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Automated Report

Technical Report for

AECOM, INC.

N6274223F0104 RH Fire Suppression System

60697810

SGS Job Number: FC11222

Sampling Date: 11/10/23



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: 36



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: Terri McNulty-Patterson 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: FC11222

N6274223F0104 RH Fire Suppression System
Project No: 60697810

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
FC11222-1	11/10/23	10:15 JVMV	11/14/23	AQ	Ground Water	AF-RHMW03-WGN01LF-2311
FC11222-2	11/10/23	11:25 MG	11/14/23	AQ	Ground Water	AF-RHMW10-WGN01LF-2311

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: AECOM, INC.

Job No: FC11222

Site: N6274223F0104 RH Fire Suppression System

Report Date 11/21/2023 5:02:57 P

On 11/14/2023, 2 Sample(s), 0 Trip Blank(s), 0 Equip. Blank(s) and 0 Field Blank(s) were received at SGS North America Inc - Orlando. at a maximum corrected temperature of 3.8 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. - Orlando Job Number of FC11222 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: OP162
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- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) FC11200-1MS 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.

Summary of Hits

Job Number: FC11222
Account: AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System
Collected: 11/10/23



Lab Sample ID	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
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FC11222-1 **AF-RHMW03-WGN01LF-2311**

Perfluoroheptanoic acid	0.92 J	3.8	1.9	ng/l	EPA DRAFT 1633
6:2 Fluorotelomer sulfonate	7.2 J	19	7.5	ng/l	EPA DRAFT 1633

FC11222-2 **AF-RHMW10-WGN01LF-2311**

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	AF-RHMW03-WGN01LF-2311		
Lab Sample ID:	FC11222-1	Date Sampled:	11/10/23
Matrix:	AQ - Ground Water	Date Received:	11/14/23
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	6Q28595.D	1	11/20/23 12:45	NG	11/17/23 08:30	OP162	S6Q396
Run #2							

Run #	Initial Volume	Final Volume
Run #1	530 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	3.8 U	15	3.8	1.8	ng/l	
2706-90-3	Perfluoropentanoic acid	1.9 U	7.5	1.9	0.89	ng/l	
307-24-4	Perfluorohexanoic acid	1.9 U	3.8	1.9	0.47	ng/l	
375-85-9	Perfluoroheptanoic acid	0.92	3.8	1.9	0.47	ng/l	J
335-67-1	Perfluorooctanoic acid	0.94 U	3.8	0.94	0.47	ng/l	
375-95-1	Perfluorononanoic acid	1.9 U	3.8	1.9	0.58	ng/l	
335-76-2	Perfluorodecanoic acid	1.9 U	3.8	1.9	0.47	ng/l	
2058-94-8	Perfluoroundecanoic acid	1.9 U	3.8	1.9	0.57	ng/l	
307-55-1	Perfluorododecanoic acid	1.9 U	3.8	1.9	0.57	ng/l	
72629-94-8	Perfluorotridecanoic acid	1.9 U	3.8	1.9	0.79	ng/l	
376-06-7	Perfluorotetradecanoic acid	1.9 U	3.8	1.9	0.47	ng/l	

PERFLUOROALKYL SULFONIC ACIDS

375-73-5	Perfluorobutanesulfonic acid	1.9 U	3.8	1.9	0.47	ng/l	
2706-91-4	Perfluoropentanesulfonic acid	3.8 U	4.7	3.8	1.1	ng/l	
355-46-4	Perfluorohexanesulfonic acid	1.9 U	3.8	1.9	0.66	ng/l	
375-92-8	Perfluoroheptanesulfonic acid	1.9 U	3.8	1.9	0.47	ng/l	
1763-23-1	Perfluorooctanesulfonic acid	1.9 U	3.8	1.9	0.51	ng/l	
68259-12-1	Perfluorononanesulfonic acid	1.9 U	3.8	1.9	0.54	ng/l	
335-77-3	Perfluorodecanesulfonic acid	1.9 U	3.8	1.9	0.60	ng/l	
79780-39-5	Perfluorododecanesulfonic aci	3.8 U	4.7	3.8	1.1	ng/l	

FLUOROTELOMER SULFONIC ACIDS

757124-72-4	4:2 Fluorotelomer sulfonate	7.5 U	19	7.5	3.0	ng/l	
27619-97-2	6:2 Fluorotelomer sulfonate	7.2	19	7.5	3.3	ng/l	J
39108-34-4	8:2 Fluorotelomer sulfonate	7.5 U	19	7.5	3.9	ng/l	

PERFLUOROOCCTANE SULFONAMIDES

754-91-6	PFOSA	1.9 U	3.8	1.9	0.63	ng/l	
31506-32-8	MeFOSA	3.8 U	7.5	3.8	0.94	ng/l	
4151-50-2	EtFOSA	3.8 U	7.5	3.8	0.94	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

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Report of Analysis

Client Sample ID:	AF-RHMW03-WGN01LF-2311		
Lab Sample ID:	FC11222-1	Date Sampled:	11/10/23
Matrix:	AQ - Ground Water	Date Received:	11/14/23
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	3.8 U	4.7	3.8	0.94	ng/l	
2991-50-6	EtFOSAA	3.8 U	4.7	3.8	1.3	ng/l	

PERFLUOROOCCTANE SULFONAMIDO ETHANOLS

24448-09-7	MeFOSE	19 U	38	19	4.1	ng/l	
1691-99-2	EtFOSE	19 U	38	19	7.0	ng/l	

PER and POLYFLUOROETHER CARBOXYLIC ACIDS

13252-13-6	HFPO-DA (GenX)	1.9 U	3.8	1.9	0.94	ng/l	
919005-14-4	ADONA	3.8 U	7.5	3.8	1.8	ng/l	
377-73-1	PFMPA	1.9 U	7.5	1.9	0.94	ng/l	
863090-89-5	PFMBA	3.8 U	7.5	3.8	1.1	ng/l	
151772-58-6	NFDHA	3.8 U	7.5	3.8	1.1	ng/l	

PER and POLYFLUOROETHER SULFONIC ACIDS

756426-58-1	9Cl-PF3ONS (F-53B Major)	3.8 U	7.5	3.8	1.3	ng/l	
763051-92-9	11Cl-PF3OUdS (F-53B Minor)	3.8 U	7.5	3.8	1.7	ng/l	
113507-82-7	PFEESA	1.9 U	7.5	1.9	0.74	ng/l	

FLUOROTELOMER CARBOXYLIC ACIDS

356-02-5	3:3 Fluorotelomer carboxylate	9.4 U	19	9.4	4.3	ng/l	
914637-49-3	5:3 Fluorotelomer carboxylate	19 U	94	19	8.2	ng/l	
812-70-4	7:3 Fluorotelomer carboxylate	19 U	94	19	7.4	ng/l	

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
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	13C4-PFBA	100%		20-150%
	13C5-PFPeA	109%		20-150%
	13C5-PFHxA	107%		20-150%
	13C4-PFHpA	111%		20-150%
	13C8-PFOA	103%		20-150%
	13C9-PFNA	104%		20-150%
	13C6-PFDA	94%		20-150%
	13C7-PFUnDA	76%		20-150%
	13C2-PFDoDA	77%		20-150%
	13C2-PFTeDA	76%		20-150%
	13C3-PFBS	102%		20-150%
	13C3-PFHxS	110%		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-RHMW03-WGN01LF-2311	
Lab Sample ID:	FC11222-1	Date Sampled: 11/10/23
Matrix:	AQ - Ground Water	Date Received: 11/14/23
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	92%		20-150%
	13C8-FOSA	75%		20-150%
	d3-MeFOSA	72%		20-150%
	d5-EtFOSA	77%		20-150%
	d3-MeFOSAA	91%		20-150%
	d5-EtFOSAA	86%		20-150%
	d7-MeFOSE	76%		20-150%
	d9-EtFOSE	83%		20-150%
	13C2-4:2FTS	112%		20-180%
	13C2-6:2FTS	104%		20-180%
	13C2-8:2FTS	96%		20-180%
	13C3-HFPO-DA	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-RHMW10-WGN01LF-2311		
Lab Sample ID:	FC11222-2	Date Sampled:	11/10/23
Matrix:	AQ - Ground Water	Date Received:	11/14/23
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	6Q28596.D	1	11/20/23 12:59	NG	11/17/23 08:30	OP162	S6Q396
Run #2							

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

CAS No. Compound Result LOQ LOD DL Units Q

PERFLUOROALKYL CARBOXYLIC ACIDS

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

PERFLUOROALKYL SULFONIC ACIDS

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

FLUOROTELOMER SULFONIC ACIDS

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

PERFLUOROOCCTANE SULFONAMIDES

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

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

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Report of Analysis

Client Sample ID:	AF-RHMW10-WGN01LF-2311	
Lab Sample ID:	FC11222-2	Date Sampled: 11/10/23
Matrix:	AQ - Ground Water	Date Received: 11/14/23
Method:	EPA DRAFT 1633 EPA 1633 DRAFT	Percent Solids: n/a
Project:	N6274223F0104 RH Fire Suppression System	

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

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

PERFLUOROOCCTANE SULFONAMIDO ETHANOLS

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

PER and POLYFLUOROETHER CARBOXYLIC ACIDS

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

PER and POLYFLUOROETHER SULFONIC ACIDS

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

FLUOROTELOMER CARBOXYLIC ACIDS

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

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
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	13C4-PFBA	109%		20-150%
	13C5-PFPeA	113%		20-150%
	13C5-PFHxA	113%		20-150%
	13C4-PFHpA	115%		20-150%
	13C8-PFOA	99%		20-150%
	13C9-PFNA	106%		20-150%
	13C6-PFDA	108%		20-150%
	13C7-PFUnDA	102%		20-150%
	13C2-PFDoDA	102%		20-150%
	13C2-PFTeDA	98%		20-150%
	13C3-PFBS	107%		20-150%
	13C3-PFHxS	114%		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-RHMW10-WGN01LF-2311		Date Sampled: 11/10/23
Lab Sample ID: FC11222-2		Date Received: 11/14/23
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: EPA DRAFT 1633 EPA 1633 DRAFT		
Project: N6274223F0104 RH Fire Suppression System		

CAS No.	ID Standard Recoveries	Run# 1	Run# 2	Limits
	13C8-PFOS	105%		20-150%
	13C8-FOSA	83%		20-150%
	d3-MeFOSA	76%		20-150%
	d5-EtFOSA	83%		20-150%
	d3-MeFOSAA	104%		20-150%
	d5-EtFOSAA	107%		20-150%
	d7-MeFOSE	87%		20-150%
	d9-EtFOSE	95%		20-150%
	13C2-4:2FTS	115%		20-180%
	13C2-6:2FTS	118%		20-180%
	13C2-8:2FTS	110%		20-180%
	13C3-HFPO-DA	117%		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



SGS North America Inc - Orlando
Chain of Custody

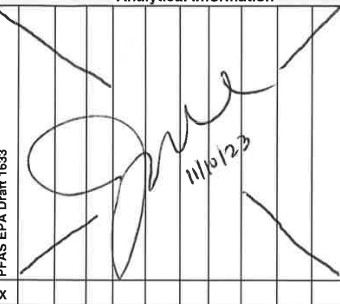
4405 Vineland Road, Suite C-15 Orlando, FL 32811
TEL: 407-425-6700 FAX: 407-425-0707
www.sgs.com

FC11222

COC #: 2311AFSG02

SGS - ORLANDO JOB # :

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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 OL - 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 Project Manager: Watson Tanji Phone #: 303-796-4624 / 808-954-4512		Email: katie.abbott@aecom.com Email: watson.tanji@aecom.com						Project # 23F0104 - 60697810	
Sampler(s) Name(s) (Printed) Sampler 1: <i>WJ</i>		Sampler 2: <i>MV</i>						Fax #	
Field ID / Point of Collection		DATE		TIME		SAMPLED BY:			
SGS Orlando Sample #	AF-RHMW03-WGN01LF-2311	11/023	1015	<i>WJ MY</i>	GW	3	X		
Turnaround Time (Business days)		Data Deliverable Information		Comments / Remarks					
10 Day (Business) 7 Day <input checked="" type="checkbox"/> 5 Day 3 Day RUSH 2 Day RUSH 1 Day RUSH Other		Approved By: / Date: <input type="checkbox"/> COMMERCIAL "A" (RESULTS ONLY) <input type="checkbox"/> COMMERCIAL "B" (RESULTS PLUS QC) <input type="checkbox"/> REDT1 (EPA LEVEL 3) <input checked="" type="checkbox"/> FULLT1 (EPA LEVEL 4) <input checked="" type="checkbox"/> EDD'S		EDMS upload database: JBPHE EDMS Coverage: AFFF Assessment Sampling GW United ANB: 010-29029301 INITIAL ASSESSMENT <i>ZD</i> LABEL VERIFICATION <i>ZD</i> 3.4 ERI					
Rush T/A Data Available VIA Email or Lablink									
Sample Custody must be documented below each time samples change possession, including courier delivery.									
Relinquished by Sampler/Affiliation	Date Time	Received By/Affiliation	Relinquished By/Affiliation	Date Time	Received By/Affiliation	Relinquished By/Affiliation	Date Time		
1 <i>Watson Tanji / AECOM</i>	11/10/23 1250	2 <i>Ellie Shimatsu</i>	3 <i>Ellie Shimatsu AECOM</i>	11/10/23 1510	4 <i>ZB</i>	5 <i>ZB</i>	11/14/23 1700		
Relinquished by/Affiliation	Date Time	Received By/Affiliation	Relinquished By/Affiliation	Date Time	Received By/Affiliation	Relinquished By/Affiliation	Date Time		
5		6	7		8				

PFAS_COCs_ALL_10022023.xls Rev 031318

FC11222: Chain of Custody

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SGS Sample Receipt Summary

Job Number: fc11222

Client: AECOM

Project: N6274223F0104 RH Fire Suppression Syst

Date / Time Received: 11/14/2023 5:00:00 PM

Delivery Method: United Cargo/Airspace

Airbill #'s: United Cargo AWB #: 016-29629331

Cooler Temps (Raw Measured) °C: Cooler 1: (3.4);

Cooler Temps (Corrected) °C: Cooler 1: (3.8);

Cooler Informatio

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

Trip Blank Information

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

	<u>W</u>	<u>or</u>	<u>S</u>	<u>N/A</u>
3. Type of TB Received	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sample Information

	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Samples presented properly	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
3. Sufficient volume/containers recv'd for analysi	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Condition of sample:			Intact	
5. Sample recv'd within HT	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
6. Dates/Times/IDs on COC match sample labe	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
7. VOCs have headspace	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
9. Compositing instructions clear	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Voa Soil Kits/Jars received past 48hrs?	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. % Solids Jar Received?	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Residual Chlorine Present?	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Misc Information

Number of Encores: 25 Gram	5 Gram	Number of Lab Filtered Metals
Test Strip Lot #: pH 0-3: <u>226422</u>	pH 10-12: _____	Other: (Specify) pH 1.0 - 12.0 <u>222221</u>
Residual Chlorine Test Strip Lot: _____		

Comments

SM001

Rev. Date 05/04/17

Technician: ZANEB

Date: 11/14/2023 5:00:00 PM

Reviewer: ZD

Date: 11/14/2023

FC11222: Chain of Custody

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QC Evaluation: DOD QSM5.x Limits

Job Number: FC11222
Account: AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System
Collected: 11/10/23

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 FC11222

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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: FC11222
Account: AECOMCOD AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q396-IBLK	6Q28589.D	1	11/20/23	NG	n/a	n/a	S6Q396

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC11222-1, FC11222-2

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

Instrument Blank

Job Number: FC11222
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q396-IBLK	6Q28589.D	1	11/20/23	NG	n/a	n/a	S6Q396

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC11222-1, FC11222-2

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	100% 20-150%
	13C8-PFOA	100% 20-150%
	13C9-PFNA	98% 20-150%
	13C6-PFDA	95% 20-150%
	13C7-PFUnDA	91% 20-150%
	13C2-PFDoDA	96% 20-150%
	13C2-PFTeDA	111% 20-150%
	13C3-PFBS	103% 20-150%
	13C3-PFHxS	98% 20-150%
	13C8-PFOS	100% 20-150%
	13C8-FOSA	105% 20-150%
	d3-MeFOSA	98% 20-150%
	d5-EtFOSA	101% 20-150%
	d3-MeFOSAA	84% 20-150%
	d5-EtFOSAA	92% 20-150%
	d7-MeFOSE	125% 20-150%
	d9-EtFOSE	125% 20-150%
	13C2-4:2FTS	103% 20-180%
	13C2-6:2FTS	88% 20-180%
	13C2-8:2FTS	81% 20-180%
	13C3-HFPO-DA	105% 20-150%

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Instrument Blank

Job Number: FC11222
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q396-IBLK	6Q28684.D	1	11/21/23	NG	n/a	n/a	S6Q396

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC11222-1, FC11222-2

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

Instrument Blank

Job Number: FC11222
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q396-IBLK	6Q28684.D	1	11/21/23	NG	n/a	n/a	S6Q396

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC11222-1, FC11222-2

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

CAS No.	ID Standard Recoveries	Limits
	13C4-PFBA	101% 20-150%
	13C5-PFPeA	102% 20-150%
	13C5-PFHxA	102% 20-150%
	13C4-PFHpA	100% 20-150%
	13C8-PFOA	101% 20-150%
	13C9-PFNA	104% 20-150%
	13C6-PFDA	103% 20-150%
	13C7-PFUnDA	94% 20-150%
	13C2-PFDoDA	103% 20-150%
	13C2-PFTeDA	105% 20-150%
	13C3-PFBS	99% 20-150%
	13C3-PFHxS	102% 20-150%
	13C8-PFOS	103% 20-150%
	13C8-FOSA	104% 20-150%
	d3-MeFOSA	95% 20-150%
	d5-EtFOSA	103% 20-150%
	d3-MeFOSAA	105% 20-150%
	d5-EtFOSAA	107% 20-150%
	d7-MeFOSE	100% 20-150%
	d9-EtFOSE	96% 20-150%
	13C2-4:2FTS	116% 20-180%
	13C2-6:2FTS	107% 20-180%
	13C2-8:2FTS	103% 20-180%
	13C3-HFPO-DA	106% 20-150%

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Method Blank Summary

Job Number: FC11222
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP162-MB	6Q28594.D	1	11/20/23	NG	11/17/23	OP162	S6Q396

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC11222-1, FC11222-2

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: FC11222
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP162-MB	6Q28594.D	1	11/20/23	NG	11/17/23	OP162	S6Q396

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC11222-1, FC11222-2

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	118% 20-150%
	13C5-PFPeA	112% 20-150%
	13C5-PFHxA	112% 20-150%
	13C4-PFHpA	117% 20-150%
	13C8-PFOA	110% 20-150%
	13C9-PFNA	112% 20-150%
	13C6-PFDA	126% 20-150%
	13C7-PFUnDA	118% 20-150%
	13C2-PFDoDA	118% 20-150%
	13C2-PFTeDA	117% 20-150%
	13C3-PFBS	106% 20-150%
	13C3-PFHxS	107% 20-150%
	13C8-PFOS	114% 20-150%
	13C8-FOSA	67% 20-150%
	d3-MeFOSA	65% 20-150%
	d5-EtFOSA	81% 20-150%
	d3-MeFOSAA	112% 20-150%
	d5-EtFOSAA	106% 20-150%
	d7-MeFOSE	71% 20-150%
	d9-EtFOSE	86% 20-150%
	13C2-4:2FTS	112% 20-180%
	13C2-6:2FTS	118% 20-180%
	13C2-8:2FTS	115% 20-180%
	13C3-HFPO-DA	118% 20-150%

Continuing Calibration Blank

Job Number: FC11222
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q396-ICCB	6Q28680.D	1	11/21/23	NG	n/a	n/a	S6Q396

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

S6Q396-IBLK

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

Continuing Calibration Blank

Job Number: FC11222
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q396-ICCB	6Q28680.D	1	11/21/23	NG	n/a	n/a	S6Q396

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

S6Q396-IBLK

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

CAS No.	ID Standard Recoveries	Limits
	13C4-PFBA	103% 20-150%
	13C5-PFPeA	99% 20-150%
	13C5-PFHxA	103% 20-150%
	13C4-PFHpA	104% 20-150%
	13C8-PFOA	99% 20-150%
	13C9-PFNA	102% 20-150%
	13C6-PFDA	100% 20-150%
	13C7-PFUnDA	96% 20-150%
	13C2-PFDoDA	95% 20-150%
	13C2-PFTeDA	103% 20-150%
	13C3-PFBS	97% 20-150%
	13C3-PFHxS	103% 20-150%
	13C8-PFOS	97% 20-150%
	13C8-FOSA	100% 20-150%
	d3-MeFOSA	92% 20-150%
	d5-EtFOSA	94% 20-150%
	d3-MeFOSAA	99% 20-150%
	d5-EtFOSAA	104% 20-150%
	d7-MeFOSE	97% 20-150%
	d9-EtFOSE	93% 20-150%
	13C2-4:2FTS	121% 20-180%
	13C2-6:2FTS	120% 20-180%
	13C2-8:2FTS	109% 20-180%
	13C3-HFPO-DA	103% 20-150%

Continuing Calibration Blank

Job Number: FC11222
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q396-ICCB	6Q28695.D	1	11/21/23	NG	n/a	n/a	S6Q396

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

S6Q396-IBLK

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

Continuing Calibration Blank

Job Number: FC11222
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
S6Q396-ICCB	6Q28695.D	1	11/21/23	NG	n/a	n/a	S6Q396

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

S6Q396-IBLK

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

CAS No.	ID Standard Recoveries	Limits
	13C4-PFBA	102% 20-150%
	13C5-PFPeA	97% 20-150%
	13C5-PFHxA	101% 20-150%
	13C4-PFHpA	103% 20-150%
	13C8-PFOA	98% 20-150%
	13C9-PFNA	102% 20-150%
	13C6-PFDA	98% 20-150%
	13C7-PFUnDA	95% 20-150%
	13C2-PFDoDA	96% 20-150%
	13C2-PFTeDA	102% 20-150%
	13C3-PFBS	93% 20-150%
	13C3-PFHxS	97% 20-150%
	13C8-PFOS	87% 20-150%
	13C8-FOSA	96% 20-150%
	d3-MeFOSA	91% 20-150%
	d5-EtFOSA	95% 20-150%
	d3-MeFOSAA	97% 20-150%
	d5-EtFOSAA	104% 20-150%
	d7-MeFOSE	90% 20-150%
	d9-EtFOSE	88% 20-150%
	13C2-4:2FTS	116% 20-180%
	13C2-6:2FTS	112% 20-180%
	13C2-8:2FTS	114% 20-180%
	13C3-HFPO-DA	101% 20-150%

Blank Spike Summary

Job Number: FC11222
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP162-LLBS	6Q28593.D	1	11/20/23	NG	11/17/23	OP162	S6Q396

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC11222-1, FC11222-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.03	0.0334	111	40-150
2706-90-3	Perfluoropentanoic acid	0.015	0.0170	113	40-150
307-24-4	Perfluorohexanoic acid	0.0075	0.0079	105	40-150
375-85-9	Perfluoroheptanoic acid	0.0075	0.0077	103	40-150
335-67-1	Perfluorooctanoic acid	0.0075	0.0084	112	40-150
375-95-1	Perfluorononanoic acid	0.0075	0.0081	108	40-150
335-76-2	Perfluorodecanoic acid	0.0075	0.0078	104	40-150
2058-94-8	Perfluoroundecanoic acid	0.0075	0.0085	113	40-150
307-55-1	Perfluorododecanoic acid	0.0075	0.0087	116	40-150
72629-94-8	Perfluorotridecanoic acid	0.0075	0.0073	97	40-150
376-06-7	Perfluorotetradecanoic acid	0.0075	0.0088	117	40-150
375-73-5	Perfluorobutanesulfonic acid	0.00665	0.0071	107	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.00706	0.0081	115	40-150
355-46-4	Perfluorohexanesulfonic acid	0.00686	0.0082	120	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.00715	0.0082	115	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.00696	0.0079	114	40-150
68259-12-1	Perfluorononanesulfonic acid	0.00722	0.0073	101	40-150
335-77-3	Perfluorodecanesulfonic acid	0.00724	0.0073	101	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.00728	0.0073	100	40-150
757124-72-44:2	Fluorotelomer sulfonate	0.0281	0.0323	115	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.0285	0.0329	115	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.0288	0.0366	127	40-150
754-91-6	PFOSA	0.0075	0.0095	127	40-150
31506-32-8	MeFOSA	0.015	0.0176	117	40-150
4151-50-2	EtFOSA	0.015	0.0171	114	40-150
2355-31-9	MeFOSAA	0.0075	0.0092	123	40-150
2991-50-6	EtFOSAA	0.0075	0.0083	111	40-150
24448-09-7	MeFOSE	0.0375	0.0410	109	40-150
1691-99-2	EtFOSE	0.0375	0.0406	108	40-150
13252-13-6	HFPO-DA (GenX)	0.015	0.0170	113	40-150
919005-14-4	ADONA	0.0142	0.0151	107	40-150
377-73-1	PFMPA	0.015	0.0181	121	40-150
863090-89-5	PFMBA	0.015	0.0173	115	40-150
151772-58-6	NFDHA	0.015	0.0156	104	40-150
756426-58-19	Cl-PF3ONS (F-53B Major)	0.014	0.0135	96	40-150
763051-92-91	Cl-PF3OUdS (F-53B Minor)	0.0142	0.0117	83	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11222
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP162-LLBS	6Q28593.D	1	11/20/23	NG	11/17/23	OP162	S6Q396

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC11222-1, FC11222-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0134	0.0150	112	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.0375	0.0299	80	40-150
914637-49-35:3	Fluorotelomer carboxylate	0.188	0.192	102	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.188	0.206	110	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	111%	20-150%
	13C5-PFPeA	110%	20-150%
	13C5-PFHxA	113%	20-150%
	13C4-PFHpA	116%	20-150%
	13C8-PFOA	107%	20-150%
	13C9-PFNA	110%	20-150%
	13C6-PFDA	103%	20-150%
	13C7-PFUnDA	88%	20-150%
	13C2-PFDoDA	90%	20-150%
	13C2-PFTeDA	90%	20-150%
	13C3-PFBS	100%	20-150%
	13C3-PFHxS	103%	20-150%
	13C8-PFOS	99%	20-150%
	13C8-FOSA	71%	20-150%
	d3-MeFOSA	71%	20-150%
	d5-EtFOSA	78%	20-150%
	d3-MeFOSAA	91%	20-150%
	d5-EtFOSAA	92%	20-150%
	d7-MeFOSE	72%	20-150%
	d9-EtFOSE	86%	20-150%
	13C2-4:2FTS	115%	20-180%
	13C2-6:2FTS	105%	20-180%
	13C2-8:2FTS	95%	20-180%
	13C3-HFPO-DA	115%	20-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11222
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP162-B5	6Q28592.D	1	11/20/23	NG	11/17/23	OP162	S6Q396

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC11222-1, FC11222-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
375-22-4	Perfluorobutanoic acid	0.1	0.0942	94	40-150
2706-90-3	Perfluoropentanoic acid	0.05	0.0503	101	40-150
307-24-4	Perfluorohexanoic acid	0.025	0.0228	91	40-150
375-85-9	Perfluoroheptanoic acid	0.025	0.0233	93	40-150
335-67-1	Perfluorooctanoic acid	0.025	0.0248	99	40-150
375-95-1	Perfluorononanoic acid	0.025	0.0243	97	40-150
335-76-2	Perfluorodecanoic acid	0.025	0.0239	96	40-150
2058-94-8	Perfluoroundecanoic acid	0.025	0.0261	104	40-150
307-55-1	Perfluorododecanoic acid	0.025	0.0279	112	40-150
72629-94-8	Perfluorotridecanoic acid	0.025	0.0275	110	40-150
376-06-7	Perfluorotetradecanoic acid	0.025	0.0229	92	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0222	0.0234	106	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0235	0.0220	94	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0229	0.0233	102	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0238	0.0259	109	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0232	0.0244	105	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0241	0.0249	104	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0241	0.0248	103	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0243	0.0229	94	40-150
757124-72-44:2	Fluorotelomer sulfonate	0.0938	0.0885	94	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.095	0.0884	93	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.096	0.100	104	40-150
754-91-6	PFOSA	0.025	0.0250	100	40-150
31506-32-8	MeFOSA	0.05	0.0540	108	40-150
4151-50-2	EtFOSA	0.05	0.0473	95	40-150
2355-31-9	MeFOSAA	0.025	0.0264	106	40-150
2991-50-6	EtFOSAA	0.025	0.0239	96	40-150
24448-09-7	MeFOSE	0.125	0.112	90	40-150
1691-99-2	EtFOSE	0.125	0.113	90	40-150
13252-13-6	HFPO-DA (GenX)	0.05	0.0479	96	40-150
919005-14-4	ADONA	0.0473	0.0446	94	40-150
377-73-1	PFMPA	0.05	0.0298	60	40-150
863090-89-5	PFMBA	0.05	0.0517	103	40-150
151772-58-6	NFDHA	0.05	0.0422	84	40-150
756426-58-19	Cl-PF3ONS (F-53B Major)	0.0468	0.0467	100	40-150
763051-92-91	Cl-PF3OUdS (F-53B Minor)	0.0473	0.0415	88	40-150

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC11222
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP162-BS	6Q28592.D	1	11/20/23	NG	11/17/23	OP162	S6Q396

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC11222-1, FC11222-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
113507-82-7	PFEESA	0.0445	0.0445	100	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.125	0.164	131	40-150
914637-49-35:3	Fluorotelomer carboxylate	0.625	0.531	85	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.625	0.536	86	40-150

CAS No.	ID Standard Recoveries	BSP	Limits
	13C4-PFBA	36%	20-150%
	13C5-PFPeA	108%	20-150%
	13C5-PFHxA	117%	20-150%
	13C4-PFHpA	115%	20-150%
	13C8-PFOA	103%	20-150%
	13C9-PFNA	104%	20-150%
	13C6-PFDA	109%	20-150%
	13C7-PFUnDA	103%	20-150%
	13C2-PFDoDA	100%	20-150%
	13C2-PFTeDA	117%	20-150%
	13C3-PFBS	101%	20-150%
	13C3-PFHxS	106%	20-150%
	13C8-PFOS	98%	20-150%
	13C8-FOSA	78%	20-150%
	d3-MeFOSA	76%	20-150%
	d5-EtFOSA	83%	20-150%
	d3-MeFOSAA	93%	20-150%
	d5-EtFOSAA	100%	20-150%
	d7-MeFOSE	83%	20-150%
	d9-EtFOSE	94%	20-150%
	13C2-4:2FTS	128%	20-180%
	13C2-6:2FTS	116%	20-180%
	13C2-8:2FTS	101%	20-180%
	13C3-HFPO-DA	119%	20-150%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC11222
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP162-MS	6Q28598.D	1	11/20/23	NG	11/17/23	OP162	S6Q396
FC11200-1	6Q28597.D	1	11/20/23	NG	11/17/23	OP162	S6Q396

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC11222-1, FC11222-2

CAS No.	Compound	FC11200-1 ug/l	Spike Q	ug/l	MS ug/l	MS %	Limits
375-22-4	Perfluorobutanoic acid	0.0536		0.0926	0.149	103	40-150
2706-90-3	Perfluoropentanoic acid	0.0636		0.0463	0.114	109	40-150
307-24-4	Perfluorohexanoic acid	0.0036	J	0.0231	0.0281	106	40-150
375-85-9	Perfluoroheptanoic acid	0.0038	U	0.0231	0.0221	95	40-150
335-67-1	Perfluorooctanoic acid	0.0038	U	0.0231	0.0251	108	40-150
375-95-1	Perfluorononanoic acid	0.0038	U	0.0231	0.0255	110	40-150
335-76-2	Perfluorodecanoic acid	0.0038	U	0.0231	0.0246	106	40-150
2058-94-8	Perfluoroundecanoic acid	0.0038	U	0.0231	0.0262	113	40-150
307-55-1	Perfluorododecanoic acid	0.0038	U	0.0231	0.0279	121	40-150
72629-94-8	Perfluorotridecanoic acid	0.0038	U	0.0231	0.0261	113	40-150
376-06-7	Perfluorotetradecanoic acid	0.0038	U	0.0231	0.0236	102	40-150
375-73-5	Perfluorobutanesulfonic acid	0.0038	U	0.0205	0.0209	102	40-150
2706-91-4	Perfluoropentanesulfonic acid	0.0047	U	0.0218	0.0236	108	40-150
355-46-4	Perfluorohexanesulfonic acid	0.0038	U	0.0212	0.0220	104	40-150
375-92-8	Perfluoroheptanesulfonic acid	0.0038	U	0.0221	0.0247	112	40-150
1763-23-1	Perfluorooctanesulfonic acid	0.0038	U	0.0215	0.0224	104	40-150
68259-12-1	Perfluorononanesulfonic acid	0.0038	U	0.0223	0.0224	101	40-150
335-77-3	Perfluorodecanesulfonic acid	0.0038	U	0.0223	0.0200	90	40-150
79780-39-5	Perfluorododecanesulfonic aci	0.0047	U	0.0225	0.0202	90	40-150
757124-72-44:2	Fluorotelomer sulfonate	0.019	U	0.0868	0.0937	108	40-150
27619-97-2	6:2 Fluorotelomer sulfonate	0.019	U	0.088	0.0877	100	40-150
39108-34-4	8:2 Fluorotelomer sulfonate	0.019	U	0.0889	0.0918	103	40-150
754-91-6	PFOSA	0.0038	U	0.0231	0.0257	111	40-150
31506-32-8	MeFOSA	0.0075	U	0.0463	0.0489	106	40-150
4151-50-2	EtFOSA	0.0075	U	0.0463	0.0503	109	40-150
2355-31-9	MeFOSAA	0.0047	U	0.0231	0.0249	108	40-150
2991-50-6	EtFOSAA	0.0047	U	0.0231	0.0263	114	40-150
24448-09-7	MeFOSE	0.038	U	0.116	0.115	99	40-150
1691-99-2	EtFOSE	0.038	U	0.116	0.118	102	40-150
13252-13-6	HFPO-DA (GenX)	0.0038	U	0.0463	0.0446	96	40-150
919005-14-4	ADONA	0.0075	U	0.0438	0.0414	95	40-150
377-73-1	PFMPA	0.0075	U	0.0463	0.0509	110	40-150
863090-89-5	PFMBA	0.0075	U	0.0463	0.0502	108	40-150
151772-58-6	NFDHA	0.0075	U	0.0463	0.0491	106	40-150
756426-58-19	Cl-PF3ONS (F-53B Major)	0.0075	U	0.0433	0.0365	84	40-150
763051-92-91	Cl-PF3OUdS (F-53B Minor)	0.0075	U	0.0438	0.0326	75	40-150

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC11222
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP162-MS	6Q28598.D	1	11/20/23	NG	11/17/23	OP162	S6Q396
FC11200-1	6Q28597.D	1	11/20/23	NG	11/17/23	OP162	S6Q396

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC11222-1, FC11222-2

CAS No.	Compound	FC11200-1 ug/l	Spike Q	MS ug/l	MS %	Limits
113507-82-7	PFEESA	0.0075 U	0.0412	0.0446	108	40-150
356-02-5	3:3 Fluorotelomer carboxylate	0.019 U	0.116	0.0945	82	40-150
914637-49-35:3	Fluorotelomer carboxylate	0.094 U	0.579	0.548	95	40-150
812-70-4	7:3 Fluorotelomer carboxylate	0.094 U	0.579	0.574	99	40-150

CAS No.	ID Standard Recoveries	MS	FC11200-1	Limits
	13C4-PFBA	96%	95%	20-150%
	13C5-PFPeA	100%	93%	20-150%
	13C5-PFHxA	101%	93%	20-150%
	13C4-PFHpA	106%	95%	20-150%
	13C8-PFOA	97%	91%	20-150%
	13C9-PFNA	95%	94%	20-150%
	13C6-PFDA	89%	87%	20-150%
	13C7-PFUnDA	76%	76%	20-150%
	13C2-PFDoDA	74%	74%	20-150%
	13C2-PFTeDA	77%	74%	20-150%
	13C3-PFBS	103%	94%	20-150%
	13C3-PFHxS	105%	96%	20-150%
	13C8-PFOS	89%	80%	20-150%
	13C8-FOSA	66%	63%	20-150%
	d3-MeFOSA	67%	64%	20-150%
	d5-EtFOSA	72%	67%	20-150%
	d3-MeFOSAA	83%	84%	20-150%
	d5-EtFOSAA	81%	79%	20-150%
	d7-MeFOSE	66%	64%	20-150%
	d9-EtFOSE	74%	71%	20-150%
	13C2-4:2FTS	112%	114%	20-180%
	13C2-6:2FTS	115%	104%	20-180%
	13C2-8:2FTS	102%	90%	20-180%
	13C3-HFPO-DA	109%	99%	20-150%

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC11222
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP162-DUP	6Q28601.D	1	11/20/23	NG	11/17/23	OP162	S6Q396
FC11200-3	6Q28600.D	1	11/20/23	NG	11/17/23	OP162	S6Q396

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC11222-1, FC11222-2

CAS No.	Compound	FC11200-3 ug/l	DUP Q	ug/l	Q	RPD	Limits
375-22-4	Perfluorobutanoic acid	0.0505		0.0490		3	30
2706-90-3	Perfluoropentanoic acid	0.124		0.119		4	30
307-24-4	Perfluorohexanoic acid	0.186		0.174		7	30
375-85-9	Perfluoroheptanoic acid	0.0372		0.0346		7	30
335-67-1	Perfluorooctanoic acid	0.0828		0.0832		0	30
375-95-1	Perfluorononanoic acid	0.00095 J		0.00089 J		7	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	0.101		0.0981		3	30
2706-91-4	Perfluoropentanesulfonic acid	0.137		0.143		4	30
355-46-4	Perfluorohexanesulfonic acid	0.538 E		0.578 E		7	30
375-92-8	Perfluoroheptanesulfonic acid	0.0118		0.0114		3	30
1763-23-1	Perfluorooctanesulfonic acid	0.140		0.114		20	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: FC11222
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP162-DUP	6Q28601.D	1	11/20/23	NG	11/17/23	OP162	S6Q396
FC11200-3	6Q28600.D	1	11/20/23	NG	11/17/23	OP162	S6Q396

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC11222-1, FC11222-2

CAS No.	Compound	FC11200-3 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	FC11200-3	Limits
	13C4-PFBA	100%	99%	20-150%
	13C5-PFPeA	101%	102%	20-150%
	13C5-PFHxA	104%	100%	20-150%
	13C4-PFHpA	101%	102%	20-150%
	13C8-PFOA	93%	99%	20-150%
	13C9-PFNA	97%	94%	20-150%
	13C6-PFDA	89%	78%	20-150%
	13C7-PFUnDA	76%	76%	20-150%
	13C2-PFDoDA	75%	68%	20-150%
	13C2-PFTeDA	76%	76%	20-150%
	13C3-PFBS	100%	95%	20-150%
	13C3-PFHxS	95%	96%	20-150%
	13C8-PFOS	95%	81%	20-150%
	13C8-FOSA	66%	72%	20-150%
	d3-MeFOSA	62%	66%	20-150%
	d5-EtFOSA	69%	78%	20-150%
	d3-MeFOSAA	89%	81%	20-150%
	d5-EtFOSAA	86%	76%	20-150%
	d7-MeFOSE	66%	66%	20-150%
	d9-EtFOSE	74%	76%	20-150%
	13C2-4:2FTS	112%	115%	20-180%
	13C2-6:2FTS	111%	112%	20-180%
	13C2-8:2FTS	91%	90%	20-180%
	13C3-HFPO-DA	106%	106%	20-150%

* = Outside of Control Limits.