The results set forth herein are provided by SGS North America Inc.

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Automated Report

Technical Report for

AECOM, INC.

N6274223F0104 RH Fire Suppression System

60697810

SGS Job Number: FC2108

Sampling Date: 01/20/23

Report to:

AECOM, Inc
7595 Technology Way
Denver, CO 80237
katie.abbott@aecom.com; mark.kromis@aecom.com;
watson.tanji@aecom.com; kristin.rutherford@aecom.com
ATTN: Katie Abbott

Total number of pages in report: 56

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
Technical Director

Client Service contact: Elvin Kumar 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

February 9, 2023

Katie Abbott
AECOM, Inc.
7595 Technology Way
Denver, CO 80237

RE: SGS North America Inc. - Orlando job FC2108 Reissue

Dear Katie,

The data set for sample FC2108-1 [AF-RHMW17D-WGN01LF-2301W3] was fixed for reporting
The changes are incorporated in the revised report for sample delivery group FC2108

SGS North America Inc. - Orlando apologizes for any inconvenience this may have caused.
Please feel free to contact us if we can be of further assistance.

Sincerely,

SGS North America, Inc. - Orlando

Florida ♦ 4405 Vineland Road ♦ Suite C-15 ♦ Orlando, FL 32811 ♦ tel: 407 425-6700 ♦ fax: 407 425-0707

Sections: 1 2 3 4 5 6

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SGS North America Inc.

Sample Summary

AECOM, INC.

Job No: FC2108

N6274223F0104 RH Fire Suppression System
Project No: 60697810

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FC2108-1	01/20/23	12:45	NT	01/21/23	AQ	Ground Water	AF-RHMW17D-WGN01LF-2301W3
FC2108-2	01/20/23	14:15	NT	01/21/23	AQ	Equipment Blank	AF-RHMW17D-WQEB01-2301W3
FC2108-3	01/20/23	11:20	NT	01/21/23	AQ	Field Blank Water	AF-RHMW17D-WQFB01-2301W3
FC2108-4	01/20/23	10:50	NT	01/21/23	AQ	Ground Water	AF-RHMW17-WGN01LF-2301W3

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: AECOM, INC. **Job No:** FC2108

Site: N6274223F0104 RH Fire Suppression System **Report Revised Date:**2/9/2023 8:42:57 AM

On 01/21/2023, 3 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 1.6 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. - Orlando Job Number of FC2108 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:** OP95122

Sample(s) FC2108-3MS, FC2108-4DUP were used as the QC samples indicated.

RPD(s) for Duplicate for Perfluorobutanoic acid are outside control limits for sample OP95122-DUP. Probable cause is due to sample non-homogeneity.

Sample(s) FC2108-1 have surrogates outside control limits.

FC2108-1 for 13C4-PFBA: Outside control limits.

FC2108-1 for d3-MeFOSAA: Outside control limits.

FC2108-1 for d5-EtFOSAA: Outside control limits.

FC2108-1 for 13C4-PFBA: Outside control limits.

Matrix: AQ **Batch ID:** OP95294

Sample(s) FC2294-2MS, FC2294-3DUP were used as the QC samples indicated.

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 revised February 9, 2023 by:

_____

Kim Benham, Client Services *(Signature on File)*

Summary of Hits

Job Number: FC2108
Account: AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System
Collected: 01/20/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FC2108-1	**AF-RHMW17D-WGN01LF-2301W3**					
6:2 Fluorotelomer sulfonate		22.6	20	8.0	ng/l	EPA DRAFT 1633
FC2108-2	**AF-RHMW17D-WQEB01-2301W3**					
Perfluorododecanoic acid		0.93 J	5.0	2.0	ng/l	EPA DRAFT 1633
FC2108-3	**AF-RHMW17D-WQFB01-2301W3**					
No hits reported in this sample.						
FC2108-4	**AF-RHMW17-WGN01LF-2301W3**					
Perfluorobutanoic acid		2.9 J	20	4.0	ng/l	EPA DRAFT 1633
Perfluoropentanoic acid		5.7 J	10	2.0	ng/l	EPA DRAFT 1633
Perfluorohexanoic acid		2.9 J	5.0	1.0	ng/l	EPA DRAFT 1633
6:2 Fluorotelomer sulfonate		26.1	20	8.0	ng/l	EPA DRAFT 1633

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	AF-RHMW17D-WGN01LF-2301W3		
Lab Sample ID:	FC2108-1	**Date Sampled:**	01/20/23
Matrix:	AQ - Ground Water	**Date Received:**	01/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	N6274223F0104 RH Fire Suppression System		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q12696.D	1	02/01/23 11:11	MV	01/24/23 12:45	OP95122	S6Q195
Run #2	6Q13196.D	1	02/07/23 12:39	MV	02/03/23 09:00	OP95294	S6Q202
Run #3	6Q12712.D	10	02/01/23 14:56	MV	01/24/23 12:45	OP95122	S6Q195

	Initial Volume	Final Volume
Run #1	500 ml	5.0 ml
Run #2	60.0 ml	5.0 ml
Run #3	500 ml	5.0 ml

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	33 U [a]	170	33	16	ng/l	
2706-90-3	Perfluoropentanoic acid	2.0 U	10	2.0	0.94	ng/l	
307-24-4	Perfluorohexanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
375-95-1	Perfluorononanoic acid	2.0 U	5.0	2.0	0.61	ng/l	
335-76-2	Perfluorodecanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	2.0 U	5.0	2.0	0.60	ng/l	
307-55-1	Perfluorododecanoic acid	2.0 U	5.0	2.0	0.60	ng/l	
72629-94-8	Perfluorotridecanoic acid	2.0 U	5.0	2.0	0.84	ng/l	
376-06-7	Perfluorotetradecanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	1.0 U	5.0	1.0	0.50	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	4.0 U	5.0	4.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	2.0 U	5.0	2.0	0.70	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	1.0 U	5.0	1.0	0.50	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	2.0 U	5.0	2.0	0.54	ng/l	
68259-12-1	Perfluorononanesulfonic acid	2.0 U	5.0	2.0	0.57	ng/l	
335-77-3	Perfluorodecanesulfonic acid	2.0 U	5.0	2.0	0.64	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	4.0 U	5.0	4.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	8.0 U	20	8.0	3.2	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	22.6	20	8.0	3.5	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	8.0 U	20	8.0	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	2.0 U	5.0	2.0	0.67	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-WGN01LF-2301W3		
Lab Sample ID:	FC2108-1	**Date Sampled:**	01/20/23
Matrix:	AQ - Ground Water	**Date Received:**	01/21/23
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	2.0 U	5.0	2.0	1.0	ng/l	
4151-50-2	EtFOSA	2.0 U	5.0	2.0	1.0	ng/l	
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS							
2355-31-9	MeFOSAA	33 U [a]	42	33	8.3	ng/l	
2991-50-6	EtFOSAA	33 U [a]	42	33	11	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS							
24448-09-7	MeFOSE	10 U	50	10	4.4	ng/l	
1691-99-2	EtFOSE	20 U	50	20	7.4	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS							
13252-13-6	HFPO-DA (GenX)	4.0 U	20	4.0	1.0	ng/l	
919005-14-4	ADONA	4.0 U	20	4.0	1.9	ng/l	
377-73-1	PFMPA	2.0 U	10	2.0	1.0	ng/l	
863090-89-5	PFMBA	4.0 U	10	4.0	1.1	ng/l	
151772-58-6	NFDHA	4.0 U	10	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS							
756426-58-1	9Cl-PF3ONS (F-53B Major)	4.0 U	20	4.0	1.4	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	4.0 U	20	4.0	1.8	ng/l	
113507-82-7	PFEESA	2.0 U	10	2.0	0.78	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS							
356-02-5	3:3 Fluorotelomer carboxylate	10 U	25	10	4.5	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	20 U	130	20	8.7	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	20 U	130	20	7.9	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Run# 3	Limits
	13C4-PFBA	2% [b]	111%	1% [b]	20-150%
	13C5-PFPeA	26%	106%	25%	20-150%
	13C5-PFHxA	108%	105%	102%	20-150%
	13C4-PFHpA	115%	110%	105%	20-150%
	13C8-PFOA	108%	103%	105%	20-150%
	13C9-PFNA	106%	107%	91%	20-150%
	13C6-PFDA	99%	110%	90%	20-150%
	13C7-PFUnDA	103%	112%	90%	20-150%
	13C2-PFDoDA	100%	106%	89%	20-150%
	13C2-PFTeDA	72%	102%	61%	20-150%

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Report of Analysis

Client Sample ID:	AF-RHMW17D-WGN01LF-2301W3		
Lab Sample ID:	FC2108-1	**Date Sampled:**	01/20/23
Matrix:	AQ - Ground Water	**Date Received:**	01/21/23
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	Run# 3	Limits
	13C3-PFBS	86%	109%	69%	20-150%
	13C3-PFHxS	96%	113%	95%	20-150%
	13C8-PFOS	94%	85%	38%	20-150%
	13C8-FOSA	111%	90%	35%	20-150%
	d3-MeFOSA	115%	75%	37%	20-150%
	d5-EtFOSA	110%	71%	36%	20-150%
	d3-MeFOSAA	165% b	76%	36%	20-150%
	d5-EtFOSAA	175% b	87%	38%	20-150%
	d7-MeFOSE	101%	73%	28%	20-150%
	d9-EtFOSE	96%	78%	29%	20-150%
	13C2-4:2FTS	123%	108%	116%	20-150%
	13C2-6:2FTS	106%	119%	119%	20-150%
	13C2-8:2FTS	109%	112%	101%	20-150%
	13C3-HFPO-DA	110%	113%	106%	20-150%

(a) Result is from Run# 2

(b) 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-WQEB01-2301W3
Lab Sample ID: FC2108-2
Matrix: AQ - Equipment Blank
Method: EPA DRAFT 1633 EPA 1633 DRAFT
Project: N6274223F0104 RH Fire Suppression System

Date Sampled: 01/20/23
Date Received: 01/21/23
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q12697.D	1	02/01/23 11:25	MV	01/24/23 12:45	OP95122	S6Q195
Run #2							

	Initial Volume	Final Volume
Run #1	500 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	4.0 U	20	4.0	1.9	ng/l	
2706-90-3	Perfluoropentanoic acid	2.0 U	10	2.0	0.94	ng/l	
307-24-4	Perfluorohexanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
375-95-1	Perfluorononanoic acid	2.0 U	5.0	2.0	0.61	ng/l	
335-76-2	Perfluorodecanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	2.0 U	5.0	2.0	0.60	ng/l	
307-55-1	Perfluorododecanoic acid	0.93	5.0	2.0	0.60	ng/l	J
72629-94-8	Perfluorotridecanoic acid	2.0 U	5.0	2.0	0.84	ng/l	
376-06-7	Perfluorotetradecanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	1.0 U	5.0	1.0	0.50	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	4.0 U	5.0	4.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	2.0 U	5.0	2.0	0.70	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	1.0 U	5.0	1.0	0.50	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	2.0 U	5.0	2.0	0.54	ng/l	
68259-12-1	Perfluorononanesulfonic acid	2.0 U	5.0	2.0	0.57	ng/l	
335-77-3	Perfluorodecanesulfonic acid	2.0 U	5.0	2.0	0.64	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	4.0 U	5.0	4.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	8.0 U	20	8.0	3.2	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	8.0 U	20	8.0	3.5	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	8.0 U	20	8.0	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	2.0 U	5.0	2.0	0.67	ng/l	
31506-32-8	MeFOSA	2.0 U	5.0	2.0	1.0	ng/l	
4151-50-2	EtFOSA	2.0 U	5.0	2.0	1.0	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-WQEB01-2301W3		
Lab Sample ID:	FC2108-2	**Date Sampled:**	01/20/23
Matrix:	AQ - Equipment Blank	**Date Received:**	01/21/23
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
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS							
2355-31-9	MeFOSAA	4.0 U	5.0	4.0	1.0	ng/l	
2991-50-6	EtFOSAA	4.0 U	5.0	4.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS							
24448-09-7	MeFOSE	10 U	50	10	4.4	ng/l	
1691-99-2	EtFOSE	20 U	50	20	7.4	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS							
13252-13-6	HFPO-DA (GenX)	4.0 U	20	4.0	1.0	ng/l	
919005-14-4	ADONA	4.0 U	20	4.0	1.9	ng/l	
377-73-1	PFMPA	2.0 U	10	2.0	1.0	ng/l	
863090-89-5	PFMBA	4.0 U	10	4.0	1.1	ng/l	
151772-58-6	NFDHA	4.0 U	10	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS							
756426-58-1	9Cl-PF3ONS (F-53B Major)	4.0 U	20	4.0	1.4	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	4.0 U	20	4.0	1.8	ng/l	
113507-82-7	PFEESA	2.0 U	10	2.0	0.78	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS							
356-02-5	3:3 Fluorotelomer carboxylate	10 U	25	10	4.5	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	20 U	130	20	8.7	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	20 U	130	20	7.9	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	107%		20-150%
	13C5-PFPeA	107%		20-150%
	13C5-PFHxA	110%		20-150%
	13C4-PFHpA	110%		20-150%
	13C8-PFOA	108%		20-150%
	13C9-PFNA	99%		20-150%
	13C6-PFDA	96%		20-150%
	13C7-PFUnDA	90%		20-150%
	13C2-PFDoDA	88%		20-150%
	13C2-PFTeDA	89%		20-150%
	13C3-PFBS	106%		20-150%
	13C3-PFHxS	109%		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-WQEB01-2301W3		
Lab Sample ID:	FC2108-2	**Date Sampled:**	01/20/23
Matrix:	AQ - Equipment Blank	**Date Received:**	01/21/23
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	100%		20-150%
	13C8-FOSA	98%		20-150%
	d3-MeFOSA	86%		20-150%
	d5-EtFOSA	91%		20-150%
	d3-MeFOSAA	104%		20-150%
	d5-EtFOSAA	100%		20-150%
	d7-MeFOSE	89%		20-150%
	d9-EtFOSE	86%		20-150%
	13C2-4:2FTS	141%		20-150%
	13C2-6:2FTS	122%		20-150%
	13C2-8:2FTS	105%		20-150%
	13C3-HFPO-DA	115%		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-WQFB01-2301W3
Lab Sample ID: FC2108-3
Matrix: AQ - Field Blank Water
Method: EPA DRAFT 1633 EPA 1633 DRAFT
Project: N6274223F0104 RH Fire Suppression System

Date Sampled: 01/20/23
Date Received: 01/21/23
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q12698.D	1	02/01/23 11:39	MV	01/24/23 12:45	OP95122	S6Q195
Run #2							

	Initial Volume	Final Volume
Run #1	500 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	4.0 U	20	4.0	1.9	ng/l	
2706-90-3	Perfluoropentanoic acid	2.0 U	10	2.0	0.94	ng/l	
307-24-4	Perfluorohexanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
375-85-9	Perfluoroheptanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
375-95-1	Perfluorononanoic acid	2.0 U	5.0	2.0	0.61	ng/l	
335-76-2	Perfluorodecanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	2.0 U	5.0	2.0	0.60	ng/l	
307-55-1	Perfluorododecanoic acid	2.0 U	5.0	2.0	0.60	ng/l	
72629-94-8	Perfluorotridecanoic acid	2.0 U	5.0	2.0	0.84	ng/l	
376-06-7	Perfluorotetradecanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	1.0 U	5.0	1.0	0.50	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	4.0 U	5.0	4.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	2.0 U	5.0	2.0	0.70	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	1.0 U	5.0	1.0	0.50	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	2.0 U	5.0	2.0	0.54	ng/l	
68259-12-1	Perfluorononanesulfonic acid	2.0 U	5.0	2.0	0.57	ng/l	
335-77-3	Perfluorodecanesulfonic acid	2.0 U	5.0	2.0	0.64	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	4.0 U	5.0	4.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	8.0 U	20	8.0	3.2	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	8.0 U	20	8.0	3.5	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	8.0 U	20	8.0	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	2.0 U	5.0	2.0	0.67	ng/l	
31506-32-8	MeFOSA	2.0 U	5.0	2.0	1.0	ng/l	
4151-50-2	EtFOSA	2.0 U	5.0	2.0	1.0	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-WQFB01-2301W3		
Lab Sample ID:	FC2108-3	**Date Sampled:**	01/20/23
Matrix:	AQ - Field Blank Water	**Date Received:**	01/21/23
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
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS							
2355-31-9	MeFOSAA	4.0 U	5.0	4.0	1.0	ng/l	
2991-50-6	EtFOSAA	4.0 U	5.0	4.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS							
24448-09-7	MeFOSE	10 U	50	10	4.4	ng/l	
1691-99-2	EtFOSE	20 U	50	20	7.4	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS							
13252-13-6	HFPO-DA (GenX)	4.0 U	20	4.0	1.0	ng/l	
919005-14-4	ADONA	4.0 U	20	4.0	1.9	ng/l	
377-73-1	PFMPA	2.0 U	10	2.0	1.0	ng/l	
863090-89-5	PFMBA	4.0 U	10	4.0	1.1	ng/l	
151772-58-6	NFDHA	4.0 U	10	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS							
756426-58-1	9Cl-PF3ONS (F-53B Major)	4.0 U	20	4.0	1.4	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	4.0 U	20	4.0	1.8	ng/l	
113507-82-7	PFEESA	2.0 U	10	2.0	0.78	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS							
356-02-5	3:3 Fluorotelomer carboxylate	10 U	25	10	4.5	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	20 U	130	20	8.7	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	20 U	130	20	7.9	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	101%		20-150%
	13C5-PFPeA	104%		20-150%
	13C5-PFHxA	103%		20-150%
	13C4-PFHpA	102%		20-150%
	13C8-PFOA	104%		20-150%
	13C9-PFNA	101%		20-150%
	13C6-PFDA	82%		20-150%
	13C7-PFUnDA	81%		20-150%
	13C2-PFDoDA	73%		20-150%
	13C2-PFTeDA	48%		20-150%
	13C3-PFBS	104%		20-150%
	13C3-PFHxS	102%		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-WQFB01-2301W3		
Lab Sample ID:	FC2108-3	**Date Sampled:**	01/20/23
Matrix:	AQ - Field Blank Water	**Date Received:**	01/21/23
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	91%		20-150%
	13C8-FOSA	89%		20-150%
	d3-MeFOSA	78%		20-150%
	d5-EtFOSA	77%		20-150%
	d3-MeFOSAA	99%		20-150%
	d5-EtFOSAA	96%		20-150%
	d7-MeFOSE	82%		20-150%
	d9-EtFOSE	79%		20-150%
	13C2-4:2FTS	139%		20-150%
	13C2-6:2FTS	113%		20-150%
	13C2-8:2FTS	99%		20-150%
	13C3-HFPO-DA	113%		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-RHMW17-WGN01LF-2301W3		
Lab Sample ID:	FC2108-4	**Date Sampled:**	01/20/23
Matrix:	AQ - Ground Water	**Date Received:**	01/21/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	**Percent Solids:**	n/a
Project:	N6274223F0104 RH Fire Suppression System		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6Q12700.D	1	02/01/23 12:07	MV	01/24/23 12:45	OP95122	S6Q195
Run #2							

	Initial Volume	Final Volume
Run #1	500 ml	5.0 ml
Run #2		

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
PERFLUOROALKYL CARBOXYLIC ACIDS							
375-22-4	Perfluorobutanoic acid	2.9	20	4.0	1.9	ng/l	J
2706-90-3	Perfluoropentanoic acid	5.7	10	2.0	0.94	ng/l	J
307-24-4	Perfluorohexanoic acid	2.9	5.0	1.0	0.50	ng/l	J
375-85-9	Perfluoroheptanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
335-67-1	Perfluorooctanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
375-95-1	Perfluorononanoic acid	2.0 U	5.0	2.0	0.61	ng/l	
335-76-2	Perfluorodecanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
2058-94-8	Perfluoroundecanoic acid	2.0 U	5.0	2.0	0.60	ng/l	
307-55-1	Perfluorododecanoic acid	2.0 U	5.0	2.0	0.60	ng/l	
72629-94-8	Perfluorotridecanoic acid	2.0 U	5.0	2.0	0.84	ng/l	
376-06-7	Perfluorotetradecanoic acid	1.0 U	5.0	1.0	0.50	ng/l	
PERFLUOROALKYL SULFONIC ACIDS							
375-73-5	Perfluorobutanesulfonic acid	1.0 U	5.0	1.0	0.50	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	4.0 U	5.0	4.0	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	2.0 U	5.0	2.0	0.70	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	1.0 U	5.0	1.0	0.50	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	2.0 U	5.0	2.0	0.54	ng/l	
68259-12-1	Perfluorononanesulfonic acid	2.0 U	5.0	2.0	0.57	ng/l	
335-77-3	Perfluorodecanesulfonic acid	2.0 U	5.0	2.0	0.64	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	4.0 U	5.0	4.0	1.1	ng/l	
FLUOROTELOMER SULFONIC ACIDS							
757124-72-4	4:2 Fluorotelomer sulfonate	8.0 U	20	8.0	3.2	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	26.1	20	8.0	3.5	ng/l	
39108-34-4	8:2 Fluorotelomer sulfonate	8.0 U	20	8.0	4.1	ng/l	
PERFLUOROOCTANE SULFONAMIDES							
754-91-6	PFOSA	2.0 U	5.0	2.0	0.67	ng/l	
31506-32-8	MeFOSA	2.0 U	5.0	2.0	1.0	ng/l	
4151-50-2	EtFOSA	2.0 U	5.0	2.0	1.0	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-RHMW17-WGN01LF-2301W3		
Lab Sample ID:	FC2108-4	**Date Sampled:**	01/20/23
Matrix:	AQ - Ground Water	**Date Received:**	01/21/23
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
PERFLUOROOCTANE SULFONAMIDOACETIC ACIDS							
2355-31-9	MeFOSAA	4.0 U	5.0	4.0	1.0	ng/l	
2991-50-6	EtFOSAA	4.0 U	5.0	4.0	1.3	ng/l	
PERFLUOROOCTANE SULFONAMIDO ETHANOLS							
24448-09-7	MeFOSE	10 U	50	10	4.4	ng/l	
1691-99-2	EtFOSE	20 U	50	20	7.4	ng/l	
PER and POLYFLUOROETHER CARBOXYLIC ACIDS							
13252-13-6	HFPO-DA (GenX)	4.0 U	20	4.0	1.0	ng/l	
919005-14-4	ADONA	4.0 U	20	4.0	1.9	ng/l	
377-73-1	PFMPA	2.0 U	10	2.0	1.0	ng/l	
863090-89-5	PFMBA	4.0 U	10	4.0	1.1	ng/l	
151772-58-6	NFDHA	4.0 U	10	4.0	1.2	ng/l	
PER and POLYFLUOROETHER SULFONIC ACIDS							
756426-58-1	9Cl-PF3ONS (F-53B Major)	4.0 U	20	4.0	1.4	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	4.0 U	20	4.0	1.8	ng/l	
113507-82-7	PFEESA	2.0 U	10	2.0	0.78	ng/l	
FLUOROTELOMER CARBOXYLIC ACIDS							
356-02-5	3:3 Fluorotelomer carboxylate	10 U	25	10	4.5	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	20 U	130	20	8.7	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	20 U	130	20	7.9	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C4-PFBA	109%		20-150%
	13C5-PFPeA	123%		20-150%
	13C5-PFHxA	123%		20-150%
	13C4-PFHpA	120%		20-150%
	13C8-PFOA	110%		20-150%
	13C9-PFNA	114%		20-150%
	13C6-PFDA	97%		20-150%
	13C7-PFUnDA	89%		20-150%
	13C2-PFDoDA	77%		20-150%
	13C2-PFTeDA	83%		20-150%
	13C3-PFBS	110%		20-150%
	13C3-PFHxS	112%		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-RHMW17-WGN01LF-2301W3		
Lab Sample ID:	FC2108-4	**Date Sampled:**	01/20/23
Matrix:	AQ - Ground Water	**Date Received:**	01/21/23
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	98%		20-150%
	13C8-FOSA	103%		20-150%
	d3-MeFOSA	82%		20-150%
	d5-EtFOSA	82%		20-150%
	d3-MeFOSAA	104%		20-150%
	d5-EtFOSAA	93%		20-150%
	d7-MeFOSE	86%		20-150%
	d9-EtFOSE	77%		20-150%
	13C2-4:2FTS	142%		20-150%
	13C2-6:2FTS	123%		20-150%
	13C2-8:2FTS	108%		20-150%
	13C3-HFPO-DA	127%		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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- QC Evaluation: DOD QSM5.x Limits

FC2108

COC #: 2301W3AFSG11

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SGS North America Inc - Orlando
Chain of Custody

SGS - ORLANDO JOB # :

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL 407-425-6700 FAX 407-425-0707
www.sgs.com

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information	Project Information	Analytical Information	Matrix Codes
Company Name: AECOM	**Project Name:** N6274223F0104 RH Fire Suppression System		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	**Project #** 60697810		
Phone #: 303-796-4624 / 808-954-4512	**Fax #**		
Sampler(s) Name(s) (Printed) **Sampler 1:** NOAH TURNER **Sampler 2:**	**Client Purchase Order #**		

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	CONTAINER INFORMATION MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	PFAS EPA Draft 1633	LAB USE ONLY
1	AF-RHMW17D-WGN01LF-2301W3	01/20/23	1245	KW/MY/NT	GW	3		X								X	
2	AF-RHMW17D-WQEB01-2301W3	↓	1415	↓	GW	3		X								X	
3	AF-RHMW17D-WQFB01-2301W3	↓	1120	↓	GW	3		X								X	

NT 01-20-2023

INITIAL ASSESSMENT

LABEL VERIFICATION

NT 01-20-2023

Turnaround Time (Business days)	Data Deliverable Information	Comments / Remarks
10 Day (Business) Approved By: / Date: 7 Day [5 Day] 3 Day *RUSH* 2 Day *RUSH* 1 Day *RUSH* Other Rush T/A Data Available VIA Email or Lablink	[ ] COMMERCIAL "A" (RESULTS ONLY) [ ] COMMERCIAL "B" (RESULTS PLUS QC) [ ] REDT1 (EPA LEVEL 3) [x] FULLT1 (EPA LEVEL 4) [x] EDD'S	EDMS upload database: JBPHE EDMS Coverage: AFFF Assessment Sampling GW United AWR-516 1172

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	Noah T /AECOM	01-20-2023	2 AECOM	3 AECOM	01/20/23 1603	4
5	Relinquished by/Affiliation	Date Time: 1700 1/21/23	6 Received By/Affiliation	7 Relinquished By/Affiliation	Date Time:	8 Received By/Affiliation

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 1.4 IR1

http://www.sgs.com/en/terms-and-conditions

PFAS_COCs_ALL.xls Rev 031318

FC2108: Chain of Custody
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SGS North America Inc - Orlando
Chain of Custody

FC2108

SGS - ORLANDO JOB #:

COC #: 2301W3AFSG10

PAGE 1 OF 1

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL: 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO Quote #

SKIFF #

Client / Reporting Information	Project Information	Analytical Information	Matrix Codes
Company Name: AECOM	**Project Name:** N6274223F0104 RH Fire Suppression System	PFAS EPA Draft 1633	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	**Project #** 60697810		
Phone #: 303-796-4624 / 808-954-4512	**Fax #**		
Sampler(s) Name(s) (Printed) **Sampler 1:** NOAH TURNER **Sampler 2:**	**Client Purchase Order #**		

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	CONTAINER INFORMATION TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NACH+ZNAC	DI WATER	MEOH	PFAS EPA Draft 1633	LAB USE ONLY
4	AF-RHMW17-WGN01LF-2301W3	01-20-23	1050	CW/MY/NT	GW	3		X								X	

NT 01-20-2023

INITIAL ASSESSMENT

LABEL VERIFICATION

Turnaround Time (Business days)	Data Deliverable Information	Comments / Remarks
10 Day (Business) Approved By: / Date:	[ ] COMMERCIAL "A" (RESULTS ONLY)	EDMS upload database: JBPHE
7 Day	[ ] COMMERCIAL "B" (RESULTS PLUS QC)	EDMS Coverage: AFFF Assessment Sampling GW
[5 Day]	[ ] REDT1 (EPA LEVEL 3)	United AWB-016-51761172
3 Day *RUSH*	[x] FULLT1 (EPA LEVEL 4)	
2 Day *RUSH*	[x] EDD'S	
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	/ AECOM	01-20-2023	2 AECOM	3 AECOM	01/20/23 1600	4
5	Relinquished by/Affiliation	Date Time: 1700 1/23/23	6 Received By/Affiliation	7 Relinquished By/Affiliation	Date Time:	8 Received By/Affiliation

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 1.4

http://www.sgs.com/en/terms-and-conditions

PFAS_COCs_ALL.xls Rev 031318

FC2108: Chain of Custody
Page 2 of 3

SGS Sample Receipt Summary

Job Number: FC2108 **Client:** AECOM **Project:** N6274223F0104 RH Fire Suppression System

Date / Time Received: 1/21/2023 5:00:00 PM **Delivery Method:** United Cargo/Airspace **Airbill #'s:** United Cargo AWB #: 016-51761172

Therm ID: IR 1; **Therm CF:** 0.2; **# of Coolers:** N/A

Cooler Temps (Raw Measured) °C: Cooler 1: (1.4);

Cooler Temps (Corrected) °C: Cooler 1: (1.6);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

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 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: CARLOSD Date: 1/21/2023 5:00:00 PM Reviewer: CD Date: 1/23/2023

FC2108: Chain of Custody
Page 3 of 3

QC Evaluation: DOD QSM5.x Limits

Job Number: FC2108
Account: AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System
Collected: 01/20/23

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

No DOD QSM5.x Limits found for methods in this job.

* Sample used for QC is not from job FC2108

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: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q195-IBLK	6Q12658.D	1	01/31/23	MV	n/a	n/a	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1, FC2108-2, FC2108-3, FC2108-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.020	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.010	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0050	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0050	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0050	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0050	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0050	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0050	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0050	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0050	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0050	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0050	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0050	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0050	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0050	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0050	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0050	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 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	0.0050	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0050	0.0010	ug/l	
4151-50-2	EtFOSA	0.0013	0.0050	0.0010	ug/l	J
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	0.050	0.0044	ug/l	
1691-99-2	EtFOSE	0.0196	0.050	0.0074	ug/l	J
13252-13-6	HFPO-DA (GenX)	ND	0.020	0.0010	ug/l	
919005-14-4	ADONA	ND	0.020	0.0019	ug/l	
377-73-1	PFMPA	ND	0.010	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.010	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.010	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.020	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.020	0.0018	ug/l	

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Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q195-IBLK	6Q12658.D	1	01/31/23	MV	n/a	n/a	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1, FC2108-2, FC2108-3, FC2108-4

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.010	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.025	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.13	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.13	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	97%	20-150%
	13C5-PFPeA	101%	20-150%
	13C5-PFHxA	100%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	98%	20-150%
	13C9-PFNA	96%	20-150%
	13C6-PFDA	101%	20-150%
	13C7-PFUnDA	94%	20-150%
	13C2-PFDoDA	93%	20-150%
	13C2-PFTeDA	96%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	106%	20-150%
	13C8-PFOS	104%	20-150%
	13C8-FOSA	101%	20-150%
	d3-MeFOSA	96%	20-150%
	d5-EtFOSA	105%	20-150%
	d3-MeFOSAA	109%	20-150%
	d5-EtFOSAA	111%	20-150%
	d7-MeFOSE	99%	20-150%
	d9-EtFOSE	97%	20-150%
	13C2-4:2FTS	130%	20-150%
	13C2-6:2FTS	119%	20-150%
	13C2-8:2FTS	115%	20-150%
	13C3-HFPO-DA	95%	20-150%

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Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q195-IBLK	6Q12690.D	1	02/01/23	MV	n/a	n/a	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1, FC2108-2, FC2108-3, FC2108-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.020	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.010	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0050	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0050	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0050	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0050	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0050	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0050	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0050	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0050	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0050	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0050	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0050	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0050	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0050	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0050	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0050	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 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	0.0050	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0050	0.0010	ug/l	
4151-50-2	EtFOSA	0.0013	0.0050	0.0010	ug/l	J
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	0.050	0.0044	ug/l	
1691-99-2	EtFOSE	0.0139	0.050	0.0074	ug/l	J
13252-13-6	HFPO-DA (GenX)	ND	0.020	0.0010	ug/l	
919005-14-4	ADONA	ND	0.020	0.0019	ug/l	
377-73-1	PFMPA	ND	0.010	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.010	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.010	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.020	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.020	0.0018	ug/l	

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Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q195-IBLK	6Q12690.D	1	02/01/23	MV	n/a	n/a	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1, FC2108-2, FC2108-3, FC2108-4

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.010	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.025	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.13	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.13	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	98%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	103%	20-150%
	13C4-PFHpA	101%	20-150%
	13C8-PFOA	96%	20-150%
	13C9-PFNA	96%	20-150%
	13C6-PFDA	97%	20-150%
	13C7-PFUnDA	95%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	93%	20-150%
	13C3-PFBS	98%	20-150%
	13C3-PFHxS	104%	20-150%
	13C8-PFOS	104%	20-150%
	13C8-FOSA	98%	20-150%
	d3-MeFOSA	100%	20-150%
	d5-EtFOSA	99%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	105%	20-150%
	d7-MeFOSE	96%	20-150%
	d9-EtFOSE	93%	20-150%
	13C2-4:2FTS	126%	20-150%
	13C2-6:2FTS	113%	20-150%
	13C2-8:2FTS	104%	20-150%
	13C3-HFPO-DA	109%	20-150%

Instrument Blank

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q202-IBLK	6Q13187.D	1	02/07/23	MV	n/a	n/a	S6Q202

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.020	0.0019	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	100%	20-150%
	13C6-PFDA	111%	20-150%
	13C7-PFUnDA	109%	20-150%
	13C2-PFDoDA	105%	20-150%
	13C2-PFTeDA	106%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	108%	20-150%
	13C8-PFOS	103%	20-150%
	13C8-FOSA	109%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	102%	20-150%
	13C2-4:2FTS	105%	20-150%
	13C2-6:2FTS	102%	20-150%
	13C2-8:2FTS	95%	20-150%

Instrument Blank

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q202-IBLK	6Q13212.D	1	02/08/23	MV	n/a	n/a	S6Q202

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.020	0.0019	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	101%	20-150%
	13C5-PFPeA	100%	20-150%
	13C5-PFHxA	104%	20-150%
	13C4-PFHpA	98%	20-150%
	13C8-PFOA	92%	20-150%
	13C9-PFNA	108%	20-150%
	13C6-PFDA	107%	20-150%
	13C7-PFUnDA	104%	20-150%
	13C2-PFDoDA	108%	20-150%
	13C2-PFTeDA	110%	20-150%
	13C3-PFBS	102%	20-150%
	13C3-PFHxS	103%	20-150%
	13C8-PFOS	88%	20-150%
	13C8-FOSA	94%	20-150%
	d3-MeFOSAA	102%	20-150%
	d5-EtFOSAA	95%	20-150%
	13C2-4:2FTS	112%	20-150%
	13C2-6:2FTS	103%	20-150%
	13C2-8:2FTS	90%	20-150%

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Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q195-ICCB	6Q12703.D	1	02/01/23	MV	n/a	n/a	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1

CAS No.	Compound	Result	RL	MDL	Units	Q

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	96%	20-150%
	13C5-PFPeA	104%	20-150%
	13C5-PFHxA	105%	20-150%
	13C4-PFHpA	107%	20-150%
	13C8-PFOA	99%	20-150%
	13C9-PFNA	99%	20-150%
	13C6-PFDA	95%	20-150%
	13C7-PFUnDA	95%	20-150%
	13C2-PFDoDA	94%	20-150%
	13C2-PFTeDA	94%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	99%	20-150%
	13C8-PFOS	113%	20-150%
	13C8-FOSA	105%	20-150%
	d3-MeFOSA	107%	20-150%
	d5-EtFOSA	107%	20-150%
	d3-MeFOSAA	114%	20-150%
	d5-EtFOSAA	118%	20-150%
	d7-MeFOSE	102%	20-150%
	d9-EtFOSE	93%	20-150%
	13C2-4:2FTS	129%	20-150%
	13C2-6:2FTS	111%	20-150%
	13C2-8:2FTS	101%	20-150%
	13C3-HFPO-DA	107%	20-150%

Continuing Calibration Blank

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q195-ICCB	6Q12714.D	1	02/01/23	MV	n/a	n/a	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1

CAS No.	Compound	Result	RL	MDL	Units	Q

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	98%	20-150%
	13C5-PFPeA	102%	20-150%
	13C5-PFHxA	99%	20-150%
	13C4-PFHpA	102%	20-150%
	13C8-PFOA	103%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	102%	20-150%
	13C7-PFUnDA	98%	20-150%
	13C2-PFDoDA	95%	20-150%
	13C2-PFTeDA	95%	20-150%
	13C3-PFBS	91%	20-150%
	13C3-PFHxS	91%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	104%	20-150%
	d3-MeFOSA	98%	20-150%
	d5-EtFOSA	100%	20-150%
	d3-MeFOSAA	114%	20-150%
	d5-EtFOSAA	112%	20-150%
	d7-MeFOSE	102%	20-150%
	d9-EtFOSE	94%	20-150%
	13C2-4:2FTS	119%	20-150%
	13C2-6:2FTS	107%	20-150%
	13C2-8:2FTS	99%	20-150%
	13C3-HFPO-DA	98%	20-150%

Method Blank Summary

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95122-MB	6Q12695.D	1	02/01/23	MV	01/24/23	OP95122	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1, FC2108-2, FC2108-3, FC2108-4

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.020	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.010	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0050	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0050	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0050	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0050	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0050	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0050	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0050	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0050	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0050	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0050	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0050	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0050	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0050	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0050	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0050	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 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	0.0050	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0050	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0050	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	0.050	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.050	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.020	0.0010	ug/l	
919005-14-4	ADONA	ND	0.020	0.0019	ug/l	
377-73-1	PFMPA	ND	0.010	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.010	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.010	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.020	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.020	0.0018	ug/l	

Method Blank Summary

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95122-MB	6Q12695.D	1	02/01/23	MV	01/24/23	OP95122	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1, FC2108-2, FC2108-3, FC2108-4

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.010	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.025	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.13	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.13	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	108%	20-150%
	13C5-PFPeA	113%	20-150%
	13C5-PFHxA	118%	20-150%
	13C4-PFHpA	117%	20-150%
	13C8-PFOA	110%	20-150%
	13C9-PFNA	113%	20-150%
	13C6-PFDA	112%	20-150%
	13C7-PFUnDA	111%	20-150%
	13C2-PFDoDA	95%	20-150%
	13C2-PFTeDA	99%	20-150%
	13C3-PFBS	107%	20-150%
	13C3-PFHxS	115%	20-150%
	13C8-PFOS	115%	20-150%
	13C8-FOSA	109%	20-150%
	d3-MeFOSA	99%	20-150%
	d5-EtFOSA	97%	20-150%
	d3-MeFOSAA	114%	20-150%
	d5-EtFOSAA	115%	20-150%
	d7-MeFOSE	102%	20-150%
	d9-EtFOSE	98%	20-150%
	13C2-4:2FTS	147%	20-150%
	13C2-6:2FTS	130%	20-150%
	13C2-8:2FTS	119%	20-150%
	13C3-HFPO-DA	118%	20-150%

Method Blank Summary

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95294-MB	6Q13195.D	1	02/07/23	MV	02/03/23	OP95294	S6Q202

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.020	0.0019	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	113%	20-150%
	13C5-PFPeA	118%	20-150%
	13C5-PFHxA	116%	20-150%
	13C4-PFHpA	124%	20-150%
	13C8-PFOA	108%	20-150%
	13C9-PFNA	115%	20-150%
	13C6-PFDA	124%	20-150%
	13C7-PFUnDA	121%	20-150%
	13C2-PFDoDA	106%	20-150%
	13C2-PFTeDA	95%	20-150%
	13C3-PFBS	107%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	107%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSA	83%	20-150%
	d5-EtFOSA	85%	20-150%
	d3-MeFOSAA	104%	20-150%
	d5-EtFOSAA	108%	20-150%
	d7-MeFOSE	83%	20-150%
	d9-EtFOSE	81%	20-150%
	13C2-4:2FTS	112%	20-150%
	13C2-6:2FTS	113%	20-150%
	13C2-8:2FTS	101%	20-150%
	13C3-HFPO-DA	116%	20-150%

Method Blank Summary

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95294-MB	6Q13217.D	1	02/08/23	MV	02/03/23	OP95294	S6Q202

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.020	0.0019	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	112%	20-150%
	13C5-PFPeA	119%	20-150%
	13C5-PFHxA	124%	20-150%
	13C4-PFHpA	113%	20-150%
	13C8-PFOA	112%	20-150%
	13C9-PFNA	107%	20-150%
	13C6-PFDA	122%	20-150%
	13C7-PFUnDA	116%	20-150%
	13C2-PFDoDA	109%	20-150%
	13C2-PFTeDA	86%	20-150%
	13C3-PFBS	112%	20-150%
	13C3-PFHxS	113%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	101%	20-150%
	d3-MeFOSA	79%	20-150%
	d5-EtFOSA	76%	20-150%
	d3-MeFOSAA	108%	20-150%
	d5-EtFOSAA	109%	20-150%
	d7-MeFOSE	75%	20-150%
	d9-EtFOSE	78%	20-150%
	13C2-4:2FTS	128%	20-150%
	13C2-6:2FTS	125%	20-150%
	13C2-8:2FTS	115%	20-150%
	13C3-HFPO-DA	115%	20-150%

Continuing Calibration Blank

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q195-ICCB	6Q12684.D	1	02/01/23	MV	n/a	n/a	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q195-IBLK, S6Q195-RT

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.020	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.010	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0050	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0050	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0050	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0050	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0050	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0050	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0050	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0050	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0050	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0050	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0050	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0050	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0050	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0050	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0050	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 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	0.0050	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0050	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0050	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	0.050	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.050	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.020	0.0010	ug/l	
919005-14-4	ADONA	ND	0.020	0.0019	ug/l	
377-73-1	PFMPA	ND	0.010	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.010	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.010	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.020	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.020	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q195-ICCB	6Q12684.D	1	02/01/23	MV	n/a	n/a	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q195-IBLK, S6Q195-RT

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.010	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.025	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.13	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.13	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	98%	20-150%
	13C5-PFPeA	99%	20-150%
	13C5-PFHxA	101%	20-150%
	13C4-PFHpA	107%	20-150%
	13C8-PFOA	101%	20-150%
	13C9-PFNA	92%	20-150%
	13C6-PFDA	99%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	97%	20-150%
	13C2-PFTeDA	95%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	103%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	106%	20-150%
	d3-MeFOSA	100%	20-150%
	d5-EtFOSA	98%	20-150%
	d3-MeFOSAA	114%	20-150%
	d5-EtFOSAA	113%	20-150%
	d7-MeFOSE	100%	20-150%
	d9-EtFOSE	92%	20-150%
	13C2-4:2FTS	119%	20-150%
	13C2-6:2FTS	118%	20-150%
	13C2-8:2FTS	105%	20-150%
	13C3-HFPO-DA	100%	20-150%

Continuing Calibration Blank

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q195-ICCB	6Q12686.D	1	02/01/23	MV	n/a	n/a	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q195-IBLK, S6Q195-RT

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.020	0.0019	ug/l	
2706-90-3	Perfluoropentanoic acid	ND	0.010	0.00094	ug/l	
307-24-4	Perfluorohexanoic acid	ND	0.0050	0.00050	ug/l	
375-85-9	Perfluoroheptanoic acid	ND	0.0050	0.00050	ug/l	
335-67-1	Perfluorooctanoic acid	ND	0.0050	0.00050	ug/l	
375-95-1	Perfluorononanoic acid	ND	0.0050	0.00061	ug/l	
335-76-2	Perfluorodecanoic acid	ND	0.0050	0.00050	ug/l	
2058-94-8	Perfluoroundecanoic acid	ND	0.0050	0.00060	ug/l	
307-55-1	Perfluorododecanoic acid	ND	0.0050	0.00060	ug/l	
72629-94-8	Perfluorotridecanoic acid	ND	0.0050	0.00084	ug/l	
376-06-7	Perfluorotetradecanoic acid	ND	0.0050	0.00050	ug/l	
375-73-5	Perfluorobutanesulfonic acid	ND	0.0050	0.00050	ug/l	
2706-91-4	Perfluoropentanesulfonic acid	ND	0.0050	0.0011	ug/l	
355-46-4	Perfluorohexanesulfonic acid	ND	0.0050	0.00070	ug/l	
375-92-8	Perfluoroheptanesulfonic acid	ND	0.0050	0.00050	ug/l	
1763-23-1	Perfluorooctanesulfonic acid	ND	0.0050	0.00054	ug/l	
68259-12-1	Perfluorononanesulfonic acid	ND	0.0050	0.00057	ug/l	
335-77-3	Perfluorodecanesulfonic acid	ND	0.0050	0.00064	ug/l	
79780-39-5	Perfluorododecanesulfonic aci	ND	0.0050	0.0011	ug/l	
757124-72-4	4:2 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	0.0050	0.00067	ug/l	
31506-32-8	MeFOSA	ND	0.0050	0.0010	ug/l	
4151-50-2	EtFOSA	ND	0.0050	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	0.050	0.0044	ug/l	
1691-99-2	EtFOSE	ND	0.050	0.0074	ug/l	
13252-13-6	HFPO-DA (GenX)	ND	0.020	0.0010	ug/l	
919005-14-4	ADONA	ND	0.020	0.0019	ug/l	
377-73-1	PFMPA	ND	0.010	0.0010	ug/l	
863090-89-5	PFMBA	ND	0.010	0.0011	ug/l	
151772-58-6	NFDHA	ND	0.010	0.0012	ug/l	
756426-58-1	9Cl-PF3ONS (F-53B Major)	ND	0.020	0.0014	ug/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	ND	0.020	0.0018	ug/l	

Continuing Calibration Blank

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q195-ICCB	6Q12686.D	1	02/01/23	MV	n/a	n/a	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q195-IBLK, S6Q195-RT

CAS No.	Compound	Result	RL	MDL	Units	Q
113507-82-7	PFEESA	ND	0.010	0.00078	ug/l	
356-02-5	3:3 Fluorotelomer carboxylate	ND	0.025	0.0045	ug/l	
914637-49-3	5:3 Fluorotelomer carboxylate	ND	0.13	0.0087	ug/l	
812-70-4	7:3 Fluorotelomer carboxylate	ND	0.13	0.0079	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	94%	20-150%
	13C5-PFPeA	108%	20-150%
	13C5-PFHxA	102%	20-150%
	13C4-PFHpA	118%	20-150%
	13C8-PFOA	103%	20-150%
	13C9-PFNA	97%	20-150%
	13C6-PFDA	102%	20-150%
	13C7-PFUnDA	104%	20-150%
	13C2-PFDoDA	102%	20-150%
	13C2-PFTeDA	111%	20-150%
	13C3-PFBS	87%	20-150%
	13C3-PFHxS	96%	20-150%
	13C8-PFOS	112%	20-150%
	13C8-FOSA	107%	20-150%
	d3-MeFOSA	100%	20-150%
	d5-EtFOSA	97%	20-150%
	d3-MeFOSAA	88%	20-150%
	d5-EtFOSAA	97%	20-150%
	d7-MeFOSE	94%	20-150%
	d9-EtFOSE	85%	20-150%
	13C2-4:2FTS	116%	20-150%
	13C2-6:2FTS	97%	20-150%
	13C2-8:2FTS	84%	20-150%
	13C3-HFPO-DA	133%	20-150%

Continuing Calibration Blank

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q202-ICCB	6Q13201.D	1	02/07/23	MV	n/a	n/a	S6Q202

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

S6Q202-IBLK

CAS No.	Compound	Result	RL	MDL	Units	Q
375-22-4	Perfluorobutanoic acid	ND	0.020	0.0019	ug/l	
2355-31-9	MeFOSAA	ND	0.0050	0.0010	ug/l	
2991-50-6	EtFOSAA	ND	0.0050	0.0013	ug/l	

CAS No.	ID Standard Recoveries		Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	105%	20-150%
	13C5-PFHxA	103%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	103%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	110%	20-150%
	13C7-PFUnDA	100%	20-150%
	13C2-PFDoDA	100%	20-150%
	13C2-PFTeDA	98%	20-150%
	13C3-PFBS	97%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	94%	20-150%
	d3-MeFOSAA	93%	20-150%
	d5-EtFOSAA	94%	20-150%
	13C2-4:2FTS	108%	20-150%
	13C2-6:2FTS	106%	20-150%
	13C2-8:2FTS	94%	20-150%

Blank Spike Summary

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95122-LLBS	6Q12694.D	1	02/01/23	MV	01/24/23	OP95122	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1, FC2108-2, FC2108-3, FC2108-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.04	0.0353	88	40-150
2706-90-3	Perfluoropentanoic acid	0.02	0.0198	99	40-150
307-24-4	Perfluorohexanoic acid	0.01	0.0104	104	40-150
375-85-9	Perfluoroheptanoic acid	0.01	0.0102	102	40-150
335-67-1	Perfluorooctanoic acid	0.01	0.0094	94	40-150
375-95-1	Perfluorononanoic acid	0.01	0.0094	94	40-150
335-76-2	Perfluorodecanoic acid	0.01	0.0090	90	40-150
2058-94-8	Perfluoroundecanoic acid	0.01	0.0090	90	40-150
307-55-1	Perfluorododecanoic acid	0.01	0.0097	97	40-150
72629-94-8	Perfluorotridecanoic acid	0.01	0.0100	100	40-150
376-06-7	Perfluorotetradecanoic acid	0.01	0.0096	96	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00887	0.0087	98	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00941	0.0095	101	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00914	0.0089	97	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00953	0.0092	97	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00928	0.0091	98	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00962	0.0089	93	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00965	0.0086	89	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0097	0.0082	85	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0375	0.0367	98	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.038	0.0363	96	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0384	0.0404	105	40-150
754-91-6	PFOSA	0.01	0.0095	95	40-150
31506-32-8	MeFOSA	0.01	0.0104	104	40-150
4151-50-2	EtFOSA	0.01	0.0104	104	40-150
2355-31-9	MeFOSAA	0.01	0.0085	85	40-150
2991-50-6	EtFOSAA	0.01	0.010	100	40-150
24448-09-7	MeFOSE	0.1	0.0903	90	40-150
1691-99-2	EtFOSE	0.1	0.0879	88	40-150
13252-13-6	HFPO-DA (GenX)	0.04	0.0374	94	40-150
919005-14-4	ADONA	0.0378	0.0335	89	40-150
377-73-1	PFMPA	0.02	0.0193	97	40-150
863090-89-5	PFMBA	0.02	0.0177	89	40-150
151772-58-6	NFDHA	0.02	0.0192	96	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0374	0.0330	88	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0378	0.0297	79	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95122-LLBS	6Q12694.D	1	02/01/23	MV	01/24/23	OP95122	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1, FC2108-2, FC2108-3, FC2108-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0178	0.0169	95	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.05	0.0454	91	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.25	0.217	87	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.25	0.223	89	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	105%	20-150%
	13C5-PFPeA	112%	20-150%
	13C5-PFHxA	113%	20-150%
	13C4-PFHpA	109%	20-150%
	13C8-PFOA	113%	20-150%
	13C9-PFNA	98%	20-150%
	13C6-PFDA	116%	20-150%
	13C7-PFUnDA	105%	20-150%
	13C2-PFDoDA	98%	20-150%
	13C2-PFTeDA	88%	20-150%
	13C3-PFBS	103%	20-150%
	13C3-PFHxS	102%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	99%	20-150%
	d3-MeFOSA	85%	20-150%
	d5-EtFOSA	83%	20-150%
	d3-MeFOSAA	112%	20-150%
	d5-EtFOSAA	107%	20-150%
	d7-MeFOSE	93%	20-150%
	d9-EtFOSE	94%	20-150%
	13C2-4:2FTS	131%	20-150%
	13C2-6:2FTS	127%	20-150%
	13C2-8:2FTS	111%	20-150%
	13C3-HFPO-DA	124%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95294-LLBS	6Q13194.D	1	02/07/23	MV	02/03/23	OP95294	S6Q202

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.04	0.0389	97	40-150
2355-31-9	MeFOSAA	0.01	0.0094	94	40-150
2991-50-6	EtFOSAA	0.01	0.0091	91	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	102%	20-150%
	13C5-PFPeA	111%	20-150%
	13C5-PFHxA	110%	20-150%
	13C4-PFHpA	110%	20-150%
	13C8-PFOA	105%	20-150%
	13C9-PFNA	111%	20-150%
	13C6-PFDA	111%	20-150%
	13C7-PFUnDA	115%	20-150%
	13C2-PFDoDA	116%	20-150%
	13C2-PFTeDA	92%	20-150%
	13C3-PFBS	110%	20-150%
	13C3-PFHxS	114%	20-150%
	13C8-PFOS	112%	20-150%
	13C8-FOSA	112%	20-150%
	d3-MeFOSA	84%	20-150%
	d5-EtFOSA	84%	20-150%
	d3-MeFOSAA	115%	20-150%
	d5-EtFOSAA	104%	20-150%
	d7-MeFOSE	80%	20-150%
	d9-EtFOSE	83%	20-150%
	13C2-4:2FTS	122%	20-150%
	13C2-6:2FTS	112%	20-150%
	13C2-8:2FTS	115%	20-150%
	13C3-HFPO-DA	109%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95294-LLBS	6Q13216.D	1	02/08/23	MV	02/03/23	OP95294	S6Q202

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.04	0.0391	98	40-150
2355-31-9	MeFOSAA	0.01	0.0097	97	40-150
2991-50-6	EtFOSAA	0.01	0.0084	84	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	103%	20-150%
	13C5-PFPeA	116%	20-150%
	13C5-PFHxA	119%	20-150%
	13C4-PFHpA	111%	20-150%
	13C8-PFOA	102%	20-150%
	13C9-PFNA	107%	20-150%
	13C6-PFDA	106%	20-150%
	13C7-PFUnDA	111%	20-150%
	13C2-PFDoDA	112%	20-150%
	13C2-PFTeDA	88%	20-150%
	13C3-PFBS	108%	20-150%
	13C3-PFHxS	114%	20-150%
	13C8-PFOS	111%	20-150%
	13C8-FOSA	108%	20-150%
	d3-MeFOSA	78%	20-150%
	d5-EtFOSA	84%	20-150%
	d3-MeFOSAA	120%	20-150%
	d5-EtFOSAA	117%	20-150%
	d7-MeFOSE	79%	20-150%
	d9-EtFOSE	85%	20-150%
	13C2-4:2FTS	130%	20-150%
	13C2-6:2FTS	122%	20-150%
	13C2-8:2FTS	108%	20-150%
	13C3-HFPO-DA	111%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95122-BS	6Q12693.D	1	02/01/23	MV	01/24/23	OP95122	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1, FC2108-2, FC2108-3, FC2108-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.0865	87	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0478	96	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0231	92	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0241	96	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0250	100	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0238	95	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0223	89	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0214	86	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0224	90	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0220	88	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0215	86	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0231	104	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0201	85	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0206	90	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0248	104	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0218	94	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0217	90	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0226	94	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0210	87	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.0938	0.0844	90	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.0839	88	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.0889	93	40-150
754-91-6	PFOSA	0.025	0.0228	91	40-150
31506-32-8	MeFOSA	0.025	0.0241	96	40-150
4151-50-2	EtFOSA	0.025	0.0240	96	40-150
2355-31-9	MeFOSAA	0.025	0.0229	92	40-150
2991-50-6	EtFOSAA	0.025	0.0232	93	40-150
24448-09-7	MeFOSE	0.25	0.239	96	40-150
1691-99-2	EtFOSE	0.25	0.233	93	40-150
13252-13-6	HFPO-DA (GenX)	0.1	0.0919	92	40-150
919005-14-4	ADONA	0.0945	0.0851	90	40-150
377-73-1	PFMPA	0.05	0.0452	90	40-150
863090-89-5	PFMBA	0.05	0.0433	87	40-150
151772-58-6	NFDHA	0.05	0.0438	88	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.0935	0.0840	90	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.0945	0.0800	85	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95122-BS	6Q12693.D	1	02/01/23	MV	01/24/23	OP95122	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1, FC2108-2, FC2108-3, FC2108-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0418	94	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.107	86	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.625	0.521	83	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.531	85	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	91%	20-150%
	13C5-PFPeA	117%	20-150%
	13C5-PFHxA	122%	20-150%
	13C4-PFHpA	115%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	105%	20-150%
	13C6-PFDA	112%	20-150%
	13C7-PFUnDA	112%	20-150%
	13C2-PFDoDA	108%	20-150%
	13C2-PFTeDA	95%	20-150%
	13C3-PFBS	104%	20-150%
	13C3-PFHxS	118%	20-150%
	13C8-PFOS	106%	20-150%
	13C8-FOSA	107%	20-150%
	d3-MeFOSA	95%	20-150%
	d5-EtFOSA	90%	20-150%
	d3-MeFOSAA	113%	20-150%
	d5-EtFOSAA	110%	20-150%
	d7-MeFOSE	91%	20-150%
	d9-EtFOSE	88%	20-150%
	13C2-4:2FTS	140%	20-150%
	13C2-6:2FTS	136%	20-150%
	13C2-8:2FTS	116%	20-150%
	13C3-HFPO-DA	124%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95294-BS	6Q13193.D	1	02/07/23	MV	02/03/23	OP95294	S6Q202

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.102	102	40-150
2355-31-9	MeFOSAA	0.025	0.0255	102	40-150
2991-50-6	EtFOSAA	0.025	0.0229	92	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	20%	20-150%
	13C5-PFPeA	107%	20-150%
	13C5-PFHxA	110%	20-150%
	13C4-PFHpA	106%	20-150%
	13C8-PFOA	113%	20-150%
	13C9-PFNA	107%	20-150%
	13C6-PFDA	106%	20-150%
	13C7-PFUnDA	101%	20-150%
	13C2-PFDoDA	104%	20-150%
	13C2-PFTeDA	99%	20-150%
	13C3-PFBS	99%	20-150%
	13C3-PFHxS	101%	20-150%
	13C8-PFOS	105%	20-150%
	13C8-FOSA	105%	20-150%
	d3-MeFOSA	95%	20-150%
	d5-EtFOSA	88%	20-150%
	d3-MeFOSAA	106%	20-150%
	d5-EtFOSAA	110%	20-150%
	d7-MeFOSE	90%	20-150%
	d9-EtFOSE	88%	20-150%
	13C2-4:2FTS	109%	20-150%
	13C2-6:2FTS	106%	20-150%
	13C2-8:2FTS	99%	20-150%
	13C3-HFPO-DA	113%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95294-BS	6Q13215.D	1	02/08/23	MV	02/03/23	OP95294	S6Q202

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.103	103	40-150
2355-31-9	MeFOSAA	0.025	0.0279	112	40-150
2991-50-6	EtFOSAA	0.025	0.0231	92	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	20%	20-150%
	13C5-PFPeA	110%	20-150%
	13C5-PFHxA	118%	20-150%
	13C4-PFHpA	110%	20-150%
	13C8-PFOA	106%	20-150%
	13C9-PFNA	102%	20-150%
	13C6-PFDA	112%	20-150%
	13C7-PFUnDA	106%	20-150%
	13C2-PFDoDA	103%	20-150%
	13C2-PFTeDA	96%	20-150%
	13C3-PFBS	103%	20-150%
	13C3-PFHxS	110%	20-150%
	13C8-PFOS	100%	20-150%
	13C8-FOSA	101%	20-150%
	d3-MeFOSA	91%	20-150%
	d5-EtFOSA	91%	20-150%
	d3-MeFOSAA	109%	20-150%
	d5-EtFOSAA	113%	20-150%
	d7-MeFOSE	84%	20-150%
	d9-EtFOSE	87%	20-150%
	13C2-4:2FTS	116%	20-150%
	13C2-6:2FTS	112%	20-150%
	13C2-8:2FTS	108%	20-150%
	13C3-HFPO-DA	110%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95122-MS	6Q12699.D	1	02/01/23	MV	01/24/23	OP95122	S6Q195
FC2108-3	6Q12698.D	1	02/01/23	MV	01/24/23	OP95122	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1, FC2108-2, FC2108-3, FC2108-4

CAS No.	Compound	FC2108-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	0.020	U	0.1	0.0816	82	40-150
2706-90-3	Perfluoropentanoic acid	0.010	U	0.05	0.0464	93	40-150
307-24-4	Perfluorohexanoic acid	0.0050	U	0.025	0.0222	89	40-150
375-85-9	Perfluoroheptanoic acid	0.0050	U	0.025	0.0239	96	40-150
335-67-1	Perfluorooctanoic acid	0.0050	U	0.025	0.0221	88	40-150
375-95-1	Perfluorononanoic acid	0.0050	U	0.025	0.0209	84	40-150
335-76-2	Perfluorodecanoic acid	0.0050	U	0.025	0.0209	84	40-150
2058-94-8	Perfluoroundecanoic acid	0.0050	U	0.025	0.0218	87	40-150
307-55-1	Perfluorododecanoic acid	0.0050	U	0.025	0.0229	92	40-150
72629-94-8	Perfluorotridecanoic acid	0.0050	U	0.025	0.0234	94	40-150
376-06-7	Perfluorotetradecanoic acid	0.0050	U	0.025	0.0222	89	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0050	U	0.0222	0.0191	86	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0050	U	0.0235	0.0208	88	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0050	U	0.0229	0.0188	82	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0050	U	0.0238	0.0219	92	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0050	U	0.0232	0.0201	87	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0050	U	0.0241	0.0201	84	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0050	U	0.0241	0.0185	77	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0050	U	0.0243	0.0173	71	40-150
757124-72-4	4:2 Fluorotelomer sulfonate	0.020	U	0.0938	0.0795	85	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.020	U	0.095	0.0873	92	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.020	U	0.096	0.0715	74	40-150
754-91-6	PFOSA	0.0050	U	0.025	0.0213	85	40-150
31506-32-8	MeFOSA	0.0050	U	0.025	0.0204	82	40-150
4151-50-2	EtFOSA	0.0050	U	0.025	0.0200	80	40-150
2355-31-9	MeFOSAA	0.0050	U	0.025	0.0208	83	40-150
2991-50-6	EtFOSAA	0.0050	U	0.025	0.0242	97	40-150
24448-09-7	MeFOSE	0.050	U	0.25	0.209	84	40-150
1691-99-2	EtFOSE	0.050	U	0.25	0.202	81	40-150
13252-13-6	HFPO-DA (GenX)	0.020	U	0.1	0.0920	92	40-150
919005-14-4	ADONA	0.020	U	0.0945	0.0833	88	40-150
377-73-1	PFMPA	0.010	U	0.05	0.0444	89	40-150
863090-89-5	PFMBA	0.010	U	0.05	0.0413	83	40-150
151772-58-6	NFDHA	0.010	U	0.05	0.0418	84	40-150
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.020	U	0.0935	0.0818	87	40-150
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.020	U	0.0945	0.0735	78	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95122-MS	6Q12699.D	1	02/01/23	MV	01/24/23	OP95122	S6Q195
FC2108-3	6Q12698.D	1	02/01/23	MV	01/24/23	OP95122	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1, FC2108-2, FC2108-3, FC2108-4

CAS No.	Compound	FC2108-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
113507-82-7	PFEESA	0.010	U	0.0445	0.0415	93	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.025	U	0.125	0.104	83	40-150
914637-49-3	5:3 Fluorotelomer carboxylate	0.13	U	0.625	0.523	84	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.13	U	0.625	0.488	78	40-150

CAS No.	ID Standard Recoveries	MS	FC2108-3	Limits
	13C4-PFBA	108%	101%	20-150%
	13C5-PFPeA	114%	104%	20-150%
	13C5-PFHxA	116%	103%	20-150%
	13C4-PFHpA	111%	102%	20-150%
	13C8-PFOA	106%	104%	20-150%
	13C9-PFNA	108%	101%	20-150%
	13C6-PFDA	105%	82%	20-150%
	13C7-PFUnDA	101%	81%	20-150%
	13C2-PFDoDA	90%	73%	20-150%
	13C2-PFTeDA	85%	48%	20-150%
	13C3-PFBS	109%	104%	20-150%
	13C3-PFHxS	114%	102%	20-150%
	13C8-PFOS	109%	91%	20-150%
	13C8-FOSA	111%	89%	20-150%
	d3-MeFOSA	104%	78%	20-150%
	d5-EtFOSA	104%	77%	20-150%
	d3-MeFOSAA	114%	99%	20-150%
	d5-EtFOSAA	109%	96%	20-150%
	d7-MeFOSE	102%	82%	20-150%
	d9-EtFOSE	95%	79%	20-150%
	13C2-4:2FTS	139%	139%	20-150%
	13C2-6:2FTS	124%	113%	20-150%
	13C2-8:2FTS	126%	99%	20-150%
	13C3-HFPO-DA	117%	113%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95294-MS	6Q13199.D	1	02/07/23	MV	02/03/23	OP95294	S6Q202
FC2294-2	6Q13198.D	1	02/07/23	MV	02/03/23	OP95294	S6Q202

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1

CAS No.	Compound	FC2294-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	0.018	U	0.0893	0.0903	101	40-150
2355-31-9	MeFOSAA	0.0044	U	0.0223	0.0201	90	40-150
2991-50-6	EtFOSAA	0.0044	U	0.0223	0.0210	94	40-150

CAS No.	ID Standard Recoveries	MS	FC2294-2	Limits
	13C4-PFBA	24%	37%	20-150%
	13C5-PFPeA	109%	106%	20-150%
	13C5-PFHxA	111%	105%	20-150%
	13C4-PFHpA	110%	105%	20-150%
	13C8-PFOA	106%	108%	20-150%
	13C9-PFNA	110%	108%	20-150%
	13C6-PFDA	110%	95%	20-150%
	13C7-PFUnDA	102%	97%	20-150%
	13C2-PFDoDA	91%	94%	20-150%
	13C2-PFTeDA	83%	90%	20-150%
	13C3-PFBS	115%	109%	20-150%
	13C3-PFHxS	114%	112%	20-150%
	13C8-PFOS	101%	105%	20-150%
	13C8-FOSA	100%	118%	20-150%
	d3-MeFOSA	87%	96%	20-150%
	d5-EtFOSA	81%	97%	20-150%
	d3-MeFOSAA	111%	103%	20-150%
	d5-EtFOSAA	103%	109%	20-150%
	d7-MeFOSE	73%	92%	20-150%
	d9-EtFOSE	69%	88%	20-150%
	13C2-4:2FTS	118%	114%	20-150%
	13C2-6:2FTS	113%	116%	20-150%
	13C2-8:2FTS	96%	108%	20-150%
	13C3-HFPO-DA	109%	108%	20-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95122-DUP	6Q12701.D	1	02/01/23	MV	01/24/23	OP95122	S6Q195
FC2108-4	6Q12700.D	1	02/01/23	MV	01/24/23	OP95122	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1, FC2108-2, FC2108-3, FC2108-4

CAS No.	Compound	FC2108-4 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	0.0029	J	ND		200*	30
2706-90-3	Perfluoropentanoic acid	0.0057	J	0.0060	J	5	30
307-24-4	Perfluorohexanoic acid	0.0029	J	0.0031	J	7	30
375-85-9	Perfluoroheptanoic acid	0.0050 U		ND		nc	30
335-67-1	Perfluorooctanoic acid	0.0050 U		ND		nc	30
375-95-1	Perfluorononanoic acid	0.0050 U		ND		nc	30
335-76-2	Perfluorodecanoic acid	0.0050 U		ND		nc	30
2058-94-8	Perfluoroundecanoic acid	0.0050 U		ND		nc	30
307-55-1	Perfluorododecanoic acid	0.0050 U		ND		nc	30
72629-94-8	Perfluorotridecanoic acid	0.0050 U		ND		nc	30
376-06-7	Perfluorotetradecanoic acid	0.0050 U		ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	0.0050 U		ND		nc	30
2706-91-4	Perfluoropentanesulfonic acid	0.0050 U		ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	0.0050 U		ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	0.0050 U		ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	0.0050 U		ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	0.0050 U		ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	0.0050 U		ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	0.0050 U		ND		nc	30
757124-72-4	4:2 Fluorotelomer sulfonate	0.020 U		ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	0.0261		0.0246		6	30
39108-34-4	8:2 Fluorotelomer sulfonate	0.020 U		ND		nc	30
754-91-6	PFOSA	0.0050 U		ND		nc	30
31506-32-8	MeFOSA	0.0050 U		ND		nc	30
4151-50-2	EtFOSA	0.0050 U		ND		nc	30
2355-31-9	MeFOSAA	0.0050 U		ND		nc	30
2991-50-6	EtFOSAA	0.0050 U		ND		nc	30
24448-09-7	MeFOSE	0.050 U		ND		nc	30
1691-99-2	EtFOSE	0.050 U		ND		nc	30
13252-13-6	HFPO-DA (GenX)	0.020 U		ND		nc	30
919005-14-4	ADONA	0.020 U		ND		nc	30
377-73-1	PFMPA	0.010 U		ND		nc	30
863090-89-5	PFMBA	0.010 U		ND		nc	30
151772-58-6	NFDHA	0.010 U		ND		nc	30
756426-58-1	9Cl-PF3ONS (F-53B Major)	0.020 U		ND		nc	30
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	0.020 U		ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95122-DUP	6Q12701.D	1	02/01/23	MV	01/24/23	OP95122	S6Q195
FC2108-4	6Q12700.D	1	02/01/23	MV	01/24/23	OP95122	S6Q195

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1, FC2108-2, FC2108-3, FC2108-4

CAS No.	Compound	FC2108-4 ug/l	Q	DUP ug/l	Q	RPD	Limits
113507-82-7	PFEESA	0.010	U	ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	0.025	U	ND		nc	30
914637-49-3	5:3 Fluorotelomer carboxylate	0.13	U	ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	0.13	U	ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC2108-4	Limits
	13C4-PFBA	90%	109%	20-150%
	13C5-PFPeA	104%	123%	20-150%
	13C5-PFHxA	110%	123%	20-150%
	13C4-PFHpA	104%	120%	20-150%
	13C8-PFOA	107%	110%	20-150%
	13C9-PFNA	101%	114%	20-150%
	13C6-PFDA	99%	97%	20-150%
	13C7-PFUnDA	95%	89%	20-150%
	13C2-PFDoDA	89%	77%	20-150%
	13C2-PFTeDA	76%	83%	20-150%
	13C3-PFBS	96%	110%	20-150%
	13C3-PFHxS	98%	112%	20-150%
	13C8-PFOS	87%	98%	20-150%
	13C8-FOSA	96%	103%	20-150%
	d3-MeFOSA	84%	82%	20-150%
	d5-EtFOSA	83%	82%	20-150%
	d3-MeFOSAA	101%	104%	20-150%
	d5-EtFOSAA	94%	93%	20-150%
	d7-MeFOSE	85%	86%	20-150%
	d9-EtFOSE	85%	77%	20-150%
	13C2-4:2FTS	127%	142%	20-150%
	13C2-6:2FTS	123%	123%	20-150%
	13C2-8:2FTS	94%	108%	20-150%
	13C3-HFPO-DA	113%	127%	20-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC2108
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95294-DUP	6Q13219.D	1	02/08/23	MV	02/03/23	OP95294	S6Q202
FC2294-3	6Q13218.D	1	02/08/23	MV	02/03/23	OP95294	S6Q202

The QC reported here applies to the following samples: **Method:** EPA DRAFT 1633

FC2108-1

CAS No.	Compound	FC2294-3 ug/l	Q	DUP ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	0.019	U	ND		nc	30
2355-31-9	MeFOSAA	0.0046	U	ND		nc	30
2991-50-6	EtFOSAA	0.0046	U	ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC2294-3	Limits
	13C4-PFBA	99%	96%	20-150%
	13C5-PFPeA	109%	104%	20-150%
	13C5-PFHxA	109%	103%	20-150%
	13C4-PFHpA	105%	101%	20-150%
	13C8-PFOA	100%	94%	20-150%
	13C9-PFNA	98%	104%	20-150%
	13C6-PFDA	94%	108%	20-150%
	13C7-PFUnDA	81%	101%	20-150%
	13C2-PFDoDA	73%	87%	20-150%
	13C2-PFTeDA	70%	82%	20-150%
	13C3-PFBS	103%	101%	20-150%
	13C3-PFHxS	107%	99%	20-150%
	13C8-PFOS	97%	97%	20-150%
	13C8-FOSA	101%	94%	20-150%
	d3-MeFOSA	76%	81%	20-150%
	d5-EtFOSA	76%	75%	20-150%
	d3-MeFOSAA	102%	100%	20-150%
	d5-EtFOSAA	94%	96%	20-150%
	d7-MeFOSE	75%	71%	20-150%
	d9-EtFOSE	72%	73%	20-150%
	13C2-4:2FTS	89%	84%	20-150%
	13C2-6:2FTS	90%	88%	20-150%
	13C2-8:2FTS	87%	87%	20-150%
	13C3-HFPO-DA	104%	98%	20-150%

* = Outside of Control Limits.