

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

e-Hardcopy 2.0
Automated Report

Technical Report for

AECOM, INC.

N6274223F0104 RH Fire Suppression System

60697810

SGS Job Number: FC6649

Sampling Date: 06/02/23



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: 41



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

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.



June 14, 2023

Mark Kromis
AECOM
7595 Technology Way
Denver, CO 80237

RE: SGS North America Inc. - Orlando job FC6649 Reissue

Dear Mark,

The samples to be reported separately for EDMS upload to GW 2023 June event were split and included and reported under SDG FC6649A
The changes are incorporated in the revised report for Sample Delivery Group FC6649

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

Table of Contents

-1-

| | |
|---|-----------|
| Section 1: Sample Summary | 4 |
| Section 2: Case Narrative/Conformance Summary | 5 |
| Section 3: Summary of Hits | 6 |
| Section 4: Sample Results | 7 |
| 4.1: FC6649-1: AF-RHMW17D-WGN01LF-2305W5 | 8 |
| 4.2: FC6649-2: AF-RHMW17D-WQFB01-2305W5 | 11 |
| Section 5: Misc. Forms | 14 |
| 5.1: Chain of Custody | 15 |
| 5.2: QC Evaluation: DOD QSM5.x Limits | 24 |
| Section 6: MS Semi-volatiles - QC Data Summaries | 25 |
| 6.1: Method Blank Summary | 26 |
| 6.2: Blank Spike Summary | 34 |
| 6.3: Matrix Spike Summary | 38 |
| 6.4: Duplicate Summary | 40 |

1

2

3

4

5

6



Sample Summary

AECOM, INC.

Job No: FC6649

N6274223F0104 RH Fire Suppression System
Project No: 60697810

| Sample Number | Collected Date | Time By | Received | Matrix Code | Type | Client Sample ID |
|---------------|----------------|---------|---------------|-------------|-------------------|---------------------------|
| FC6649-1 | 06/02/23 | 10:30 | BSAL 06/06/23 | AQ | Ground Water | AF-RHMW17D-WGN01LF-2305W5 |
| FC6649-2 | 06/02/23 | 10:20 | BSAL 06/06/23 | AQ | Field Blank Water | AF-RHMW17D-WQFB01-2305W5 |

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: AECOM, INC.

Job No: FC6649

Site: N6274223F0104 RH Fire Suppression System

Report Revised Date: 6/14/2023 2:56:37 PM

On 06/06/2023, 1 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc - Orlando. at a maximum corrected temperature of 4.2 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. - Orlando Job Number of FC6649 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: OP97275

Sample(s) FC6649-1MS, FC6649-4DUP, FC6649-1MS were used as the QC samples indicated.

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

Matrix Spike Recovery(s) for 3:3 Fluorotelomer carboxylate, PFMPA are outside control limits. Probable cause is due to matrix interference.

RPD(s) for Duplicate for 6:2 Fluorotelomer sulfonate are outside control limits for sample OP97275-DUP. Probable cause is due to sample non-homogeneity.

Sample(s) FC6649-1 have surrogates outside control limits.

FC6649-1 for 13C4-PFBA: Outside control limits.

FC6649-1 for 3:3 Fluorotelomer carboxylate: Associated BS recovery outside control limits.

FC6649-1 for MeFOSAA: Associated Low Level CCV outside of control limits high, sample was ND.

FC6649-1 for Perfluorobutanoic acid: Associated ID Standard outside control limits, Confirmed by batch QC.

FC6649-1 for Perfluorodecanesulfonic acid: Associated Low Level CCV outside of control limits high, sample was ND.

FC6649-1 for PFEESA: Associated Low Level CCV outside of control limits high, sample was ND.

FC6649-2 for 3:3 Fluorotelomer carboxylate: Associated BS recovery outside control limits.

FC6649-2 for MeFOSAA: Associated Low Level CCV outside of control limits high, sample was ND.

FC6649-2 for Perfluorodecanesulfonic acid: Associated Low Level CCV outside of control limits high, sample was ND.

FC6649-2 for PFEESA: Associated Low Level CCV outside of 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 revised June 14, 2023 by:

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

Summary of Hits

Job Number: FC6649
Account: AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System
Collected: 06/02/23



| Lab Sample ID | Client Sample ID | Result/ Qual | LOQ | LOD | Units | Method |
|---------------|------------------|-----------------|-----|-----|-------|--------|
|---------------|------------------|-----------------|-----|-----|-------|--------|

FC6649-1 AF-RHMW17D-WGN01LF-2305W5

6:2 Fluorotelomer sulfonate 3.8 J 19 7.4 ng/l EPA DRAFT 1633

FC6649-2 AF-RHMW17D-WQFB01-2305W5

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

| | | | |
|-------------------|--|-----------------|----------|
| Client Sample ID: | AF-RHMW17D-WGN01LF-2305W5 | | |
| Lab Sample ID: | FC6649-1 | Date Sampled: | 06/02/23 |
| Matrix: | AQ - Ground Water | Date Received: | 06/06/23 |
| 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 | 6Q19268.D | 1 | 06/12/23 22:19 | MV | 06/09/23 11:30 | OP97275 | S6Q287 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 540 ml | 5.0 ml |
| Run #2 | | |

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

PERFLUOROALKYL CARBOXYLIC ACIDS

| | | | | | | | |
|------------|-------------------------------------|--------|-----|------|------|------|--|
| 375-22-4 | Perfluorobutanoic acid ^a | 3.7 U | 15 | 3.7 | 1.8 | ng/l | |
| 2706-90-3 | Perfluoropentanoic acid | 1.9 U | 7.4 | 1.9 | 0.87 | ng/l | |
| 307-24-4 | Perfluorohexanoic acid | 1.9 U | 3.7 | 1.9 | 0.46 | ng/l | |
| 375-85-9 | Perfluoroheptanoic acid | 1.9 U | 3.7 | 1.9 | 0.46 | ng/l | |
| 335-67-1 | Perfluorooctanoic acid | 0.93 U | 3.7 | 0.93 | 0.46 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | 1.9 U | 3.7 | 1.9 | 0.56 | ng/l | |
| 335-76-2 | Perfluorodecanoic acid | 1.9 U | 3.7 | 1.9 | 0.46 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid | 1.9 U | 3.7 | 1.9 | 0.56 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid | 1.9 U | 3.7 | 1.9 | 0.56 | ng/l | |
| 72629-94-8 | Perfluorotridecanoic acid | 1.9 U | 3.7 | 1.9 | 0.78 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid | 1.9 U | 3.7 | 1.9 | 0.46 | ng/l | |

PERFLUOROALKYL SULFONIC ACIDS

| | | | | | | | |
|------------|---|-------|-----|-----|------|------|--|
| 375-73-5 | Perfluorobutanesulfonic acid | 1.9 U | 3.7 | 1.9 | 0.46 | ng/l | |
| 2706-91-4 | Perfluoropentanesulfonic acid | 3.7 U | 4.6 | 3.7 | 1.0 | ng/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | 1.9 U | 3.7 | 1.9 | 0.65 | ng/l | |
| 375-92-8 | Perfluoroheptanesulfonic acid | 1.9 U | 3.7 | 1.9 | 0.46 | ng/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | 1.9 U | 3.7 | 1.9 | 0.50 | ng/l | |
| 68259-12-1 | Perfluorononanesulfonic acid | 1.9 U | 3.7 | 1.9 | 0.53 | ng/l | |
| 335-77-3 | Perfluorodecanesulfonic acid ^b | 1.9 U | 3.7 | 1.9 | 0.59 | ng/l | |
| 79780-39-5 | Perfluorododecanesulfonic aci | 3.7 U | 4.6 | 3.7 | 1.1 | ng/l | |

FLUOROTELOMER SULFONIC ACIDS

| | | | | | | | |
|-------------|-----------------------------|-------|----|-----|-----|------|---|
| 757124-72-4 | 4:2 Fluorotelomer sulfonate | 7.4 U | 19 | 7.4 | 3.0 | ng/l | |
| 27619-97-2 | 6:2 Fluorotelomer sulfonate | 3.8 | 19 | 7.4 | 3.2 | ng/l | J |
| 39108-34-4 | 8:2 Fluorotelomer sulfonate | 7.4 U | 19 | 7.4 | 3.8 | ng/l | |

PERFLUOROOCCTANE SULFONAMIDES

| | | | | | | | |
|------------|--------|-------|-----|-----|------|------|--|
| 754-91-6 | PFOSA | 1.9 U | 3.7 | 1.9 | 0.62 | ng/l | |
| 31506-32-8 | MeFOSA | 3.7 U | 7.4 | 3.7 | 0.93 | ng/l | |
| 4151-50-2 | EtFOSA | 3.7 U | 7.4 | 3.7 | 0.93 | ng/l | |

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

4.1
4

Report of Analysis

| | | | |
|-------------------|--|-----------------|----------|
| Client Sample ID: | AF-RHMW17D-WGN01LF-2305W5 | | |
| Lab Sample ID: | FC6649-1 | Date Sampled: | 06/02/23 |
| Matrix: | AQ - Ground Water | Date Received: | 06/06/23 |
| Method: | EPA DRAFT 1633 EPA 1633 DRAFT | Percent Solids: | n/a |
| Project: | N6274223F0104 RH Fire Suppression System | | |

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

PERFLUOROOCCTANE SULFONAMIDOACETIC ACIDS

| | | | | | | | |
|-----------|----------------------|-------|-----|-----|------|------|--|
| 2355-31-9 | MeFOSAA ^b | 3.7 U | 4.6 | 3.7 | 0.93 | ng/l | |
| 2991-50-6 | EtFOSAA | 3.7 U | 4.6 | 3.7 | 1.2 | ng/l | |

PERFLUOROOCCTANE SULFONAMIDO ETHANOLS

| | | | | | | | |
|------------|--------|------|----|----|-----|------|--|
| 24448-09-7 | MeFOSE | 19 U | 37 | 19 | 4.1 | ng/l | |
| 1691-99-2 | EtFOSE | 19 U | 37 | 19 | 6.9 | ng/l | |

PER and POLYFLUOROETHER CARBOXYLIC ACIDS

| | | | | | | | |
|-------------|----------------|-------|-----|-----|------|------|--|
| 13252-13-6 | HFPO-DA (GenX) | 1.9 U | 3.7 | 1.9 | 0.93 | ng/l | |
| 919005-14-4 | ADONA | 3.7 U | 7.4 | 3.7 | 1.7 | ng/l | |
| 377-73-1 | PFMPA | 1.9 U | 7.4 | 1.9 | 0.93 | ng/l | |
| 863090-89-5 | PFMBA | 3.7 U | 7.4 | 3.7 | 1.1 | ng/l | |
| 151772-58-6 | NFDHA | 3.7 U | 7.4 | 3.7 | 1.1 | ng/l | |

PER and POLYFLUOROETHER SULFONIC ACIDS

| | | | | | | | |
|-------------|----------------------------|-------|-----|-----|------|------|--|
| 756426-58-1 | 9Cl-PF3ONS (F-53B Major) | 3.7 U | 7.4 | 3.7 | 1.3 | ng/l | |
| 763051-92-9 | 11Cl-PF3OUdS (F-53B Minor) | 3.7 U | 7.4 | 3.7 | 1.6 | ng/l | |
| 113507-82-7 | PFEESA ^b | 1.9 U | 7.4 | 1.9 | 0.72 | ng/l | |

FLUOROTELOMER CARBOXYLIC ACIDS

| | | | | | | | |
|-------------|---|-------|----|-----|-----|------|--|
| 356-02-5 | 3:3 Fluorotelomer carboxylat ^c | 9.3 U | 19 | 9.3 | 4.2 | ng/l | |
| 914637-49-3 | 5:3 Fluorotelomer carboxylate | 19 U | 93 | 19 | 8.1 | ng/l | |
| 812-70-4 | 7:3 Fluorotelomer carboxylate | 19 U | 93 | 19 | 7.3 | ng/l | |

| CAS No. | ID Standard Recoveries | Run# 1 | Run# 2 | Limits |
|---------|------------------------|-----------------|--------|---------|
| | 13C4-PFBA | 4% ^d | | 20-150% |
| | 13C5-PFPeA | 25% | | 20-150% |
| | 13C5-PFHxA | 95% | | 20-150% |
| | 13C4-PFHpA | 105% | | 20-150% |
| | 13C8-PFOA | 115% | | 20-150% |
| | 13C9-PFNA | 113% | | 20-150% |
| | 13C6-PFDA | 107% | | 20-150% |
| | 13C7-PFUnDA | 99% | | 20-150% |
| | 13C2-PFDoDA | 102% | | 20-150% |
| | 13C2-PFTeDA | 74% | | 20-150% |
| | 13C3-PFBS | 105% | | 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-WGN01LF-2305W5 | |
| Lab Sample ID: | FC6649-1 | Date Sampled: 06/02/23 |
| Matrix: | AQ - Ground Water | Date Received: 06/06/23 |
| 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 | 102% | | 20-150% |
| | 13C8-FOSA | 91% | | 20-150% |
| | d3-MeFOSA | 87% | | 20-150% |
| | d5-EtFOSA | 98% | | 20-150% |
| | d3-MeFOSAA | 125% | | 20-150% |
| | d5-EtFOSAA | 126% | | 20-150% |
| | d7-MeFOSE | 69% | | 20-150% |
| | d9-EtFOSE | 73% | | 20-150% |
| | 13C2-4:2FTS | 141% | | 20-180% |
| | 13C2-6:2FTS | 97% | | 20-180% |
| | 13C2-8:2FTS | 113% | | 20-180% |
| | 13C3-HFPO-DA | 83% | | 20-150% |

- (a) Associated ID Standard outside control limits, Confirmed by batch QC.
- (b) Associated Low Level CCV outside of control limits high, sample was ND.
- (c) Associated BS recovery outside control limits.
- (d) Outside control limits.

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

Report of Analysis

| | | | |
|-------------------|--|-----------------|----------|
| Client Sample ID: | AF-RHMW17D-WQFB01-2305W5 | | |
| Lab Sample ID: | FC6649-2 | Date Sampled: | 06/02/23 |
| Matrix: | AQ - Field Blank Water | Date Received: | 06/06/23 |
| 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 | 6Q19270.D | 1 | 06/12/23 22:47 | MV | 06/09/23 11:30 | OP97275 | S6Q287 |
| 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 ^a | 1.8 U | 3.6 | 1.8 | 0.57 | ng/l | |
| 79780-39-5 | Perfluorododecanesulfonic aci | 3.6 U | 4.5 | 3.6 | 1.0 | ng/l | |

FLUOROTELOMER SULFONIC ACIDS

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

PERFLUOROOCCTANE SULFONAMIDES

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

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

4.2
4

Report of Analysis

| | | | |
|-------------------|--|-----------------|----------|
| Client Sample ID: | AF-RHMW17D-WQFB01-2305W5 | | |
| Lab Sample ID: | FC6649-2 | Date Sampled: | 06/02/23 |
| Matrix: | AQ - Field Blank Water | Date Received: | 06/06/23 |
| Method: | EPA DRAFT 1633 EPA 1633 DRAFT | Percent Solids: | n/a |
| Project: | N6274223F0104 RH Fire Suppression System | | |

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

PERFLUOROOCCTANE SULFONAMIDOACETIC ACIDS

| | | | | | | | |
|-----------|----------------------|-------|-----|-----|------|------|--|
| 2355-31-9 | MeFOSAA ^a | 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 ^a | 1.8 U | 7.1 | 1.8 | 0.70 | ng/l | |

FLUOROTELOMER CARBOXYLIC ACIDS

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

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

| | | | | |
|--|-------------|------|--|---------|
| | 13C4-PFBA | 115% | | 20-150% |
| | 13C5-PFPeA | 110% | | 20-150% |
| | 13C5-PFHxA | 110% | | 20-150% |
| | 13C4-PFHpA | 105% | | 20-150% |
| | 13C8-PFOA | 119% | | 20-150% |
| | 13C9-PFNA | 116% | | 20-150% |
| | 13C6-PFDA | 116% | | 20-150% |
| | 13C7-PFUnDA | 99% | | 20-150% |
| | 13C2-PFDoDA | 92% | | 20-150% |
| | 13C2-PFTeDA | 50% | | 20-150% |
| | 13C3-PFBS | 116% | | 20-150% |
| | 13C3-PFHxS | 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

4.2
4

Report of Analysis

| | | |
|---|--|-------------------------|
| Client Sample ID: AF-RHMW17D-WQFB01-2305W5 | | Date Sampled: 06/02/23 |
| Lab Sample ID: FC6649-2 | | Date Received: 06/06/23 |
| Matrix: AQ - Field Blank 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 | 112% | | 20-150% |
| | 13C8-FOSA | 93% | | 20-150% |
| | d3-MeFOSA | 87% | | 20-150% |
| | d5-EtFOSA | 88% | | 20-150% |
| | d3-MeFOSAA | 108% | | 20-150% |
| | d5-EtFOSAA | 108% | | 20-150% |
| | d7-MeFOSE | 74% | | 20-150% |
| | d9-EtFOSE | 82% | | 20-150% |
| | 13C2-4:2FTS | 141% | | 20-180% |
| | 13C2-6:2FTS | 136% | | 20-180% |
| | 13C2-8:2FTS | 125% | | 20-180% |
| | 13C3-HFPO-DA | 107% | | 20-150% |

- (a) Associated Low Level CCV outside of control limits high, sample was ND.
- (b) Associated BS recovery outside control limits.

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

4.2
4

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

COC #: 2306AFSG09

SGS - ORLANDO JOB #:

PAGE 1 OF 1

SGS - ORLANDO Quote #

SKIFF #

FC6649

| Client / Reporting Information | | Project Information | | Analytical Information | | | | | | | | | | | | Matrix Codes | | |
|--|--------------------------------|--|------|--|-----------------------|--------------------|-------|------------|-----|-----------------------------|-------|-----------|----------|------------|---------------------|---|--|--|
| Company Name: AECOM | | Project Name: N6274223F0104 RH Fire Suppression System | | <div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small; margin-right: 5px;">PFAS EPA Draft 1633</div> </div> | | | | | | | | | | | | 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 Email: katie.abbott@aecom.com | | Project # 60697810 | | | | | | | | | | | | | | | | |
| Project Manager: Watson Tanji Email: watson.tanji@aecom.com | | Fax # | | | | | | | | | | | | | | | | |
| Phone #: 303-796-4624 / 808-954-4512 | | Client Purchase Order # | | | | | | | | | | | | | | | | |
| Sampler(s) Name(s) (Printed) | | Sampler 1: | | Sampler 2: | | | | | | | | | | | | | | |
| SGS Orlando Sample # | Field ID / Point of Collection | COLLECTION | | | CONTAINER INFORMATION | | | | | | | | | | PFAS EPA Draft 1633 | LAB USE ONLY | | |
| | | DATE | TIME | SAMPLED BY: | MATRIX | TOTAL # OF BOTTLES | OTHER | NONE | HIG | HNO3 | H2SO4 | MOH+2HNO3 | DI WATER | MEDH | | | | |
| 10 | AF-RHMW06-WGN01LF-2306 | 6-5-23 | 1500 | CH | GW | 3 | | X | | | | | | | | | | |
| Turnaround Time (Business days) | | Approved By: / Date: | | 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 | | | | <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 V.A. Tech 6/16/23 15:27:18 | | |
| 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 | | | | Date Time: | | Relinquished By/Affiliation | | | | Date Time: | | Received By/Affiliation | | |
| 1 Christina Brantley | | 6-5-23 | | 2 [Signature] AECOM | | | | 5/4/23 | | 3 [Signature] | | | | 5/4/23 | | 4 United Cargo | | |
| 5 United Cargo | | | | 6 [Signature] 06/06/23 | | | | 1730 | | 7 | | | | | | 8 | | |
| Lab Use Only: Cooler Temperature (s) Celsius (corrected): | | http://www.sgs.com/en/terms-and-conditions | | | | | | | | | | | | | | | | |

PFAS_COCS_ALL.xls Rev 031318

FC6649: Chain of Custody

Page 5 of 9



SGS Sample Receipt Summary

Job Number: FC6649

Client: AECOM

Project: N6274223F0104 RH Fire Suppression System

Date / Time Received: 6/6/2023 5:30:00 PM

Delivery Method: United Cargo/Airspace

Airbill #s: United Cargo AWB #: 016-15277183

Therm ID: IR 1;

Therm CF: -0.1;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (4.3);

Cooler Temps (Corrected) °C: Cooler 1: (4.2);

Cooler Information

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

Trip Blank Information

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

Sample Information

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

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____
 Test Strip Lot #s: pH 0-3 _____ 230320 _____ pH 10-12 _____ Other: (Specify) pH 1.0 - 12.0 _____ 222221 _____
 Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SHAYLAP

Date: 6/6/2023 5:30:00 PM

Reviewer: SP

Date: 6/7/2023

FC6649: Chain of Custody

Page 6 of 9

Job Change Order: FC6649

| | | | |
|-----------------------------|--|-----------------------|-----------|
| Requested Date: | 6/14/2023 | Received Date: | 6/6/2023 |
| Account Name: | AECOM, INC. | Due Date: | 6/13/2023 |
| Project Description: | N6274223F0104 RH Fire Suppression System | Deliverable: | FULT2 |
| CSR: | EK | TAT (Days): | 7 |

=====
Sample #: FC6649-1 **Change:**
Dept: Sample to be reported separately for EDMS Upload to GW 2023 May Event.
TAT: Reissue report under Job FC6649
7

AF-RHMW17D-WGN01LF-2305W5
=====

=====
Sample #: FC6649-2 **Change:**
Dept: Sample to be reported separately for EDMS Upload to GW 2023 May Event
TAT: 7

AF-RHMW17D-WQFB01-2305W5
=====

FC6649: Chain of Custody

Page 7 of 9

Above Changes Per: Mark Kromis

Date/Time: 6/14/2023 3:33:00 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 1 of 1

5.1
5

Job Change Order: FC6649A

| | | | |
|-----------------------------|--|-----------------------|-----------|
| Requested Date: | 6/14/2023 | Received Date: | 6/6/2023 |
| Account Name: | AECOM, INC. | Due Date: | 6/13/2023 |
| Project Description: | N6274223F0104 RH Fire Suppression System | Deliverable: | FULT2 |
| CSR: | EK | TAT (Days): | 7 |

5.1
5

FC6649: Chain of Custody
Page 9 of 9

Above Changes Per: Mark Kromis

Date/Time: 6/14/2023 3:38:23 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Page 2 of 2

QC Evaluation: DOD QSM5.x Limits

Job Number: FC6649
Account: AECOM, INC.
Project: N6274223F0104 RH Fire Suppression System
Collected: 06/02/23

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

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

* Sample used for QC is not from job FC6649

5.2
5

MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

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

Instrument Blank

Job Number: FC6649
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

| | | | | | | | |
|-------------|-----------|----|----------|----|-----------|------------|------------------|
| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
| S6Q287-IBLK | 6Q19248.D | 1 | 06/12/23 | MV | n/a | n/a | S6Q287 |

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6649-1, FC6649-2

| 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: FC6649
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|-------------|-----------|----|----------|----|-----------|------------|------------------|
| S6Q287-IBLK | 6Q19248.D | 1 | 06/12/23 | MV | n/a | n/a | S6Q287 |

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6649-1, FC6649-2

| 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 | 100% 20-150% |
| | 13C5-PFPeA | 97% 20-150% |
| | 13C5-PFHxA | 99% 20-150% |
| | 13C4-PFHpA | 100% 20-150% |
| | 13C8-PFOA | 97% 20-150% |
| | 13C9-PFNA | 100% 20-150% |
| | 13C6-PFDA | 100% 20-150% |
| | 13C7-PFUnDA | 89% 20-150% |
| | 13C2-PFDoDA | 93% 20-150% |
| | 13C2-PFTeDA | 91% 20-150% |
| | 13C3-PFBS | 103% 20-150% |
| | 13C3-PFHxS | 101% 20-150% |
| | 13C8-PFOS | 102% 20-150% |
| | 13C8-FOSA | 101% 20-150% |
| | d3-MeFOSA | 103% 20-150% |
| | d5-EtFOSA | 107% 20-150% |
| | d3-MeFOSAA | 99% 20-150% |
| | d5-EtFOSAA | 109% 20-150% |
| | d7-MeFOSE | 100% 20-150% |
| | d9-EtFOSE | 95% 20-150% |
| | 13C2-4:2FTS | 121% 20-180% |
| | 13C2-6:2FTS | 122% 20-180% |
| | 13C2-8:2FTS | 118% 20-180% |
| | 13C3-HFPO-DA | 93% 20-150% |

6.1.1
6

Continuing Calibration Blank

Job Number: FC6649
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

| | | | | | | | |
|-------------|-----------|----|----------|----|-----------|------------|------------------|
| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
| S6Q287-ICCB | 6Q19262.D | 1 | 06/12/23 | MV | n/a | n/a | S6Q287 |

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6649-1, FC6649-2

| 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 | |

Continuing Calibration Blank

Job Number: FC6649
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|-------------|-----------|----|----------|----|-----------|------------|------------------|
| S6Q287-ICCB | 6Q19262.D | 1 | 06/12/23 | MV | n/a | n/a | S6Q287 |

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6649-1, FC6649-2

| 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 | 100% 20-150% |
| | 13C5-PFPeA | 103% 20-150% |
| | 13C5-PFHxA | 98% 20-150% |
| | 13C4-PFHpA | 104% 20-150% |
| | 13C8-PFOA | 96% 20-150% |
| | 13C9-PFNA | 109% 20-150% |
| | 13C6-PFDA | 101% 20-150% |
| | 13C7-PFUnDA | 100% 20-150% |
| | 13C2-PFDoDA | 96% 20-150% |
| | 13C2-PFTeDA | 96% 20-150% |
| | 13C3-PFBS | 109% 20-150% |
| | 13C3-PFHxS | 108% 20-150% |
| | 13C8-PFOS | 104% 20-150% |
| | 13C8-FOSA | 100% 20-150% |
| | d3-MeFOSA | 96% 20-150% |
| | d5-EtFOSA | 99% 20-150% |
| | d3-MeFOSAA | 105% 20-150% |
| | d5-EtFOSAA | 101% 20-150% |
| | d7-MeFOSE | 100% 20-150% |
| | d9-EtFOSE | 86% 20-150% |
| | 13C2-4:2FTS | 128% 20-180% |
| | 13C2-6:2FTS | 124% 20-180% |
| | 13C2-8:2FTS | 112% 20-180% |
| | 13C3-HFPO-DA | 96% 20-150% |

Method Blank Summary

Job Number: FC6649
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

| | | | | | | | |
|------------|-----------|----|----------|----|-----------|------------|------------------|
| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
| OP97275-MB | 6Q19265.D | 1 | 06/12/23 | MV | 06/09/23 | OP97275 | S6Q287 |

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6649-1, FC6649-2

| 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: FC6649
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|------------|-----------|----|----------|----|-----------|------------|------------------|
| OP97275-MB | 6Q19265.D | 1 | 06/12/23 | MV | 06/09/23 | OP97275 | S6Q287 |

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6649-1, FC6649-2

| 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 | 105% 20-150% |
| | 13C5-PFPeA | 101% 20-150% |
| | 13C5-PFHxA | 99% 20-150% |
| | 13C4-PFHpA | 98% 20-150% |
| | 13C8-PFOA | 103% 20-150% |
| | 13C9-PFNA | 116% 20-150% |
| | 13C6-PFDA | 107% 20-150% |
| | 13C7-PFUnDA | 101% 20-150% |
| | 13C2-PFDoDA | 99% 20-150% |
| | 13C2-PFTeDA | 86% 20-150% |
| | 13C3-PFBS | 97% 20-150% |
| | 13C3-PFHxS | 97% 20-150% |
| | 13C8-PFOS | 101% 20-150% |
| | 13C8-FOSA | 76% 20-150% |
| | d3-MeFOSA | 72% 20-150% |
| | d5-EtFOSA | 81% 20-150% |
| | d3-MeFOSAA | 104% 20-150% |
| | d5-EtFOSAA | 92% 20-150% |
| | d7-MeFOSE | 58% 20-150% |
| | d9-EtFOSE | 68% 20-150% |
| | 13C2-4:2FTS | 119% 20-180% |
| | 13C2-6:2FTS | 119% 20-180% |
| | 13C2-8:2FTS | 99% 20-180% |
| | 13C3-HFPO-DA | 95% 20-150% |

Continuing Calibration Blank

Job Number: FC6649
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

| | | | | | | | |
|-------------|-----------|----|----------|----|-----------|------------|------------------|
| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
| S6Q287-ICCB | 6Q19273.D | 1 | 06/12/23 | MV | n/a | n/a | S6Q287 |

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

OP97275-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: FC6649
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|-------------|-----------|----|----------|----|-----------|------------|------------------|
| S6Q287-ICCB | 6Q19273.D | 1 | 06/12/23 | MV | n/a | n/a | S6Q287 |

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

OP97275-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 | 96% 20-150% |
| | 13C5-PFHxA | 92% 20-150% |
| | 13C4-PFHpA | 100% 20-150% |
| | 13C8-PFOA | 100% 20-150% |
| | 13C9-PFNA | 96% 20-150% |
| | 13C6-PFDA | 100% 20-150% |
| | 13C7-PFUnDA | 101% 20-150% |
| | 13C2-PFDoDA | 98% 20-150% |
| | 13C2-PFTeDA | 88% 20-150% |
| | 13C3-PFBS | 101% 20-150% |
| | 13C3-PFHxS | 102% 20-150% |
| | 13C8-PFOS | 97% 20-150% |
| | 13C8-FOSA | 100% 20-150% |
| | d3-MeFOSA | 91% 20-150% |
| | d5-EtFOSA | 97% 20-150% |
| | d3-MeFOSAA | 102% 20-150% |
| | d5-EtFOSAA | 94% 20-150% |
| | d7-MeFOSE | 86% 20-150% |
| | d9-EtFOSE | 82% 20-150% |
| | 13C2-4:2FTS | 113% 20-180% |
| | 13C2-6:2FTS | 123% 20-180% |
| | 13C2-8:2FTS | 108% 20-180% |
| | 13C3-HFPO-DA | 90% 20-150% |

Blank Spike Summary

Job Number: FC6649
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

| | | | | | | | |
|--------------|-----------|----|----------|----|-----------|------------|------------------|
| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
| OP97275-LLBS | 6Q19264.D | 1 | 06/12/23 | MV | 06/09/23 | OP97275 | S6Q287 |

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6649-1, FC6649-2

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | Limits |
|----------------|-------------------------------|---------------|-------------|----------|--------|
| 375-22-4 | Perfluorobutanoic acid | 0.03 | 0.0264 | 88 | 40-150 |
| 2706-90-3 | Perfluoropentanoic acid | 0.015 | 0.0129 | 86 | 40-150 |
| 307-24-4 | Perfluorohexanoic acid | 0.0075 | 0.0068 | 91 | 40-150 |
| 375-85-9 | Perfluoroheptanoic acid | 0.0075 | 0.0060 | 80 | 40-150 |
| 335-67-1 | Perfluorooctanoic acid | 0.0075 | 0.0083 | 111 | 40-150 |
| 375-95-1 | Perfluorononanoic acid | 0.0075 | 0.0061 | 81 | 40-150 |
| 335-76-2 | Perfluorodecanoic acid | 0.0075 | 0.0059 | 79 | 40-150 |
| 2058-94-8 | Perfluoroundecanoic acid | 0.0075 | 0.0071 | 95 | 40-150 |
| 307-55-1 | Perfluorododecanoic acid | 0.0075 | 0.0063 | 84 | 40-150 |
| 72629-94-8 | Perfluorotridecanoic acid | 0.0075 | 0.0063 | 84 | 40-150 |
| 376-06-7 | Perfluorotetradecanoic acid | 0.0075 | 0.0062 | 83 | 40-150 |
| 375-73-5 | Perfluorobutanesulfonic acid | 0.00665 | 0.0053 | 80 | 40-150 |
| 2706-91-4 | Perfluoropentanesulfonic acid | 0.00706 | 0.0062 | 88 | 40-150 |
| 355-46-4 | Perfluorohexanesulfonic acid | 0.00686 | 0.0056 | 82 | 40-150 |
| 375-92-8 | Perfluoroheptanesulfonic acid | 0.00715 | 0.0060 | 84 | 40-150 |
| 1763-23-1 | Perfluorooctanesulfonic acid | 0.00696 | 0.0060 | 86 | 40-150 |
| 68259-12-1 | Perfluorononanesulfonic acid | 0.00722 | 0.0059 | 82 | 40-150 |
| 335-77-3 | Perfluorodecanesulfonic acid | 0.00724 | 0.0057 | 79 | 40-150 |
| 79780-39-5 | Perfluorododecanesulfonic aci | 0.00728 | 0.0056 | 77 | 40-150 |
| 757124-72-44:2 | Fluorotelomer sulfonate | 0.0281 | 0.0242 | 86 | 40-150 |
| 27619-97-2 | 6:2 Fluorotelomer sulfonate | 0.0285 | 0.0263 | 92 | 40-150 |
| 39108-34-4 | 8:2 Fluorotelomer sulfonate | 0.0288 | 0.0235 | 82 | 40-150 |
| 754-91-6 | PFOSA | 0.0075 | 0.0063 | 84 | 40-150 |
| 31506-32-8 | MeFOSA | 0.015 | 0.0134 | 89 | 40-150 |
| 4151-50-2 | EtFOSA | 0.015 | 0.0131 | 87 | 40-150 |
| 2355-31-9 | MeFOSAA | 0.0075 | 0.0067 | 89 | 40-150 |
| 2991-50-6 | EtFOSAA | 0.0075 | 0.0065 | 87 | 40-150 |
| 24448-09-7 | MeFOSE | 0.0375 | 0.0329 | 88 | 40-150 |
| 1691-99-2 | EtFOSE | 0.0375 | 0.0315 | 84 | 40-150 |
| 13252-13-6 | HFPO-DA (GenX) | 0.015 | 0.0120 | 80 | 40-150 |
| 919005-14-4 | ADONA | 0.0142 | 0.0119 | 84 | 40-150 |
| 377-73-1 | PFMPA | 0.015 | 0.0127 | 85 | 40-150 |
| 863090-89-5 | PFMBA | 0.015 | 0.0126 | 84 | 40-150 |
| 151772-58-6 | NFDHA | 0.015 | 0.0134 | 89 | 40-150 |
| 756426-58-19 | Cl-PF3ONS (F-53B Major) | 0.014 | 0.0111 | 79 | 40-150 |
| 763051-92-91 | Cl-PF3OUdS (F-53B Minor) | 0.0142 | 0.0115 | 81 | 40-150 |

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6649
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------------|-----------|----|----------|----|-----------|------------|------------------|
| OP97275-LLBS | 6Q19264.D | 1 | 06/12/23 | MV | 06/09/23 | OP97275 | S6Q287 |

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6649-1, FC6649-2

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | Limits |
|----------------|-------------------------------|------------|----------|-------|--------|
| 113507-82-7 | PFEESA | 0.0134 | 0.0131 | 98 | 40-150 |
| 356-02-5 | 3:3 Fluorotelomer carboxylate | 0.0375 | 0.0246 | 66 | 40-150 |
| 914637-49-35:3 | Fluorotelomer carboxylate | 0.188 | 0.171 | 91 | 40-150 |
| 812-70-4 | 7:3 Fluorotelomer carboxylate | 0.188 | 0.170 | 91 | 40-150 |

| CAS No. | ID Standard Recoveries | BSP | Limits |
|---------|------------------------|------|---------|
| | 13C4-PFBA | 115% | 20-150% |
| | 13C5-PFPeA | 113% | 20-150% |
| | 13C5-PFHxA | 107% | 20-150% |
| | 13C4-PFHpA | 114% | 20-150% |
| | 13C8-PFOA | 122% | 20-150% |
| | 13C9-PFNA | 116% | 20-150% |
| | 13C6-PFDA | 130% | 20-150% |
| | 13C7-PFUnDA | 114% | 20-150% |
| | 13C2-PFDoDA | 115% | 20-150% |
| | 13C2-PFTeDA | 106% | 20-150% |
| | 13C3-PFBS | 113% | 20-150% |
| | 13C3-PFHxS | 109% | 20-150% |
| | 13C8-PFOS | 120% | 20-150% |
| | 13C8-FOSA | 92% | 20-150% |
| | d3-MeFOSA | 81% | 20-150% |
| | d5-EtFOSA | 87% | 20-150% |
| | d3-MeFOSAA | 114% | 20-150% |
| | d5-EtFOSAA | 117% | 20-150% |
| | d7-MeFOSE | 68% | 20-150% |
| | d9-EtFOSE | 78% | 20-150% |
| | 13C2-4:2FTS | 131% | 20-180% |
| | 13C2-6:2FTS | 125% | 20-180% |
| | 13C2-8:2FTS | 114% | 20-180% |
| | 13C3-HFPO-DA | 116% | 20-150% |

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6649
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

| | | | | | | | |
|------------|-----------|----|----------|----|-----------|------------|------------------|
| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
| OP97275-BS | 6Q19263.D | 1 | 06/12/23 | MV | 06/09/23 | OP97275 | S6Q287 |

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6649-1, FC6649-2

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | Limits |
|----------------|-------------------------------|---------------|-------------|----------|--------|
| 375-22-4 | Perfluorobutanoic acid | 0.1 | 0.0892 | 89 | 40-150 |
| 2706-90-3 | Perfluoropentanoic acid | 0.05 | 0.0448 | 90 | 40-150 |
| 307-24-4 | Perfluorohexanoic acid | 0.025 | 0.0239 | 96 | 40-150 |
| 375-85-9 | Perfluoroheptanoic acid | 0.025 | 0.0212 | 85 | 40-150 |
| 335-67-1 | Perfluorooctanoic acid | 0.025 | 0.0256 | 102 | 40-150 |
| 375-95-1 | Perfluorononanoic acid | 0.025 | 0.0214 | 86 | 40-150 |
| 335-76-2 | Perfluorodecanoic acid | 0.025 | 0.0188 | 75 | 40-150 |
| 2058-94-8 | Perfluoroundecanoic acid | 0.025 | 0.0216 | 86 | 40-150 |
| 307-55-1 | Perfluorododecanoic acid | 0.025 | 0.0243 | 97 | 40-150 |
| 72629-94-8 | Perfluorotridecanoic acid | 0.025 | 0.0222 | 89 | 40-150 |
| 376-06-7 | Perfluorotetradecanoic acid | 0.025 | 0.0226 | 90 | 40-150 |
| 375-73-5 | Perfluorobutanesulfonic acid | 0.0222 | 0.0204 | 92 | 40-150 |
| 2706-91-4 | Perfluoropentanesulfonic acid | 0.0235 | 0.0209 | 89 | 40-150 |
| 355-46-4 | Perfluorohexanesulfonic acid | 0.0229 | 0.0192 | 84 | 40-150 |
| 375-92-8 | Perfluoroheptanesulfonic acid | 0.0238 | 0.0205 | 86 | 40-150 |
| 1763-23-1 | Perfluorooctanesulfonic acid | 0.0232 | 0.0209 | 90 | 40-150 |
| 68259-12-1 | Perfluorononanesulfonic acid | 0.0241 | 0.0211 | 88 | 40-150 |
| 335-77-3 | Perfluorodecanesulfonic acid | 0.0241 | 0.0226 | 94 | 40-150 |
| 79780-39-5 | Perfluorododecanesulfonic aci | 0.0243 | 0.0193 | 80 | 40-150 |
| 757124-72-44:2 | Fluorotelomer sulfonate | 0.0938 | 0.0859 | 92 | 40-150 |
| 27619-97-2 | 6:2 Fluorotelomer sulfonate | 0.095 | 0.0985 | 104 | 40-150 |
| 39108-34-4 | 8:2 Fluorotelomer sulfonate | 0.096 | 0.0865 | 90 | 40-150 |
| 754-91-6 | PFOSA | 0.025 | 0.0216 | 86 | 40-150 |
| 31506-32-8 | MeFOSA | 0.05 | 0.0459 | 92 | 40-150 |
| 4151-50-2 | EtFOSA | 0.05 | 0.0462 | 92 | 40-150 |
| 2355-31-9 | MeFOSAA | 0.025 | 0.0241 | 96 | 40-150 |
| 2991-50-6 | EtFOSAA | 0.025 | 0.0218 | 87 | 40-150 |
| 24448-09-7 | MeFOSE | 0.125 | 0.108 | 86 | 40-150 |
| 1691-99-2 | EtFOSE | 0.125 | 0.103 | 82 | 40-150 |
| 13252-13-6 | HFPO-DA (GenX) | 0.05 | 0.0418 | 84 | 40-150 |
| 919005-14-4 | ADONA | 0.0473 | 0.0411 | 87 | 40-150 |
| 377-73-1 | PFMPA | 0.05 | 0.0243 | 49 | 40-150 |
| 863090-89-5 | PFMBA | 0.05 | 0.0463 | 93 | 40-150 |
| 151772-58-6 | NFDHA | 0.05 | 0.0437 | 87 | 40-150 |
| 756426-58-19 | Cl-PF3ONS (F-53B Major) | 0.0468 | 0.0400 | 86 | 40-150 |
| 763051-92-91 | Cl-PF3OUdS (F-53B Minor) | 0.0473 | 0.0387 | 82 | 40-150 |

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC6649
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|------------|-----------|----|----------|----|-----------|------------|------------------|
| OP97275-BS | 6Q19263.D | 1 | 06/12/23 | MV | 06/09/23 | OP97275 | S6Q287 |

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6649-1, FC6649-2

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | Limits |
|----------------|-------------------------------|------------|----------|-------|--------|
| 113507-82-7 | PFEESA | 0.0445 | 0.0450 | 101 | 40-150 |
| 356-02-5 | 3:3 Fluorotelomer carboxylate | 0.125 | 0.0476 | 38* | 40-150 |
| 914637-49-35:3 | Fluorotelomer carboxylate | 0.625 | 0.595 | 95 | 40-150 |
| 812-70-4 | 7:3 Fluorotelomer carboxylate | 0.625 | 0.562 | 90 | 40-150 |

| CAS No. | ID Standard Recoveries | BSP | Limits |
|---------|------------------------|------|---------|
| | 13C4-PFBA | 30% | 20-150% |
| | 13C5-PFPeA | 102% | 20-150% |
| | 13C5-PFHxA | 99% | 20-150% |
| | 13C4-PFHpA | 108% | 20-150% |
| | 13C8-PFOA | 97% | 20-150% |
| | 13C9-PFNA | 106% | 20-150% |
| | 13C6-PFDA | 127% | 20-150% |
| | 13C7-PFUnDA | 112% | 20-150% |
| | 13C2-PFDoDA | 106% | 20-150% |
| | 13C2-PFTeDA | 98% | 20-150% |
| | 13C3-PFBS | 116% | 20-150% |
| | 13C3-PFHxS | 117% | 20-150% |
| | 13C8-PFOS | 108% | 20-150% |
| | 13C8-FOSA | 86% | 20-150% |
| | d3-MeFOSA | 82% | 20-150% |
| | d5-EtFOSA | 81% | 20-150% |
| | d3-MeFOSAA | 109% | 20-150% |
| | d5-EtFOSAA | 105% | 20-150% |
| | d7-MeFOSE | 64% | 20-150% |
| | d9-EtFOSE | 73% | 20-150% |
| | 13C2-4:2FTS | 135% | 20-180% |
| | 13C2-6:2FTS | 119% | 20-180% |
| | 13C2-8:2FTS | 120% | 20-180% |
| | 13C3-HFPO-DA | 108% | 20-150% |

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC6649
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|------------|-----------|----|----------|----|-----------|------------|------------------|
| OP97275-MS | 6Q19269.D | 1 | 06/12/23 | MV | 06/09/23 | OP97275 | S6Q287 |
| FC6649-1 | 6Q19268.D | 1 | 06/12/23 | MV | 06/09/23 | OP97275 | S6Q287 |

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6649-1, FC6649-2

| CAS No. | Compound | FC6649-1 ug/l | Spike Q | MS ug/l | MS % | Limits | |
|----------------|-------------------------------|------------------|------------|------------|---------|--------|--------|
| 375-22-4 | Perfluorobutanoic acid | 0.015 U | | 0.0909 | 0.0740 | 81 | 40-150 |
| 2706-90-3 | Perfluoropentanoic acid | 0.0074 U | | 0.0455 | 0.0392 | 86 | 40-150 |
| 307-24-4 | Perfluorohexanoic acid | 0.0037 U | | 0.0227 | 0.0190 | 84 | 40-150 |
| 375-85-9 | Perfluoroheptanoic acid | 0.0037 U | | 0.0227 | 0.0195 | 86 | 40-150 |
| 335-67-1 | Perfluorooctanoic acid | 0.0037 U | | 0.0227 | 0.0212 | 93 | 40-150 |
| 375-95-1 | Perfluorononanoic acid | 0.0037 U | | 0.0227 | 0.0188 | 83 | 40-150 |
| 335-76-2 | Perfluorodecanoic acid | 0.0037 U | | 0.0227 | 0.0184 | 81 | 40-150 |
| 2058-94-8 | Perfluoroundecanoic acid | 0.0037 U | | 0.0227 | 0.0215 | 95 | 40-150 |
| 307-55-1 | Perfluorododecanoic acid | 0.0037 U | | 0.0227 | 0.0198 | 87 | 40-150 |
| 72629-94-8 | Perfluorotridecanoic acid | 0.0037 U | | 0.0227 | 0.0181 | 80 | 40-150 |
| 376-06-7 | Perfluorotetradecanoic acid | 0.0037 U | | 0.0227 | 0.0200 | 88 | 40-150 |
| 375-73-5 | Perfluorobutanesulfonic acid | 0.0037 U | | 0.0202 | 0.0173 | 86 | 40-150 |
| 2706-91-4 | Perfluoropentanesulfonic acid | 0.0046 U | | 0.0214 | 0.0196 | 92 | 40-150 |
| 355-46-4 | Perfluorohexanesulfonic acid | 0.0037 U | | 0.0208 | 0.0188 | 91 | 40-150 |
| 375-92-8 | Perfluoroheptanesulfonic acid | 0.0037 U | | 0.0217 | 0.0191 | 88 | 40-150 |
| 1763-23-1 | Perfluorooctanesulfonic acid | 0.0037 U | | 0.0211 | 0.0191 | 91 | 40-150 |
| 68259-12-1 | Perfluorononanesulfonic acid | 0.0037 U | | 0.0219 | 0.0193 | 88 | 40-150 |
| 335-77-3 | Perfluorodecanesulfonic acid | 0.0037 U | | 0.0219 | 0.0167 | 76 | 40-150 |
| 79780-39-5 | Perfluorododecanesulfonic aci | 0.0046 U | | 0.022 | 0.0104 | 47 | 40-150 |
| 757124-72-44:2 | Fluorotelomer sulfonate | 0.019 U | | 0.0852 | 0.0702 | 82 | 40-150 |
| 27619-97-2 | 6:2 Fluorotelomer sulfonate | 0.0038 U | J | 0.0864 | 0.0856 | 95 | 40-150 |
| 39108-34-4 | 8:2 Fluorotelomer sulfonate | 0.019 U | | 0.0873 | 0.0697 | 80 | 40-150 |
| 754-91-6 | PFOSA | 0.0037 U | | 0.0227 | 0.0202 | 89 | 40-150 |
| 31506-32-8 | MeFOSA | 0.0074 U | | 0.0455 | 0.0391 | 86 | 40-150 |
| 4151-50-2 | EtFOSA | 0.0074 U | | 0.0455 | 0.0395 | 87 | 40-150 |
| 2355-31-9 | MeFOSAA | 0.0046 U | | 0.0227 | 0.0223 | 98 | 40-150 |
| 2991-50-6 | EtFOSAA | 0.0046 U | | 0.0227 | 0.0197 | 87 | 40-150 |
| 24448-09-7 | MeFOSE | 0.037 U | | 0.114 | 0.103 | 91 | 40-150 |
| 1691-99-2 | EtFOSE | 0.037 U | | 0.114 | 0.101 | 89 | 40-150 |
| 13252-13-6 | HFPO-DA (GenX) | 0.0037 U | | 0.0455 | 0.0367 | 81 | 40-150 |
| 919005-14-4 | ADONA | 0.0074 U | | 0.043 | 0.0446 | 104 | 40-150 |
| 377-73-1 | PFMPA | 0.0074 U | | 0.0455 | 0.0106 | 23* | 40-150 |
| 863090-89-5 | PFMBA | 0.0074 U | | 0.0455 | 0.0645 | 142 | 40-150 |
| 151772-58-6 | NFDHA | 0.0074 U | | 0.0455 | 0.0342 | 75 | 40-150 |
| 756426-58-19 | Cl-PF3ONS (F-53B Major) | 0.0074 U | | 0.0425 | 0.0448 | 105 | 40-150 |
| 763051-92-91 | Cl-PF3OUdS (F-53B Minor) | 0.0074 U | | 0.043 | 0.0363 | 85 | 40-150 |

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC6649
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|------------|-----------|----|----------|----|-----------|------------|------------------|
| OP97275-MS | 6Q19269.D | 1 | 06/12/23 | MV | 06/09/23 | OP97275 | S6Q287 |
| FC6649-1 | 6Q19268.D | 1 | 06/12/23 | MV | 06/09/23 | OP97275 | S6Q287 |

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6649-1, FC6649-2

| CAS No. | Compound | FC6649-1 ug/l | Spike Q | MS ug/l | MS % | Limits |
|----------------|-------------------------------|------------------|------------|------------|---------|--------|
| 113507-82-7 | PFEESA | 0.0074 U | 0.0405 | 0.0396 | 98 | 40-150 |
| 356-02-5 | 3:3 Fluorotelomer carboxylate | 0.019 U | 0.114 | 0.0230 | 20* | 40-150 |
| 914637-49-35:3 | Fluorotelomer carboxylate | 0.093 U | 0.568 | 0.513 | 90 | 40-150 |
| 812-70-4 | 7:3 Fluorotelomer carboxylate | 0.093 U | 0.568 | 0.655 | 115 | 40-150 |

| CAS No. | ID Standard Recoveries | MS | FC6649-1 | Limits |
|---------|------------------------|-------|----------|---------|
| | 13C4-PFBA | 4%* a | 4%* a | 20-150% |
| | 13C5-PFPeA | 26% | 25% | 20-150% |
| | 13C5-PFHxA | 98% | 95% | 20-150% |
| | 13C4-PFHpA | 107% | 105% | 20-150% |
| | 13C8-PFOA | 117% | 115% | 20-150% |
| | 13C9-PFNA | 105% | 113% | 20-150% |
| | 13C6-PFDA | 109% | 107% | 20-150% |
| | 13C7-PFUnDA | 97% | 99% | 20-150% |
| | 13C2-PFDoDA | 96% | 102% | 20-150% |
| | 13C2-PFTeDA | 70% | 74% | 20-150% |
| | 13C3-PFBS | 109% | 105% | 20-150% |
| | 13C3-PFHxS | 110% | 109% | 20-150% |
| | 13C8-PFOS | 100% | 102% | 20-150% |
| | 13C8-FOSA | 84% | 91% | 20-150% |
| | d3-MeFOSA | 85% | 87% | 20-150% |
| | d5-EtFOSA | 87% | 98% | 20-150% |
| | d3-MeFOSAA | 114% | 125% | 20-150% |
| | d5-EtFOSAA | 116% | 126% | 20-150% |
| | d7-MeFOSE | 63% | 69% | 20-150% |
| | d9-EtFOSE | 68% | 73% | 20-150% |
| | 13C2-4:2FTS | 149% | 141% | 20-180% |
| | 13C2-6:2FTS | 102% | 97% | 20-180% |
| | 13C2-8:2FTS | 114% | 113% | 20-180% |
| | 13C3-HFPO-DA | 90% | 83% | 20-150% |

(a) Outside control limits.

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC6649
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|-------------|-----------|----|----------|----|-----------|------------|------------------|
| OP97275-DUP | 6Q19275.D | 1 | 06/12/23 | MV | 06/09/23 | OP97275 | S6Q287 |
| FC6649-4 | 6Q19274.D | 1 | 06/12/23 | MV | 06/09/23 | OP97275 | S6Q287 |

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6649-1, FC6649-2

| CAS No. | Compound | FC6649-4 ug/l | DUP Q | ug/l | Q | RPD | Limits |
|----------------|-------------------------------|------------------|----------|----------|---|-----|--------|
| 375-22-4 | Perfluorobutanoic acid | 0.015 U | ND | | | nc | 30 |
| 2706-90-3 | Perfluoropentanoic acid | 0.0075 U | ND | | | nc | 30 |
| 307-24-4 | Perfluorohexanoic acid | 0.0038 U | ND | | | nc | 30 |
| 375-85-9 | Perfluoroheptanoic acid | 0.0038 U | ND | | | nc | 30 |
| 335-67-1 | Perfluorooctanoic acid | 0.0038 U | ND | | | nc | 30 |
| 375-95-1 | Perfluorononanoic acid | 0.0038 U | ND | | | nc | 30 |
| 335-76-2 | Perfluorodecanoic acid | 0.0038 U | ND | | | nc | 30 |
| 2058-94-8 | Perfluoroundecanoic acid | 0.0038 U | ND | | | nc | 30 |
| 307-55-1 | Perfluorododecanoic acid | 0.0038 U | ND | | | nc | 30 |
| 72629-94-8 | Perfluorotridecanoic acid | 0.0038 U | ND | | | nc | 30 |
| 376-06-7 | Perfluorotetradecanoic acid | 0.0038 U | ND | | | nc | 30 |
| 375-73-5 | Perfluorobutanesulfonic acid | 0.0038 U | ND | | | nc | 30 |
| 2706-91-4 | Perfluoropentanesulfonic acid | 0.0047 U | ND | | | nc | 30 |
| 355-46-4 | Perfluorohexanesulfonic acid | 0.0038 U | ND | | | nc | 30 |
| 375-92-8 | Perfluoroheptanesulfonic acid | 0.0038 U | ND | | | nc | 30 |
| 1763-23-1 | Perfluorooctanesulfonic acid | 0.0038 U | ND | | | nc | 30 |
| 68259-12-1 | Perfluorononanesulfonic acid | 0.0038 U | ND | | | nc | 30 |
| 335-77-3 | Perfluorodecanesulfonic acid | 0.0038 U | ND | | | nc | 30 |
| 79780-39-5 | Perfluorododecanesulfonic aci | 0.0047 U | ND | | | nc | 30 |
| 757124-72-44:2 | Fluorotelomer sulfonate | 0.019 U | ND | | | nc | 30 |
| 27619-97-2 | 6:2 Fluorotelomer sulfonate | 0.0085 U | J | 0.0055 U | J | 43* | 30 |
| 39108-34-4 | 8:2 Fluorotelomer sulfonate | 0.019 U | ND | | | nc | 30 |
| 754-91-6 | PFOSA | 0.0038 U | ND | | | nc | 30 |
| 31506-32-8 | MeFOSA | 0.0075 U | ND | | | nc | 30 |
| 4151-50-2 | EtFOSA | 0.0075 U | ND | | | nc | 30 |
| 2355-31-9 | MeFOSAA | 0.0047 U | ND | | | nc | 30 |
| 2991-50-6 | EtFOSAA | 0.0047 U | ND | | | nc | 30 |
| 24448-09-7 | MeFOSE | 0.038 U | ND | | | nc | 30 |
| 1691-99-2 | EtFOSE | 0.038 U | ND | | | nc | 30 |
| 13252-13-6 | HFPO-DA (GenX) | 0.0038 U | ND | | | nc | 30 |
| 919005-14-4 | ADONA | 0.0075 U | ND | | | nc | 30 |
| 377-73-1 | PFMPA | 0.0075 U | ND | | | nc | 30 |
| 863090-89-5 | PFMBA | 0.0075 U | ND | | | nc | 30 |
| 151772-58-6 | NFDHA | 0.0075 U | ND | | | nc | 30 |
| 756426-58-19 | Cl-PF3ONS (F-53B Major) | 0.0075 U | ND | | | nc | 30 |
| 763051-92-91 | Cl-PF3OUdS (F-53B Minor) | 0.0075 U | ND | | | nc | 30 |

* = Outside of Control Limits.

Duplicate Summary

Job Number: FC6649
 Account: AECOMCOD AECOM, INC.
 Project: N6274223F0104 RH Fire Suppression System

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|-------------|-----------|----|----------|----|-----------|------------|------------------|
| OP97275-DUP | 6Q19275.D | 1 | 06/12/23 | MV | 06/09/23 | OP97275 | S6Q287 |
| FC6649-4 | 6Q19274.D | 1 | 06/12/23 | MV | 06/09/23 | OP97275 | S6Q287 |

The QC reported here applies to the following samples:

Method: EPA DRAFT 1633

FC6649-1, FC6649-2

| CAS No. | Compound | FC6649-4 ug/l | DUP Q | ug/l | Q | RPD | Limits |
|----------------|-------------------------------|------------------|----------|------|---|-----|--------|
| 113507-82-7 | PFEESA | 0.0075 U | ND | | | nc | 30 |
| 356-02-5 | 3:3 Fluorotelomer carboxylate | 0.019 U | ND | | | nc | 30 |
| 914637-49-35:3 | Fluorotelomer carboxylate | 0.094 U | ND | | | nc | 30 |
| 812-70-4 | 7:3 Fluorotelomer carboxylate | 0.094 U | ND | | | nc | 30 |

| CAS No. | ID Standard Recoveries | DUP | FC6649-4 | Limits |
|---------|------------------------|------|----------|---------|
| | 13C4-PFBA | 114% | 107% | 20-150% |
| | 13C5-PFPeA | 116% | 113% | 20-150% |
| | 13C5-PFHxA | 113% | 117% | 20-150% |
| | 13C4-PFHpA | 115% | 110% | 20-150% |
| | 13C8-PFOA | 110% | 116% | 20-150% |
| | 13C9-PFNA | 127% | 107% | 20-150% |
| | 13C6-PFDA | 123% | 101% | 20-150% |
| | 13C7-PFUnDA | 94% | 95% | 20-150% |
| | 13C2-PFDoDA | 94% | 88% | 20-150% |
| | 13C2-PFTeDA | 89% | 84% | 20-150% |
| | 13C3-PFBS | 119% | 118% | 20-150% |
| | 13C3-PFHxS | 109% | 114% | 20-150% |
| | 13C8-PFOS | 106% | 105% | 20-150% |
| | 13C8-FOSA | 94% | 92% | 20-150% |
| | d3-MeFOSA | 86% | 79% | 20-150% |
| | d5-EtFOSA | 97% | 80% | 20-150% |
| | d3-MeFOSAA | 107% | 102% | 20-150% |
| | d5-EtFOSAA | 110% | 97% | 20-150% |
| | d7-MeFOSE | 71% | 67% | 20-150% |
| | d9-EtFOSE | 84% | 69% | 20-150% |
| | 13C2-4:2FTS | 134% | 135% | 20-180% |
| | 13C2-6:2FTS | 130% | 127% | 20-180% |
| | 13C2-8:2FTS | 114% | 109% | 20-180% |
| | 13C3-HFPO-DA | 105% | 102% | 20-150% |

* = Outside of Control Limits.