30
763051-92-91	Cl-PF3OUdS (F-53B Minor)	0.067 U	ND		nc		30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC6803
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP97385-DUP	6Q19608.D	1	06/20/23	MV	06/16/23	OP97385	S6Q292
FC6444-24 ^a	6Q19607.D	1	06/20/23	MV	06/16/23	OP97385	S6Q292

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6803-4

CAS No.	Compound	FC6444-24 ug/l	DUP Q ug/l	Q	RPD	Limits
113507-82-7PFEESA		0.067 U	ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	0.17 U	ND		nc	30
914637-49-35:3	Fluorotelomer carboxylate	0.83 U	ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	0.83 U	ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC6444-24	Limits
	13C4-PFBA	112%	105%	20-150%
	13C5-PFPeA	120%	106%	20-150%
	13C5-PFHxA	110%	105%	20-150%
	13C4-PFHpA	106%	94%	20-150%
	13C8-PFOA	106%	97%	20-150%
	13C9-PFNA	109%	108%	20-150%
	13C6-PFDA	102%	101%	20-150%
	13C7-PFUnDA	99%	92%	20-150%
	13C2-PFDoDA	87%	81%	20-150%
	13C2-PFTeDA	70%	60%	20-150%
	13C3-PFBS	111%	109%	20-150%
	13C3-PFHxS	116%	105%	20-150%
	13C8-PFOS	101%	86%	20-150%
	13C8-FOSA	74%		20-150%
	d3-MeFOSA	78%		20-150%
	d5-EtFOSA	84%		20-150%
	d3-MeFOSAA	99%	90%	20-150%
	d5-EtFOSAA	91%	87%	20-150%
	d7-MeFOSE	65%		20-150%
	d9-EtFOSE	80%		20-150%
	13C2-4:2FTS	130%		20-180%
	13C2-6:2FTS	124%	129%	20-180%
	13C2-8:2FTS	105%	106%	20-180%
	13C3-HFPO-DA	122%		20-150%

- (a) Reduced volume extracted due to high solids content.
- (b) Associated BS recovery outside DOD QSM control limits.

* = Outside of Control Limits.