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Automated Report

Technical Report for

AECOM, INC.

N6274223F0104 RH Fire Suppression System

60697810

SGS Job Number: FC8731

Sampling Date: 08/11/23



Report to:

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Total number of pages in report: 28



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 unless noted in the narrative, comments or footnotes.

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

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Test results relate only to samples analyzed.

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Sample Summary

AECOM, INC.

Job No: FC8731

N6274223F0104 RH Fire Suppression System
Project No: 60697810

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FC8731-1	08/11/23	10:35 MD	08/15/23	AQ	Ground Water	AF-HDMW225303-WGN01LF-2308



SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: AECOM, INC.

Job No: FC8731

Site: N6274223F0104 RH Fire Suppression System

Report Date: 8/24/2023 5:31:45 PM

On 08/15/2023, 1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc - Orlando. at a maximum corrected temperature of 3.2 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. - Orlando Job Number of FC8731 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: OP98526

Sample(s) FC8240-7MS, FC8240-8DUP were used as the QC samples indicated.

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

FC8731-1 for 3:3 Fluorotelomer carboxylate: Associated BS outside control limits high, sample was ND.

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: FC8731
Account: AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System
Collected: 08/11/23



Lab Sample ID	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
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FC8731-1 AF-HDMW225303-WGN01LF-2308

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	AF-HDMW225303-WGN01LF-2308		
Lab Sample ID:	FC8731-1	Date Sampled:	08/11/23
Matrix:	AQ - Ground Water	Date Received:	08/15/23
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	4Q49345.D	1	08/23/23 12:04	MV	08/19/23 08:40	OP98526	S4Q723
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
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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

Report of Analysis

Client Sample ID:	AF-HDMW225303-WGN01LF-2308		
Lab Sample ID:	FC8731-1	Date Sampled:	08/11/23
Matrix:	AQ - Ground Water	Date Received:	08/15/23
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	122%		20-150%
13C5-PFPeA	126%		20-150%
13C5-PFHxA	124%		20-150%
13C4-PFHpA	130%		20-150%
13C8-PFOA	122%		20-150%
13C9-PFNA	128%		20-150%
13C6-PFDA	125%		20-150%
13C7-PFUnDA	116%		20-150%
13C2-PFDoDA	112%		20-150%
13C2-PFTeDA	100%		20-150%
13C3-PFBS	123%		20-150%
13C3-PFHxS	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

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Report of Analysis

Client Sample ID:	AF-HDMW225303-WGN01LF-2308		
Lab Sample ID:	FC8731-1	Date Sampled:	08/11/23
Matrix:	AQ - Ground Water	Date Received:	08/15/23
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	117%		20-150%
	13C8-FOSA	101%		20-150%
	d3-MeFOSA	105%		20-150%
	d5-EtFOSA	103%		20-150%
	d3-MeFOSAA	115%		20-150%
	d5-EtFOSAA	121%		20-150%
	d7-MeFOSE	101%		20-150%
	d9-EtFOSE	102%		20-150%
	13C2-4:2FTS	120%		20-180%
	13C2-6:2FTS	152%		20-180%
	13C2-8:2FTS	129%		20-180%
	13C3-HFPO-DA	117%		20-150%

(a) Associated BS outside control limits high, sample was ND.

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

QC Evaluation: DOD QSM5.x Limits

Job Number: FC8731
Account: AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System
Collected: 08/11/23

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 FC8731

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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: FC8731
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q723-IBLK	4Q49339.D	1	08/23/23	MV	n/a	n/a	S4Q723

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC8731-1

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	0.0038	0.0080	0.0010	ug/l	J
4151-50-2	EtFOSA	0.0063	0.0080	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	0.0077	0.040	0.0044	ug/l	J
1691-99-2	EtFOSE	0.0138	0.040	0.0074	ug/l	J
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: FC8731
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q723-IBLK	4Q49339.D	1	08/23/23	MV	n/a	n/a	S4Q723

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC8731-1

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	102% 20-150%
	13C5-PFHxA	100% 20-150%
	13C4-PFHpA	103% 20-150%
	13C8-PFOA	102% 20-150%
	13C9-PFNA	104% 20-150%
	13C6-PFDA	105% 20-150%
	13C7-PFUnDA	109% 20-150%
	13C2-PFDoDA	112% 20-150%
	13C2-PFTeDA	120% 20-150%
	13C3-PFBS	101% 20-150%
	13C3-PFHxS	98% 20-150%
	13C8-PFOS	97% 20-150%
	13C8-FOSA	110% 20-150%
	d3-MeFOSAA	97% 20-150%
	d5-EtFOSAA	96% 20-150%
	13C2-4:2FTS	104% 20-180%
	13C2-6:2FTS	106% 20-180%
	13C2-8:2FTS	97% 20-180%

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Method Blank Summary

Job Number: FC8731
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98526-MB	4Q49344.D	1	08/23/23	MV	08/19/23	OP98526	S4Q723

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC8731-1

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: FC8731
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98526-MB	4Q49344.D	1	08/23/23	MV	08/19/23	OP98526	S4Q723

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC8731-1

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	115% 20-150%
	13C5-PFPeA	115% 20-150%
	13C5-PFHxA	117% 20-150%
	13C4-PFHpA	115% 20-150%
	13C8-PFOA	121% 20-150%
	13C9-PFNA	114% 20-150%
	13C6-PFDA	125% 20-150%
	13C7-PFUnDA	119% 20-150%
	13C2-PFDoDA	112% 20-150%
	13C2-PFTeDA	101% 20-150%
	13C3-PFBS	118% 20-150%
	13C3-PFHxS	111% 20-150%
	13C8-PFOS	114% 20-150%
	13C8-FOSA	77% 20-150%
	d3-MeFOSA	86% 20-150%
	d5-EtFOSA	84% 20-150%
	d3-MeFOSAA	108% 20-150%
	d5-EtFOSAA	117% 20-150%
	d7-MeFOSE	75% 20-150%
	d9-EtFOSE	87% 20-150%
	13C2-4:2FTS	129% 20-180%
	13C2-6:2FTS	142% 20-180%
	13C2-8:2FTS	127% 20-180%
	13C3-HFPO-DA	106% 20-150%

Continuing Calibration Blank

Job Number: FC8731
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q723-ICCB	4Q49353.D	1	08/23/23	MV	n/a	n/a	S4Q723

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

OP98526-DUP

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: FC8731
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S4Q723-ICCB	4Q49353.D	1	08/23/23	MV	n/a	n/a	S4Q723

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

OP98526-DUP

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	102% 20-150%
	13C5-PFHxA	101% 20-150%
	13C4-PFHpA	102% 20-150%
	13C8-PFOA	99% 20-150%
	13C9-PFNA	104% 20-150%
	13C6-PFDA	108% 20-150%
	13C7-PFUnDA	108% 20-150%
	13C2-PFDoDA	108% 20-150%
	13C2-PFTeDA	100% 20-150%
	13C3-PFBS	99% 20-150%
	13C3-PFHxS	99% 20-150%
	13C8-PFOS	95% 20-150%
	13C8-FOSA	96% 20-150%
	d3-MeFOSAA	102% 20-150%
	d5-EtFOSAA	102% 20-150%
	13C2-4:2FTS	118% 20-180%
	13C2-6:2FTS	123% 20-180%
	13C2-8:2FTS	114% 20-180%

6.1.3

6

Blank Spike Summary

Job Number: FC8731
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98526-LLBS	4Q49343.D	1	08/23/23	MV	08/19/23	OP98526	S4Q723

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC8731-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.03	0.0324	108	40-150
2706-90-3	Perfluoropentanoic acid	0.015	0.0162	108	40-150
307-24-4	Perfluorohexanoic acid	0.0075	0.0082	109	40-150
375-85-9	Perfluoroheptanoic acid	0.0075	0.0078	104	40-150
335-67-1	Perfluorooctanoic acid	0.0075	0.0071	95	40-150
375-95-1	Perfluorononanoic acid	0.0075	0.0079	105	40-150
335-76-2	Perfluorodecanoic acid	0.0075	0.0070	93	40-150
2058-94-8	Perfluoroundecanoic acid	0.0075	0.0083	111	40-150
307-55-1	Perfluorododecanoic acid	0.0075	0.0082	109	40-150
72629-94-8	Perfluorotridecanoic acid	0.0075	0.0073	97	40-150
376-06-7	Perfluorotetradecanoic acid	0.0075	0.0082	109	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00665	0.0072	108	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00706	0.0080	113	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00686	0.0067	98	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00715	0.0083	116	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00696	0.0075	108	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00722	0.0079	109	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00724	0.0083	115	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00728	0.0068	93	40-150
757124-72-44:2	Fluorotelomer sulfonate	0.0281	0.0288	102	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0285	0.0319	112	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0288	0.0362	126	40-150
754-91-6	PFOSA	0.0075	0.0082	109	40-150
31506-32-8	MeFOSA	0.015	0.0144	96	40-150
4151-50-2	EtFOSA	0.015	0.0169	113	40-150
2355-31-9	MeFOSAA	0.0075	0.0077	103	40-150
2991-50-6	EtFOSAA	0.0075	0.0093	124	40-150
24448-09-7	MeFOSE	0.0375	0.0376	100	40-150
1691-99-2	EtFOSE	0.0375	0.0353	94	40-150
13252-13-6	HFPO-DA (GenX)	0.015	0.0161	107	40-150
919005-14-4	ADONA	0.0142	0.0149	105	40-150
377-73-1	PFMPA	0.015	0.0154	103	40-150
863090-89-5	PFMBA	0.015	0.0158	105	40-150
151772-58-6	NFDHA	0.015	0.0165	110	40-150
756426-58-19	Cl-PF3ONS (F-53B Major)	0.014	0.0134	96	40-150
763051-92-91	Cl-PF3OUdS (F-53B Minor)	0.0142	0.0142	100	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8731
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98526-LLBS	4Q49343.D	1	08/23/23	MV	08/19/23	OP98526	S4Q723

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC8731-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0134	0.0140	105	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.0375	0.0307	82	40-150
914637-49-35:3	Fluorotelomer carboxylate	0.188	0.189	101	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.188	0.197	105	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	119%	20-150%
	13C5-PFPeA	121%	20-150%
	13C5-PFHxA	120%	20-150%
	13C4-PFHpA	125%	20-150%
	13C8-PFOA	121%	20-150%
	13C9-PFNA	130%	20-150%
	13C6-PFDA	129%	20-150%
	13C7-PFUnDA	119%	20-150%
	13C2-PFDoDA	117%	20-150%
	13C2-PFTeDA	104%	20-150%
	13C3-PFBS	117%	20-150%
	13C3-PFHxS	113%	20-150%
	13C8-PFOS	117%	20-150%
	13C8-FOSA	90%	20-150%
	d3-MeFOSA	93%	20-150%
	d5-EtFOSA	87%	20-150%
	d3-MeFOSAA	112%	20-150%
	d5-EtFOSAA	114%	20-150%
	d7-MeFOSE	76%	20-150%
	d9-EtFOSE	86%	20-150%
	13C2-4:2FTS	129%	20-180%
	13C2-6:2FTS	131%	20-180%
	13C2-8:2FTS	105%	20-180%
	13C3-HFPO-DA	117%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8731
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98526-BS	4Q49342.D	1	08/23/23	MV	08/19/23	OP98526	S4Q723

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC8731-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.119	119	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0596	119	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0292	117	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0287	115	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0280	112	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0280	112	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0279	112	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0323	129	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0290	116	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0276	110	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0321	128	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0243	110	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0295	125	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0286	125	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0283	119	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0271	117	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0288	120	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0269	112	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0240	99	40-150
757124-72-44:2	Fluorotelomer sulfonate	0.0938	0.108	115	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.100	105	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.128	133	40-150
754-91-6	PFOSA	0.025	0.0316	126	40-150
31506-32-8	MeFOSA	0.05	0.0570	114	40-150
4151-50-2	EtFOSA	0.05	0.0554	111	40-150
2355-31-9	MeFOSAA	0.025	0.0284	114	40-150
2991-50-6	EtFOSAA	0.025	0.0277	111	40-150
24448-09-7	MeFOSE	0.125	0.135	108	40-150
1691-99-2	EtFOSE	0.125	0.132	106	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0577	115	40-150
919005-14-4	ADONA	0.0473	0.0578	122	40-150
377-73-1	PFMPA	0.05	0.0261	52	40-150
863090-89-5	PFMBA	0.05	0.0600	120	40-150
151772-58-6	NFDHA	0.05	0.0574	115	40-150
756426-58-19	Cl-PF3ONS (F-53B Major)	0.0468	0.0555	119	40-150
763051-92-91	Cl-PF3OUdS (F-53B Minor)	0.0473	0.0509	108	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC8731
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98526-BS	4Q49342.D	1	08/23/23	MV	08/19/23	OP98526	S4Q723

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC8731-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0522	117	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.242	194*	40-150
914637-49-35:3	Fluorotelomer carboxylate	0.625	0.712	114	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.743	119	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	26%	20-150%
	13C5-PFPeA	112%	20-150%
	13C5-PFHxA	118%	20-150%
	13C4-PFHpA	123%	20-150%
	13C8-PFOA	116%	20-150%
	13C9-PFNA	121%	20-150%
	13C6-PFDA	120%	20-150%
	13C7-PFUnDA	112%	20-150%
	13C2-PFDoDA	114%	20-150%
	13C2-PFTeDA	90%	20-150%
	13C3-PFBS	126%	20-150%
	13C3-PFHxS	114%	20-150%
	13C8-PFOS	119%	20-150%
	13C8-FOSA	96%	20-150%
	d3-MeFOSA	100%	20-150%
	d5-EtFOSA	96%	20-150%
	d3-MeFOSAA	116%	20-150%
	d5-EtFOSAA	122%	20-150%
	d7-MeFOSE	87%	20-150%
	d9-EtFOSE	93%	20-150%
	13C2-4:2FTS	129%	20-180%
	13C2-6:2FTS	145%	20-180%
	13C2-8:2FTS	118%	20-180%
	13C3-HFPO-DA	113%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC8731
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98526-MS	4Q49350.D	1	08/23/23	MV	08/19/23	OP98526	S4Q723
FC8240-7	4Q49349.D	1	08/23/23	MV	08/19/23	OP98526	S4Q723

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC8731-1

CAS No.	Compound	FC8240-7 ug/l	Spike Q	MS ug/l	MS %	Limits	
375-22-4	Perfluorobutanoic acid	0.0435		0.0926	0.152	117	40-150
2706-90-3	Perfluoropentanoic acid	0.0213		0.0463	0.0765	119	40-150
307-24-4	Perfluorohexanoic acid	0.0017	J	0.0231	0.0275	111	40-150
375-85-9	Perfluoroheptanoic acid	0.0037	U	0.0231	0.0267	115	40-150
335-67-1	Perfluorooctanoic acid	0.0037	U	0.0231	0.0269	116	40-150
375-95-1	Perfluorononanoic acid	0.0037	U	0.0231	0.0278	120	40-150
335-76-2	Perfluorodecanoic acid	0.0037	U	0.0231	0.0260	112	40-150
2058-94-8	Perfluoroundecanoic acid	0.0037	U	0.0231	0.0283	122	40-150
307-55-1	Perfluorododecanoic acid	0.0037	U	0.0231	0.0288	124	40-150
72629-94-8	Perfluorotridecanoic acid	0.0037	U	0.0231	0.0266	115	40-150
376-06-7	Perfluorotetradecanoic acid	0.0037	U	0.0231	0.0261	113	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0037	U	0.0205	0.0242	118	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0046	U	0.0218	0.0280	129	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0037	U	0.0212	0.0270	128	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0037	U	0.0221	0.0302	137	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0037	U	0.0215	0.0278	129	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0037	U	0.0223	0.0287	129	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0037	U	0.0223	0.0274	123	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0046	U	0.0225	0.0247	110	40-150
757124-72-44:2	Fluorotelomer sulfonate	0.019	U	0.0868	0.101	116	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.019	U	0.088	0.0933	106	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.019	U	0.0889	0.115	129	40-150
754-91-6	PFOSA	0.0037	U	0.0231	0.0279	121	40-150
31506-32-8	MeFOSA	0.0074	U	0.0463	0.0506	109	40-150
4151-50-2	EtFOSA	0.0074	U	0.0463	0.0557	120	40-150
2355-31-9	MeFOSAA	0.0046	U	0.0231	0.0257	111	40-150
2991-50-6	EtFOSAA	0.0046	U	0.0231	0.0243	105	40-150
24448-09-7	MeFOSE	0.037	U	0.116	0.131	113	40-150
1691-99-2	EtFOSE	0.037	U	0.116	0.130	112	40-150
13252-13-6	HFPO-DA (GenX)	0.0037	U	0.0463	0.0525	113	40-150
919005-14-4	ADONA	0.0074	U	0.0438	0.0540	123	40-150
377-73-1	PFMPA	0.0074	U	0.0463	0.0440	95	40-150
863090-89-5	PFMBA	0.0074	U	0.0463	0.0528	114	40-150
151772-58-6	NFDHA	0.0074	U	0.0463	0.0475	103	40-150
756426-58-19	Cl-PF3ONS (F-53B Major)	0.0074	U	0.0433	0.0488	113	40-150
763051-92-91	Cl-PF3OUdS (F-53B Minor)	0.0074	U	0.0438	0.0468	107	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC8731
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98526-MS	4Q49350.D	1	08/23/23	MV	08/19/23	OP98526	S4Q723
FC8240-7	4Q49349.D	1	08/23/23	MV	08/19/23	OP98526	S4Q723

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC8731-1

CAS No.	Compound	FC8240-7 ug/l	Spike Q	MS ug/l	MS %	Limits
113507-82-7	PFEESA	0.0074 U	0.0412	0.0449	109	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.019 U	0.116	0.162	140	40-150
914637-49-35:3	Fluorotelomer carboxylate	0.093 U	0.579	0.618	107	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.093 U	0.579	0.657	114	40-150

CAS No.	ID Standard Recoveries	MS	FC8240-7	Limits
	13C4-PFBA	58%	69%	20-150%
	13C5-PFPeA	115%	117%	20-150%
	13C5-PFHxA	119%	119%	20-150%
	13C4-PFHpA	117%	120%	20-150%
	13C8-PFOA	112%	114%	20-150%
	13C9-PFNA	105%	115%	20-150%
	13C6-PFDA	118%	117%	20-150%
	13C7-PFUnDA	113%	104%	20-150%
	13C2-PFDoDA	109%	94%	20-150%
	13C2-PFTeDA	98%	90%	20-150%
	13C3-PFBS	120%	120%	20-150%
	13C3-PFHxS	106%	110%	20-150%
	13C8-PFOS	95%	99%	20-150%
	13C8-FOSA	83%	85%	20-150%
	d3-MeFOSA	92%		20-150%
	d5-EtFOSA	82%		20-150%
	d3-MeFOSAA	99%	102%	20-150%
	d5-EtFOSAA	110%	104%	20-150%
	d7-MeFOSE	79%		20-150%
	d9-EtFOSE	81%		20-150%
	13C2-4:2FTS	123%	137%	20-180%
	13C2-6:2FTS	137%	138%	20-180%
	13C2-8:2FTS	111%	122%	20-180%
	13C3-HFPO-DA	108%		20-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC8731
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98526-DUP	4Q49355.D	1	08/23/23	MV	08/19/23	OP98526	S4Q723
FC8240-8	4Q49354.D	1	08/23/23	MV	08/19/23	OP98526	S4Q723

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC8731-1

CAS No.	Compound	FC8240-8 ug/l	DUP Q	ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	0.0422		0.0445		5	30
2706-90-3	Perfluoropentanoic acid	0.0129		0.0145		12	30
307-24-4	Perfluorohexanoic acid	0.0031	J	0.0039		23	30
375-85-9	Perfluoroheptanoic acid	0.0037	U	ND		nc	30
335-67-1	Perfluorooctanoic acid	0.0037	U	ND		nc	30
375-95-1	Perfluorononanoic acid	0.0037	U	ND		nc	30
335-76-2	Perfluorodecanoic acid	0.0037	U	ND		nc	30
2058-94-8	Perfluoroundecanoic acid	0.0037	U	ND		nc	30
307-55-1	Perfluorododecanoic acid	0.0037	U	ND		nc	30
72629-94-8	Perfluorotridecanoic acid	0.0037	U	ND		nc	30
376-06-7	Perfluorotetradecanoic acid	0.0037	U	ND		nc	30
375-73-5	Perfluorobutanesulfonic acid	0.0011	J	0.0010	J	10	30
2706-91-4	Perfluoropentanesulfonic acid	0.0046	U	ND		nc	30
355-46-4	Perfluorohexanesulfonic acid	0.0037	U	ND		nc	30
375-92-8	Perfluoroheptanesulfonic acid	0.0037	U	ND		nc	30
1763-23-1	Perfluorooctanesulfonic acid	0.0037	U	ND		nc	30
68259-12-1	Perfluorononanesulfonic acid	0.0037	U	ND		nc	30
335-77-3	Perfluorodecanesulfonic acid	0.0037	U	ND		nc	30
79780-39-5	Perfluorododecanesulfonic aci	0.0046	U	ND		nc	30
757124-72-44:2	Fluorotelomer sulfonate	0.019	U	ND		nc	30
27619-97-2	6:2 Fluorotelomer sulfonate	0.019	U	ND		nc	30
39108-34-4	8:2 Fluorotelomer sulfonate	0.019	U	ND		nc	30
754-91-6	PFOSA	0.0037	U	ND		nc	30
31506-32-8	MeFOSA	0.0074	U	ND		nc	30
4151-50-2	EtFOSA	0.0074	U	ND		nc	30
2355-31-9	MeFOSAA	0.0046	U	ND		nc	30
2991-50-6	EtFOSAA	0.0046	U	ND		nc	30
24448-09-7	MeFOSE	0.037	U	ND		nc	30
1691-99-2	EtFOSE	0.037	U	ND		nc	30
13252-13-6	HFPO-DA (GenX)	0.0037	U	ND		nc	30
919005-14-4	ADONA	0.0074	U	ND		nc	30
377-73-1	PFMPA	0.0074	U	ND		nc	30
863090-89-5	PFMBA	0.0074	U	ND		nc	30
151772-58-6	NFDHA	0.0074	U	ND		nc	30
756426-58-19	Cl-PF3ONS (F-53B Major)	0.0074	U	ND		nc	30
763051-92-91	Cl-PF3OUdS (F-53B Minor)	0.0074	U	ND		nc	30

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC8731
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP98526-DUP	4Q49355.D	1	08/23/23	MV	08/19/23	OP98526	S4Q723
FC8240-8	4Q49354.D	1	08/23/23	MV	08/19/23	OP98526	S4Q723

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC8731-1

CAS No.	Compound	FC8240-8 ug/l	DUP Q ug/l	Q	RPD	Limits
113507-82-7	PFEESA	0.0074 U	ND		nc	30
356-02-5	3:3 Fluorotelomer carboxylate	0.019 U	ND		nc	30
914637-49-35:3	Fluorotelomer carboxylate	0.093 U	ND		nc	30
812-70-4	7:3 Fluorotelomer carboxylate	0.093 U	ND		nc	30

CAS No.	ID Standard Recoveries	DUP	FC8240-8	Limits
	13C4-PFBA	62%	62%	20-150%
	13C5-PFPeA	114%	120%	20-150%
	13C5-PFHxA	115%	120%	20-150%
	13C4-PFHpA	118%	122%	20-150%
	13C8-PFOA	112%	119%	20-150%
	13C9-PFNA	109%	111%	20-150%
	13C6-PFDA	115%	105%	20-150%
	13C7-PFUnDA	110%	92%	20-150%
	13C2-PFDoDA	100%	89%	20-150%
	13C2-PFTeDA	95%	87%	20-150%
	13C3-PFBS	114%	121%	20-150%
	13C3-PFHxS	106%	116%	20-150%
	13C8-PFOS	99%	101%	20-150%
	13C8-FOSA	74%	95%	20-150%
	d3-MeFOSA	82%		20-150%
	d5-EtFOSA	85%		20-150%
	d3-MeFOSAA	97%	99%	20-150%
	d5-EtFOSAA	104%	102%	20-150%
	d7-MeFOSE	76%		20-150%
	d9-EtFOSE	79%		20-150%
	13C2-4:2FTS	122%	119%	20-180%
	13C2-6:2FTS	132%	137%	20-180%
	13C2-8:2FTS	114%	121%	20-180%
	13C3-HFPO-DA	105%		20-150%

* = Outside of Control Limits.