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Automated Report

Technical Report for

APTIM

TCWTS; Coupeville, WA

501207

SGS Job Number: FA67211

Sampling Date: 08/19/19

Report to:

APTIM

natasha.sullivan@aptim.com

ATTN: Natasha Sullivan

Total number of pages in report: 56



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink that reads "Caitlin Brice".

Caitlin Brice, M.S.
General Manager

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Test results relate only to samples analyzed.

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Sample Summary

APTIM

Job No: FA67211

**TCWTS; Coupeville, WA
Project No: 501207**

| Sample Number | Collected | | Received | Matrix | | | Client Sample ID |
|---------------|-----------|----------|----------|--------|---------------------|--|----------------------------|
| | Date | Time By | | Code | Type | | |
| FA67211-1 | 08/19/19 | 12:30 MB | 08/20/19 | DW | Drinking Water FB | | WI-CV-FCWTP-FB-01-081919 |
| FA67211-2 | 08/19/19 | 12:35 MB | 08/20/19 | DW | Drinking Water | | WI-CV-FCWTP-INF200-081919 |
| FA67211-3 | 08/19/19 | 12:38 MB | 08/20/19 | DW | Drinking Water FB | | WI-CV-FCWTP-FB-02-081919 |
| FA67211-4 | 08/19/19 | 12:42 MB | 08/20/19 | DW | Drinking Water | | WI-CV-FCWTP-MP205-081919 |
| FA67211-5 | 08/19/19 | 12:50 MB | 08/20/19 | DW | Drinking Water FB | | WI-CV-FCWTP-FB-03-081919 |
| FA67211-6 | 08/19/19 | 12:56 MB | 08/20/19 | DW | Drinking Water | | WI-CV-FCWTP-EF209-081919 |
| FA67211-7 | 08/19/19 | 13:01 MB | 08/20/19 | DW | Drinking Water FB | | WI-CV-FCWTP-FB-04-081919 |
| FA67211-8 | 08/19/19 | 13:04 MB | 08/20/19 | DW | Drinking Water | | WI-CV-FCWTP-EF002-081919 |
| FA67211-8D | 08/19/19 | 13:04 MB | 08/20/19 | DW | Drinking Water Dup. | | WI-CV-FCWTP-EF002-081919 |
| FA67211-8S | 08/19/19 | 13:04 MB | 08/20/19 | DW | Drinking Water MS | | WI-CV-FCWTP-EF002-081919 |
| FA67211-9 | 08/19/19 | 13:12 MB | 08/20/19 | DW | Drinking Water | | WI-CV-FCWTP-INF001-081919 |
| FA67211-10 | 08/19/19 | 13:12 MB | 08/20/19 | DW | Drinking Water | | WI-CV-FCWTP-INF001P-081919 |
| FA67211-11 | 08/19/19 | 13:17 MB | 08/20/19 | DW | Drinking Water FB | | WI-CV-FCWTP-FB-05-081919 |

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: APTIM

Job No: FA67211

Site: TCWTS; Coupeville, WA

Report Date 8/29/2019 7:43:06 PM

6 Samples and 5 Field Blanks were collected on 08/19/2019 and were received at SGS North America Inc - Orlando on 08/20/2019 properly preserved, at 1.8 Deg. C and intact. These Samples received an SGS Orlando job number of FA67211. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Semi-volatiles By Method EPA 537.1 REV 1.0

Matrix: DW

Batch ID: OP76525

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) FA67211-8MS, FA67211-8MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Blank Spike Recovery(s) for Perfluorododecanoic acid, Perfluorotridecanoic acid, Perfluoroundecanoic acid are outside control limits.

Matrix Spike Recovery(s) for Perfluorododecanoic acid, Perfluorotetradecanoic acid, Perfluorotridecanoic acid are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for Perfluorododecanoic acid, Perfluorotetradecanoic acid, Perfluorotridecanoic acid, Perfluoroundecanoic acid are outside control limits. Probable cause is due to matrix interference.

FA67211-1 for EtFOSAA: Associated CCV outside control limits high. Sample was ND.

FA67211-1 for MeFOSAA: Associated CCV outside control limits high. Sample was ND.

FA67211-1 for Perfluorododecanoic acid: Associated BS and CCV outside of control limits high, sample was ND.

FA67211-1 for Perfluorotetradecanoic acid: Associated CCV outside control limits high. Sample was ND.

FA67211-1 for Perfluorotridecanoic acid: Associated BS and CCV outside of control limits high, sample was ND.

FA67211-1 for Perfluoroundecanoic acid: Associated BS and CCV outside of control limits high, sample was ND.

FA67211-2 for EtFOSAA: Associated CCV outside control limits high. Sample was ND.

FA67211-2 for MeFOSAA: Associated CCV outside control limits high. Sample was ND.

FA67211-2 for Perfluorododecanoic acid: Associated BS and CCV outside of control limits high, sample was ND.

FA67211-2 for Perfluorotetradecanoic acid: Associated CCV outside control limits high. Sample was ND.

FA67211-2 for Perfluorotridecanoic acid: Associated BS and CCV outside of control limits high, sample was ND.

FA67211-2 for Perfluoroundecanoic acid: Associated BS and CCV outside of control limits high, sample was ND.

FA67211-3 for EtFOSAA: Associated CCV outside control limits high. Sample was ND.

FA67211-3 for MeFOSAA: Associated CCV outside control limits high. Sample was ND.

FA67211-3 for Perfluorododecanoic acid: Associated BS and CCV outside of control limits high, sample was ND.

FA67211-3 for Perfluorotetradecanoic acid: Associated CCV outside control limits high. Sample was ND.

FA67211-3 for Perfluorotridecanoic acid: Associated BS and CCV outside of control limits high, sample was ND.

FA67211-3 for Perfluoroundecanoic acid: Associated BS and CCV outside of control limits high, sample was ND.

FA67211-4 for EtFOSAA: Associated CCV outside control limits high. Sample was ND.

FA67211-4 for MeFOSAA: Associated CCV outside control limits high. Sample was ND.

FA67211-4 for Perfluorododecanoic acid: Associated BS and CCV outside of control limits high, sample was ND.

FA67211-4 for Perfluorotetradecanoic acid: Associated CCV outside control limits high. Sample was ND.

FA67211-4 for Perfluorotridecanoic acid: Associated BS and CCV outside of control limits high, sample was ND.

FA67211-4 for Perfluoroundecanoic acid: Associated BS and CCV outside of control limits high, sample was ND.

FA67211-5 for EtFOSAA: Associated CCV outside control limits high. Sample was ND.

FA67211-5 for MeFOSAA: Associated CCV outside control limits high. Sample was ND.

FA67211-5 for Perfluorododecanoic acid: Associated BS and CCV outside of control limits high, sample was ND.

FA67211-5 for Perfluorotetradecanoic acid: Associated CCV outside control limits high. Sample was ND.

FA67211-5 for Perfluorotridecanoic acid: Associated BS and CCV outside of control limits high, sample was ND.

FA67211-5 for Perfluoroundecanoic acid: Associated BS and CCV outside of control limits high, sample was ND.

FA67211-6 for Perfluorododecanoic acid: Associated BS outside control limits high. Sample was ND.

FA67211-6 for Perfluorotridecanoic acid: Associated BS outside control limits high. Sample was ND.

FA67211-6 for Perfluoroundecanoic acid: Associated BS outside control limits high. Sample was ND.
FA67211-7 for Perfluorododecanoic acid: Associated BS outside control limits high. Sample was ND.
FA67211-7 for Perfluorotridecanoic acid: Associated BS outside control limits high. Sample was ND.
FA67211-7 for Perfluoroundecanoic acid: Associated BS outside control limits high. Sample was ND.
FA67211-8 for Perfluorododecanoic acid: Associated BS outside control limits high. Sample was ND.
FA67211-8 for Perfluorotridecanoic acid: Associated BS outside control limits high. Sample was ND.
FA67211-8 for Perfluoroundecanoic acid: Associated BS outside control limits high. Sample was ND.
FA67211-9 for Perfluorododecanoic acid: Associated BS outside control limits high. Sample was ND.
FA67211-9 for Perfluorotridecanoic acid: Associated BS outside control limits high. Sample was ND.
FA67211-9 for Perfluoroundecanoic acid: Associated BS outside control limits high. Sample was ND.
FA67211-10 for Perfluorododecanoic acid: Associated BS outside control limits high. Sample was ND.
FA67211-10 for Perfluorotridecanoic acid: Associated BS outside control limits high. Sample was ND.
FA67211-10 for Perfluoroundecanoic acid: Associated BS outside control limits high. Sample was ND.
FA67211-11 for Perfluorododecanoic acid: Associated BS outside control limits high. Sample was ND.
FA67211-11 for Perfluorotridecanoic acid: Associated BS outside control limits high. Sample was ND.
FA67211-11 for Perfluoroundecanoic acid: Associated BS outside control limits high. Sample was ND.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Ariel Hartney, Client Services (signature on file)

Summary of Hits

Job Number: FA67211
Account: APTIM
Project: TCWTS; Coupeville, WA
Collected: 08/19/19



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

FA67211-1 WI-CV-FCWTP-FB-01-081919

No hits reported in this sample.

FA67211-2 WI-CV-FCWTP-INF200-081919

| | | | | | |
|------------------------------|------|-----|-----|------|-------------------|
| Perfluorohexanoic acid | 27.3 | 3.7 | 1.9 | ng/l | EPA 537.1 REV 1.0 |
| Perfluoroheptanoic acid | 9.21 | 3.7 | 1.9 | ng/l | EPA 537.1 REV 1.0 |
| Perfluorooctanoic acid | 50.1 | 3.7 | 1.9 | ng/l | EPA 537.1 REV 1.0 |
| Perfluorobutanesulfonic acid | 13.4 | 3.7 | 1.9 | ng/l | EPA 537.1 REV 1.0 |
| Perfluorohexanesulfonic acid | 53.0 | 3.7 | 1.9 | ng/l | EPA 537.1 REV 1.0 |

FA67211-3 WI-CV-FCWTP-FB-02-081919

No hits reported in this sample.

FA67211-4 WI-CV-FCWTP-MP205-081919

No hits reported in this sample.

FA67211-5 WI-CV-FCWTP-FB-03-081919

No hits reported in this sample.

FA67211-6 WI-CV-FCWTP-EF209-081919

No hits reported in this sample.

FA67211-7 WI-CV-FCWTP-FB-04-081919

No hits reported in this sample.

FA67211-8 WI-CV-FCWTP-EF002-081919

No hits reported in this sample.

FA67211-9 WI-CV-FCWTP-INF001-081919

| | | | | | |
|------------------------------|------|-----|-----|------|-------------------|
| Perfluorohexanoic acid | 26.1 | 3.7 | 1.9 | ng/l | EPA 537.1 REV 1.0 |
| Perfluoroheptanoic acid | 8.95 | 3.7 | 1.9 | ng/l | EPA 537.1 REV 1.0 |
| Perfluorooctanoic acid | 55.5 | 3.7 | 1.9 | ng/l | EPA 537.1 REV 1.0 |
| Perfluorobutanesulfonic acid | 13.1 | 3.7 | 1.9 | ng/l | EPA 537.1 REV 1.0 |
| Perfluorohexanesulfonic acid | 50.2 | 3.7 | 1.9 | ng/l | EPA 537.1 REV 1.0 |

Summary of Hits

Job Number: FA67211
Account: APTIM
Project: TCWTS; Coupeville, WA
Collected: 08/19/19



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

FA67211-10 WI-CV-FCWTP-INF001P-081919

| | | | | | |
|------------------------------|------|-----|-----|------|-------------------|
| Perfluorohexanoic acid | 26.2 | 3.7 | 1.9 | ng/l | EPA 537.1 REV 1.0 |
| Perfluoroheptanoic acid | 8.99 | 3.7 | 1.9 | ng/l | EPA 537.1 REV 1.0 |
| Perfluorooctanoic acid | 53.0 | 3.7 | 1.9 | ng/l | EPA 537.1 REV 1.0 |
| Perfluorobutanesulfonic acid | 13.2 | 3.7 | 1.9 | ng/l | EPA 537.1 REV 1.0 |
| Perfluorohexanesulfonic acid | 50.3 | 3.7 | 1.9 | ng/l | EPA 537.1 REV 1.0 |

FA67211-11 WI-CV-FCWTP-FB-05-081919

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

| | | | |
|-------------------|---------------------------|-----------------|----------|
| Client Sample ID: | WI-CV-FCWTP-FB-01-081919 | | |
| Lab Sample ID: | FA67211-1 | Date Sampled: | 08/19/19 |
| Matrix: | DW - Drinking Water FB | Date Received: | 08/20/19 |
| Method: | EPA 537.1 REV 1.0 EPA 537 | Percent Solids: | n/a |
| Project: | TCWTS; Coupeville, WA | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|----------|----|----------------|----|----------------|------------|------------------|
| Run #1 | 3Q7895.D | 1 | 08/28/19 03:14 | NG | 08/24/19 07:50 | OP76525 | S3Q155 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 270 ml | 1.0 ml |
| Run #2 | | |

Perfluorinated Alkyl Acids

| CAS No. | Compound | Result | MCL | LOQ | LOD | DL | Units | Q |
|---------------------------------------|--|--------|-----|-----|-----|------|-------|---|
| PERFLUOROALKYLCARBOXYLIC ACIDS | | | | | | | | |
| 307-24-4 | Perfluorohexanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-85-9 | Perfluoroheptanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-67-1 | Perfluorooctanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-76-2 | Perfluorodecanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 72629-94-8 | Perfluorotridecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid ^b | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |

| CAS No. | Compound | Result | MCL | LOQ | LOD | DL | Units | Q |
|---------------------------------|------------------------------|--------|-----|-----|-----|------|-------|---|
| PERFLUOROALKYLSULFONATES | | | | | | | | |
| 375-73-5 | Perfluorobutanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 1.4 | ng/l | |

| CAS No. | Compound | Result | MCL | LOQ | LOD | DL | Units | Q |
|--|----------------------|--------|-----|-----|-----|-----|-------|---|
| PERFLUOROOCCTANESULFONAMIDOACETIC ACIDS | | | | | | | | |
| 2355-31-9 | MeFOSAA ^b | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |
| 2991-50-6 | EtFOSAA ^b | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |

| CAS No. | Compound | Result | MCL | LOQ | LOD | DL | Units | Q |
|--------------------------------------|----------------------------|--------|-----|-----|-----|-----|-------|---|
| NEXT GENERATION PFAS ANALYTES | | | | | | | | |
| 13252-13-6 | HFPO-DA (GenX) | 9.3 U | | 19 | 9.3 | 5.6 | ng/l | |
| 919005-14-4 | ADONA | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 756426-58-1 | 9Cl-PF3ONS (F-53B Major) | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 763051-92-9 | 11Cl-PF3OUdS (F-53B Minor) | 3.7 U | | 7.4 | 3.7 | 2.8 | ng/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C2-PFHxA | 99% | | 70-130% |
| | 13C2-PFDA | 106% | | 70-130% |
| | d5-EtFOSAA | 100% | | 70-130% |
| | 13C3-HFPO-DA | 105% | | 70-130% |

U = Not detected LOD = Limit of Detection
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

4.1
4

Report of Analysis

| | | | |
|--------------------------|---------------------------|------------------------|----------|
| Client Sample ID: | WI-CV-FCWTP-FB-01-081919 | | |
| Lab Sample ID: | FA67211-1 | Date Sampled: | 08/19/19 |
| Matrix: | DW - Drinking Water FB | Date Received: | 08/20/19 |
| Method: | EPA 537.1 REV 1.0 EPA 537 | Percent Solids: | n/a |
| Project: | TCWTS; Coupeville, WA | | |

Perfluorinated Alkyl Acids

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

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

(b) Associated CCV outside control limits high. Sample was ND.

U = Not detected LOD = Limit of Detection
 MCL = Maximum Contamination Level (40 CFR 141)
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|-------------------|---------------------------|-----------------|----------|
| Client Sample ID: | WI-CV-FCWTP-INF200-081919 | | |
| Lab Sample ID: | FA67211-2 | Date Sampled: | 08/19/19 |
| Matrix: | DW - Drinking Water | Date Received: | 08/20/19 |
| Method: | EPA 537.1 REV 1.0 EPA 537 | Percent Solids: | n/a |
| Project: | TCWTS; Coupeville, WA | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|----------|----|----------------|----|----------------|------------|------------------|
| Run #1 | 3Q7896.D | 1 | 08/28/19 03:30 | NG | 08/24/19 07:50 | OP76525 | S3Q155 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 270 ml | 1.0 ml |
| Run #2 | | |

Perfluorinated Alkyl Acids

| CAS No. | Compound | Result | MCL | LOQ | LOD | DL | Units | Q |
|---------------------------------------|--|--------|-----|-----|-----|------|-------|---|
| PERFLUOROALKYLCARBOXYLIC ACIDS | | | | | | | | |
| 307-24-4 | Perfluorohexanoic acid | 27.3 | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-85-9 | Perfluoroheptanoic acid | 9.21 | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-67-1 | Perfluorooctanoic acid | 50.1 | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-76-2 | Perfluorodecanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 72629-94-8 | Perfluorotridecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid ^b | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |

| | | | | | | | | |
|---------------------------------|------------------------------|-------|--|-----|-----|------|------|--|
| PERFLUOROALKYLSULFONATES | | | | | | | | |
| 375-73-5 | Perfluorobutanesulfonic acid | 13.4 | | 3.7 | 1.9 | 0.93 | ng/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | 53.0 | | 3.7 | 1.9 | 0.93 | ng/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 1.4 | ng/l | |

| | | | | | | | | |
|--|----------------------|-------|--|-----|-----|-----|------|--|
| PERFLUOROOCCTANESULFONAMIDOACETIC ACIDS | | | | | | | | |
| 2355-31-9 | MeFOSAA ^b | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |
| 2991-50-6 | EtFOSAA ^b | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |

| | | | | | | | | |
|--------------------------------------|----------------------------|-------|--|-----|-----|-----|------|--|
| NEXT GENERATION PFAS ANALYTES | | | | | | | | |
| 13252-13-6 | HFPO-DA (GenX) | 9.3 U | | 19 | 9.3 | 5.6 | ng/l | |
| 919005-14-4 | ADONA | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 756426-58-1 | 9Cl-PF3ONS (F-53B Major) | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 763051-92-9 | 11Cl-PF3OUdS (F-53B Minor) | 3.7 U | | 7.4 | 3.7 | 2.8 | ng/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C2-PFHxA | 101% | | 70-130% |
| | 13C2-PFDA | 109% | | 70-130% |
| | d5-EtFOSAA | 105% | | 70-130% |
| | 13C3-HFPO-DA | 103% | | 70-130% |

U = Not detected LOD = Limit of Detection
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

4.2
4

Report of Analysis

| | | | |
|--------------------------|---------------------------|------------------------|----------|
| Client Sample ID: | WI-CV-FCWTP-INF200-081919 | | |
| Lab Sample ID: | FA67211-2 | Date Sampled: | 08/19/19 |
| Matrix: | DW - Drinking Water | Date Received: | 08/20/19 |
| Method: | EPA 537.1 REV 1.0 EPA 537 | Percent Solids: | n/a |
| Project: | TCWTS; Coupeville, WA | | |

Perfluorinated Alkyl Acids

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

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

(b) Associated CCV outside control limits high. Sample was ND.

U = Not detected LOD = Limit of Detection
 MCL = Maximum Contamination Level (40 CFR 141)
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|-------------------|---------------------------|-----------------|----------|
| Client Sample ID: | WI-CV-FCWTP-FB-02-081919 | | |
| Lab Sample ID: | FA67211-3 | Date Sampled: | 08/19/19 |
| Matrix: | DW - Drinking Water FB | Date Received: | 08/20/19 |
| Method: | EPA 537.1 REV 1.0 EPA 537 | Percent Solids: | n/a |
| Project: | TCWTS; Coupeville, WA | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|----------|----|----------------|----|----------------|------------|------------------|
| Run #1 | 3Q7897.D | 1 | 08/28/19 03:46 | NG | 08/24/19 07:50 | OP76525 | S3Q155 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 270 ml | 1.0 ml |
| Run #2 | | |

Perfluorinated Alkyl Acids

| CAS No. | Compound | Result | MCL | LOQ | LOD | DL | Units | Q |
|---------------------------------------|--|--------|-----|-----|-----|------|-------|---|
| PERFLUOROALKYLCARBOXYLIC ACIDS | | | | | | | | |
| 307-24-4 | Perfluorohexanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-85-9 | Perfluoroheptanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-67-1 | Perfluorooctanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-76-2 | Perfluorodecanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 72629-94-8 | Perfluorotridecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid ^b | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |

| CAS No. | Compound | Result | MCL | LOQ | LOD | DL | Units | Q |
|---------------------------------|------------------------------|--------|-----|-----|-----|------|-------|---|
| PERFLUOROALKYLSULFONATES | | | | | | | | |
| 375-73-5 | Perfluorobutanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 1.4 | ng/l | |

| CAS No. | Compound | Result | MCL | LOQ | LOD | DL | Units | Q |
|--|----------------------|--------|-----|-----|-----|-----|-------|---|
| PERFLUOROOCCTANESULFONAMIDOACETIC ACIDS | | | | | | | | |
| 2355-31-9 | MeFOSAA ^b | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |
| 2991-50-6 | EtFOSAA ^b | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |

| CAS No. | Compound | Result | MCL | LOQ | LOD | DL | Units | Q |
|--------------------------------------|----------------------------|--------|-----|-----|-----|-----|-------|---|
| NEXT GENERATION PFAS ANALYTES | | | | | | | | |
| 13252-13-6 | HFPO-DA (GenX) | 9.3 U | | 19 | 9.3 | 5.6 | ng/l | |
| 919005-14-4 | ADONA | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 756426-58-1 | 9Cl-PF3ONS (F-53B Major) | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 763051-92-9 | 11Cl-PF3OUdS (F-53B Minor) | 3.7 U | | 7.4 | 3.7 | 2.8 | ng/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C2-PFHxA | 103% | | 70-130% |
| | 13C2-PFDA | 101% | | 70-130% |
| | d5-EtFOSAA | 99% | | 70-130% |
| | 13C3-HFPO-DA | 108% | | 70-130% |

U = Not detected LOD = Limit of Detection
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

| | |
|--|-------------------------|
| Client Sample ID: WI-CV-FCWTP-FB-02-081919 | |
| Lab Sample ID: FA67211-3 | Date Sampled: 08/19/19 |
| Matrix: DW - Drinking Water FB | Date Received: 08/20/19 |
| Method: EPA 537.1 REV 1.0 EPA 537 | Percent Solids: n/a |
| Project: TCWTS; Coupeville, WA | |

Perfluorinated Alkyl Acids

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

- (a) Associated BS and CCV outside of control limits high, sample was ND.
- (b) Associated CCV outside control limits high. Sample was ND.

| | | |
|--|--------------------------|--|
| U = Not detected | LOD = Limit of Detection | J = Indicates an estimated value |
| MCL = Maximum Contamination Level (40 CFR 141) | | B = Indicates analyte found in associated method blank |
| E = Indicates value exceeds calibration range | | N = Indicates presumptive evidence of a compound |

4.3
4

Report of Analysis

| | | | |
|-------------------|---------------------------|-----------------|----------|
| Client Sample ID: | WI-CV-FCWTP-MP205-081919 | | |
| Lab Sample ID: | FA67211-4 | Date Sampled: | 08/19/19 |
| Matrix: | DW - Drinking Water | Date Received: | 08/20/19 |
| Method: | EPA 537.1 REV 1.0 EPA 537 | Percent Solids: | n/a |
| Project: | TCWTS; Coupeville, WA | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|----------|----|----------------|----|----------------|------------|------------------|
| Run #1 | 3Q7898.D | 1 | 08/28/19 04:01 | NG | 08/24/19 07:50 | OP76525 | S3Q155 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 270 ml | 1.0 ml |
| Run #2 | | |

Perfluorinated Alkyl Acids

| CAS No. | Compound | Result | MCL | LOQ | LOD | DL | Units | Q |
|---------------------------------------|--|--------|-----|-----|-----|------|-------|---|
| PERFLUOROALKYLCARBOXYLIC ACIDS | | | | | | | | |
| 307-24-4 | Perfluorohexanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-85-9 | Perfluoroheptanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-67-1 | Perfluorooctanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-76-2 | Perfluorodecanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 72629-94-8 | Perfluorotridecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid ^b | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |

| | | | | | | | | |
|---------------------------------|------------------------------|-------|--|-----|-----|------|------|--|
| PERFLUOROALKYLSULFONATES | | | | | | | | |
| 375-73-5 | Perfluorobutanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 1.4 | ng/l | |

| | | | | | | | | |
|--|----------------------|-------|--|-----|-----|-----|------|--|
| PERFLUOROOCCTANESULFONAMIDOACETIC ACIDS | | | | | | | | |
| 2355-31-9 | MeFOSAA ^b | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |
| 2991-50-6 | EtFOSAA ^b | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |

| | | | | | | | | |
|--------------------------------------|----------------------------|-------|--|-----|-----|-----|------|--|
| NEXT GENERATION PFAS ANALYTES | | | | | | | | |
| 13252-13-6 | HFPO-DA (GenX) | 9.3 U | | 19 | 9.3 | 5.6 | ng/l | |
| 919005-14-4 | ADONA | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 756426-58-1 | 9Cl-PF3ONS (F-53B Major) | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 763051-92-9 | 11Cl-PF3OUdS (F-53B Minor) | 3.7 U | | 7.4 | 3.7 | 2.8 | ng/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C2-PFHxA | 97% | | 70-130% |
| | 13C2-PFDA | 99% | | 70-130% |
| | d5-EtFOSAA | 95% | | 70-130% |
| | 13C3-HFPO-DA | 102% | | 70-130% |

U = Not detected LOD = Limit of Detection
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|-------------------|---------------------------|-----------------|----------|
| Client Sample ID: | WI-CV-FCWTP-MP205-081919 | | |
| Lab Sample ID: | FA67211-4 | Date Sampled: | 08/19/19 |
| Matrix: | DW - Drinking Water | Date Received: | 08/20/19 |
| Method: | EPA 537.1 REV 1.0 EPA 537 | Percent Solids: | n/a |
| Project: | TCWTS; Coupeville, WA | | |

Perfluorinated Alkyl Acids

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

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

(b) Associated CCV outside control limits high. Sample was ND.

U = Not detected LOD = Limit of Detection
 MCL = Maximum Contamination Level (40 CFR 141)
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|-------------------|---------------------------|-----------------|----------|
| Client Sample ID: | WI-CV-FCWTP-FB-03-081919 | | |
| Lab Sample ID: | FA67211-5 | Date Sampled: | 08/19/19 |
| Matrix: | DW - Drinking Water FB | Date Received: | 08/20/19 |
| Method: | EPA 537.1 REV 1.0 EPA 537 | Percent Solids: | n/a |
| Project: | TCWTS; Coupeville, WA | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|----------|----|----------------|----|----------------|------------|------------------|
| Run #1 | 3Q7899.D | 1 | 08/28/19 04:17 | NG | 08/24/19 07:50 | OP76525 | S3Q155 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 270 ml | 1.0 ml |
| Run #2 | | |

Perfluorinated Alkyl Acids

| CAS No. | Compound | Result | MCL | LOQ | LOD | DL | Units | Q |
|---------------------------------------|--|--------|-----|-----|-----|------|-------|---|
| PERFLUOROALKYLCARBOXYLIC ACIDS | | | | | | | | |
| 307-24-4 | Perfluorohexanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-85-9 | Perfluoroheptanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-67-1 | Perfluorooctanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-76-2 | Perfluorodecanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 72629-94-8 | Perfluorotridecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid ^b | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |

| | | | | | | | | |
|---------------------------------|------------------------------|-------|--|-----|-----|------|------|--|
| PERFLUOROALKYLSULFONATES | | | | | | | | |
| 375-73-5 | Perfluorobutanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 1.4 | ng/l | |

| | | | | | | | | |
|--|----------------------|-------|--|-----|-----|-----|------|--|
| PERFLUOROOCCTANESULFONAMIDOACETIC ACIDS | | | | | | | | |
| 2355-31-9 | MeFOSAA ^b | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |
| 2991-50-6 | EtFOSAA ^b | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |

| | | | | | | | | |
|--------------------------------------|----------------------------|-------|--|-----|-----|-----|------|--|
| NEXT GENERATION PFAS ANALYTES | | | | | | | | |
| 13252-13-6 | HFPO-DA (GenX) | 9.3 U | | 19 | 9.3 | 5.6 | ng/l | |
| 919005-14-4 | ADONA | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 756426-58-1 | 9Cl-PF3ONS (F-53B Major) | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 763051-92-9 | 11Cl-PF3OUdS (F-53B Minor) | 3.7 U | | 7.4 | 3.7 | 2.8 | ng/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C2-PFHxA | 100% | | 70-130% |
| | 13C2-PFDA | 105% | | 70-130% |
| | d5-EtFOSAA | 102% | | 70-130% |
| | 13C3-HFPO-DA | 105% | | 70-130% |

U = Not detected LOD = Limit of Detection
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

4.5
4

Report of Analysis

| | | | |
|--------------------------|---------------------------|------------------------|----------|
| Client Sample ID: | WI-CV-FCWTP-FB-03-081919 | | |
| Lab Sample ID: | FA67211-5 | Date Sampled: | 08/19/19 |
| Matrix: | DW - Drinking Water FB | Date Received: | 08/20/19 |
| Method: | EPA 537.1 REV 1.0 EPA 537 | Percent Solids: | n/a |
| Project: | TCWTS; Coupeville, WA | | |

Perfluorinated Alkyl Acids

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

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

(b) Associated CCV outside control limits high. Sample was ND.

U = Not detected LOD = Limit of Detection
 MCL = Maximum Contamination Level (40 CFR 141)
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|-------------------|---------------------------|-----------------|----------|
| Client Sample ID: | WI-CV-FCWTP-EF209-081919 | | |
| Lab Sample ID: | FA67211-6 | Date Sampled: | 08/19/19 |
| Matrix: | DW - Drinking Water | Date Received: | 08/20/19 |
| Method: | EPA 537.1 REV 1.0 EPA 537 | Percent Solids: | n/a |
| Project: | TCWTS; Coupeville, WA | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|----------|----|----------------|----|----------------|------------|------------------|
| Run #1 | 3Q7902.D | 1 | 08/28/19 05:04 | NG | 08/24/19 07:50 | OP76525 | S3Q155 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 270 ml | 1.0 ml |
| Run #2 | | |

Perfluorinated Alkyl Acids

| CAS No. | Compound | Result | MCL | LOQ | LOD | DL | Units | Q |
|---------------------------------------|--|--------|-----|-----|-----|------|-------|---|
| PERFLUOROALKYLCARBOXYLIC ACIDS | | | | | | | | |
| 307-24-4 | Perfluorohexanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-85-9 | Perfluoroheptanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-67-1 | Perfluorooctanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-76-2 | Perfluorodecanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 72629-94-8 | Perfluorotridecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |

| | | | | | | | | |
|---------------------------------|------------------------------|-------|--|-----|-----|------|------|--|
| PERFLUOROALKYLSULFONATES | | | | | | | | |
| 375-73-5 | Perfluorobutanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 1.4 | ng/l | |

| | | | | | | | | |
|--|---------|-------|--|-----|-----|-----|------|--|
| PERFLUOROOCCTANESULFONAMIDOACETIC ACIDS | | | | | | | | |
| 2355-31-9 | MeFOSAA | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |
| 2991-50-6 | EtFOSAA | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |

| | | | | | | | | |
|--------------------------------------|----------------------------|-------|--|-----|-----|-----|------|--|
| NEXT GENERATION PFAS ANALYTES | | | | | | | | |
| 13252-13-6 | HFPO-DA (GenX) | 9.3 U | | 19 | 9.3 | 5.6 | ng/l | |
| 919005-14-4 | ADONA | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 756426-58-1 | 9Cl-PF3ONS (F-53B Major) | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 763051-92-9 | 11Cl-PF3OUdS (F-53B Minor) | 3.7 U | | 7.4 | 3.7 | 2.8 | ng/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C2-PFHxA | 100% | | 70-130% |
| | 13C2-PFDA | 104% | | 70-130% |
| | d5-EtFOSAA | 89% | | 70-130% |
| | 13C3-HFPO-DA | 106% | | 70-130% |

U = Not detected LOD = Limit of Detection
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|-------------------|---------------------------|-----------------|----------|
| Client Sample ID: | WI-CV-FCWTP-EF209-081919 | | |
| Lab Sample ID: | FA67211-6 | Date Sampled: | 08/19/19 |
| Matrix: | DW - Drinking Water | Date Received: | 08/20/19 |
| Method: | EPA 537.1 REV 1.0 EPA 537 | Percent Solids: | n/a |
| Project: | TCWTS; Coupeville, WA | | |

Perfluorinated Alkyl Acids

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

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

U = Not detected LOD = Limit of Detection
 MCL = Maximum Contamination Level (40 CFR 141)
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|-------------------|---------------------------|-----------------|----------|
| Client Sample ID: | WI-CV-FCWTP-FB-04-081919 | | |
| Lab Sample ID: | FA67211-7 | Date Sampled: | 08/19/19 |
| Matrix: | DW - Drinking Water FB | Date Received: | 08/20/19 |
| Method: | EPA 537.1 REV 1.0 EPA 537 | Percent Solids: | n/a |
| Project: | TCWTS; Coupeville, WA | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|----------|----|----------------|----|----------------|------------|------------------|
| Run #1 | 3Q7903.D | 1 | 08/28/19 05:19 | NG | 08/24/19 07:50 | OP76525 | S3Q155 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 270 ml | 1.0 ml |
| Run #2 | | |

Perfluorinated Alkyl Acids

| CAS No. | Compound | Result | MCL | LOQ | LOD | DL | Units | Q |
|---------------------------------------|--|--------|-----|-----|-----|------|-------|---|
| PERFLUOROALKYLCARBOXYLIC ACIDS | | | | | | | | |
| 307-24-4 | Perfluorohexanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-85-9 | Perfluoroheptanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-67-1 | Perfluorooctanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-76-2 | Perfluorodecanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 72629-94-8 | Perfluorotridecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |

| | | | | | | | | |
|---------------------------------|------------------------------|-------|--|-----|-----|------|------|--|
| PERFLUOROALKYLSULFONATES | | | | | | | | |
| 375-73-5 | Perfluorobutanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 1.4 | ng/l | |

| | | | | | | | | |
|--|---------|-------|--|-----|-----|-----|------|--|
| PERFLUOROOCCTANESULFONAMIDOACETIC ACIDS | | | | | | | | |
| 2355-31-9 | MeFOSAA | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |
| 2991-50-6 | EtFOSAA | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |

| | | | | | | | | |
|--------------------------------------|----------------------------|-------|--|-----|-----|-----|------|--|
| NEXT GENERATION PFAS ANALYTES | | | | | | | | |
| 13252-13-6 | HFPO-DA (GenX) | 9.3 U | | 19 | 9.3 | 5.6 | ng/l | |
| 919005-14-4 | ADONA | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 756426-58-1 | 9Cl-PF3ONS (F-53B Major) | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 763051-92-9 | 11Cl-PF3OUdS (F-53B Minor) | 3.7 U | | 7.4 | 3.7 | 2.8 | ng/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C2-PFHxA | 102% | | 70-130% |
| | 13C2-PFDA | 108% | | 70-130% |
| | d5-EtFOSAA | 100% | | 70-130% |
| | 13C3-HFPO-DA | 108% | | 70-130% |

U = Not detected LOD = Limit of Detection
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

| | |
|--|-------------------------|
| Client Sample ID: WI-CV-FCWTP-FB-04-081919 | |
| Lab Sample ID: FA67211-7 | Date Sampled: 08/19/19 |
| Matrix: DW - Drinking Water FB | Date Received: 08/20/19 |
| Method: EPA 537.1 REV 1.0 EPA 537 | Percent Solids: n/a |
| Project: TCWTS; Coupeville, WA | |

Perfluorinated Alkyl Acids

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

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

U = Not detected LOD = Limit of Detection
 MCL = Maximum Contamination Level (40 CFR 141)
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|-------------------|---------------------------|-----------------|----------|
| Client Sample ID: | WI-CV-FCWTP-EF002-081919 | | |
| Lab Sample ID: | FA67211-8 | Date Sampled: | 08/19/19 |
| Matrix: | DW - Drinking Water | Date Received: | 08/20/19 |
| Method: | EPA 537.1 REV 1.0 EPA 537 | Percent Solids: | n/a |
| Project: | TCWTS; Coupeville, WA | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|----------|----|----------------|----|----------------|------------|------------------|
| Run #1 | 3Q7904.D | 1 | 08/28/19 05:35 | NG | 08/24/19 07:50 | OP76525 | S3Q155 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 270 ml | 1.0 ml |
| Run #2 | | |

Perfluorinated Alkyl Acids

| CAS No. | Compound | Result | MCL | LOQ | LOD | DL | Units | Q |
|---------------------------------------|--|--------|-----|-----|-----|------|-------|---|
| PERFLUOROALKYLCARBOXYLIC ACIDS | | | | | | | | |
| 307-24-4 | Perfluorohexanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-85-9 | Perfluoroheptanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-67-1 | Perfluorooctanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-76-2 | Perfluorodecanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 72629-94-8 | Perfluorotridecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |

PERFLUOROALKYLSULFONATES

| | | | | | | | | |
|-----------|------------------------------|-------|--|-----|-----|------|------|--|
| 375-73-5 | Perfluorobutanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 1.4 | ng/l | |

PERFLUOROOCCTANESULFONAMIDOACETIC ACIDS

| | | | | | | | | |
|-----------|---------|-------|--|-----|-----|-----|------|--|
| 2355-31-9 | MeFOSAA | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |
| 2991-50-6 | EtFOSAA | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |

NEXT GENERATION PFAS ANALYTES

| | | | | | | | | |
|-------------|----------------------------|-------|--|-----|-----|-----|------|--|
| 13252-13-6 | HFPO-DA (GenX) | 9.3 U | | 19 | 9.3 | 5.6 | ng/l | |
| 919005-14-4 | ADONA | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 756426-58-1 | 9Cl-PF3ONS (F-53B Major) | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 763051-92-9 | 11Cl-PF3OUdS (F-53B Minor) | 3.7 U | | 7.4 | 3.7 | 2.8 | ng/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C2-PFHxA | 102% | | 70-130% |
| | 13C2-PFDA | 111% | | 70-130% |
| | d5-EtFOSAA | 104% | | 70-130% |
| | 13C3-HFPO-DA | 109% | | 70-130% |

U = Not detected LOD = Limit of Detection
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|-------------------|---------------------------|-----------------|----------|
| Client Sample ID: | WI-CV-FCWTP-EF002-081919 | | |
| Lab Sample ID: | FA67211-8 | Date Sampled: | 08/19/19 |
| Matrix: | DW - Drinking Water | Date Received: | 08/20/19 |
| Method: | EPA 537.1 REV 1.0 EPA 537 | Percent Solids: | n/a |
| Project: | TCWTS; Coupeville, WA | | |

Perfluorinated Alkyl Acids

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

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

U = Not detected LOD = Limit of Detection
 MCL = Maximum Contamination Level (40 CFR 141)
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|-------------------|---------------------------|-----------------|----------|
| Client Sample ID: | WI-CV-FCWTP-INF001-081919 | | |
| Lab Sample ID: | FA67211-9 | Date Sampled: | 08/19/19 |
| Matrix: | DW - Drinking Water | Date Received: | 08/20/19 |
| Method: | EPA 537.1 REV 1.0 EPA 537 | Percent Solids: | n/a |
| Project: | TCWTS; Coupeville, WA | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|----------|----|----------------|----|----------------|------------|------------------|
| Run #1 | 3Q7908.D | 1 | 08/28/19 07:41 | NG | 08/24/19 07:50 | OP76525 | S3Q155 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 270 ml | 1.0 ml |
| Run #2 | | |

Perfluorinated Alkyl Acids

| CAS No. | Compound | Result | MCL | LOQ | LOD | DL | Units | Q |
|---------------------------------------|--|--------|-----|-----|-----|------|-------|---|
| PERFLUOROALKYLCARBOXYLIC ACIDS | | | | | | | | |
| 307-24-4 | Perfluorohexanoic acid | 26.1 | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-85-9 | Perfluoroheptanoic acid | 8.95 | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-67-1 | Perfluorooctanoic acid | 55.5 | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-76-2 | Perfluorodecanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 72629-94-8 | Perfluorotridecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |

| | | | | | | | | |
|---------------------------------|------------------------------|-------|--|-----|-----|------|------|--|
| PERFLUOROALKYLSULFONATES | | | | | | | | |
| 375-73-5 | Perfluorobutanesulfonic acid | 13.1 | | 3.7 | 1.9 | 0.93 | ng/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | 50.2 | | 3.7 | 1.9 | 0.93 | ng/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 1.4 | ng/l | |

| | | | | | | | | |
|--|---------|-------|--|-----|-----|-----|------|--|
| PERFLUOROOCCTANESULFONAMIDOACETIC ACIDS | | | | | | | | |
| 2355-31-9 | MeFOSAA | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |
| 2991-50-6 | EtFOSAA | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |

| | | | | | | | | |
|--------------------------------------|----------------------------|-------|--|-----|-----|-----|------|--|
| NEXT GENERATION PFAS ANALYTES | | | | | | | | |
| 13252-13-6 | HFPO-DA (GenX) | 9.3 U | | 19 | 9.3 | 5.6 | ng/l | |
| 919005-14-4 | ADONA | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 756426-58-1 | 9Cl-PF3ONS (F-53B Major) | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 763051-92-9 | 11Cl-PF3OUdS (F-53B Minor) | 3.7 U | | 7.4 | 3.7 | 2.8 | ng/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C2-PFHxA | 100% | | 70-130% |
| | 13C2-PFDA | 110% | | 70-130% |
| | d5-EtFOSAA | 92% | | 70-130% |
| | 13C3-HFPO-DA | 110% | | 70-130% |

U = Not detected LOD = Limit of Detection
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

4.9
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Report of Analysis

| | |
|---|-------------------------|
| Client Sample ID: WI-CV-FCWTP-INF001-081919 | Date Sampled: 08/19/19 |
| Lab Sample ID: FA67211-9 | Date Received: 08/20/19 |
| Matrix: DW - Drinking Water | Percent Solids: n/a |
| Method: EPA 537.1 REV 1.0 EPA 537 | |
| Project: TCWTS; Coupeville, WA | |

Perfluorinated Alkyl Acids

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

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

U = Not detected LOD = Limit of Detection
 MCL = Maximum Contamination Level (40 CFR 141)
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|-------------------|----------------------------|-----------------|----------|
| Client Sample ID: | WI-CV-FCWTP-INF001P-081919 | | |
| Lab Sample ID: | FA67211-10 | Date Sampled: | 08/19/19 |
| Matrix: | DW - Drinking Water | Date Received: | 08/20/19 |
| Method: | EPA 537.1 REV 1.0 EPA 537 | Percent Solids: | n/a |
| Project: | TCWTS; Coupeville, WA | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|----------|----|----------------|----|----------------|------------|------------------|
| Run #1 | 3Q7909.D | 1 | 08/28/19 07:57 | NG | 08/24/19 07:50 | OP76525 | S3Q155 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 270 ml | 1.0 ml |
| Run #2 | | |

Perfluorinated Alkyl Acids

| CAS No. | Compound | Result | MCL | LOQ | LOD | DL | Units | Q |
|---------------------------------------|--|--------|-----|-----|-----|------|-------|---|
| PERFLUOROALKYLCARBOXYLIC ACIDS | | | | | | | | |
| 307-24-4 | Perfluorohexanoic acid | 26.2 | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-85-9 | Perfluoroheptanoic acid | 8.99 | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-67-1 | Perfluorooctanoic acid | 53.0 | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-76-2 | Perfluorodecanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 72629-94-8 | Perfluorotridecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |

PERFLUOROALKYLSULFONATES

| | | | | | | | | |
|-----------|------------------------------|-------|--|-----|-----|------|------|--|
| 375-73-5 | Perfluorobutanesulfonic acid | 13.2 | | 3.7 | 1.9 | 0.93 | ng/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | 50.3 | | 3.7 | 1.9 | 0.93 | ng/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 1.4 | ng/l | |

PERFLUOROOCCTANESULFONAMIDOACETIC ACIDS

| | | | | | | | | |
|-----------|---------|-------|--|-----|-----|-----|------|--|
| 2355-31-9 | MeFOSAA | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |
| 2991-50-6 | EtFOSAA | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |

NEXT GENERATION PFAS ANALYTES

| | | | | | | | | |
|-------------|----------------------------|-------|--|-----|-----|-----|------|--|
| 13252-13-6 | HFPO-DA (GenX) | 9.3 U | | 19 | 9.3 | 5.6 | ng/l | |
| 919005-14-4 | ADONA | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 756426-58-1 | 9Cl-PF3ONS (F-53B Major) | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 763051-92-9 | 11Cl-PF3OUdS (F-53B Minor) | 3.7 U | | 7.4 | 3.7 | 2.8 | ng/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C2-PFHxA | 97% | | 70-130% |
| | 13C2-PFDA | 107% | | 70-130% |
| | d5-EtFOSAA | 96% | | 70-130% |
| | 13C3-HFPO-DA | 107% | | 70-130% |

U = Not detected LOD = Limit of Detection
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

| | | |
|-------------------|----------------------------|-------------------------|
| Client Sample ID: | WI-CV-FCWTP-INF001P-081919 | |
| Lab Sample ID: | FA67211-10 | Date Sampled: 08/19/19 |
| Matrix: | DW - Drinking Water | Date Received: 08/20/19 |
| Method: | EPA 537.1 REV 1.0 EPA 537 | Percent Solids: n/a |
| Project: | TCWTS; Coupeville, WA | |

Perfluorinated Alkyl Acids

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

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

U = Not detected LOD = Limit of Detection
 MCL = Maximum Contamination Level (40 CFR 141)
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | | |
|-------------------|---------------------------|-----------------|---------------|----------|
| Client Sample ID: | WI-CV-FCWTP-FB-05-081919 | | Date Sampled: | 08/19/19 |
| Lab Sample ID: | FA67211-11 | Date Received: | 08/20/19 | |
| Matrix: | DW - Drinking Water FB | Percent Solids: | n/a | |
| Method: | EPA 537.1 REV 1.0 EPA 537 | | | |
| Project: | TCWTS; Coupeville, WA | | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|----------|----|----------------|----|----------------|------------|------------------|
| Run #1 | 3Q7910.D | 1 | 08/28/19 08:13 | NG | 08/24/19 07:50 | OP76525 | S3Q155 |
| Run #2 | | | | | | | |

| Run # | Initial Volume | Final Volume |
|--------|----------------|--------------|
| Run #1 | 270 ml | 1.0 ml |
| Run #2 | | |

Perfluorinated Alkyl Acids

| CAS No. | Compound | Result | MCL | LOQ | LOD | DL | Units | Q |
|---------------------------------------|--|--------|-----|-----|-----|------|-------|---|
| PERFLUOROALKYLCARBOXYLIC ACIDS | | | | | | | | |
| 307-24-4 | Perfluorohexanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-85-9 | Perfluoroheptanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-67-1 | Perfluorooctanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 375-95-1 | Perfluorononanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 335-76-2 | Perfluorodecanoic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 2058-94-8 | Perfluoroundecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 307-55-1 | Perfluorododecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 72629-94-8 | Perfluorotridecanoic acid ^a | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |
| 376-06-7 | Perfluorotetradecanoic acid | 2.8 U | | 3.7 | 2.8 | 1.9 | ng/l | |

| | | | | | | | | |
|---------------------------------|------------------------------|-------|--|-----|-----|------|------|--|
| PERFLUOROALKYLSULFONATES | | | | | | | | |
| 375-73-5 | Perfluorobutanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 0.93 | ng/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | 1.9 U | | 3.7 | 1.9 | 1.4 | ng/l | |

| | | | | | | | | |
|--|---------|-------|--|-----|-----|-----|------|--|
| PERFLUOROOCCTANESULFONAMIDOACETIC ACIDS | | | | | | | | |
| 2355-31-9 | MeFOSAA | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |
| 2991-50-6 | EtFOSAA | 5.6 U | | 7.4 | 5.6 | 3.7 | ng/l | |

| | | | | | | | | |
|--------------------------------------|----------------------------|-------|--|-----|-----|-----|------|--|
| NEXT GENERATION PFAS ANALYTES | | | | | | | | |
| 13252-13-6 | HFPO-DA (GenX) | 9.3 U | | 19 | 9.3 | 5.6 | ng/l | |
| 919005-14-4 | ADONA | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 756426-58-1 | 9Cl-PF3ONS (F-53B Major) | 3.7 U | | 7.4 | 3.7 | 1.9 | ng/l | |
| 763051-92-9 | 11Cl-PF3OUdS (F-53B Minor) | 3.7 U | | 7.4 | 3.7 | 2.8 | ng/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---------|----------------------|--------|--------|---------|
| | 13C2-PFHxA | 99% | | 70-130% |
| | 13C2-PFDA | 103% | | 70-130% |
| | d5-EtFOSAA | 93% | | 70-130% |
| | 13C3-HFPO-DA | 111% | | 70-130% |

U = Not detected LOD = Limit of Detection
MCL = Maximum Contamination Level (40 CFR 141)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

| | | | |
|-------------------|---------------------------|-----------------|----------|
| Client Sample ID: | WI-CV-FCWTP-FB-05-081919 | | |
| Lab Sample ID: | FA67211-11 | Date Sampled: | 08/19/19 |
| Matrix: | DW - Drinking Water FB | Date Received: | 08/20/19 |
| Method: | EPA 537.1 REV 1.0 EPA 537 | Percent Solids: | n/a |
| Project: | TCWTS; Coupeville, WA | | |

Perfluorinated Alkyl Acids

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

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

U = Not detected LOD = Limit of Detection
 MCL = Maximum Contamination Level (40 CFR 141)
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 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



CHAIN OF CUSTODY

FA67211

Document # 501207-08192019

Page 1 of 1

Project Manager Jeff Gilliam

Project Number: 501207
Project Name: TCWTS
Subcontract Agreement #: TBD
Waybill Number:
SGS North America, Inc
Lab Destination: 4405 Vineland Road, Suite C-15
Orlando, FL 32811
Lab Contact Name / ph. #: Heather Wandrey 609-495-5321

Send Report To: Natasha Sullivan
Phone/Fax Number: natasha.sullivan@aptim.com
Address: 434 Wanamaker Rd
City: Coupeville, WA 98239

Table with columns for Analyses Requested (PFAS EPA 537.1, TRIZMA) and Cooler Temperature.

Main data table with columns: Sample ID, Location ID, Date, Time, Method, Matrix, # of containers, Container Type, and various analysis results (X marks).

Temp Blank X

Special Instructions: Level 4 Reporting. Includes turnaround time options, level of QC required, and signature blocks for Relinquished and Received parties.

1.8

FA67211: Chain of Custody

Page 1 of 2

5.1 5



SGS Sample Receipt Summary

Job Number: FA67211

Client: APTIM

Project: TCWTS

Date / Time Received: 8/20/2019 8:45:00 AM

Delivery Method: FED EX

Airbill #'s:

Therm ID: IR 1;

Therm CF: 1;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (0.8);

Cooler Temps (Corrected) °C: Cooler 1: (1.8);

Cooler Information

Y or N

- 1. Custody Seals Present
- 2. Custody Seals Intact
- 3. Temp criteria achieved
- 4. Cooler temp verification IR Gun
- 5. Cooler media Ice (Bag)

Trip Blank Information

Y or N N/A

- 1. Trip Blank present / cooler
 - 2. Trip Blank listed on COC
- W or S N/A
- 3. Type Of TB Received

Sample Information

Y or N N/A

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

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____
 Test Strip Lot #: pH 0-3 230315
 Residual Chlorine Test Strip Lot #: _____

Number of 5035 Field Kits: _____
 pH 10-12 219813A

Number of Lab Filtered Metals: _____
 Other: (Specify) _____

Comments

SM001
 Rev. Date 05/24/17

Technician: TRINITYM

Date: 8/20/2019 8:45:00 AM

Reviewer: _____

Date: _____

FA67211: Chain of Custody

Page 2 of 2

5.1
5

QC Evaluation: DOD QSM5.x Limits

Job Number: FA67211
Account: APTIM
Project: TCWTS; Coupeville, WA
Collected: 08/19/19

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

No DOD QSM5.x Limits Found.

* Sample used for QC is not from job FA67211

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
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: FA67211
 Account: ITVAVAB APTIM
 Project: TCWTS; Coupeville, WA

| | | | | | | | |
|------------|----------|----|----------|----|-----------|------------|------------------|
| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
| OP76525-MB | 3Q7891.D | 1 | 08/28/19 | NG | 08/24/19 | OP76525 | S3Q155 |

The QC reported here applies to the following samples:

Method: EPA 537.1 REV 1.0

FA67211-1, FA67211-2, FA67211-3, FA67211-4, FA67211-5, FA67211-6, FA67211-7, FA67211-8, FA67211-9, FA67211-10, FA67211-11

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|--------------|------------------------------|--------|--------|--------|-------|---|
| 307-24-4 | Perfluorohexanoic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 375-85-9 | Perfluoroheptanoic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 335-67-1 | Perfluorooctanoic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 375-95-1 | Perfluorononanoic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 335-76-2 | Perfluorodecanoic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 2058-94-8 | Perfluoroundecanoic acid | ND | 0.0040 | 0.0020 | ug/l | |
| 307-55-1 | Perfluorododecanoic acid | ND | 0.0040 | 0.0020 | ug/l | |
| 72629-94-8 | Perfluorotridecanoic acid | ND | 0.0040 | 0.0020 | ug/l | |
| 376-06-7 | Perfluorotetradecanoic acid | ND | 0.0040 | 0.0020 | ug/l | |
| 375-73-5 | Perfluorobutanesulfonic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 355-46-4 | Perfluorohexanesulfonic acid | ND | 0.0040 | 0.0010 | ug/l | |
| 1763-23-1 | Perfluorooctanesulfonic acid | ND | 0.0040 | 0.0015 | ug/l | |
| 2355-31-9 | MeFOSAA | ND | 0.0080 | 0.0040 | ug/l | |
| 2991-50-6 | EtFOSAA | ND | 0.0080 | 0.0040 | ug/l | |
| 13252-13-6 | HFPO-DA (GenX) | ND | 0.020 | 0.0060 | ug/l | |
| 919005-14-4 | ADONA | ND | 0.0080 | 0.0020 | ug/l | |
| 756426-58-19 | Cl-PF3ONS (F-53B Major) | ND | 0.0080 | 0.0020 | ug/l | |
| 763051-92-91 | Cl-PF3OUdS (F-53B Minor) | ND | 0.0080 | 0.0030 | ug/l | |

| CAS No. | Surrogate Recoveries | Limits | |
|---------|----------------------|--------|---------|
| | 13C2-PFHxA | 104% | 70-130% |
| | 13C2-PFDA | 116% | 70-130% |
| | 13C3-HFPO-DA | 107% | 70-130% |

6.1.1

6

Blank Spike Summary

Job Number: FA67211
 Account: ITVAVAB APTIM
 Project: TCWTS; Coupeville, WA

| | | | | | | | |
|------------|----------|----|----------|----|-----------|------------|------------------|
| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
| OP76525-BS | 3Q7890.D | 1 | 08/28/19 | NG | 08/24/19 | OP76525 | S3Q155 |

The QC reported here applies to the following samples:

Method: EPA 537.1 REV 1.0

FA67211-1, FA67211-2, FA67211-3, FA67211-4, FA67211-5, FA67211-6, FA67211-7, FA67211-8, FA67211-9, FA67211-10, FA67211-11

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | Limits |
|--------------|------------------------------|---------------|-------------|----------|--------|
| 307-24-4 | Perfluorohexanoic acid | 0.08 | 0.0806 | 101 | 70-130 |
| 375-85-9 | Perfluoroheptanoic acid | 0.08 | 0.0829 | 104 | 70-130 |
| 335-67-1 | Perfluorooctanoic acid | 0.08 | 0.0839 | 105 | 70-130 |
| 375-95-1 | Perfluorononanoic acid | 0.08 | 0.0844 | 106 | 70-130 |
| 335-76-2 | Perfluorodecanoic acid | 0.08 | 0.0873 | 109 | 70-130 |
| 2058-94-8 | Perfluoroundecanoic acid | 0.08 | 0.117 | 146* | 70-130 |
| 307-55-1 | Perfluorododecanoic acid | 0.08 | 0.110 | 138* | 70-130 |
| 72629-94-8 | Perfluorotridecanoic acid | 0.08 | 0.114 | 143* | 70-130 |
| 376-06-7 | Perfluorotetradecanoic acid | 0.08 | 0.100 | 125 | 70-130 |
| 375-73-5 | Perfluorobutanesulfonic acid | 0.08 | 0.0823 | 103 | 70-130 |
| 355-46-4 | Perfluorohexanesulfonic acid | 0.08 | 0.0840 | 105 | 70-130 |
| 1763-23-1 | Perfluorooctanesulfonic acid | 0.08 | 0.0807 | 101 | 70-130 |
| 2355-31-9 | MeFOSAA | 0.08 | 0.0883 | 110 | 70-130 |
| 2991-50-6 | EtFOSAA | 0.08 | 0.0881 | 110 | 70-130 |
| 13252-13-6 | HFPO-DA (GenX) | 0.4 | 0.411 | 103 | 70-130 |
| 919005-14-4 | ADONA | 0.08 | 0.0791 | 99 | 70-130 |
| 756426-58-19 | Cl-PF3ONS (F-53B Major) | 0.08 | 0.0760 | 95 | 70-130 |
| 763051-92-91 | Cl-PF3OUdS (F-53B Minor) | 0.08 | 0.0657 | 82 | 70-130 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---------|----------------------|------|---------|
| | 13C2-PFHxA | 101% | 70-130% |
| | 13C2-PFDA | 108% | 70-130% |
| | 13C3-HFPO-DA | 102% | 70-130% |

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA67211
 Account: ITVAVAB APTIM
 Project: TCWTS; Coupeville, WA

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|-------------|----------|----|----------|----|-----------|------------|------------------|
| OP76525-MS | 3Q7906.D | 1 | 08/28/19 | NG | 08/24/19 | OP76525 | S3Q155 |
| OP76525-MSD | 3Q7907.D | 1 | 08/28/19 | NG | 08/24/19 | OP76525 | S3Q155 |
| FA67211-8 | 3Q7904.D | 1 | 08/28/19 | NG | 08/24/19 | OP76525 | S3Q155 |

The QC reported here applies to the following samples:

Method: EPA 537.1 REV 1.0

FA67211-1, FA67211-2, FA67211-3, FA67211-4, FA67211-5, FA67211-6, FA67211-7, FA67211-8, FA67211-9, FA67211-10, FA67211-11

| CAS No. | Compound | FA67211-8 ug/l | Spike Q | MS ug/l | MS % | Spike ug/l | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|---------------|------------------------------|-------------------|------------|------------|---------|---------------|-------------|----------|-----|-------------------|
| 307-24-4 | Perfluorohexanoic acid | 0.0037 U | 0.0741 | 0.0745 | 101 | 0.0741 | 0.0772 | 104 | 4 | 70-130/30 |
| 375-85-9 | Perfluoroheptanoic acid | 0.0037 U | 0.0741 | 0.0805 | 109 | 0.0741 | 0.0829 | 112 | 3 | 70-130/30 |
| 335-67-1 | Perfluorooctanoic acid | 0.0037 U | 0.0741 | 0.0809 | 109 | 0.0741 | 0.0809 | 109 | 0 | 70-130/30 |
| 375-95-1 | Perfluorononanoic acid | 0.0037 U | 0.0741 | 0.0816 | 110 | 0.0741 | 0.0830 | 112 | 2 | 70-130/30 |
| 335-76-2 | Perfluorodecanoic acid | 0.0037 U | 0.0741 | 0.0803 | 108 | 0.0741 | 0.0825 | 111 | 3 | 70-130/30 |
| 2058-94-8 | Perfluoroundecanoic acid | 0.0037 U | 0.0741 | 0.0963 | 130 | 0.0741 | 0.106 | 143* | 10 | 70-130/30 |
| 307-55-1 | Perfluorododecanoic acid | 0.0037 U | 0.0741 | 0.0981 | 132* | 0.0741 | 0.103 | 139* | 5 | 70-130/30 |
| 72629-94-8 | Perfluorotridecanoic acid | 0.0037 U | 0.0741 | 0.104 | 140* | 0.0741 | 0.112 | 151* | 7 | 70-130/30 |
| 376-06-7 | Perfluorotetradecanoic acid | 0.0037 U | 0.0741 | 0.0971 | 131* | 0.0741 | 0.0998 | 135* | 3 | 70-130/30 |
| 375-73-5 | Perfluorobutanesulfonic acid | 0.0037 U | 0.0741 | 0.0772 | 104 | 0.0741 | 0.0802 | 108 | 4 | 70-130/30 |
| 355-46-4 | Perfluorohexanesulfonic acid | 0.0037 U | 0.0741 | 0.0721 | 97 | 0.0741 | 0.0745 | 101 | 3 | 70-130/30 |
| 1763-23-1 | Perfluorooctanesulfonic acid | 0.0037 U | 0.0741 | 0.0763 | 103 | 0.0741 | 0.0789 | 107 | 3 | 70-130/30 |
| 2355-31-9 | MeFOSAA | 0.0074 U | 0.0741 | 0.0777 | 105 | 0.0741 | 0.0825 | 111 | 6 | 70-130/30 |
| 2991-50-6 | EtFOSAA | 0.0074 U | 0.0741 | 0.0770 | 104 | 0.0741 | 0.0810 | 109 | 5 | 70-130/30 |
| 13252-13-6 | HFPO-DA (GenX) | 0.019 U | 0.37 | 0.462 | 125 | 0.37 | 0.439 | 119 | 5 | 70-130/30 |
| 919005-14-4 | ADONA | 0.0074 U | 0.0741 | 0.0757 | 102 | 0.0741 | 0.0762 | 103 | 1 | 70-130/30 |
| 756426-58-19 | Cl-PF3ONS (F-53B Major) | 0.0074 U | 0.0741 | 0.0678 | 92 | 0.0741 | 0.0709 | 96 | 4 | 70-130/30 |
| 763051-92-911 | Cl-PF3OUdS (F-53B Minor) | 0.0074 U | 0.0741 | 0.0631 | 85 | 0.0741 | 0.0644 | 87 | 2 | 70-130/30 |

| CAS No. | Surrogate Recoveries | MS | MSD | FA67211-8 | Limits |
|---------|----------------------|------|------|-----------|---------|
| | 13C2-PFHxA | 100% | 102% | 102% | 70-130% |
| | 13C2-PFDA | 108% | 111% | 111% | 70-130% |
| | d5-EtFOSAA | 97% | 100% | 104% | 70-130% |
| | 13C3-HFPO-DA | 128% | 119% | 109% | 70-130% |

* = Outside of Control Limits.

Internal Standard Area Summary

Job Number: FA67211
 Account: ITVAVAB APTIM
 Project: TCWTS; Coupeville, WA

| | | | |
|----------------|--------------|-----------------|-------------------|
| Check Std: | S3Q155-CC155 | Injection Date: | 08/28/19 |
| Lab File ID: | 3Q7888.D | Injection Time: | 01:25 |
| Instrument ID: | GCMS3Q | Method: | EPA 537.1 REV 1.0 |

| | IS 1 | | IS 2 | | IS 3 | | IS 4 | | IS 5 | | IS 6 | |
|--------------------------|--------|------|--------|------|--------|------|-------|------|-------|------|--------|------|
| | AREA | RT | AREA | RT | AREA | RT | AREA | RT | AREA | RT | AREA | RT |
| Initial Cal ^a | 170592 | 3.38 | 100489 | 6.39 | 321460 | 6.40 | 57166 | 6.97 | 43587 | 7.65 | 333954 | 8.18 |
| Check Std ^b | 165233 | 3.40 | 96814 | 6.39 | 312315 | 6.40 | 55397 | 6.97 | 37572 | 7.65 | 269091 | 8.19 |
| Upper Limit ^c | 238829 | 4.40 | 140685 | 7.39 | 450044 | 7.40 | 80032 | 7.97 | 61022 | 8.65 | 467536 | 9.19 |
| Lower Limit ^d | 119414 | 2.40 | 70342 | 5.39 | 225022 | 5.40 | 40016 | 5.97 | 30511 | 6.65 | 233768 | 7.19 |

| Lab Sample ID | IS 1 | | IS 2 | | IS 3 | | IS 4 | | IS 5 | | IS 6 | |
|---------------|--------|------|--------|------|--------|------|-------|------|-------|------|--------|------|
| | AREA | RT | AREA | RT | AREA | RT | AREA | RT | AREA | RT | AREA | RT |
| OP76525-BS | 182263 | 3.40 | 108580 | 6.39 | 342901 | 6.40 | 61566 | 6.97 | 44510 | 7.65 | 275633 | 8.18 |
| OP76525-MB | 159112 | 3.40 | 90739 | 6.39 | 304170 | 6.40 | 52824 | 6.97 | 38086 | 7.65 | 247382 | 8.18 |
| ZZZZZZ | 153408 | 3.38 | 89790 | 6.39 | 298798 | 6.40 | 52629 | 6.97 | 39135 | 7.65 | 247214 | 8.18 |
| ZZZZZZ | 164510 | 3.37 | 95828 | 6.39 | 321836 | 6.40 | 56884 | 6.97 | 41501 | 7.65 | 266060 | 8.18 |
| ZZZZZZ | 172244 | 3.38 | 101820 | 6.39 | 338940 | 6.40 | 60208 | 6.97 | 45376 | 7.65 | 277912 | 8.18 |
| FA67211-1 | 170191 | 3.38 | 97040 | 6.39 | 325253 | 6.40 | 57763 | 6.97 | 43699 | 7.65 | 284554 | 8.18 |
| FA67211-2 | 168153 | 3.37 | 100534 | 6.39 | 328918 | 6.40 | 57989 | 6.97 | 43660 | 7.65 | 264559 | 8.18 |
| FA67211-3 | 152485 | 3.38 | 87081 | 6.39 | 292920 | 6.40 | 51339 | 6.97 | 39819 | 7.65 | 246418 | 8.18 |
| FA67211-4 | 163339 | 3.38 | 92903 | 6.39 | 313697 | 6.40 | 56015 | 6.97 | 40887 | 7.65 | 253277 | 8.18 |
| FA67211-5 | 178558 | 3.38 | 101149 | 6.39 | 340702 | 6.40 | 60517 | 6.97 | 45055 | 7.65 | 293706 | 8.18 |

- IS 1 = 13C3-PFPeA
- IS 2 = 13C2-6:2FTS
- IS 3 = 13C2-PFOA
- IS 4 = 13C4-PFOS
- IS 5 = d3-MeFOSAA
- IS 6 = 13C2-PFDoDA

- (a) Initial Cal is: S3Q155-ICC155 3Q7854.D 08/27/19 16:34. Area is AVERAGE of initial cal points.
- (b) Check Std Limit = -50 to +50% of initial cal area.
- (c) Upper Limit = +40% of initial standard area; Retention time +1 minutes of check standard.
- (d) Lower Limit = -30% of initial standard area; Retention time -1 minutes of check standard.

Internal Standard Area Summary

Job Number: FA67211
 Account: ITVAVAB APTIM
 Project: TCWTS; Coupeville, WA

| | | | |
|----------------|--------------|-----------------|-------------------|
| Check Std: | S3Q155-CC155 | Injection Date: | 08/28/19 |
| Lab File ID: | 3Q7900.D | Injection Time: | 04:33 |
| Instrument ID: | GCMS3Q | Method: | EPA 537.1 REV 1.0 |

| | IS 1 | | IS 2 | | IS 3 | | IS 4 | | IS 5 | | IS 6 | |
|--------------------------|--------|------|--------|------|--------|------|-------|------|-------|------|--------|------|
| | AREA | RT | AREA | RT | AREA | RT | AREA | RT | AREA | RT | AREA | RT |
| Initial Cal ^a | 170592 | 3.38 | 100489 | 6.39 | 321460 | 6.40 | 57166 | 6.97 | 43587 | 7.65 | 333954 | 8.18 |
| Check Std ^b | 162640 | 3.40 | 100891 | 6.37 | 300891 | 6.40 | 55402 | 6.97 | 44930 | 7.65 | 364213 | 8.18 |
| Upper Limit ^c | 238829 | 4.40 | 140685 | 7.37 | 450044 | 7.40 | 80032 | 7.97 | 61022 | 8.65 | 467536 | 9.18 |
| Lower Limit ^d | 119414 | 2.40 | 70342 | 5.37 | 225022 | 5.40 | 40016 | 5.97 | 30511 | 6.65 | 233768 | 7.18 |

| Lab Sample ID | IS 1 | | IS 2 | | IS 3 | | IS 4 | | IS 5 | | IS 6 | |
|---------------|--------|------|--------|------|--------|------|-------|------|-------|------|--------|------|
| | AREA | RT | AREA | RT | AREA | RT | AREA | RT | AREA | RT | AREA | RT |
| FA67211-6 | 162293 | 3.38 | 93240 | 6.39 | 311147 | 6.40 | 54934 | 6.97 | 41513 | 7.65 | 262167 | 8.18 |
| FA67211-7 | 173734 | 3.38 | 98955 | 6.39 | 332883 | 6.40 | 60579 | 6.97 | 44872 | 7.65 | 297008 | 8.18 |
| FA67211-8 | 174812 | 3.38 | 99600 | 6.37 | 335878 | 6.40 | 59211 | 6.97 | 44523 | 7.65 | 285623 | 8.18 |
| OP76525-MS | 171327 | 3.37 | 104718 | 6.37 | 328889 | 6.39 | 57926 | 6.95 | 44403 | 7.65 | 300148 | 8.18 |
| OP76525-MSD | 182625 | 3.38 | 110681 | 6.37 | 348520 | 6.39 | 61121 | 6.97 | 47148 | 7.65 | 294934 | 8.18 |
| FA67211-9 | 164658 | 3.37 | 101858 | 6.37 | 331730 | 6.39 | 57492 | 6.95 | 44028 | 7.65 | 282370 | 8.18 |
| FA67211-10 | 153686 | 3.37 | 93600 | 6.37 | 306134 | 6.39 | 52852 | 6.95 | 41008 | 7.65 | 253267 | 8.18 |
| FA67211-11 | 165633 | 3.37 | 96161 | 6.37 | 323788 | 6.39 | 55565 | 6.95 | 42970 | 7.65 | 275305 | 8.18 |

- IS 1 = 13C3-PFPeA
- IS 2 = 13C2-6:2FTS
- IS 3 = 13C2-PFOA
- IS 4 = 13C4-PFOS
- IS 5 = d3-MeFOSAA
- IS 6 = 13C2-PFDoDA

- (a) Initial Cal is: S3Q155-ICC155 3Q7854.D 08/27/19 16:34. Area is AVERAGE of initial cal points.
- (b) Check Std Limit = -50 to +50% of initial cal area.
- (c) Upper Limit = +40% of initial standard area; Retention time +1 minutes of check standard.
- (d) Lower Limit = -30% of initial standard area; Retention time -1 minutes of check standard.

Surrogate Recovery Summary

Job Number: FA67211
 Account: ITVAVAB APTIM
 Project: TCWTS; Coupeville, WA

| | |
|---------------------------|------------|
| Method: EPA 537.1 REV 1.0 | Matrix: DW |
|---------------------------|------------|

Samples and QC shown here apply to the above method

| Lab Sample ID | Lab File ID | S1 | S2 | S3 | S4 |
|---------------|-------------|-----|-----|-----|-----|
| FA67211-1 | 3Q7895.D | 99 | 106 | 100 | 105 |
| FA67211-2 | 3Q7896.D | 101 | 109 | 105 | 103 |
| FA67211-3 | 3Q7897.D | 103 | 101 | 99 | 108 |
| FA67211-4 | 3Q7898.D | 97 | 99 | 95 | 102 |
| FA67211-5 | 3Q7899.D | 100 | 105 | 102 | 105 |
| FA67211-6 | 3Q7902.D | 100 | 104 | 89 | 106 |
| FA67211-7 | 3Q7903.D | 102 | 108 | 100 | 108 |
| FA67211-8 | 3Q7904.D | 102 | 111 | 104 | 109 |
| FA67211-9 | 3Q7908.D | 100 | 110 | 92 | 110 |
| FA67211-10 | 3Q7909.D | 97 | 107 | 96 | 107 |
| FA67211-11 | 3Q7910.D | 99 | 103 | 93 | 111 |
| OP76525-BS | 3Q7890.D | 101 | 108 | | 102 |
| OP76525-MB | 3Q7891.D | 104 | 116 | | 107 |
| OP76525-MS | 3Q7906.D | 100 | 108 | 97 | 128 |
| OP76525-MSD | 3Q7907.D | 102 | 111 | 100 | 119 |

| Surrogate Compounds | Recovery Limits |
|---------------------|-----------------|
| S1 = 13C2-PFHxA | 70-130% |
| S2 = 13C2-PFDA | 70-130% |
| S3 = d5-EtFOSAA | 70-130% |
| S4 = 13C3-HFPO-DA | 70-130% |

6.5.1
6

Initial Calibration Summary

Job Number: FA67211
 Account: ITVAVAB APTIM
 Project: TCWTS; Coupeville, WA

Sample: S3Q155-ICC155
 Lab FileID: 3Q7854.D

Initial Calibration Report

| Method Path | D:\MassHunter\Methods | | | | | | | | | | | | |
|-------------------|---|----------------------|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Method File | 537_082719_S3Q155_quantmethod.xml | | | | | | | | | | | | |
| Batch Name | D:\MassHunter\Data\0827_537_S3Q155_QuantResults\3q155_batch.bin | | | | | | | | | | | | |
| Last Calib Update | 8/28/2019 7:27:38 AM | | | | | | | | | | | | |
| Level Name | Calibration Files | Acq. Date-Time | Level Last Update Time | 8 | Avg RF | %RSD | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 1 | D:\MassHunter\Data\0827_537_S3Q155\3q7848.d | 8/27/2019 3:00:10 PM | 8/28/2019 7:27:38 AM | 0.7860 | 0.8524 | 9.278 | 0.8336 | 0.8444 | 0.8444 | 0.9478 | 0.9514 | 0.8676 | 0.7359 |
| 2 | D:\MassHunter\Data\0827_537_S3Q155\3q7849.d | 8/27/2019 3:15:48 PM | 8/28/2019 7:27:38 AM | 0.7931 | 0.9081 | 8.326 | 0.8539 | 0.8924 | 0.8924 | 0.9991 | 0.9989 | 0.9356 | 0.8835 |
| 3 | D:\MassHunter\Data\0827_537_S3Q155\3q7850.d | 8/27/2019 3:31:44 PM | 8/28/2019 7:27:38 AM | 0.6500 | 0.7616 | 11.817 | 0.7166 | 0.7700 | 0.7700 | 0.8876 | 0.8654 | 0.7659 | 0.6757 |
| 4 | D:\MassHunter\Data\0827_537_S3Q155\3q7851.d | 8/27/2019 3:47:22 PM | 8/28/2019 7:27:38 AM | 0.8278 | 0.9409 | 11.982 | 0.8355 | 0.9448 | 0.9448 | 1.0290 | 1.0640 | 0.9187 | 1.0751 |
| 5 | D:\MassHunter\Data\0827_537_S3Q155\3q7852.d | 8/27/2019 4:02:59 PM | 8/28/2019 7:27:38 AM | 0.9890 | 1.0695 | 10.836 | 0.9573 | 0.9634 | 0.9634 | 1.1439 | 1.1779 | 1.0378 | 1.2358 |
| 6 | D:\MassHunter\Data\0827_537_S3Q155\3q7853.d | 8/27/2019 4:18:37 PM | 8/28/2019 7:25:12 AM | 1.0221 | 1.0971 | 11.310 | 0.9831 | 0.9634 | 0.9634 | 1.1956 | 1.1924 | 1.0416 | 1.2815 |
| 7 | D:\MassHunter\Data\0827_537_S3Q155\3q7854.d | 8/27/2019 4:34:14 PM | 8/28/2019 7:27:38 AM | 1.1794 | 1.2673 | 11.201 | 1.1416 | 1.1094 | 1.1094 | 1.3656 | 1.3768 | 1.2123 | 1.4859 |
| 8 | D:\MassHunter\Data\0827_537_S3Q155\3q7855.d | 8/27/2019 4:49:52 PM | 8/28/2019 7:27:38 AM | 0.1951 | 0.1721 | 10.344 | 0.1821 | 0.1660 | 0.1660 | 0.1770 | 0.1836 | 0.1596 | 0.1417 |
| Compound | Curve Fit | ISTD | ISTD | ISTD | ISTD | ISTD | ISTD | ISTD | ISTD | ISTD | ISTD | ISTD | ISTD |
| I 13C2-6:2FTS | Avg RF | 0.8444 | 0.8336 | 0.8336 | 0.8336 | 0.8336 | 0.8336 | 0.8336 | 0.8336 | 0.8336 | 0.8336 | 0.8336 | 0.8336 |
| T 4:2FTS | Avg RF | 0.8924 | 0.8539 | 0.8539 | 0.8539 | 0.8539 | 0.8539 | 0.8539 | 0.8539 | 0.8539 | 0.8539 | 0.8539 | 0.8539 |
| T 8:2FTS | Avg RF | 0.7700 | 0.7166 | 0.7166 | 0.7166 | 0.7166 | 0.7166 | 0.7166 | 0.7166 | 0.7166 | 0.7166 | 0.7166 | 0.7166 |
| I 13C2-PFDODA | Quadratic | 0.9448 | 0.9573 | 0.9573 | 0.9573 | 0.9573 | 0.9573 | 0.9573 | 0.9573 | 0.9573 | 0.9573 | 0.9573 | 0.9573 |
| T PFUnDA | Quadratic | 0.9634 | 0.9831 | 0.9831 | 0.9831 | 0.9831 | 0.9831 | 0.9831 | 0.9831 | 0.9831 | 0.9831 | 0.9831 | 0.9831 |
| T PFDoDA | Quadratic | 1.1094 | 1.1416 | 1.1416 | 1.1416 | 1.1416 | 1.1416 | 1.1416 | 1.1416 | 1.1416 | 1.1416 | 1.1416 | 1.1416 |
| T PFTfDA | Quadratic | 0.1660 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 |
| T PFTeDA | Quadratic | 0.1660 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 |
| I 13C2-PFOA | Quadratic | 0.1660 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 | 0.1821 |
| T PFBA | Linear | 0.6409 | 0.6881 | 0.6881 | 0.6881 | 0.6881 | 0.6881 | 0.6881 | 0.6881 | 0.6881 | 0.6881 | 0.6881 | 0.6881 |
| S 13C2-PFHxA | Linear | 0.3450 | 0.3686 | 0.3686 | 0.3686 | 0.3686 | 0.3686 | 0.3686 | 0.3686 | 0.3686 | 0.3686 | 0.3686 | 0.3686 |
| T PFHxA | Linear | 0.0421 | 0.0379 | 0.0379 | 0.0379 | 0.0379 | 0.0379 | 0.0379 | 0.0379 | 0.0379 | 0.0379 | 0.0379 | 0.0379 |
| S 13C3-HFO-DA | Quadratic | 0.1368 | 0.1364 | 0.1364 | 0.1364 | 0.1364 | 0.1364 | 0.1364 | 0.1364 | 0.1364 | 0.1364 | 0.1364 | 0.1364 |
| T HFO-DA | Quadratic | 1.1380 | 1.1049 | 1.1049 | 1.1049 | 1.1049 | 1.1049 | 1.1049 | 1.1049 | 1.1049 | 1.1049 | 1.1049 | 1.1049 |
| T PHpA | Linear | 1.3714 | 1.3210 | 1.3210 | 1.3210 | 1.3210 | 1.3210 | 1.3210 | 1.3210 | 1.3210 | 1.3210 | 1.3210 | 1.3210 |
| T ADONA | Linear | 0.8495 | 0.8217 | 0.8217 | 0.8217 | 0.8217 | 0.8217 | 0.8217 | 0.8217 | 0.8217 | 0.8217 | 0.8217 | 0.8217 |
| T PFOA | Linear | 0.8855 | 0.8741 | 0.8741 | 0.8741 | 0.8741 | 0.8741 | 0.8741 | 0.8741 | 0.8741 | 0.8741 | 0.8741 | 0.8741 |
| T PFNA | Linear | 0.9425 | 0.8942 | 0.8942 | 0.8942 | 0.8942 | 0.8942 | 0.8942 | 0.8942 | 0.8942 | 0.8942 | 0.8942 | 0.8942 |
| T 9C-PFONS | Linear | 0.1474 | 0.1511 | 0.1511 | 0.1511 | 0.1511 | 0.1511 | 0.1511 | 0.1511 | 0.1511 | 0.1511 | 0.1511 | 0.1511 |
| S 13C2-PFDA | Linear | 1.1212 | 1.0506 | 1.0506 | 1.0506 | 1.0506 | 1.0506 | 1.0506 | 1.0506 | 1.0506 | 1.0506 | 1.0506 | 1.0506 |
| T PFDA | Quadratic | 0.9961 | 0.9283 | 0.9283 | 0.9283 | 0.9283 | 0.9283 | 0.9283 | 0.9283 | 0.9283 | 0.9283 | 0.9283 | 0.9283 |
| T 11C-PF3OLds | Quadratic | 0.8829 | 0.8957 | 0.8957 | 0.8957 | 0.8957 | 0.8957 | 0.8957 | 0.8957 | 0.8957 | 0.8957 | 0.8957 | 0.8957 |
| T 11C-PF3OLds | Linear | 0.4375 | 0.5351 | 0.5351 | 0.5351 | 0.5351 | 0.5351 | 0.5351 | 0.5351 | 0.5351 | 0.5351 | 0.5351 | 0.5351 |
| I 13C3-PFPeA | Linear | 1.0925 | 1.2036 | 1.2036 | 1.2036 | 1.2036 | 1.2036 | 1.2036 | 1.2036 | 1.2036 | 1.2036 | 1.2036 | 1.2036 |
| T PFPeA | Linear | 0.1959 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 | 0.2150 |
| T PPFsS | Linear | 0.1759 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 | 0.1908 |
| I 13C4-PFOS | Linear | 1.1669 | 1.1669 | 1.1669 | 1.1669 | 1.1669 | 1.1669 | 1.1669 | 1.1669 | 1.1669 | 1.1669 | 1.1669 | 1.1669 |

Initial Calibration Summary

Job Number: FA67211
 Account: ITVAVAB APTIM
 Project: TCWTS; Coupeville, WA

Sample: S3Q155-ICC155
 Lab FileID: 3Q7854.D

Initial Calibration Report

| Compound | Curve Fit | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Avg RF | %RSD |
|--------------|-----------|--------|--------|--------|--------|--------|---|--------|--------|--------|--------|
| T PFBS | Linear | 0.7229 | 0.8727 | 0.9455 | 0.9508 | 0.8377 | | 0.8856 | 0.9465 | 0.8803 | 9.307 |
| T PFHXS | Linear | 0.6493 | 0.7861 | 0.8866 | 0.8948 | 0.7237 | | 0.8199 | 0.8576 | 0.8026 | 11.245 |
| T PFHpS | Linear | 0.6786 | 0.7679 | 0.8324 | 0.8555 | 0.7447 | | 0.7854 | 0.8091 | 0.7819 | 7.563 |
| T PFOS | Linear | 0.9125 | 0.9003 | 1.1187 | 0.9185 | 0.9792 | | 1.0536 | 1.1012 | 0.9977 | 9.315 |
| T PFNS | Linear | 0.6729 | 0.7689 | 0.8013 | 0.8100 | 0.7233 | | 0.7494 | 0.7616 | 0.7553 | 6.201 |
| T PFDS | Quadratic | 0.2020 | 0.2158 | 0.2198 | 0.2234 | 0.2012 | | 0.2012 | 0.2048 | 0.2097 | 4.584 |
| I d3-MeFOSAA | | | | | | | | | | | |
| T FOSA | Quadratic | 2.5002 | 2.5390 | 2.7658 | 2.8034 | 2.3786 | | 2.1883 | 2.0501 | 2.4608 | 11.346 |
| T MeFOSAA | Linear | 1.1530 | 1.0843 | 1.2180 | 1.2247 | 1.0269 | | 1.0596 | 1.1164 | 1.1261 | 6.783 |
| S d5-EFOSAA | Quadratic | 1.1261 | 1.1048 | 1.1793 | 1.1661 | 0.9724 | | 0.9454 | 0.9360 | 1.0614 | 10.032 |
| T EFOSAA | Quadratic | 0.9929 | 0.9896 | 1.0801 | 1.0911 | 0.9080 | | 0.8862 | 0.8677 | 0.9737 | 9.274 |

(RedFont and #) = Outlier Flag; (I) = Internal Standard; (T) = Target; (S) = Surrogate; (M) = Matrix Spike

Initial Calibration Summary

Job Number: FA67211
 Account: ITVAVAB APTIM
 Project: TCWTS; Coupeville, WA

Sample: S3Q155-ICC155
 Lab FileID: 3Q7854.D

Initial Calibration Report

Compounds with Curve fitting not using Avg Response Factor:

| Compound | Curve Fit | Curve Fit Formula | Curve Fit R2 |
|----------------|-----------|---|--------------|
| T PFBA | Quadratic | $y = 0.005258 * x^2 + 0.168804 * x$ | 0.99975 |
| T PFPEA | Linear | $y = 1.206400 * x$ | 0.999496 |
| T PFBS | Linear | $y = 0.933587 * x$ | 0.99896 |
| S 13C2-PFHxA | Linear | $y = 0.709160 * x$ | 0.999553 |
| T PFHxA | Linear | $y = 0.380882 * x$ | 0.999501 |
| T PFPEs | Linear | $y = 0.206654 * x$ | 0.999727 |
| S 13C3-HFO-DA | Quadratic | $y = -7.415869E-005 * x^2 + 0.038866 * x$ | 0.999956 |
| T HFO-DA | Quadratic | $y = -3.054727E-004 * x^2 + 0.140247 * x$ | 0.999970 |
| T PFHpA | Linear | $y = 1.151578 * x$ | 0.999267 |
| T PFHxS | Linear | $y = 0.849157 * x$ | 0.999281 |
| T ADONA | Linear | $y = 1.377584 * x$ | 0.999262 |
| T PFOA | Linear | $y = 0.855172 * x$ | 0.999344 |
| T PFHpS | Linear | $y = 0.804007 * x$ | 0.999722 |
| T PFOS | Linear | $y = 1.090425 * x$ | 0.999364 |
| T PFNA | Linear | $y = 0.930105 * x$ | 0.999436 |
| T 9C-PPFONS | Linear | $y = 0.150355 * x$ | 0.999117 |
| T FOSA | Quadratic | $y = -0.061547 * x^2 + 2.356230 * x$ | 0.999809 |
| T PFNS | Linear | $y = 0.758996 * x$ | 0.999899 |
| S 13C2-PEDA | Linear | $y = 1.048089 * x$ | 0.999925 |
| T PFDA | Quadratic | $y = 0.002228 * x^2 + 0.907477 * x$ | 0.999965 |
| T MeFOSAA | Linear | $y = 1.098584 * x$ | 0.998563 |
| S d5-EFOSAA | Quadratic | $y = -0.019071 * x^2 + 1.023692 * x$ | 0.998270 |
| T EFOSAA | Quadratic | $y = -0.009195 * x^2 + 0.913172 * x$ | 0.999848 |
| T PFDS | Quadratic | $y = 0.001154 * x^2 + 0.198929 * x$ | 0.999949 |
| T PFUNDA | Quadratic | $y = -0.004767 * x^2 + 0.851198 * x$ | 0.999770 |
| T 11Cl-PF3OUds | Linear | $y = 0.559740 * x$ | 0.999118 |
| T PFDoDA | Quadratic | $y = 0.010214 * x^2 + 0.837284 * x$ | 0.999794 |
| T PFTfDA | Quadratic | $y = 0.013201 * x^2 + 0.955486 * x$ | 0.999807 |
| T PFTeDA | Quadratic | $y = 0.012865 * x^2 + 1.114511 * x$ | 0.999826 |

(RedFont and #) = Outlier Flag; (I) = Internal Standard; (T) = Target; (S) = Surrogate; (M) = Matrix Spike

Initial Calibration Verification

Job Number: FA67211
Account: ITVAVAB APTIM
Project: TCWTS; Coupeville, WA

Sample: S3Q155-ICV155
Lab FileID: 3Q7857.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0827_537_S3Q155\s3q155.batch.bin

Level ID: Calibration File
1:D:\MassHunter\Data\0827_537_S3Q155\3q7848.d
2:D:\MassHunter\Data\0827_537_S3Q155\3q7849.d
3:D:\MassHunter\Data\0827_537_S3Q155\3q7850.d
4:D:\MassHunter\Data\0827_537_S3Q155\3q7851.d
5:D:\MassHunter\Data\0827_537_S3Q155\3q7852.d
7:D:\MassHunter\Data\0827_537_S3Q155\3q7854.d
8:D:\MassHunter\Data\0827_537_S3Q155\3q7855.d

Data File: 3q7857
Type : QC
Level : 6

| Cpnd Name | Exp. Conc | Final Conc | Dev % | Area % |
|--------------|-----------|------------|----------|--------|
| 13C2-6:2FTS | --- | --ISTD-- | | |
| 13C2-PFDA | 20.000 | 0.000 | # -100.0 | 0.0 |
| 13C2-PFDoDA | --- | --ISTD-- | | |
| 13C2-PFHxA | 20.000 | 0.000 | # -100.0 | 0.0 |
| 13C2-PFOA | --- | --ISTD-- | | |
| 13C3-PFPeA | --- | --ISTD-- | | |
| 13C4-PFOS | --- | --ISTD-- | | |
| 4:2FTS | 20.000 | 19.367 | -3.2 | 96.8 |
| 6:2FTS | 20.000 | 19.943 | -0.3 | 99.7 |
| 8:2FTS | 20.000 | 20.142 | 0.7 | 100.7 |
| d3-MeFOSAA | --- | --ISTD-- | | |
| d5-EtFOSAA | 20.000 | 0.000 | # -100.0 | 0.0 |
| EtFOSAA | 20.000 | 23.502 | 17.5 | 117.5 |
| FOSA | 20.000 | 23.227 | 16.1 | 116.1 |
| MeFOSAA | 20.000 | 21.371 | 6.9 | 106.9 |
| PFBA | 20.000 | 20.422 | 2.1 | 102.1 |
| PFBS | 20.000 | 16.907 | -15.5 | 84.5 |
| PFDA | 20.000 | 19.665 | -1.7 | 98.3 |
| PFDoDA | 20.000 | 24.577 | 22.9 | 122.9 |
| PFDS | 20.000 | 20.046 | 0.2 | 100.2 |
| PFHpA | 20.000 | 20.192 | 1.0 | 101.0 |
| PFHpS | 20.000 | 19.024 | -4.9 | 95.1 |
| PFHxA | 20.000 | 17.914 | -10.4 | 89.6 |
| PFHxS | 20.000 | 17.317 | -13.4 | 86.6 |
| PFNA | 20.000 | 18.535 | -7.3 | 92.7 |
| PFNS | 20.000 | 19.994 | 0.0 | 100.0 |
| PFOA | 20.000 | 19.619 | -1.9 | 98.1 |
| PFOS | 20.000 | 19.918 | -0.4 | 99.6 |
| PFPeA | 20.000 | 18.937 | -5.3 | 94.7 |
| PFPeS | 20.000 | 18.254 | -8.7 | 91.3 |
| PFTeDA | 20.000 | 22.324 | 11.6 | 111.6 |
| PFTrDA | 20.000 | 26.831 | # 34.2 | 134.2 |
| PFUnDA | 20.000 | 24.983 | 24.9 | 124.9 |
| ADONA | 20.000 | 0.000 | # -100.0 | 0.0 |
| 9C1-PF3ONS | 20.000 | 0.000 | # -100.0 | 0.0 |
| 11C1-PF3OUds | 20.000 | 0.000 | # -100.0 | 0.0 |
| 13C3-HFPO-DA | 100.000 | 0.000 | # -100.0 | 0.0 |
| HFPO-DA | 100.000 | 0.000 | # -100.0 | 0.0 |

6.6.2
6

Initial Calibration Verification

Job Number: FA67211
Account: ITVAVAB APTIM
Project: TCWTS; Coupeville, WA

Sample: S3Q155-ICV155
Lab FileID: 3Q7857.D

CC Criteria: +/- 30%

Initial Calibration Verification

Job Number: FA67211
Account: ITVAVAB APTIM
Project: TCWTS; Coupeville, WA

Sample: S3Q155-ICV155
Lab FileID: 3Q7858.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0827_537_S3Q155\s3q155.batch.bin

Level ID: Calibration File
1:D:\MassHunter\Data\0827_537_S3Q155\3q7848.d
2:D:\MassHunter\Data\0827_537_S3Q155\3q7849.d
3:D:\MassHunter\Data\0827_537_S3Q155\3q7850.d
4:D:\MassHunter\Data\0827_537_S3Q155\3q7851.d
5:D:\MassHunter\Data\0827_537_S3Q155\3q7852.d
7:D:\MassHunter\Data\0827_537_S3Q155\3q7854.d
8:D:\MassHunter\Data\0827_537_S3Q155\3q7855.d

Data File: 3q7858
Type : QC
Level : 6

| Cpnd Name | Exp. Conc | Final Conc | Dev % | Area % |
|--------------|-----------|------------|----------|--------|
| 13C2-6:2FTS | --- | --ISTD-- | | |
| 13C2-PFDA | 20.000 | 0.000 | # -100.0 | 0.0 |
| 13C2-PFDoDA | --- | --ISTD-- | | |
| 13C2-PFHxA | 20.000 | 0.000 | # -100.0 | 0.0 |
| 13C2-PFOA | --- | --ISTD-- | | |
| 13C3-PFPeA | --- | --ISTD-- | | |
| 13C4-PFOS | --- | --ISTD-- | | |
| 4:2FTS | 20.000 | 0.000 | # -100.0 | 0.0 |
| 6:2FTS | 20.000 | 0.000 | # -100.0 | 0.0 |
| 8:2FTS | 20.000 | 0.000 | # -100.0 | 0.0 |
| d3-MeFOSAA | --- | --ISTD-- | | |
| d5-EtFOSAA | 20.000 | 0.000 | # -100.0 | 0.0 |
| EtFOSAA | 20.000 | 19.908 | -0.5 | 99.5 |
| FOSA | 20.000 | 0.000 | # -100.0 | 0.0 |
| MeFOSAA | 20.000 | 18.195 | -9.0 | 91.0 |
| PFBA | 20.000 | 0.000 | # -100.0 | 0.0 |
| PFBS | 20.000 | 18.790 | -6.1 | 93.9 |
| PFDA | 20.000 | 20.410 | 2.1 | 102.1 |
| PFDoDA | 20.000 | 22.452 | 12.3 | 112.3 |
| PFDS | 20.000 | 0.000 | # -100.0 | 0.0 |
| PFHpA | 20.000 | 18.417 | -7.9 | 92.1 |
| PFHpS | 20.000 | 0.000 | # -100.0 | 0.0 |
| PFHxA | 20.000 | 18.378 | -8.1 | 91.9 |
| PFHxS | 20.000 | 18.684 | -6.6 | 93.4 |
| PFNA | 20.000 | 19.731 | -1.3 | 98.7 |
| PFNS | 20.000 | 0.000 | # -100.0 | 0.0 |
| PFOA | 20.000 | 18.760 | -6.2 | 93.8 |
| PFOS | 20.000 | 19.252 | -3.7 | 96.3 |
| PFPeA | 20.000 | 0.000 | # -100.0 | 0.0 |
| PFPeS | 20.000 | 0.000 | # -100.0 | 0.0 |
| PFTeDA | 20.000 | 22.647 | 13.2 | 113.2 |
| PFTTrDA | 20.000 | 23.596 | 18.0 | 118.0 |
| PFUnDA | 20.000 | 23.419 | 17.1 | 117.1 |
| ADONA | 20.000 | 19.305 | -3.5 | 96.5 |
| 9C1-PF3ONS | 20.000 | 19.446 | -2.8 | 97.2 |
| 11C1-PF3OUdS | 20.000 | 19.335 | -3.3 | 96.7 |
| 13C3-HFPO-DA | 100.000 | 0.000 | # -100.0 | 0.0 |
| HFPO-DA | 20.000 | 21.645 | 8.2 | 108.2 |

Initial Calibration Verification

Job Number: FA67211
Account: ITVAVAB APTIM
Project: TCWTS; Coupeville, WA

Sample: S3Q155-ICV155
Lab FileID: 3Q7858.D

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: FA67211
 Account: ITVAVAB APTIM
 Project: TCWTS; Coupeville, WA

Sample: S3Q155-CC155
 Lab FileID: 3Q7888.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0827_537_S3Q155\s3q155.batch.bin

Level ID: Calibration File
 1:D:\MassHunter\Data\0827_537_S3Q155\3q7848.d
 2:D:\MassHunter\Data\0827_537_S3Q155\3q7849.d
 3:D:\MassHunter\Data\0827_537_S3Q155\3q7850.d
 4:D:\MassHunter\Data\0827_537_S3Q155\3q7851.d
 5:D:\MassHunter\Data\0827_537_S3Q155\3q7852.d
 7:D:\MassHunter\Data\0827_537_S3Q155\3q7854.d
 8:D:\MassHunter\Data\0827_537_S3Q155\3q7855.d

Data File: 3q7888
 Type : QC
 Level : 6

| Cpnd Name | Exp. Conc | Final Conc | Dev % | Area % |
|--------------|-----------|------------|--------|--------|
| 13C2-6:2FTS | --- | --ISTD-- | | |
| 13C2-PFDA | 20.000 | 21.693 | 8.5 | 108.5 |
| 13C2-PFDoDA | --- | --ISTD-- | | |
| 13C2-PFHxA | 20.000 | 19.993 | 0.0 | 100.0 |
| 13C2-PFOA | --- | --ISTD-- | | |
| 13C3-PFPeA | --- | --ISTD-- | | |
| 13C4-PFOS | --- | --ISTD-- | | |
| 4:2FTS | 20.000 | 21.606 | 8.0 | 108.0 |
| 6:2FTS | 20.000 | 21.324 | 6.6 | 106.6 |
| 8:2FTS | 20.000 | 21.673 | 8.4 | 108.4 |
| d3-MeFOSAA | --- | --ISTD-- | | |
| d5-EtFOSAA | 20.000 | 25.231 | 26.2 | 126.2 |
| EtFOSAA | 20.000 | 25.883 | 29.4 | 129.4 |
| FOSA | 20.000 | 26.724 | # 33.6 | 133.6 |
| MeFOSAA | 20.000 | 24.442 | 22.2 | 122.2 |
| PFBA | 20.000 | 21.263 | 6.3 | 106.3 |
| PFBS | 20.000 | 20.398 | 2.0 | 102.0 |
| PFDA | 20.000 | 21.594 | 8.0 | 108.0 |
| PFDoDA | 20.000 | 29.063 | # 45.3 | 145.3 |
| PFDS | 20.000 | 21.788 | 8.9 | 108.9 |
| PFHpA | 20.000 | 20.322 | 1.6 | 101.6 |
| PFHpS | 20.000 | 20.814 | 4.1 | 104.1 |
| PFHxA | 20.000 | 19.842 | -0.8 | 99.2 |
| PFHxS | 20.000 | 20.712 | 3.6 | 103.6 |
| PFNA | 20.000 | 20.590 | 3.0 | 103.0 |
| PFNS | 20.000 | 21.259 | 6.3 | 106.3 |
| PFOA | 20.000 | 20.248 | 1.2 | 101.2 |
| PFOS | 20.000 | 20.801 | 4.0 | 104.0 |
| PFPeA | 20.000 | 20.473 | 2.4 | 102.4 |
| PFPeS | 20.000 | 20.947 | 4.7 | 104.7 |
| PFTeDA | 20.000 | 28.667 | # 43.3 | 143.3 |
| PFTTrDA | 20.000 | 29.102 | # 45.5 | 145.5 |
| PFUnDA | 20.000 | 29.053 | # 45.3 | 145.3 |
| ADONA | 20.000 | 20.185 | 0.9 | 100.9 |
| 9Cl-PF3ONS | 20.000 | 20.023 | 0.1 | 100.1 |
| 11Cl-PF3OUds | 20.000 | 19.950 | -0.2 | 99.8 |
| 13C3-HFPO-DA | 100.000 | 100.925 | 0.9 | 100.9 |
| HFPO-DA | 100.000 | 100.248 | 0.2 | 100.2 |

6.6.4
6

Continuing Calibration Summary

Job Number: FA67211
Account: ITVAVAB APTIM
Project: TCWTS; Coupeville, WA

Sample: S3Q155-CC155
Lab FileID: 3Q7888.D

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: FA67211
 Account: ITVAVAB APTIM
 Project: TCWTS; Coupeville, WA

Sample: S3Q155-CC155
 Lab FileID: 3Q7900.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0827_537_S3Q155\s3q155.batch.bin

Level ID: Calibration File
 1:D:\MassHunter\Data\0827_537_S3Q155\3q7848.d
 2:D:\MassHunter\Data\0827_537_S3Q155\3q7849.d
 3:D:\MassHunter\Data\0827_537_S3Q155\3q7850.d
 4:D:\MassHunter\Data\0827_537_S3Q155\3q7851.d
 5:D:\MassHunter\Data\0827_537_S3Q155\3q7852.d
 7:D:\MassHunter\Data\0827_537_S3Q155\3q7854.d
 8:D:\MassHunter\Data\0827_537_S3Q155\3q7855.d

Data File: 3q7900
 Type : QC
 Level : 7

| Cpnd Name | Exp. Conc | Final Conc | Dev % | Area % |
|--------------|-----------|------------|-------|--------|
| 13C2-6:2FTS | --- | --ISTD-- | | |
| 13C2-PFDA | 50.000 | 51.001 | 2.0 | 102.0 |
| 13C2-PFDoDA | --- | --ISTD-- | | |
| 13C2-PFHxA | 50.000 | 47.622 | -4.8 | 95.2 |
| 13C2-PFOA | --- | --ISTD-- | | |
| 13C3-PFPeA | --- | --ISTD-- | | |
| 13C4-PFOS | --- | --ISTD-- | | |
| 4:2FTS | 50.000 | 48.640 | -2.7 | 97.3 |
| 6:2FTS | 50.000 | 47.132 | -5.7 | 94.3 |
| 8:2FTS | 50.000 | 47.394 | -5.2 | 94.8 |
| d3-MeFOSAA | --- | --ISTD-- | | |
| d5-EtFOSAA | 50.000 | 47.623 | -4.8 | 95.2 |
| EtFOSAA | 50.000 | 48.753 | -2.5 | 97.5 |
| FOSA | 50.000 | 50.752 | 1.5 | 101.5 |
| MeFOSAA | 50.000 | 48.565 | -2.9 | 97.1 |
| PFBA | 50.000 | 49.573 | -0.9 | 99.1 |
| PFBS | 50.000 | 47.966 | -4.1 | 95.9 |
| PFDA | 50.000 | 49.947 | -0.1 | 99.9 |
| PFDoDA | 50.000 | 49.016 | -2.0 | 98.0 |
| PFDS | 50.000 | 48.625 | -2.8 | 97.2 |
| PFHpA | 50.000 | 48.689 | -2.6 | 97.4 |
| PFHpS | 50.000 | 49.187 | -1.6 | 98.4 |
| PFHxA | 50.000 | 47.217 | -5.6 | 94.4 |
| PFHxS | 50.000 | 48.636 | -2.7 | 97.3 |
| PFNA | 50.000 | 49.044 | -1.9 | 98.1 |
| PFNS | 50.000 | 48.649 | -2.7 | 97.3 |
| PFOA | 50.000 | 48.918 | -2.2 | 97.8 |
| PFOS | 50.000 | 47.694 | -4.6 | 95.4 |
| PFPeA | 50.000 | 49.154 | -1.7 | 98.3 |
| PFPeS | 50.000 | 49.357 | -1.3 | 98.7 |
| PFTeDA | 50.000 | 48.893 | -2.2 | 97.8 |
| PFTTrDA | 50.000 | 49.374 | -1.3 | 98.7 |
| PFUnDA | 50.000 | 49.100 | -1.8 | 98.2 |
| ADONA | 50.000 | 48.657 | -2.7 | 97.3 |
| 9Cl-PF3ONS | 50.000 | 48.269 | -3.5 | 96.5 |
| 11Cl-PF3OUds | 50.000 | 48.034 | -3.9 | 96.1 |
| 13C3-HFPO-DA | 250.000 | 241.804 | -3.3 | 96.7 |
| HFPO-DA | 250.000 | 240.169 | -3.9 | 96.1 |

6.6.5
6

Continuing Calibration Summary

Job Number: FA67211
Account: ITVAVAB APTIM
Project: TCWTS; Coupeville, WA

Sample: S3Q155-CC155
Lab FileID: 3Q7900.D

CC Criteria: +/- 30%

Continuing Calibration Summary

Job Number: FA67211
Account: ITVAVAB APTIM
Project: TCWTS; Coupeville, WA

Sample: S3Q155-CC155
Lab FileID: 3Q7911.D

Continuing Calibration Report

Batch: D:\MassHunter\Data\0827_537_S3Q155\s3q155.batch.bin

Level ID: Calibration File

- 1:D:\MassHunter\Data\0827_537_S3Q155\3q7848.d
- 2:D:\MassHunter\Data\0827_537_S3Q155\3q7849.d
- 3:D:\MassHunter\Data\0827_537_S3Q155\3q7850.d
- 4:D:\MassHunter\Data\0827_537_S3Q155\3q7851.d
- 5:D:\MassHunter\Data\0827_537_S3Q155\3q7852.d
- 7:D:\MassHunter\Data\0827_537_S3Q155\3q7854.d
- 8:D:\MassHunter\Data\0827_537_S3Q155\3q7855.d

Data File: 3q7911
Type : QC
Level : 5

| Cpnd Name | Exp. Conc | Final Conc | Dev % | Area % |
|--------------|-----------|------------|-------|--------|
| 13C2-6:2FTS | --- | --ISTD-- | | |
| 13C2-PFDA | 10.000 | 10.081 | 0.8 | 100.8 |
| 13C2-PFDoDA | --- | --ISTD-- | | |
| 13C2-PFHxA | 10.000 | 8.821 | -11.8 | 88.2 |
| 13C2-PFOA | --- | --ISTD-- | | |
| 13C3-PFPeA | --- | --ISTD-- | | |
| 13C4-PFOS | --- | --ISTD-- | | |
| 4:2FTS | 10.000 | 9.767 | -2.3 | 97.7 |
| 6:2FTS | 10.000 | 9.770 | -2.3 | 97.7 |
| 8:2FTS | 10.000 | 10.137 | 1.4 | 101.4 |
| d3-MeFOSAA | --- | --ISTD-- | | |
| d5-EtFOSAA | 10.000 | 9.758 | -2.4 | 97.6 |
| EtFOSAA | 10.000 | 10.035 | 0.4 | 100.4 |
| FOSA | 10.000 | 9.796 | -2.0 | 98.0 |
| MeFOSAA | 10.000 | 9.781 | -2.2 | 97.8 |
| PFBA | 10.000 | 9.291 | -7.1 | 92.9 |
| PFBS | 10.000 | 8.968 | -10.3 | 89.7 |
| PFDA | 10.000 | 9.816 | -1.8 | 98.2 |
| PFDoDA | 10.000 | 10.022 | 0.2 | 100.2 |
| PFDS | 10.000 | 9.757 | -2.4 | 97.6 |
| PFHpA | 10.000 | 9.206 | -7.9 | 92.1 |
| PFHpS | 10.000 | 9.302 | -7.0 | 93.0 |
| PFHxA | 10.000 | 8.608 | -13.9 | 86.1 |
| PFHxS | 10.000 | 9.178 | -8.2 | 91.8 |
| PFNA | 10.000 | 9.301 | -7.0 | 93.0 |
| PFNS | 10.000 | 9.473 | -5.3 | 94.7 |
| PFOA | 10.000 | 9.166 | -8.3 | 91.7 |
| PFOS | 10.000 | 9.098 | -9.0 | 91.0 |
| PFPeA | 10.000 | 9.392 | -6.1 | 93.9 |
| PFPeS | 10.000 | 9.229 | -7.7 | 92.3 |
| PFTeDA | 10.000 | 9.766 | -2.3 | 97.7 |
| PFTrDA | 10.000 | 10.023 | 0.2 | 100.2 |
| PFUnDA | 10.000 | 9.784 | -2.2 | 97.8 |
| ADONA | 10.000 | 9.082 | -9.2 | 90.8 |
| 9Cl-PF3ONS | 10.000 | 9.042 | -9.6 | 90.4 |
| 11Cl-PF3OUds | 10.000 | 8.919 | -10.8 | 89.2 |
| 13C3-HFPO-DA | 50.000 | 48.662 | -2.7 | 97.3 |
| HFPO-DA | 50.000 | 49.239 | -1.5 | 98.5 |

6.6.6
6



Continuing Calibration Summary

Job Number: FA67211
Account: ITVAVAB APTIM
Project: TCWTS; Coupeville, WA

Sample: S3Q155-CC155
Lab FileID: 3Q7911.D

CC Criteria: +/- 30%

Run Sequence Report

Job Number: FA67211
 Account: ITVAVAB APTIM
 Project: TCWTS; Coupeville, WA

| | | |
|----------------|---------------------------|-----------------------|
| Run ID: S3Q155 | Method: EPA 537.1 REV 1.0 | Instrument ID: GCMS3Q |
|----------------|---------------------------|-----------------------|

| Lab Sample ID | Lab File ID | Date/Time Analyzed | Prep QC Batch | Client Sample ID |
|---------------|-------------|--------------------|---------------|-----------------------------|
| S3Q155-IC155 | 3Q7848.D | 08/27/19 15:00 | n/a | Initial cal 0.5 |
| S3Q155-IC155 | 3Q7849.D | 08/27/19 15:15 | n/a | Initial cal 1 |
| S3Q155-IC155 | 3Q7850.D | 08/27/19 15:31 | n/a | Initial cal 2 |
| S3Q155-IC155 | 3Q7851.D | 08/27/19 15:47 | n/a | Initial cal 5 |
| S3Q155-IC155 | 3Q7852.D | 08/27/19 16:02 | n/a | Initial cal 10 |
| S3Q155-ICC155 | 3Q7854.D | 08/27/19 16:34 | n/a | Initial cal 50 |
| S3Q155-IC155 | 3Q7855.D | 08/27/19 16:49 | n/a | Initial cal 100 |
| S3Q155-ICV155 | 3Q7857.D | 08/27/19 17:21 | n/a | Initial cal verification 20 |
| S3Q155-ICV155 | 3Q7858.D | 08/27/19 17:36 | n/a | Initial cal verification 20 |
| OP76512-BS | 3Q7859.D | 08/27/19 17:52 | OP76512 | Blank Spike |
| OP76512-MB | 3Q7860.D | 08/27/19 18:07 | OP76512 | Method Blank |
| ZZZZZZ | 3Q7861.D | 08/27/19 18:23 | OP76512 | (unrelated sample) |
| ZZZZZZ | 3Q7862.D | 08/27/19 18:39 | OP76512 | (unrelated sample) |
| ZZZZZZ | 3Q7863.D | 08/27/19 18:54 | OP76512 | (unrelated sample) |
| ZZZZZZ | 3Q7864.D | 08/27/19 19:10 | OP76512 | (unrelated sample) |
| ZZZZZZ | 3Q7865.D | 08/27/19 19:26 | OP76512 | (unrelated sample) |
| ZZZZZZ | 3Q7866.D | 08/27/19 19:41 | OP76512 | (unrelated sample) |
| ZZZZZZ | 3Q7867.D | 08/27/19 19:57 | OP76512 | (unrelated sample) |
| S3Q155-CC155 | 3Q7869.D | 08/27/19 20:28 | n/a | Continuing cal 20 |
| ZZZZZZ | 3Q7871.D | 08/27/19 20:59 | OP76512 | (unrelated sample) |
| ZZZZZZ | 3Q7872.D | 08/27/19 21:15 | OP76512 | (unrelated sample) |
| ZZZZZZ | 3Q7873.D | 08/27/19 21:31 | OP76512 | (unrelated sample) |
| ZZZZZZ | 3Q7874.D | 08/27/19 21:46 | OP76512 | (unrelated sample) |
| ZZZZZZ | 3Q7875.D | 08/27/19 22:02 | OP76512 | (unrelated sample) |
| ZZZZZZ | 3Q7876.D | 08/27/19 22:18 | OP76512 | (unrelated sample) |
| ZZZZZZ | 3Q7877.D | 08/27/19 22:33 | OP76512 | (unrelated sample) |
| S3Q155-CC155 | 3Q7878.D | 08/27/19 22:49 | n/a | Continuing cal 50 |
| ZZZZZZ | 3Q7883.D | 08/28/19 00:07 | OP76512 | (unrelated sample) |
| ZZZZZZ | 3Q7885.D | 08/28/19 00:38 | OP76512 | (unrelated sample) |
| ZZZZZZ | 3Q7887.D | 08/28/19 01:09 | OP76512 | (unrelated sample) |
| S3Q155-CC155 | 3Q7888.D | 08/28/19 01:25 | n/a | Continuing cal 20 |
| OP76525-BS | 3Q7890.D | 08/28/19 01:56 | OP76525 | Blank Spike |
| OP76525-MB | 3Q7891.D | 08/28/19 02:12 | OP76525 | Method Blank |
| ZZZZZZ | 3Q7892.D | 08/28/19 02:28 | OP76525 | (unrelated sample) |
| ZZZZZZ | 3Q7893.D | 08/28/19 02:43 | OP76525 | (unrelated sample) |
| ZZZZZZ | 3Q7894.D | 08/28/19 02:59 | OP76525 | (unrelated sample) |
| FA67211-1 | 3Q7895.D | 08/28/19 03:14 | OP76525 | WI-CV-FCWTP-FB-01-081919 |
| FA67211-2 | 3Q7896.D | 08/28/19 03:30 | OP76525 | WI-CV-FCWTP-INF200-081919 |
| FA67211-3 | 3Q7897.D | 08/28/19 03:46 | OP76525 | WI-CV-FCWTP-FB-02-081919 |
| FA67211-4 | 3Q7898.D | 08/28/19 04:01 | OP76525 | WI-CV-FCWTP-MP205-081919 |
| FA67211-5 | 3Q7899.D | 08/28/19 04:17 | OP76525 | WI-CV-FCWTP-FB-03-081919 |
| S3Q155-CC155 | 3Q7900.D | 08/28/19 04:33 | n/a | Continuing cal 50 |
| FA67211-6 | 3Q7902.D | 08/28/19 05:04 | OP76525 | WI-CV-FCWTP-EF209-081919 |
| FA67211-7 | 3Q7903.D | 08/28/19 05:19 | OP76525 | WI-CV-FCWTP-FB-04-081919 |
| FA67211-8 | 3Q7904.D | 08/28/19 05:35 | OP76525 | WI-CV-FCWTP-EF002-081919 |
| OP76525-MS | 3Q7906.D | 08/28/19 07:10 | OP76525 | Matrix Spike |

Run Sequence Report

Job Number: FA67211
 Account: ITVAVAB APTIM
 Project: TCWTS; Coupeville, WA

| | | |
|----------------|---------------------------|-----------------------|
| Run ID: S3Q155 | Method: EPA 537.1 REV 1.0 | Instrument ID: GCMS3Q |
|----------------|---------------------------|-----------------------|

| Lab Sample ID | Lab File ID | Date/Time Analyzed | Prep QC Batch | Client Sample ID |
|---------------|-------------|--------------------|---------------|----------------------------|
| OP76525-MSD | 3Q7907.D | 08/28/19 07:26 | OP76525 | Matrix Spike Duplicate |
| FA67211-9 | 3Q7908.D | 08/28/19 07:41 | OP76525 | WI-CV-FCWTP-INF001-081919 |
| FA67211-10 | 3Q7909.D | 08/28/19 07:57 | OP76525 | WI-CV-FCWTP-INF001P-081919 |
| FA67211-11 | 3Q7910.D | 08/28/19 08:13 | OP76525 | WI-CV-FCWTP-FB-05-081919 |
| S3Q155-CC155 | 3Q7911.D | 08/28/19 08:28 | n/a | Continuing cal 10 |
| ZZZZZZ | 3Q7913.D | 08/28/19 08:59 | OP76525 | (unrelated sample) |
| ZZZZZZ | 3Q7914.D | 08/28/19 09:15 | OP76525 | (unrelated sample) |
| ZZZZZZ | 3Q7915.D | 08/28/19 09:31 | OP76525 | (unrelated sample) |
| ZZZZZZ | 3Q7916.D | 08/28/19 09:49 | OP76525 | (unrelated sample) |
| ZZZZZZ | 3Q7917.D | 08/28/19 10:05 | OP76525 | (unrelated sample) |
| ZZZZZZ | 3Q7918.D | 08/28/19 10:21 | OP76525 | (unrelated sample) |
| S3Q155-ECC155 | 3Q7919.D | 08/28/19 10:36 | n/a | Ending cal 50 |

6.7.1

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